



Research Paper

Perception Regarding the Impact of Accounting Software Utilization to Competency Skills of the 4th year BSAIS students of Laguna University

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| Keywords: | Abstract. |
| Accounting Software | <i>This study addressed the critical gap in the existing literature by focusing on the perceptions of 4th-year Bachelor of Science in Accounting Information System (BSAIS) students at Laguna University regarding the impact of accounting software on competency skills. While there is a growing body of literature on the general impact of accounting software on education, Previous studies have overlooked the specific nuances of BSAIS programs.</i> |
| Accounting Software Utilization | <i>This research identifies a lack of comprehensive examination of specific software features contributing to competency, hindering targeted curriculum recommendations.</i> |
| Competency Skills | <i>The study adopted a descriptive correlational research design, employing a Likert Scale to gather perceptions from 115 randomly selected BSAIS student. The demographic profile analysis reveals that age, sex, academic year, and section influence attitudes toward accounting software. Notably, students aged 21, particularly in their fourth year, exhibit an advanced understanding due to specialized courses. Sex also plays a role, aligning with findings that female CPAs utilize similar applications to males. Furthermore, hands-on experience and regular exposure to accounting software enhance understanding, emphasizing the importance of practical engagement.</i> |

The impact analysis on competency skills indicated a positive influence of accounting software. In recording and classifying transactions, automation and standard chart availability receive high praise. In the preparation of financial statements, automation of data gathering and financial calculations is seen as highly beneficial. For financial data analysis, the use of data visualization tools is highlighted. Despite variations in perceptions based on demographic factors, the Pearson correlation analysis reveals no significant relationships between these factors and perceptions of accounting software impact. This suggests a nuanced interplay of individual

characteristics influencing attitudes. In conclusion, it is recommended that the integration of accounting software into the BSAIS curriculum at Laguna University, emphasizing its positive impact on competency skills. The findings are contributed valuable insights for academia, practitioners, and policymakers, informing educational policies, refining curriculum design, and enhancing the overall learning experience in accounting software integration.

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I. Introduction

Computerized accounting systems have now replaced manual accounting systems in most organizations (McDowall and Jackling, 2006; Curtis et al., 2009). In business schools, accounting students are now more frequently introduced to the advantages of computer technology and are encouraged to make use of it. Consequently, assignments that involve accounting software have been created to support students in learning about the accounting cycle, a crucial concept in the fields of business and accounting.

Furthermore, modern professional accountants employ a wide range of computer applications to perform their daily work. They use email to communicate, search engines to perform research, and accounting software to record and analyze financial transactions for decision-making (Boulianne, 2012). This simply shows that business schools have recognized the importance of integrating technology into their accounting curricula, with a focus on practical learning experiences using accounting software. This approach not only prepares students for the modern business landscape but also ensures they are well-equipped to excel in their future careers in accounting and related fields.

Different organizations including schools use various accounting software types like Quickbooks, Xero, and Sage. QuickBooks stands out with its extensive feature set and popularity among small and medium-sized businesses, offering both cloud-based and desktop versions. Xero, on the other hand, is prized for its user-friendly interface and emphasis on simplicity, making it a preferred choice for startups and freelancers. Sage takes a broader approach, providing a suite of accounting and business management software products suitable for businesses of various sizes, with a focus on scalability. While QuickBooks excels in its comprehensive features, Xero excels in user-friendliness, and Sage offers versatility and scalability to cater to a wide range of business needs.

Regardless of the kind of software, users need to understand its use and importance. This includes knowing how to use the software's features, like entering transactions, making financial statements, and reconciling accounts. Proficient use of accounting software also involves advanced skills, such as making informed business decisions and deeply understanding financial data for reporting and analysis. Considering this, a study on perception regarding the impact of accounting software utilization to competency skills of 4th Year BSAIS students of Laguna University was conducted.

