# LEVERAGING EXCEL AS RESOURCE: BOOSTING THE FINANCIAL REPORTING PROFICIENCY OF SHARIAH ACCOUNTING

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Revisions Required 2025-01-23 | Revisions Required 2025-01-31 | Accept Submission 2025-02-05

***Abstract*** : In higher education, studying theory alone is not enough, but also requires experience and developing skills needed in the world of work. So it is hoped that graduates will be able to compete in the world of work. Including in the world of the accounting profession. The accounting profession is closely tied to the business environment because they play a very active role in economic activities. The demand for computerized practical skills is something that is non-negotiable for the skills of graduated. one learning medium is to provide guidance and training on how to present computerized financial reports by utilizing the pivotable function of the Microsoft Excel accounting program. The results of the Forum Discussion Group (FGD) suggest that students majoring in sharia accounting are able to master accounting information applications, at least Excel software. The method used in this research is an experimental method. pre-experimen.t The experiment was carried out using a one group pretest-posttest design. The research results show differences in the capacity of sharia accounting students in making financial reports before and after studying Excel accounting. This means there is influence on increasing the capacity of sharia accounting students at the Faculty of Islamic Economics and Business.

**Keywords***:* accountant, excel accounting, pre-experiment.

**Code JEL**: M40, A2

## INTRODUCTION

In the context of higher education, theoretical learning alone is insufficient; students must also gain practical experience and develop skills that meet the demands of the workplace. Therefore, graduates are expected to be highly competitive, particularly in the field of accounting. The accounting profession is closely linked to the business world, as accountants play an active role in economic activities. Changes in the business world directly affect the types of services needed [14] Therefore, accountants must be responsive to the dynamics of the business environment [1].

This is a challenge for higher education institutions, because the potential of students is not fully aligned with the needs of accounting service users [12]. To be able to prepare financial

reports using information systems, students need to focus on mastering hard skills. One of effective learning method is to provide guidance and training on how to prepare computerized financial reports using the pivotable function in the Microsoft Excel program. Excel accounting, as part of Microsoft Office, is a tool that can be used to prepare various financial reports, such as cash flow statements, profit and loss statements, and financial position statements. These reports can later be reviewed and utilized by internal management to support decision making.

In addition, Microsoft Excel-based learning media and student learning independence also have an impact on improving learning outcomes [13]. The application of the learning method for the Introduction to Accounting I course using the Excel program effectively increased students' understanding and mastery of the material [28]. In addition, Excel accounting really helps students in processing transactions more easily and producing various financial reports, including profit and loss reports and financial position reports [18]. Based on findings from various previous studies, this study aims to analyze the differences in students' abilities in using Excel accounting to prepare financial reports, both before and after participating in training that focuses on the use of Excel accounting.

## 1. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The International Federation of Accountants defines the accounting profession as all occupations that require expertise in the field of accounting. This includes the role of public accountants, internal accountants working in the industrial, financial, or trade sectors, accountants working in government institutions, and accountants who act as educators. In a more specific sense, the "accounting profession" refers to the various tasks performed by public accountants, such as management consulting, auditing, and other accounting activities. In general, this profession is considered part of the professional industry, on par with organizations such as the Indonesian Doctors Association (IDI). A profession must meet a number of criteria in order to be recognized by the general public as a profession, including: 1) Active in the field of science that is the basis for professional work 2) Have a code of ethics that functions as a guideline for professional behavior 3) Organize in groups that are officially recognized by the government or society 4) Have a deep understanding of the relevant environment, and 5) Prioritize public responsibility over personal gain. All these requirement must be met so that the accounting profession can be recognized as a legitimate profession.

The complexity of accounting services needed by the community is reflected in the development of the accounting industry. The recognition of an accountant's professionalism has the same weight as other professions, such as engineering or law. In general, accountants are divided into several categories, with public accountants as one of the main ones. Public accountants, often referred to as external accountants, are independent accountants who offer services for a set fee. They usually work independently or establish an accounting firm. Public Accountants are professionals who work in Public Accounting Firms (KAP). To practice as a public accountant or to establish an accounting firm, an official permit from the Ministry of Finance is required. Some of the services that a Certified Public Accountant (CPA) can provide include tax report preparation, management consulting, and management systems development. Internal auditors, often called internal accountants, are accounting professionals who work for a company or organization. They are also known as corporate accountants or management accountants. Some positions that can be filled by internal accountants include chief accounting officer, financial

director, and full-time accounting staff. Their duties include developing accounting systems, preparing financial reports for management and external parties, budget planning, handling taxes, and conducting internal audits. Accountants who work as Public Accountants in government agencies, such as the Financial and Development Supervisory Agency (BPKP), the Financial Supervisory Agency, or similar institutions, are known as government accountants (BPK). Meanwhile, in the university environment, accountants play a role in teaching accounting courses, conducting research and development in the field of accounting, and contributing to curriculum development.

