
STUDENT'S PERCEPTIONS TOWARDS AUTOCOUNT SOFTWARE IN DPA20043 COMPUTERIZED ACCOUNTING SYSTEMS

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Abstract: The study aimed to assess the acceptance of AutoCount accounting software in the computerized accounting systems course for Diploma of Accountancy students at Jabatan Perdagangan Politeknik Sultan Abdul Halim Mu'adzam Shah, Jitra Kedah. The research investigated the impact of using the AutoCount accounting software in the learning environment, comparing it to the traditional method of learning accounting in a classroom setting. The study also aimed to determine the level of acceptance and usage of AutoCount software during the learning activities. The study focused on the effects of the AutoCount system in the tertiary education system of Malaysia, specifically at the diploma level in polytechnics. The researchers used the Technology Acceptance Model (TAM) to gather data from 100 Diploma in Accountancy students. The questionnaire consisted of four sections: demographic characteristics, perceived ease of use, perceived usefulness, acceptance, and attitude toward learning The AutoCount Accounting System. The results of the study indicated that the students well-received AutoCount accounting systems as an accounting system. However, it was observed that the system required a step-by-step learning approach in a laboratory environment with guidance from the lecturer. This suggests that a structured teaching and learning environment facilitated the effective acquisition of skills and knowledge related to AutoCount software.

Keywords: *teaching and learning, acceptance, AutoCount Accounting System*

1.0 Introduction

In this modern world, the Fourth Industrial Revolution (IR 4.0) has introduced advanced technologies that are transforming the accounting field. These changes improve efficiency by automating tasks like data entry and processing, ensuring more accurate and timely financial reporting. Accountants now use computerized systems instead of traditional paper-based methods, allowing for quicker and more environmentally friendly processes. Technology-savvy accountants are increasingly in demand and expected to be familiar with accounting software and data analytics tools. The shift to digital platforms also brings the need for enhanced cybersecurity measures to protect financial data. Overall, To thrive in the modern accounting landscape, accountants must embrace continuous learning and professional development. Staying updated with the latest technological advancements and obtaining relevant certifications can enhance their expertise and competitiveness.

The integration of these business and technology skills is crucial for modern accountants. Universities and colleges are adapting their curricula to meet these evolving demands by offering courses that blend traditional accounting education with practical technology training. Internships and hands-on projects with real-world applications are also becoming an integral part of accounting programs, ensuring that graduates are job-ready. Scholars like Holcomb and Michaelson (1996) and Havelka (2003) highlight the importance of integrating technology skills into education.

Given the rapid pace of technological advancements, continuous learning and adaptability are essential traits for accountants. Professional development courses, certifications in new software, and staying updated with industry trends are necessary steps for maintaining competitiveness in the field. The modern landscape for accounting graduates demands a harmonious blend of traditional accounting knowledge and advanced technological skills. This combination ensures that entry-level accountants are not only adept at handling current job requirements but are also prepared for future challenges in the evolving world of accounting.

Recommendations from Boyce (1999) stress the alignment of accounting curricula with workplace requirements. Collins (1996) emphasizes the need for authenticity in designing educational environments, reflecting the real-world demands of the accounting profession. Studies on information and communication technology (ICT) in education by Martens et al. (2005) underscore the significance of creating learning environments that mirror the practical applications of knowledge students are expected to acquire. Overall, there is a call for educational institutions to prepare graduates with the technological competencies demanded by the contemporary workforce.

Research on the use and perceived usefulness of commercial accounting software packages in developing the learning skills of accounting students is limited (Birt 2001). Beaman et al. (2003) found that incorporating such software into accounting curricula did not significantly improve students' understanding of accounting principles. The level of interest or informativeness a student associates with an application is influenced by factors such as vocational choice and intrinsic motivation (Boekaerts and Boscolo 2002). Notably, when assessing learning effectiveness, the perceived ease of use and usefulness of the software

application play crucial roles in shaping a user's attitude toward its adoption (Davis 1989). To gain a better understanding of how computer experience affects the perceived ease of use and usefulness, particularly with software like AutoCount Accounting System, efforts can be made to determine the impact of experience on learning effectiveness for different psychological attributes and learning styles.