The study aimed to propose for including accounting software in the curriculum for students taking accounting related subjects at their university which proceed to their main goal which is to determine the perception of 4th Year BSAIS students of Laguna University with regards to the impact of using accounting software on their competency skills.

Hence, it measured how much accounting software influences different aspects of students' accounting skills based on their perceptions. They will also explore how students' personal backgrounds relate to their views on how accounting software affects their accounting abilities.

In summary, the researchers are committed to enhancing the education of students at Laguna University by advocating for the integration of accounting software. They expect their findings to inform decision-making at the university regarding this matter.

1. Theoretical background

This study's theoretical Background examines the influences on financial competency in an academic setting, considering age, sex, academic progression, and accounting software use. Age may affect cognitive abilities and tech adaptability, impacting financial proficiency. Sex differences, tied to societal norms and education, contribute to distinct financial management approaches. Academic progression is expected to positively correlate with financial competency. Accounting software use, in terms of type and frequency, shapes competency, with varying features impacting efficiency. The study breaks down financial competency into data

analysis, transaction recording, and financial statement preparation. The relationship between accounting software use and competency is contingent on internal and external factors specific to Laguna University, necessitating a nuanced analysis.

2. Research question or Research hypothesis or Problem statement

This study examines the impact of accounting software on the competency skills of 4th-year BSAIS students. It investigates the demographic profile of respondents, including age, sex, academic year, and software familiarity. The research explores perceived impacts on competencies such as recording transactions, financial statement preparation, and data analysis. The core question addresses the existence of a statistically significant relationship between demographic profiles and the perceived impact of accounting software on students' skills. The study aims to uncover how automation, precision, and integration in accounting software contribute to shaping the skills and perceptions of BSAIS students

3. Data and methods

This study adopts a quantitative descriptive research design to assess the impact of accounting software on the competency skills of 4th-year BSAIS students at Laguna University. Utilizing numerical data, the research employs statistical tools for quantitative analysis. The sample comprises 115 respondents, selected through a random sampling method, ensuring a representative distribution across BSAIS 4A, 4B, 4C, and 4D.

4. Results

Table 1 shows the summary of frequency results on the Demographic profile of the Respondents in terms of Age, Sex, Year and Section, Types of Accounting Software and Frequency of Use.

Table 1. Summary of the Frequency Results

| | Frequency |
|---|------------------|
| Age | 16.43 |
| Sex | 57.5 |
| Year level and Section | 28.75 |
| Accounting Software Used | 14.38 |
| Frequency of use of accounting software | 28.75 |

The age distribution shows a number of 4th year BSAIS students at Laguna University falling within the 21 to 22 years old range, with 56% and 34% respectively. Thus, it is evident that a majority of the respondents belong to a quite close age range. The under representation of the participants who are 20, 24, 25, and 26 years old shows that this age group is less likely to be included in the study. This demographic profile should be taken into account when interpreting the perceptions of the impact of accounting software on competency skills since the findings may be influenced by the majority group in the study.

This supports the findings of Stainbank Prof and colleagues in their 2023 study, which indicated that students, such as the 21-year-old participants in their fourth year of education, exhibit an improved understanding of the synergy between accounting and technology after undertaking accounting software courses.

The given data shows a clear difference in the sex ratio of the 115 respondents, 18 of whom were males. 0% of the respondents identified as male and 82% of them preferred the female answer. 00% as female. This explains the variety of the participant base, however, it is necessary to remember that these percentages are just the sex representation. Think of carrying out a well-detailed survey of responses to questions on accounting software in our research. Research the effects of the software on the students' perception of the competency skills irrespective of sex. The research can be carried out by examining their views on the usability of the software, its usefulness in skill development, and the overall satisfaction with the software. The realization of these viewpoints will give an all-round picture of the perceived impact, hence, a better analysis of the relationship between accounting software and competency skills among the 4th year BSAIS students at Laguna University can be done.

