POLITEKNIK NEGERI BALI

THE EFFECT OF ACCOUNTING INFORMATION SYSTEM EFFECTIVENESS ON EMPLOYEE PERFORMANCE WITH WORK STRESS AS A MODERATING VARIABLE AT LMATS CONSULTING

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Abstract: *A company's success is significantly influenced by how well its human resources are utilized. Making advantage of an effective and efficient Accounting Information System is one factor that affects a company's degree of human resource quality. As a tax consulting firm, LMATS Consulting has a lot of work to do, but there isn't much time to get it done because some of the taxpayers it works with frequently forget to provide the necessary information on time. These circumstances suggest that there may be a connection between work stress and how effectively Accounting Information systems affect employee performance, which calls for more research. This research aim is to ascertain the relationship between employee performance at LMATS Consulting and the Accounting Information System's effectiveness with work stress. A questionnaire using quantitative data analysis methods and variant-based SEM (Structural Equation Modeling) structural equation model, especially partial least squares, is used in this study to collect data (PLS). The findings indicated that LMATS Consulting experienced work stress even if its accounting information system was operating effectively. The excessive workload that workers deal with daily is what causes this stress. It is concluded from the findings that the moderating factor for work stress is non-moderating. (weakening) the effect of the Accounting Information System effectiveness on employee performance at LMATS Consulting.*

Keywords: *Accounting Information System Effectiveness, Work Stress, Employee Performance, SEM-PLS*

Introduction

The parties and the company's stakeholders utilize the reports as a decision-making tool to manage operational activities, and the Accounting Information System is a network that includes all the processes, notations, and tools necessary to convert financial data into reports (Marina et al., 2017). For the results of the information system to be used as a decision-making tool by the company's internal parties and as a source of reliable information for the company's external parties, it is necessary to have an accounting information system that is guaranteed to be accurate. Therefore, the information produced must be accurate, available on time whenever necessary, and have relevant and precise value. However, the advancement of information systems that continue to develop and the amount of pressure to master the use of a good information system can cause work stress for some of its users. Having too much work and not enough time to complete it is one of the elements that contribute to workplace stress in an organizational setting, per research (Waruwu, 2018).

LMATS Consulting to be able to submit tax reports truthfully and reliably. It is due to the Accounting Information System's use by the Tax Consulting Office, which helps to produce accurate accounting and tax data. There isn't much time, but LMATS Consulting has one managing partner, 7 partners, 9 junior partners, 52 employees, and 13 managers. Due to the enormous number of work teams and employees involved in each activity, the development of the Accounting Information System at LMATS Consulting was particularly complicated. According to the researcher's observations, each employee at LMATS Consulting has a lot of work to complete while having a highly constrained amount of time to do it. Additionally, some of the taxpayers handled frequently delayed providing the necessary details. Based on the results of observations made by researchers on one of the partner teams at LMATS Consulting, the following data were obtained:

Table 1 Annual Corporate Tax Clients 2021

Total of clients handled	150 WP
Total of clients who have not provided data	10 WP
Percentage of tax statements that have been completed	80%
Percentage of financial statements that have been completed	80%
Percentage of overall progress as of April 27, 2022	80%

Data as of April 27, 2022 for the final period of corporate tax reporting on April 28, 2022
Source: Control the activities of the LMATS Consulting partner team, 2022

Of the 150 corporate taxpayers handled, it is known that as of April 27, 2022, 10 taxpayers have not collected financial data as material for preparing financial and taxation statements. Under normal conditions, the accountant team and the tax team take 3-5 days to complete the financial and taxation statements of one company /client. In addition, for financial statements, tax reports, and overall reports that have been completed, it only reaches 80% where the Founder of LMATS Consulting itself has given a deadline for completing all annual financial and taxation statements on April 28, 2022. According to the facts provided above, employees and management at LMATS Consulting who are directly involved with the creation of the Accounting Information System may feel work stress.