Microsoft Excel is a popular spreadsheet program and is often used for various purposes, such as calculations, data analysis, graphing, and data management [6]. As one of the components of the Microsoft Office program suite, Excel is very useful in everyday life for processing numerical data into effective and usable information. Microsoft Excel has a primary function as a number processing software. In the context of accounting, Microsoft Excel can be used to manage accounting information systems, thus producing the required financial reports more effectively and efficiently. Excel is the choice because it has relatively simple and easy-to-use features, even for users who are less familiar with computer technology. In addition, Excel is also very effective for processing financial reports with simple transactions. he functions and menus available in Excel can be used to create accounting application programs. The functions used in Excel For Accounting include:

*First,* The SUM function is a function used to add up the values contained in several cells in a certain range with the formula: =SUM(Range). *Second,* The IF function is a logical function to determine a decision based on a certain condition. This function will produce a value or answer if it matches the required criteria. The IF function formula is: =IF(condition; possibility1; possibility. *Third,* The SUMIF function is a function used to add up the values contained in several cells in a certain range with certain criteria that are connected to the criteria range. The formula is: =SUMIF (Range; Criteria; Sum_Range). And *fourth,* The SUBTOTAL function is a function that will produce a subtotal value in a list or database. This function will automatically be formed when working in a list or database using the Data>Subtotal menu. This function can also be used in relation to the display of data resulting from a filter. The SUBTOTAL function formula is: =SUBTOTAL (Function_number; Ref).

**Framework research**

$H_a$ : There are differences in the capacity of Islamic accounting students at IAIN Lhokseumawe in making financial reports before and after taking Excel accounting training.

$H_o$: There are no difference in the capacity of Islamic accounting students at IAIN Lhokseumawe in making financial reports before and after taking Excel accounting training.

## 2. METHODS

This study uses an experimental method, which involves manipulation of the research

object with the control of certain variables [9]. The purpose of the experimental method is to identify causal relationships, measure the level of these relationships, and determine how much influence is caused. This is done by giving a certain treatment to the experimental group while providing a control group for comparison. This study uses a pre-experimental design with a one-group pretest-posttest design, which aims to analyze the influence of independent variables on dependent variables. In this method, the pretest is carried out before the treatment is given, so that the results of the treatment can be measured more accurately by comparing them with the initial conditions before the treatment [19]. The type of research instrument is a test. A test is a research instrument in the form of an assignment that must be completed individually or in groups. The test in this study took the form of a list of multiple-choice questions to assess the respondents' abilities and knowledge.

The question instrument consists of :

1. When creating a transaction journal in Excel, the most mandatory column to maintain accounting balance is…
2. The SUMIF function in Excel is very useful in accounting for...
3. To display the account name automatically after entering the account code, the correct function to use is...
4. In recording transactions based on murabahah contracts, Excel can help record profit margins using the formula...
5. When using Excel to create automated journals, the most important feature for maintaining data consistency between sheets is...
6. To prepare an automatic profit and loss report, transaction data can be presented using the features…
7. If you want to display the total income from the ijarah contract only, then the most appropriate Excel formula to use is....
8. An Excel feature that allows users to analyze financial trends over time with interactive charts is....
9. To create a financial position report (balance sheet) in Excel, the main principle that must be maintained is...
10. In Islamic accounting, if you want to mark transactions that contain elements of usury, the appropriate Excel feature to use is...
11. In bank reconciliation using Excel, the function commonly used to find the difference between two columns is...
12. In bank reconciliation using Excel, the function commonly used to find the difference between two columns is....
13. If you want to calculate the total zakat of a company (for example 2.5% of net profit), the correct Excel formula is...
14. To create more interactive and easy-to-read Islamic financial reports, the most recommended visual feature in Excel is...
15. The main advantage of using an automated Islamic accounting Excel template over manual bookkeeping is...

The one-group pretest-posttest design scheme is described as follows :

**Table 1** ***One group pre-test-post test design scheme***

| *Pre Test* | *Treatment* | *Post Test* |
|---|---|---|
| $T_1$ | X | $T_2$ |

## 3. RESULT AND DISCUSSION

The data in this study were collected through questionnaires delivered directly by the researcher to the respondents during the workshop. The instrument used was a non-test questionnaire with 15 questions. Before the workshop began, respondents first filled out the questionnaire as a pretest. After the workshop was over, respondents then filled out the posttest questionnaire that had been provided.