This result justified by Benjamin Foster and his co-authors in their journal titled "Gender and Accountants' Use of Technology." According to their findings, female CPAs tend to utilize similar applications and undertake comparable tasks to their male counterparts.

The data underlines the different respondents' composition across academic years and sections, providing insights that are important for the context of this study. To begin with, the significance of BSAIS 4A members who make up 37.00% of the total with 42 respondents indicates that this particular subgroup

significantly shapes opinions about how competence skills would be affected by accounting software application. This is evidence which implies that suggestions from BSAIS 4A students would highly impact on overall conclusions of this research. On the other hand, limited presence of only 14.00% (16) and BSAIS 4C prompts to think over whether there are distinctions in perceptions within this category. Investigating ideas from BSAIS 4C could help give insight into distinct challenges or perspectives which may enhance analysis. Therefore both subgroups including BSAIS 4B (26%) and BSAIS D (23%) have contributed immensely towards understanding accounting software utilization impacts as well. Such a large involvement signifies various perspectives that must be put into consideration when assessing competency skills influenced by the use of these programs. To sum up, a complete breakdown has been given based on academic years throughout

As stated on the study conducted by Stainbank Prof et al. (2023) when students in their second year were taught with an example from accounting during their software training, they understood how accounting works better and got better at using technology too. This tells us that using a real accounting example while teaching the software can help students become better at using technology and understand how accounting works.

The results gives insight into the different preferences of the respondents in regard to the use of accounting software. QuickBooks was favored by 82% of participants, therefore it has been widely accepted indicating its dominance within the sample. The finding also showed common accounting software selection among Laguna University fourth year BSAIS students which supports the objective of this study. This indicates that students not only need to be proficient in specialized accounting platforms but they also need training on use of several software tools as suggested by substantial preference for Excel (7%). Additionally, the finding that some respondents use Xero, None, Sage and QNE is an indication that there are a wide range of choices in terms of accounting software packages that can be used by students with different proficiencies. Understanding these trends can help tailor curriculum to enhance competency with the most commonly used applications. The scope of this research included less popular alternatives such as SAP and Oracle software, which were chosen by only 1% of respondents. This may necessitate further investigation into why these options have lower adoption rates and consequent adjustments in curricula which would enable more exposure to different accounting software leading to a well-rounded skill set.

This finding supports Freedman's claim that Quickbooks is the premier choice for small business accounting software. Perhaps this preference stems from its widespread popularity among accounting professionals in the small business sector, coupled with its extensive online training resources and support forums. The user-friendly central dashboard ensures convenient access to all accounting functions, improving the efficiency and smoothness of accounting processes. Furthermore, it's noteworthy that Quickbooks has been introduced to all BSAIS students at Laguna University.

The participants behaviors were observed, showing a tendency to use accounting software "2 to 3 times " indicating a choice, among those surveyed. With 42.00% of the participants falling into this group it suggests an interaction with the software among the students surveyed. Moreover the significant selection of "Once" as the frequent response at 40.00% highlights the varied usage frequencies of the software among the student body. The lower percentages in the "4 to 5 times" and " than 5 times" categories indicate that fewer students belong to these extremes. This may signal a need for investigation into why these usage patterns exist potentially revealing insights into student preferences, workload or perceptions of the software. The study suggests that how accounting software is utilized could be linked to how fourth year BSAIS students perceive its impact on their competency skills. Understanding why some students use the software frequently can provide information on its efficacy. Additionally exploring how individuals in the usage category particularly those who use it "4 to 5 times " relate, to competency skills may unveil factors influencing moderate usage frequencies.

Stainbank Prof. et al are accurate in asserting that incorporating a practical accounting illustration during software instruction can enhance students' proficiency in utilizing technology and deepen their comprehension of accounting principles.

Table 2 shows the summary of mean results on the extent of the impact of accounting software to the following accounting competency skills as perceived by the respondents.