Malik (2017), Nayaka & Suardikha (2019), Fatmayon & Yadnyana (2017), Melasari (2017), Dwi Cahyanti & Suartana (2018), Widhawat (2018), Prariadena & Putra (2019), Sefianti (2020), Putri & Endiana (2020), Jatiwardani & Ayutrisnayudiasri (2021) have all previously performed research. However, there are still differences in the results of these studies, so similar research with different variables, years, and objects are being considered for execution. Researchers are interested in conducting a similar study using LMATS Consulting as the object of this research because meeting the needs of employees and shaping the welfare of the work environment is important to be carried out by LMATS Consulting to ensure that employee performance is carried out optimally and every employee can do his job to the fullest. This research will offer empirical proof of the considerable effects of work stress and the efficiency of the Accounting Information System on employee performance, as well as the moderating role of work stress in these effects.

Method

The main participants in this study were all partner teams and management teams at LMATS Consulting, which included all tax consultants, accountants, and management staff. In terms of the study's time frame, it took place in 2022. All of the LMATS Consulting head office and partner offices' personnel made up the study's population. The non-probabilistic (non-probability sampling) sample method used in this investigation used the saturation sampling methodology. The sampling strategy utilized in this study consisted of 83 samples from 83 populations. One independent, one dependent, and one moderating variable make up the three variables used in this study. Work stress variable as a moderator, employee performance as the dependent variable, and Accounting Information System effectiveness serve as an independent variable. The core data for this study was gathered using questionnaire techniques and direct survey methods (observation). Both descriptive statistical analysis methods and inferential statistical analysis methods were used to analyze the data. The descriptive analysis interval value in the descriptive statistical analysis technique can be calculated using the formula below:

$$Interval = \frac{(maximum\ value - minimum\ value)}{total\ of\ scales\ used}$$

The inferential statistical analysis method used in this inquiry was called SEM-PLS (Structural Equation Model-Partial Least Squares).

1. Draw a structural path diagram
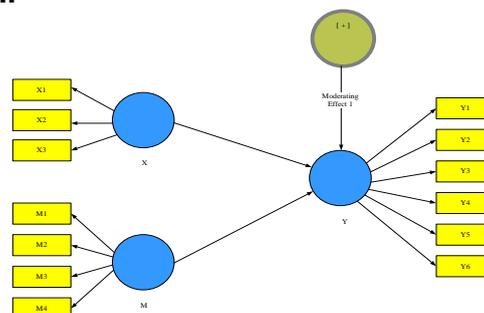
Source: Researcher's thoughts, 2022
Picture 1 Structural Path Diagram

2. Measurement model design (outer model)
There are three measurement model tests carried out in this study, namely:
- **Convergent Validity**
This is significantly connected if the convergent validity value surpasses 0,70. However, in early-stage studies, convergent validity that reaches a score of 0,50 to 0,60 is considered sufficient (Ghozali, 2018).
- **Discriminant Validity**
To ascertain the discriminant validity, the cross-loading value and the latent variable are contrasted. If the loading indicator score on the connected construct is higher than the loading indicator score on other constructs, cross-loading is considered genuine.
- **Composite Reliability and Cronbach Alpha**
Reliability testing is carried out with the intention of testing the accuracy, consistency and accuracy of the instruments used. A good composite reliability value is 0,60 to 0,70.

3. Structural Model Design (inner model)

This test aims to make predictions between latent variables based on the R-square score. The inner model test can also be measured based on the Q-square value. The equation regarding (Q^2) predictive relevance (Ghozali, 2018).

$$Q^2 = 1 - (1 - R_1{}^2)(1 - R_2{}^2)..(1 - R_n{}^2)$$

4. Estimated Goodness of Fit (GoF)

The goodness of fit value ranges from 0 to 1. The closer the GoF value of the variable is to 1, the better the model is built. The equation for measuring the GoF value is

$$GoF = \sqrt{communality \times \overline{R^2}}$$

5. Hypothesis test

Hypothesis testing was measured using the t-test statistic (t-test) with a significance level of 5% (0,05). If the t-statistic score exceeds the t-table score of 1.96 with an alpha of 5%, then Ha may be accepted and H0 may be refused. The path coefficient in PLS displays the results of the computation. A path coefficient value greater than 0 indicates a positive relationship. In PLS, the results of testing the moderating effect are presented in the total effects table.

Result and Discussion

In this research, multiple linear analysis tests using the IBM SPSS 26 tool were used to assess the research hypothesis.