Education plays a crucial role in preparing future accountants with the necessary technological knowledge, and one avenue for this is through institutions like Politeknik Sultan Abdul Halim Mu'adzam Shah (POLIMAS). POLIMAS offers Computerized Accounting System (CAS) courses, making it mandatory for Diploma Accountancy students to enroll in these classes. The CAS courses at POLIMAS provide students with exposure to prominent accounting software platforms: Auto-Count Accounting. This hands-on experience allows students to familiarize themselves with the practical use of these software tools, enhancing their skills and readiness for the evolving technological landscape in the field of accounting.

The motivation to learn and actively use accounting software during the study is crucial for fostering a positive attitude toward these tools. This positive attitude, in turn, can significantly impact the students' ongoing utilization of accounting software when they enter the job market. Without genuine motivation, there is a risk that students may only learn to use accounting software for exam purposes and not for practical application in real-world scenarios. This aligns with the findings of Brezavšček et al. (2014), who observed a similar trend in students' acceptance of SPSS software. Recognizing the importance of student acceptance, the current study was undertaken to assess and understand the factors influencing students' willingness to embrace and utilize accounting software effectively.

2.0 Literature Review

In this study, the evaluation of the AutoCount Accounting System's effectiveness in equipping students with essential technology-based skills is based on the concepts of perceived ease of use and perceived usefulness from the Technology Acceptance Model (Davis et al., 1986). Perceived ease of use, as defined by Davis (1989), gauges the degree to which a person believes using a particular system is effortless. This concept measures how easily a student can

overcome technical challenges in learning to use the software, allowing the focus to shift toward understanding accounting concepts. Conversely, perceived usefulness is the extent to which a person believes that using a particular system will enhance their performance (Davis, 1989). As computer technology becomes more prevalent in educational settings, the adoption of such technology must be considered to maximize acceptance effectiveness.

The student's perceived performance level serves as a partial measure of the attitude toward using the AutoCount Accounting System as a learning tool and, consequently, forming an opinion about how informative the AutoCount Accounting System is for understanding accounting concepts. The customized measure of perceived ease of use aligns with Igbaria et al. (1997) to make it specifically relevant to the AutoCount Accounting System case. Additionally, the measure of perceived usefulness, following Davis (1989), is appropriately modified to assess the usefulness of the AutoCount Accounting System case in improving students' understanding of accounting concepts and their real-world application.

2.1 The Acceptance AutoCount Accounting Software

The Technology Acceptance Model (TAM) is a framework that untangles the acceptance of a system based on two key criteria: perceived ease of use and perceived usefulness. This model has been identified and substantiated by earlier studies conducted by researchers such as Davis (1989), and Goodwin (1987). According to Davis (1989), perceived ease of use and perceived usefulness are distinct constructs.

In a study led by Davis et al. (1989), computer acceptance is determined by measuring intention, which is assessed through perceived usefulness and perceived ease of use. The Technology Acceptance Model is recognized as a robust, powerful, and concise model for predicting user acceptance, as emphasized by Venkatesh and Davis (2000). Consequently, this study intends to leverage the Technology Acceptance Model to ascertain students' acceptance of the Computerized Accounting System (CAS) course. By employing this model, the research aims to gauge how students perceive ease of use and the usefulness of AutoCount Accounting Software, providing valuable insights into their acceptance and potential engagement with the technology-based learning platform.

2.2 Perceived ease of use

Perceived ease of use, according to Davis (1989), is defined as the degree to which a person believes that using a specific system is effortless. This concept serves as a measure of how easy or challenging it was for a student to navigate the technical complexities of learning to use the software. The aim is to facilitate a smooth transition so that the focus can shift towards understanding accounting concepts.