Table 2. Summary of the Mean Results

| | Weighted Mean | Verbal Interpretation |
|---------------------------------------|----------------------|------------------------------|
| Recording and Classifying Transaction | 4.16 | Positive Impact |
| Preparation of Financial Statements | 4.21 | Very Positive Impact |
| Financial Data Analysis | 4.15 | Positive Impact |

| | |
|---------------------|---|
| Legend: ± 1.0 : | Perfect (Positive/Negative) Correlation |
| $\pm 0.80 - 0.99$: | Very Strong (Positive/Negative) Correlation |
| $\pm 0.60 - 0.79$: | Strong (Positive/Negative) Correlation |
| $\pm 0.40 - 0.59$: | Moderate (Positive/Negative) Correlation |
| $\pm 0.20 - 0.39$: | Weak (Positive/Negative) Correlation |
| $\pm 0.01 - 0.19$: | Very Weak (Positive/Negative) Correlation |
| 0.0: | No Correlation |

The impact of accounting software to the following accounting competency skills in terms of recording and classifying transactions attained a weighted mean score of 4.16 and a standard deviation of 0.77 and was verbally interpreted as Positive Impact among the respondents.

This supports the statement of Briggs et. al (2018) that automation, such as accounting software, frees up not only the professionals but also the students from repetitive tasks enabling them to concentrate on more valuable and strategic activities.

The reported findings of a weighted mean score of 4.16, a standard deviation of 0.77, and a verbal interpretation as a "Positive Impact" on recording and classifying transactions due to accounting software offer strong backing for Briggs et al.'s assertion in 2018.

These findings depict the results of a collective agreement by the respondents that accounting software positively influences the two competency skills, recording and classifying. In tandem, the standard deviation underscores the respondents' relative agreement that the software had a beneficial influence on these accounting skills specifically. Such consistency in the generated empirical output and the statement by Briggs reflect a stronger argument for automation, represented by accounting software, freeing professionals and students from repetitive tasks. They can concentrate their efforts on more meaningful aspects and activities related to the field of accounting. As a result, such empirical evidence provides concrete basis to assert that accounting software frees people from repetitive tasks to focus on meaningful..

With regard to the preparation of the financial statements the impact of the accounting software on the below accounting competency skills was 4.21 and the standard deviation is 0.77 and was verbally given the sense of Very Positive Impact among the respondents. The very positive impact result, Chapman and colleagues (2021) along with Sriwidharmanely et al. (2012) show that the accounting students are most likely going to be the ones who will adopt the accounting software due to the expected advantages that it will bring them such as the improvement of performance, the increase of productivity, and the enhancement of efficiency.

The reported findings, with a weighted mean score of 4.21, a standard deviation of 0.77, and a verbal interpretation as a "Very Positive Impact" on the preparation of financial statements due to accounting software, are in line with the research by Chapman and colleagues (2021) and Sriwidharmanely et al. (2012).

Chapman and colleagues, along with Sriwidharmanely et al., illustrate that accounting students are inclined to adopt accounting software due to the anticipated benefits it offers. These benefits encompass enhancing performance, increasing productivity, and improving efficiency in tasks related to the preparation of financial statements.

The high weighted mean score indicates a high consensus among the respondents that accounting software has a positive effect on the competency skills necessary for the preparation of financial statements. The standard deviation of 0.77 reveals the level of agreement among the respondents on the impact, meaning that many respondents consider the impact to be highly positive. These results validate the assertions by Chapman et al., and Sriwidharmanely et al., that accounting students are attracted to accounting software due to the possible effects in improving performance and productivity. In this regard, the high consensus would imply that the impacts are amicable to the accounting students, thus providing empirical evidence on the expected positive effects of adopting accounting software by accounting students on the skills relevant to the preparation of financial statements.

Accounting software on the next accounting competency skills under Financial Data Analysis got a weighted mean of 4.15 with a standard deviation of 0.81 that was verbally interpreted by the respondents as Positive Impact. This is consistent with the statement of Cockcroft and Russell : in accounting, the use of big data

analytics does not only increase the accuracy of processing but also helps to create an industry-wide benchmarks and make strategic decisions.