1. Descriptive Analysis Results

Table 2 MV Descriptives

	Mean	Median	Minimum	Maximum	Standard Deviation	Description
M1	1,993	2,000	1,000	3,000	0,532	Low
M2	2,107	2,000	1,000	3,000	0,526	Low
M3	1,813	2,000	1,000	3,000	0,539	Low
M4	1,900	2,000	1,000	3,000	0,572	Low
X1	3,853	4,000	3,000	5,000	0,667	High
X2	3,893	4,000	3,000	5,000	0,704	High
X3	4,027	4,000	3,000	5,000	0,565	High
Y2	4,013	4,000	3,000	5,000	0,516	High
Y3	3,867	4,000	3,000	5,000	0,512	High
Y4	3,867	4,000	3,000	5,000	0,550	High
Y5	4,170	4,000	3,000	5,000	0,463	High
Y6	3,929	4,000	3,000	5,000	0,605	High
Y1	3,813	3,500	3,000	5,000	0,570	High

Source: Primary data processed, 2022

Table 2 shows that the respondents' average assessment of all indicators contained in the work stress variable as a moderating variable is quite low. However, the respondents' average rating of each indication in the dependent variable, the Accounting Information System effectiveness, and the independent variable, employee performance, is fairly high.

2. Inferential Analysis Results
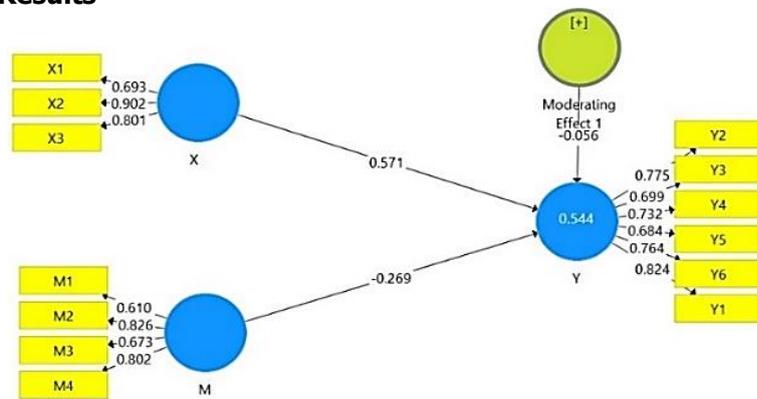
Source: Primary data processed, 2022
Picture 2 Path Diagram

a. Measurement Model Testing (Outer Model)
- **Convergent Validity**

Table 3 Outer Loadings

Variable	Indicator	Load	Description
Accounting Information System Effectiveness (X)	On-time	0,693	Valid
	Accurate	0,902	Valid
	Can be trusted	0,801	Valid
Employee Performance (Y)	Work result	0,824	Valid
	Job Knowledge	0,775	Valid
	Initiative	0,699	Valid
	Mental Dexterity	0,732	Valid
	Attitude	0,684	Valid
	The discipline of Time and Attendance	0,764	Valid
Work Stress (M)	Physical Environment	0,610	Valid
	Stress Due to Role/Task	0,826	Valid
	Causes of Interpersonal Stress	0,673	Valid
	Employee Reduction	0,802	Valid

Source: Primary data processed, 2022

According to Table 3 above, all indicators utilized in the questionnaire were deemed valid when the results of the outer model testing of each indicator of the endogenous and exogenous latent variables in this study had a loading score > 0.60.

- **Discriminant Validity**

Table 4 Cross Loadings

	M	Moderating Effect	X	Y	Description
M1	0,610	0,164	-0,116	-0,268	Valid
M2	0,826	0,244	-0,341	-0,443	Valid
M3	0,673	0,130	-0,205	-0,228	Valid
M4	0,802	0,199	-0,374	-0,454	Valid
X1	-0,257	-0,160	0,693	0,427	Valid
X * M	0,260	1,000	-0,221	-0,258	Valid
X2	-0,299	-0,157	0,902	0,654	Valid
X3	-0,363	-0,222	0,801	0,549	Valid
Y2	-0,315	0,000	0,521	0,775	Valid
Y3	-0,249	-0,119	0,374	0,699	Valid
Y4	-0,437	-0,316	0,562	0,732	Valid
Y5	-0,428	-0,282	0,451	0,684	Valid
Y6	-0,288	-0,138	0,623	0,764	Valid
Y1	-0,501	-0,271	0,503	0,824	Valid

Source: Primary data processed, 2022

Because the association between the variable and its indicators has a higher value than the relationship of the variable with other indicators, Table 4 above indicates that the discriminant validity in this study can be regarded as legitimate.