In the context of a learning environment increasingly adopting computer technology, the acceptance of such technology is vital to maximize effectiveness. The student's perceived performance level becomes a partial measure of their attitude toward using the AutoCount Accounting System as a learning tool, shaping their opinion about how informative the AutoCount Accounting System is for understanding accounting concepts. The hypothesis of this study is as follows:

H1: There is an association between ease of use and attitude toward acceptance of the AutoCount Accounting System

2.2 Perceived usefulness

The studies, including those by Azleen and Nurul Nazirah (2013) and Muhammad Sharif et al. (2011), have consistently demonstrated that perceived usefulness is a crucial factor influencing users' behavioral intentions. In the context of accounting software, research by Sriwidharmanely and Vina Syafrudin (2012) found a positive and significant effect of perceived usefulness on the behavioral intention to use accounting software. This implies that accounting students are more likely to continue using accounting software if they perceive it as beneficial for their needs. The hypothesis of this study is as follows:

H2: There is an association between usefulness and attitude toward the acceptance of the AutoCount Accounting System

2.3 Research Model

The study's research model is built upon the foundation of the Technology Acceptance Model (TAM), a commonly employed framework in information system research aimed at forecasting the adoption and utilization of information systems (Venkatesh et al., 2003). TAM consists of two key elements that influence users' acceptance of technology: perceived ease of use and perceived usefulness, and attitude toward using the system.

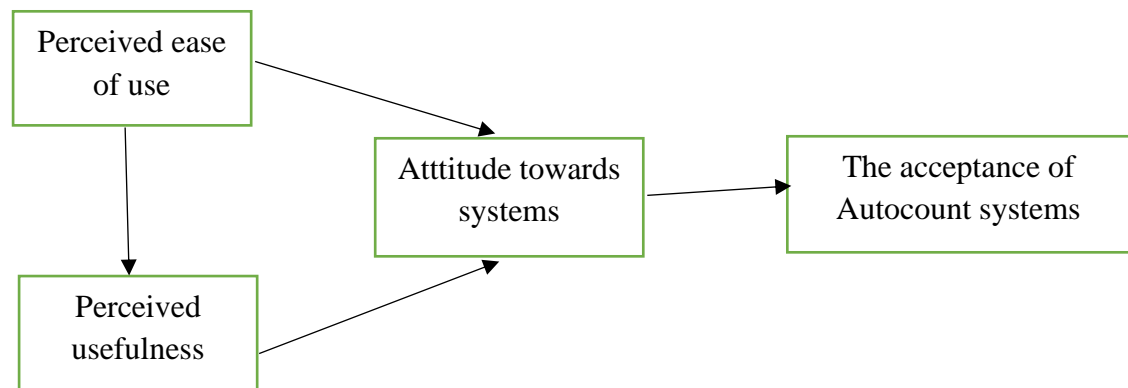


Figure 1: Research model

3.0 Methodology

The research model employed in this study is derived from the Technology Acceptance Model (TAM), a widely used framework in information system studies for predicting the acceptance and usage of information systems (Venkatesh et al., 2003). TAM posits that two key factors influence user acceptance of technology: perceived ease of use and perceived usefulness. These factors are crucial in understanding how individuals perceive and adopt new technological tools, providing insights into the dynamics of technology acceptance in various contexts.

The population for this study consists of 100 students, representing the same group as the sampling frame. These students have completed the Computerized Accounting System (CAS)

course during session 1 2022/ 2023 and session 2 2022/2023. Primary data for the research was collected through questionnaires, adapted and modified from research by Davis (1989) and Malhotra and Galletta (1999). The questionnaires are organized into four sections: Part 1: which focuses on demographics, Part 2: perceived ease of use, Part 3: which addresses perceived usefulness, and Part 4: the acceptance of accounting software and attitude towards them. Respondents used a Likert Scale ranging from 1 to 4, expressing their level of agreement or disagreement from "strongly agree" to "strongly disagree." Google Forms served as the platform for questionnaire responses. This comprehensive approach aims to gather insights into students' perceptions and acceptance of computerized accounting systems and software.

4.0 Result and Discussions

4.1 The study was conducted at POLIMAS. All 100 respondents consist of students who have completed the computerized accounting system course in POLIMAS. It includes those who are working in the accounting field, while others are currently pursuing their degrees in higher education institutions.

Part 1: Demographic Profile.