The reported weighted mean score of 4.15, a standard deviation of 0.81, and a verbal interpretation of a "Positive Impact" on Financial Data Analysis due to accounting software align with Cockcroft and Russell's assertion in 2018.

Cockcroft and Russell emphasize that within the accounting field, the utilization of big data analytics, similar to the impact identified in the findings related to accounting software, improves accuracy and aids in creating industry-wide benchmarks. This application of technology also assists in strategic decision-making processes.

The high weighted mean score signifies a common preference among the respondents on the positive influence of accounting software on the competency skills related to financial data analysis. Although there is some variability revealed by the standard deviation, the majority support the idea that the impact is positive and thus, confirm the opinion of Cockcroft and Russell.

The alignment between the findings of the research and Cockcroft and Russell's argument validates the opinion that accounting software, which is a tool for the better accuracy and the creation of the benchmarks through the data analysis, fits the expectations of the decision-making of the accounting domain. Hence, this empirical evidence is an indication that the predicted positive effect of accounting software on the improvement of financial data analysis skills in the accounting profession is valid.

Table 3: shows the summary of Pearson correlation coefficient results on the Significant Relationship between the Profile of Respondents and their Perceptions regarding the Impact of Accounting Software to their Accounting Skills of BS AIS students

Table 3. Summary of the Pearson Correlation Coefficient Results

| | R-value | Verbal Interpretation |
|---------------------------------------|----------------|------------------------------|
| Recording and classifying transaction | 0.044 | Positive Correlation |
| Preparation of financial statements | 0.044 | Positive Correlation |
| Financial data analysis | 0.066 | Positive Correlation |

- Legend: ± 1.0 : Perfect (Positive/Negative) Correlation
 $\pm 0.80 - 0.99$: Very Strong (Positive/Negative) Correlation
 $\pm 0.60 - 0.79$: Strong (Positive/Negative) Correlation
 $\pm 0.40 - 0.59$: Moderate (Positive/Negative) Correlation
 $\pm 0.20 - 0.39$: Weak (Positive/Negative) Correlation
 $\pm 0.01 - 0.19$: Very Weak (Positive/Negative) Correlation
 0.0: No Correlation

When it comes to recording and classifying transactions, respondents reported a very weak positive correlation. This is shown by the fact that they performed specific accounting activities involving the use of accounting software like record keeping and classifying transactions which has an effect on their ages since 4th year students who are mainly 21 years old have exposure to use of accounting software during their on-the-job training as indicated by r-value of 0.06 and p-value of 0.464. Additionally, they also agreed that there was a very weak positive correlation between sex and accounting software and their accounting skills. As males differ from females, females do most of these tasks for enhancing their accounting skills using accounting software in order to provide effective record keeping and classification, as indicated by an r-value of 0.02 and a p-value of 0.783

Though -0.02 and its p-value of 0.829 imply, that year and section are not important in improving their accounting skills with the use of accounting software since they can have different sections but still be fourth years and hence have exposure, which could be at school or in a host training college. Respondents confirmed to a weak positive link between being exposed to diverse accounting software and improved skillfulness in doing bookkeeping duties through the r-value that is 0.11 coupled with its p-value i.e 0.232 as well as such factors like how long the exposure took place for example time of exposure and use of accounting software will build their skills in accounting into digital technology having an r-value is equal to 0.049 along with a p-value equal to 0.596.

This finding can be inferred from the fact that integrating accounting software into the classroom offers students a more accurate reflection of organizational processes, potentially providing learning benefits (McDowall and Jackling, 2006). The integration of accounting software into on-the-job training for recording and classifying transaction tasks may provide learners with a more realistic insight into organizational processes, potentially enhancing their practical skills.