- **Composite Reliability**

Table 5 Cronbach's Alpha dan Composite Reliability

Construct	Composite Reliability	Cronbach's Alpha	Description
M	0,821	0,719	Reliable
Moderating Effect	1,000	1,000	Reliable
X	0,844	0,722	Reliable
Y	0,883	0,842	Reliable

Source: Primary data processed, 2022

The findings in Table 5 demonstrate that all variables are reliable because the composite reliability value of all variables is > 0.70. Additionally, all Cronbach's alpha ratings are greater than 0.60, indicating strong reliability for all variables.

b. Structural Model Testing (Inner Model)

Table 6 Coefficient of Determination (R-Square) R^2

	R Square	R Square Adjusted	Description
Y	0,544	0,525	Moderate

Source: Primary data processed, 2022

Table 6 shows that the employee performance value (Y) is 0.544 which concludes that the R2 requirements have been met, which means the validity of the employee performance variable (Y) can be clarified and influenced by the effectiveness variable of the accounting information system, and work stress is 54.4%. Another 45.6%, were influenced by other constructs outside the construct used in this study. Because the Adjusted R-Square is more than 50% but less than 75%, the effect of exogenous constructs on the effectiveness of accounting information systems (X) and work stress (M) on employee performance (Y) is moderate.

c. Goodness of Fit (GoF)

Table 7 Goodness of Fit (GoF)

Variable	Communality	R-Square
X	0,646	
Y	0,559	0,544
M	0,538	
Average	0,581	0,544

Source: Primary data processed, 2022

$$\text{GoF} = \sqrt{0,581 \times \overline{0,544^2}}$$
$$= \sqrt{0,316}$$
$$= 0,562$$

According to the calculations above, the model's GoF value is 0.562, which is included in the large value criteria since 0.562 > 0.36, indicating that the model satisfies highly stringent instrument requirements.

d. Hypothesis test
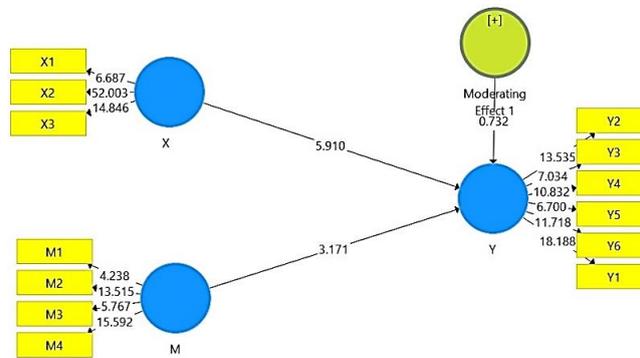
Source: Primary data processed, 2022
Picture 3 Bookstraping PLS

- **The Effect of Accounting Information System Effectiveness on Employee Performance**

Table 8 Path Coefficients (Output Booksrapping) (H1)

Hypothesis	Influence	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (O/STERR)	P-Value
H1	X → Y	0,571	0,569	0,097	5,910	0,000

Source: Primary data processed, 2022

The effect of Accounting Information System effectiveness on employee performance resulted in t-statistics of 5,910 > 1,960 (P value = 0,000 < 0,050). These findings support the notion that in the LMATS Consulting environment, the Accounting Information System significantly improves staff performance. Therefore, the acceptance of H1 and rejection of H0, means that the implementation of the Accounting Information System in the LMATS Consulting environment is optimal based on the ease of employees in collecting, processing, and compiling data into information that is used as the basis for their daily tasks.

The understanding that the improvement that occurs in the effectiveness of the accounting information system also means an improvement in the quality of employee performance in the company underlies the positive influence that the effectiveness of the accounting information system exerts on employee performance. The application of an accounting information system effectively in the LMATS Consulting environment can assist employees in completing their work tasks quickly and that way the services produced by employees will also be better because employees can produce financial and taxation reports accurately, on time, and relevantly.