**Table 2 Accounting pretest and post-test scores**

| **No Respondent** | ***Pre-test*** | ***Post-test*** |
|---|---|---|
| 1. | 60 | 72 |
| 2. | 52 | 82 |
| 3. | 64 | 78 |
| 4. | 62 | 62 |
| 5. | 54 | 72 |
| 6. | 58 | 78 |
| 7. | 56 | 76 |
| 8. | 64 | 70 |
| 9. | 66 | 82 |
| 10. | 70 | 84 |
| 11. | 66 | 78 |
| 12. | 70 | 88 |
| 13. | 72 | 86 |
| 14. | 72 | 78 |
| 15. | 0 | 0 |

The descriptive statistics of the above data were analyzed using SPSS 25. Statistically, the average, minimum score, maximum score, range, variance and standard deviation will be described. The descriptive statistics of the pretest and posttest data of the respondents are below:

**Table 3 Average results of pretest and posttest**

| **Descriptive Statistics** | | | | | |
|---|---|---|---|---|---|
| | N | Min | Max | Mean | Std. Deviation |
| Pretest | 14 | 52 | 72 | 63.29 | 6.592 |

| | | | | | |
|---|---|---|---|---|---|
| Postest | 14 | 62 | 88 | 77.57 | 6.936 |
| Valid N (listwise) | 14 | | | | |

Based on table 3, it can be seen that the average questionnaire results increased after students attended the excel accounting workshop. In the pretest, the average learning outcome or mean was 63.29, while in the posttest it increased to 77.57. This study involved 14 respondents from a total of 15 students who were samples. Descriptively, the results show a difference in the average learning outcomes, where the average pretest score (63.29) is lower than the average posttest score (77.57). This indicates an increase in learning outcomes after the workshop.

**Tabel 4 One Samples Correlations**

| | | N | Correlation | Sig. |
|---|---|---|---|---|
| Pair 1 | Pretest & Postest | 14 | .417 | .138 |

In the paired samples correlation table shows the results of the correlation test or relationship between the two data or the relationship between the pre-test and post-test variables. Based on the output above, the correlation coefficient value is 0.417 with a significance value of 0.138. Because the sig value of 0.138> probability 0.05, it can be said that there is no relationship between the pretest and posttest variables.

**Validity and Reliability Test**

Validity testing in this study was carried out statistically, namely by using the Pearson Product-Moment Coefficient of Correlation test with the help of the Statistical Package for Social Science (SPSS) Version 25 Program. Based on the results of data processing, all showed Cronbach alpha values for each variable before the workshop for the pretest of 1.00 and the posttest of 0.588.

| Analyze | Result | Criteria | Interpretation |
|---|---|---|---|
| Validitas (r Pearson) | 0.756 (p=0.002) | r>0.3 & p<0.05 | Valid |
| Reliabilitas (Cronbach's Alpha) | 0.738 | >0.7 | Reliabel |
| Normality Test (Shapiro-Wilk) | Pre-test (946/.499)<br>Post-test (956/.664) | >0.05 | Normal |

To test the reliability of the questionnaire used in this study, a reliability test was conducted. This test uses a reliability coefficient calculated using the Cronbach Alpha formula. The results of the analysis show a Cronbach's Alpha value of 0.738, which indicates that all variables in this study have an adequate level of reliability. The following table shows reliability. The results of the analysis show a pretest significance value of 0.499 and a posttest of 0.664. Since these values are greater than 0.05, in accordance with the basis for decision making in the

Shapiro-Wilk normality test, it can be concluded that the data from the pretest and posttest questionnaires are normally distributed.

Before the experiment was conducted, students were first given a pretest to determine their abilities before receiving the treatment. The results of this test will be used as a comparison with the scores obtained by students after receiving treatment through the experimental method. After the pretest is completed, students follow learning using excel accounting as a treatment. After the learning, they were given a final test (posttest) using the same questions as in the pretest. From table 3 above, it can be concluded that the average questionnaire results increased after attending the excel accounting workshop. For the pretest value, the average workshop learning result or mean was 63.29. While the posttest value obtained an average workshop learning result of 77.57. The number of respondents used in the research sample was 14 students from 15 students who were the sample. Because the average value of learning outcomes with the workshop in the pre-test was 63.29 < Post-test 77.57, this means that descriptively there is a difference in the average learning outcomes between the pre-test and post-test results. Based on the table above, it can be concluded that the experimental method has proven effective in improving the abilities of Islamic Accounting students at the Faculty of Islamic Economics and Business, Institut Agama Islam Negeri Lhokseumawe, especially in preparing financial reports.

## 4. CONCLUSION

The results of the research and discussion show that there are differences in the abilities of Islamic accounting students in preparing financial reports before and after being given learning using Excel accounting. This indicates an increase in the capabilities of Islamic Accounting students at the Faculty of Islamic Economics and Business. This study recommends Microsoft Excel Accounting to be made a compulsory course before final year students undergo On The Job Training (OJT). In addition, it is recommended that further researchers provide initial training to ensure uniformity of participants' knowledge and skills in operating Microsoft Excel. This aims to ensure that technical aspects do not need to be taught again, so that the learning process can take place more efficiently.

**Author Contributions**
Conceptualization, TN,;
Methodology, TN,;
Format Analysis, TN,;
Software Statistic Analysis, TN,;
Data Validation, TN,;
Analysis of discussion and results, TN;

**Funding**

This study was funded by a grant from IAIN Lhokseumawe

**Acknowledgements**

The authors would like to thank the editors and reviewers in the Competitive Journal of Accounting and Finance at Muhammadiyah University Tanggerang for their contribution to this article. Hopefully this article will be references to other researchers.

**Conflicts Of Interest**

The two authors do not have any conflicts of interest.

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