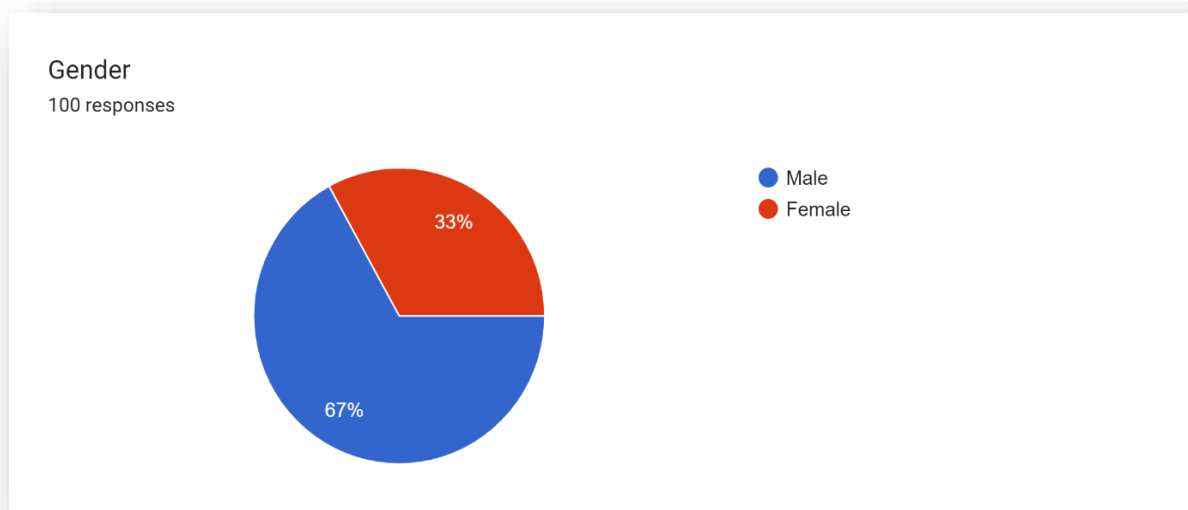


Figure 2: Gender

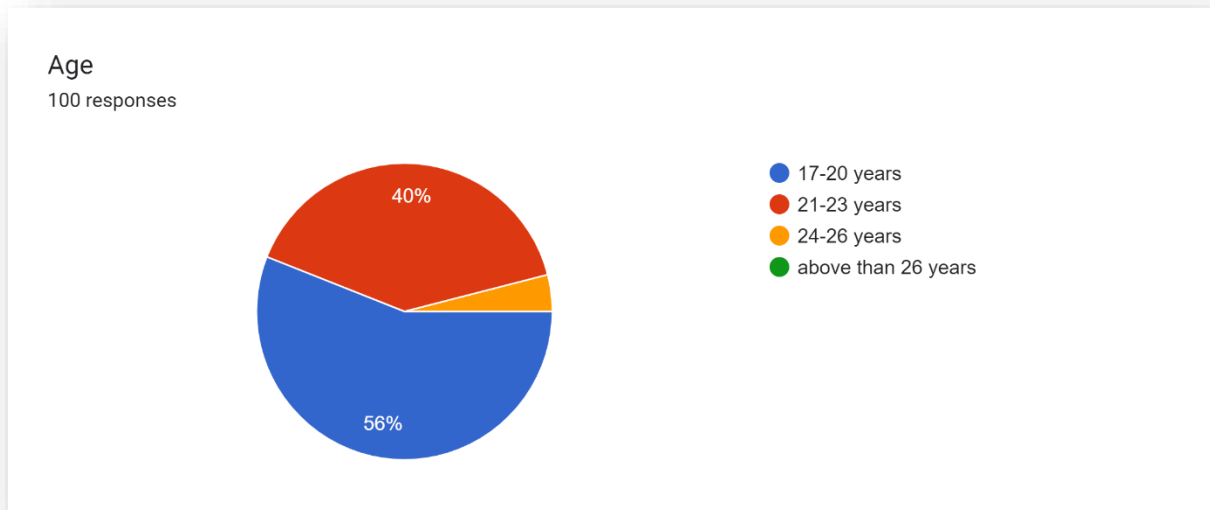


Figure 3: Age

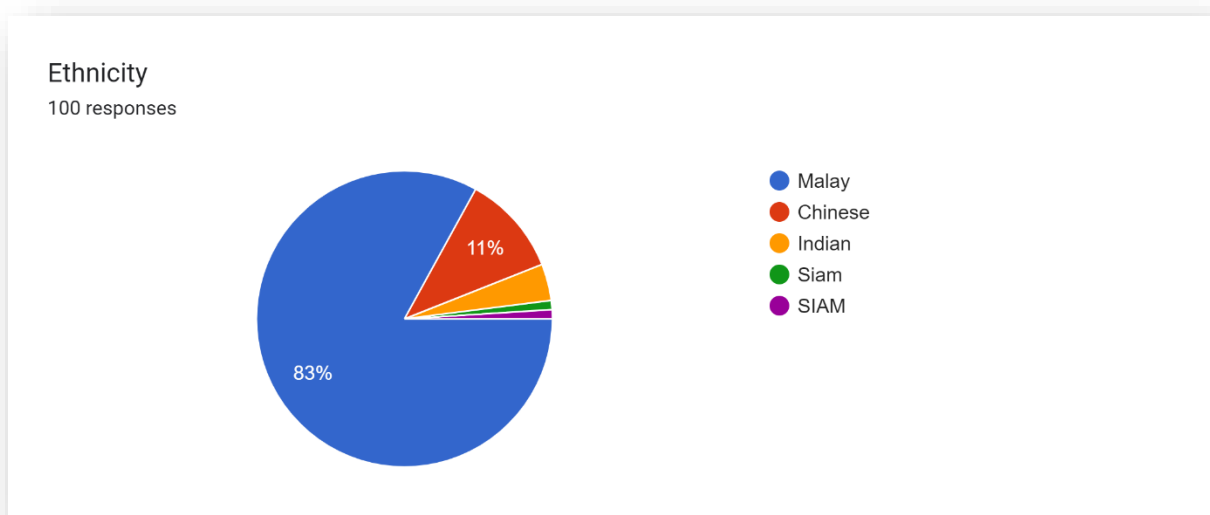


Figure 4: Ethnicity

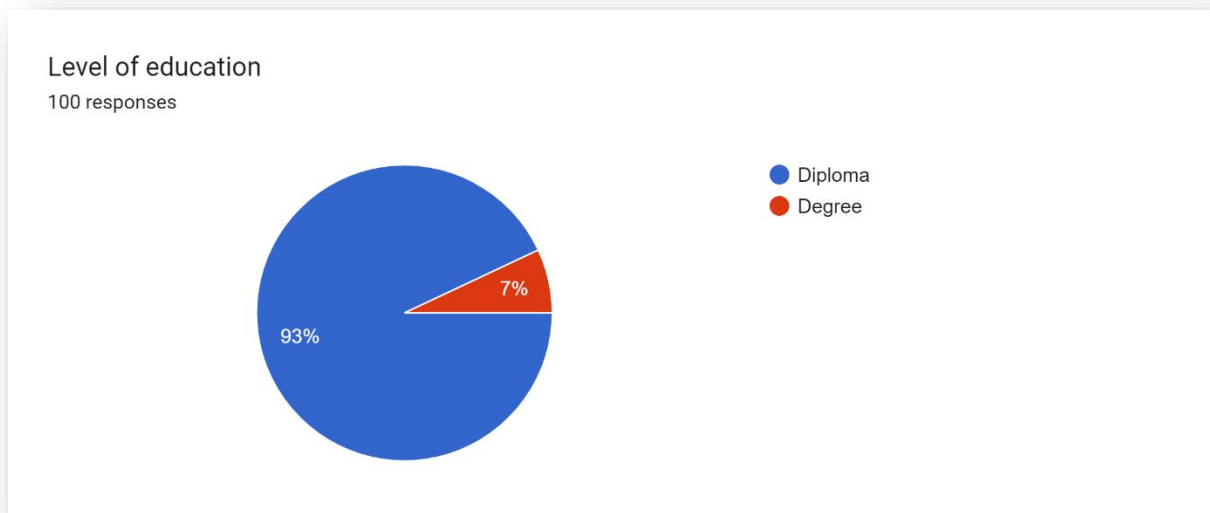


Figure 5: Level of Education

Table 1: Demographic profile

	Item	Percentage
Gender	Male	33%
	Female	67%
Age	17-20 years	56%
	21-23 years	40%
	24-26 years	4%
Ethnicity	Malay	83%
	Chinese	11%
	Indian	4%
	Siamese	2%
Level of education	Diploma	93%
	Degree	7%