The degree of influence that each indication has on the factors affecting the efficiency of the accounting information system in the LMATS Consulting environment is understood from image 2. With a value of 0,693, this timely indicator has the least impact, indicating that in the LMATS Consulting context, punctuality is not a significant determinant of the effectiveness of accounting information systems. With each of the influences valued at 0,902 and 0,801, accurate and trustworthy indicators achieve balanced results, indicating a moderately high influence in determining the efficacy of accounting information systems within LMATS Consulting.

- **The Effect of Work Stress on Employee Performance**

Table 9 Path Coefficients (Output Booksrapping) (H2)

Hypothesis	Influence	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (O/STERR)	P-Value
H2	M → Y	-0,269	-0,290	0,085	3,171	0,002

Source: Primary data processed, 2022

Based on table 9, it is known that the original sample value on H2 shows a value of -0,269 with a t-statistics value of 3,171 > 1,96 this means that work stress has a negative and significant influence on employee performance in the LMATS Consulting environment. The findings of this test demonstrate that there is work stress in the LMATS Consulting environment, which harms employee performance as shown by the completion of subpar work assignments. Where the day before the set deadline for completing the annual tax report, there are still 20% of work tasks that have not been completed.

The relationship between each indication and several job stress variables in the LMATS Consulting environment is shown in Picture 2. The physical environment indicators and interpersonal stress-causing indicators in the LMATS Consulting context had the least influence on the job stress variables, with values of 0.610 and 0.673, respectively. This implies that these stresses have little impact on these variables. Although the indicators of stress due to roles or tasks and the existence of employee reductions had balanced results and were valued at 0.826 and 0.802, respectively, this suggests that the indicators of stress due to roles or tasks and the existence of employee reductions have a relatively high influence in determining the variables of work stress in the LMATS Consulting environment.

- **The Effect of Work Stress Moderates the Accounting Information System Effectiveness on Employee Performance**

Table 10 Total Effects (H3)

Hypothesis	Influence	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (O/STERR)	P-Value
H3	Moderating Effect → Y	-0,056	-0,054	0,076	0,732	0,464

Source: Primary data processed, 2022

The work stress variable moderated the effect of the Accounting Information System effectiveness on employee performance resulting in t-statistics of 0.732 < 1.960 (P value = 0.464 < 0.050). These results conclude that the moderating variable of work stress is non-moderating (does not have a significant effect) on the effect of effectiveness of the Accounting Information System on employee performance in LMATS Consulting. Therefore, the rejection of H3 and acceptance of H0, means that the moderating variable of work stress is weakening but not significant in the relationship between the Accounting Information System effectiveness and employee performance in LMATS Consulting.

The variables of work stress moderation contained in this study are weakening in line with the second hypothesis (H2) which states that work stress weakens employee performance. However, several factors contribute to the varied character of work stress moderation, which is non-moderation (insignificant) in the LMATS Consulting setting, including:

1) The existence of work stress in the LMATS Consulting environment does not have a considerable influence because the effectiveness of implementing an accounting information system at LMATS Consulting is at an optimal level.

2) The family relationships implemented in the LMATS Consulting environment have succeeded in forming good relations between its employees. Where every two weeks, LMATS Consulting will hold a sharing session as a medium for each employee to discuss work tasks that they do not understand, one of which is work tasks related to the use of accounting information systems within LMATS Consulting.

3) After the annual tax reporting, each employee will receive a bonus distribution from LMATS Consulting, in addition, LMATS Consulting also holds outing activities for all employees within LMATS Consulting once a year. It is this activity that becomes an opportunity for employees to restart their minds after previously working on a fairly heavy workload in a short time limit.

Conclusion

Following testing and analysis, the following findings can be drawn: 1) The effectiveness of the Accounting Information System significantly improves staff performance. 2) Employee performance is significantly harmed by work stress. 3) In LMATS Consulting, the moderating variable of job stress is non-moderating (weakening) and has no discernible impact on the effectiveness of the Accounting Information System on employee performance.

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