In terms of financial statement preparation, respondents note a subtle positive correlation, suggesting that as respondents age, their perception of the impact of accounting software on their financial statement preparation skills becomes slightly more positive with an evidence of r-value 0.05 and p-value of 0.527. This may be attributed to the increased experience and exposure to diverse accounting software among older individuals throughout their careers, contributing to a more favorable view of its effects.

Furthermore, the absence of a significant relationship between gender and financial statement preparation suggests that there is no visible gender-based pattern regarding how accounting software influences people's understanding. Men and women think in exactly the same way about their knowledge of preparing financial statements with a r-value of 0.02 and $p = 0.814$ for men and women respondents respectively. Besides, no substantial link exists between the academic level or section with financial statement preparation meaning that factors outside of academic standing like practical experience or exposure to real-life scenarios may have more weight on these perspectives as indicated by -0.05 r-value and $p = 0.593$ for academic year and section respectively.

The positive correlations observed between the kind of accounting software used and the frequency of software use with financial statement preparation indicate that respondents using particular software types or using accounting software more often than others perceive a greater enhancement on their skills due to such as r-value of 0.13 and p-value of 0.159. This positivity may emanate from certain software brands, which have friendlier interfaces, advanced features or great compatibility with financial statement preparation tasks. However, it is important to acknowledge that although these correlations are statistically significant, they are very weak thus indicating that demographic factors can slightly influence perceptions. For more inclusive knowledge, further qualitative data or follow-up questionnaires could be useful for highlighting those essentially in accounting programs which the participants consider instrumental in improving their financial statement preparation ability as evidenced by r-value of 0.07 and has p-value of 0.419

Considering the financial data analysis, the correlation analysis provides implications on the relationships of demographic factors and accounting skills. A very weak positive correlation between age and accounting skills can be proven with a p-value of 0.375 and $R = 0.08$, which imply a subtle connection and indicate that the accounting skills can have an unnoticeable relationship to age. A very weak positive correlation between gender and accounting skill is also statistically significant with a p-value of 0.429 and $R = 0.07$, which implies very subtle differences between the accounting skills of genders in the analyzed group.

The next correlate to be considered is the one between the survey respondents' academic year and section and accounting skills. Although the p-value of 0.908 is statistically significant, the positive correlation of $R = 0.01$ is extremely weak. As a result, the type of academic year and section within this survey may have slightly more than no impact on accounting skills in the target population. Another consideration is the type of accounting software used. While the p-value of 0.069 is statistically significant, the correlation of $R = 0.16$ is very weak. Therefore, choice of accounting software may play a subliminal role in this particular case.

Finally, the very weak positive correlation between the frequency of software use and accounting skills, and the statistically significant p value of 0.847, indicate a subtle connection. Overall, people who use accounting software more often may vary slightly in their accounting skills, but the correlation is extremely weak. To summarize, although the statistically significant correlations were found, their very weak nature suggests that demographic characteristics are of little practical importance for accounting skills in the given context. Other potential factors not accounted for might display more influence on why the people analyzed differ in their capacities for accounting.

5. Conclusion

In the light of the findings of this study entitled: Perception Regarding to the Impact of Accounting Software Utilization to Competency Skills of the 4th year BSAIS students of Laguna University, the following conclusions are drawn:

1. The study employed a questionnaire method approach in which a sample of 115 4th-year BSAIS students participated in the research.

2. Recording and Classifying Transactions competency skill attained a weighted mean score of 4.16 and a standard deviation of 0.77 was verbally interpreted as Positive Impact among the respondents.
3. Preparation of Financial Statements competency skill attained a weighted mean score of 4.21 and a standard deviation of 0.77 which was verbally interpreted as Very Positive Impact among the respondents.
4. Financial data analysis competency skill attained a weighted mean score of 4.15 and a standard deviation of 0.81 and was verbally interpreted as Positive Impact among the respondents.
5. The majority of respondents reported that the use of accounting software enhanced their ability to perform various accounting tasks efficiently improved their analytical skills, and increased their proficiency in financial analysis and reporting

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