Table 1 shows the summary of the demographic profile. The majority of 33% of the respondents were male other 67% were female. 56% of the respondents were between the age of 17-20 years old, followed by 40% of respondents between 21-23 years old and the remaining 4% between 24-26 years old.

The Ethnicity shows that 83% is the respondents from Malay. Followed by Chinese, Indian and Siamese contributed 11%, 4%, and 2%. 93 % of the respondents were in the diploma level and 7% were in pursuing their degree in higher institutions.

Part 2: Ease of use

Table 2: Ease of use

	Strongly agree 1	Agree 2	Neutral 3	Disagree 4	Strongly disagree 5
It was easy to learn to use the AutoCount software.	88%	9%	2%	0%	1%
It was easy to get AutoCount to do what I wanted it to do.	84%	14%	1%	0%	1%
It was easy for me to become skilled at using AutoCount Software.	81%	15%	3%	0%	1%
The AutoCount software was always easy for me to use.	82%	15%	2%	0%	1%

Part 3: Usefulness

Table 3: Usefulness

	Strongly agree 1	Agree 2	Neutral 3	Disagree 4	Strongly disagree 5
The AutoCount assignment helped me understand accounting concepts.	83%	15%	1%	0%	1%
The AutoCount assignment has improved my accounting skills.	83%	15%	1%	0%	1%
The AutoCount helped me understand accounting in the business world.	86%	11%	2%	0%	1%
The AutoCount assignment made the course more interesting.	85%	13%	1%	0%	1%
The AutoCount assignment has improved my technology skills.	87%	11%	0%	1%	1%

Part 4: Acceptance and Attitude towards AutoCount Software

Table 4: Acceptance and attitude towards AutoCount Software

	Strongly agree 1	Agree 2	Neutral 3	Disagree 4	Strongly disagree 5
The use of AutoCount makes me feel I'm a brilliant accounting student.	78%	20%	1%	0%	1%

I love the idea use the AutoCount system in my coursework.	84%	12%	2%	0%	2%
I will encourage my friends to use AutoCount as added added-value skill in the future.	85%	12%	2%	0%	1%
I believe it is a good idea to proceed using AutoCount as a tool in the learning process.	85%	12%	2%	0%	1%

Table 5: Instruments Measurements

Variables	Cronbach's Alpha
Ease of use	0.882
Usefulness	0.875
Acceptance and attitude towards AutoCount Software	0.824

Based on Table 5 above, there is consistency in the research instrument by using Cronbach's Alpha test. The values of the variables over 0.7 and above are accepted. All the variables were accepted above the standard guideline.

Table 6: Cronbach's Alpha guideline

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Table 7: Correlation Analysis

Variables	1	2	3
Ease of use	1	0.801	0.772
Usefulness	0.801	1	0.655
Acceptance and attitude towards AutoCount Software	0.772	0.772	1

Table 8: Scale of correlation

Scale of Correlation Coefficient	Value
$0 < r \leq 0.19$	Very low correlation
$0.2 \leq r \leq 0.39$	Low correlation
$0.4 \leq r \leq 0.59$	Moderate correlation
$0.6 \leq r \leq 0.79$	High correlation
$0.8 \leq r \leq 1.0$	Very high correlation

Results in H1: show there is an association between ease of use and attitude toward acceptance of the AutoCount Accounting System. The figure showed a significant positive high association on the correlation between the variables, thus H1 is accepted.

Results in H2: show there is an association between usefulness and attitude towards acceptance of the AutoCount Accounting System. The is a significant positive high correlation between the variables, thus the H2 is accepted.

5.0 Conclusion

This study utilizes the Technology Acceptance Model (TAM) due to its widespread use in explaining and forecasting user acceptance of information systems. This study suggests that the perceived usefulness of the AutoCount Accounting System significantly impacts its acceptance. This finding aligns with previous research by Ong et al. (2004), and Noor Farazila

and Hashamuddin (2019). It implies that accounting students who perceive the software as beneficial are more likely to embrace it.

Additionally, the study indicates that perceived ease of use also plays a significant role in the acceptance of the AutoCount Accounting System. This result is consistent with studies by Azleen and Nurul Nazirah (2013), Muhammad Sharif et al. (2011), and Sriwidharmanely and Vina Syafrudin (2012). Thus, difficulties in using the software can hinder its acceptance.

Moreover, the study highlights that perceived usefulness strongly correlates with the acceptance of accounting software, echoing findings by Davis (1989). This emphasizes that users primarily embrace accounting software due to its perceived ability to improve their job performance. Subsequently, they also take into account the ease of use of the software.

The practical implication of this study is that the acceptance and attitude of the AutoCount Accounting System are influenced by both perceived ease of use and perceived usefulness. However, it was observed that the system required a step-by-step learning approach in a laboratory environment with guidance from the lecturer. This suggests that a structured teaching and learning environment facilitated the effective acquisition of skills and knowledge related to AutoCount software.

References

- Azleen Ilias & Nurul Nazirah Binti Zainudin (2013). *Factors affecting the computerized accounting system usage in the public sector*. Journal of Internet Banking and Commerce.
- Birt, J.L. (2001) *The MYOB Experience in a First-year Accounting Unit: Issues for the Accounting Educator*, Working Paper
- Boekaerts, M., & Boscolo, P. (2002). *Interest in learning, learning to be interested. Learning and Instruction*, 12(4), 375–382.

Boyce, G. (1999) *Computer-assisted teaching and learning in accounting: pedagogy or product?* Journal of Accounting Education, 17, 191-220

Collins, A. (1996) *Design issues for learning environments*. In S. Vosniadou(Ed.), *International Perspectives on the design of technology-supported learning environments* (pp. 347-361). Mahwah, NJ

Davis, F.D. (1986) *A Technology Acceptance Model for Empirically Testing New End-User Information Systems: Theory and Results*, Doctoral dissertation, MIT Sloan School of Management, Cambridge

Davis, F.D. (1989) *Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology*, MIS Quarterly, 13(3), 319-339.

Goodwin, N.C. (1987). *Functionality and usability*. *Communications of the ACM*, 30,229-233.

Havelka, D. (2003) *Predicting Software Self Efficacy among Business Students: A Preliminary Assessment*, Journal of Information Systems Education, 14(2), 145-150.

Holcomb, T. and Michaelsen, R. (1996) *A Strategic Plan for Educational Technology in Accounting*, Journal of Accounting Education, 14, 277-292.

Igbaria, M., Zinatelli, N., Cragg, P. and Cavaye, A.L. (1997) *Personal Computing Acceptance Factors in SmallFirms: A Structural Equation Model*, MIS Quarterly, 21(3), 279-305.

Martens, R.L., Gulikers, J. and Bastiaens, T. (2005) *The impact of intrinsic motivation on e-learning in authentic computer tasks*, Journal of Computer Assisted Learning, 20, 368–376

Noor Farazila Radzi & Hashamuddin Yaakob (2019). *The Acceptance Of Accounting Software Among Accounting Students*. Jurnal Kejuruteraan, Teknologi dan Sains SosialVol. 1 Issue 1 (Special Issue - NaCoSC'19)

Sriwidharmanely & Vina Syafrudin (2012). *An empirical study of accounting software acceptance among Bengkulu city students*. Asian Journal of Accounting and Governance, 3: 99–112 (2012).

Venkatesh,V., Morris, M. G. and Davis, F. D. (2003). *User acceptance of information technology: toward a unified view*. MIS Quarterly Vol. 27 No. 3, pp. 425-478/September 2003.