Cost-It-Right (CIR) as Learning Innovative Tool in Management Accounting

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Abstract: This paper aims to share the viewpoint of the authors on the understanding and importance of using innovative tool in teaching and learning management accounting subject. Rapid changes in technologies require educators to blend innovative advancement as a new way of teaching method with conventional approach. This study was conducted by analysing findings from previous studies and associated with the facts that occur at this time. It provides evidence that the creation of the Cost-It-Right (CIR) system offers users with hands-on experience in determining the cost of a product and setting its selling price. Furthermore, this system may help educators in delivering lectures to their students in a creative method. Students will be guided on how to use the system while absorbing the knowledge of job and batch costing simultaneously, capture their interests and turns the learning process into a more engaging and enjoyable journey.

Keywords: Cost-It-Right (CIR), innovative tool, Job and Batch Costing, Management Accounting, Teaching method

Introduction

The rising interest in e-learning is becoming evident in both the education and corporate sectors. Precisely, e-learning in corporate sector can be regarded as a tool to save training cost. Meanwhile, on education point of view, e-learning can be considered as a means of knowledge transfer whilst Latt (2012) described it as an innovation tool to improve learning and teaching process, and also to encourage better communication between educators and students.

In addition, Rosenberg (2001) defined e-learning as technologies used to deliver a broad array of solution that enhance knowledge and performance. Particularly, e-learning tools are the software used to develop content, navigation structure, interface design and multimedia elements such as text, video, audio, animation and graphic (Veeramani, 2010). These tools range from blogs, wikis, instant messengers, social networks, podcast, vodcasts, blackboards, game-based learning and others.

Due to the evolution of technologies, it is seen as a beneficial approach for the "do net" generation as a new way of learning, specifically in the context of management accounting education and thus promoting quality in learning. Consequently, numerous innovations are being invented especially in learning accounting subject to enhance students' understanding and performance. Apart from that, e-learning in accounting subject offers an alternative way of teaching method besides conventional method, enabling students to concentrate better on their accounting subject studies.

Teaching and learning management accounting subject demands educators' and students' attention and hard work to enhance understanding. According to Sari (2018) and Othman and Zambi (2021), students are engaging in independent study outside the classroom either individually or in groups to increase their understanding and performance in accounting subjects. Extra efforts such as

reading additional materials on new topic, participation during class, discussion among peers and attempting questions will eventually stimulate their interest in learning.

Not only that, Sari (2018) emphasised the use of comics as learning media to stimulate students' critical thinking and ethical discussion in classroom. Interestingly, this approach can create effective, attractive, fun, understandable teaching, and resolve problems with time limitation. Besides that, teaching tool by adapting gamification approach such as colour-coded magnetic blocks and penalty cards namely "Accounting on the Block" (AOTB) is perceived to be more effective, improving student's performance and promote two-way communications (Din et al., 2018). Furthermore, Othman and Zambri (2021) identified that Facebook can be used as an alternative learning tool in management accounting subject. The study revealed that the students had a positive attitude in their academic activities and performance when they were using Facebook. Therefore, this study focuses on the using of Cost-It-Right (CIR) system as learning innovative tool in Management Accounting subject as a new way of teaching method with conventional approach. On top of that, active participation among students is also likely to enhance course learning outcomes.

Literature Review

There is a growing interest in applying innovative tool in education system especially in the accounting subject. This is because accounting subjects are known as challenging and often contribute to high failure rate in the examination results (Husin, Din, Jamaluddin, Fadzillah & Ahmad, 2015). Other than that, the conventional teaching approaches such as lectures, seminars and textbooks tend to render the class boring, leading students to face difficulties in understanding the subject (Narayanasamy, 2020; Sari, 2018). Consequently, passive learning environment and ability to foster deep learning outcomes are questionable (Joshi & Chugh, 2009).

Hence, educators need to find the best initiatives to foster creativity and ensure the learning objective are achieved. Many innovative learning tools have been invented and created to harness the benefits of advanced technologies in teaching and learning accounting subjects. Various approaches on the use of innovative tools in education system have been documented such as gamification (Din et al., 2018), teleconferencing (Panigrahi, 2012); the use of comics as learning media (Sari, 2018), excelbased template to calculate job and batch costing (Mustafa et al., 2021), the use of educational blogs for reflective thinking (Joshi & Chugh, 2009), social networking sites (Othman & Zambi, 2021) and the use of clicker devices as a teaching tool (Camacho-Miñano & Del Campo, 2012). These studies show a positive impact when using innovative tools to deliver the knowledge. In addition, a study by Latt (2012) examined the effect of e-learning tools on university students as users and established factors which are significant to their learning process. Remarkably, the findings stated that students are generally willing to accept e-learning tools for their learning process.

At universities, especially undergraduate students, they may encounter some difficulties in learning the cost accounting subject. Therefore, educators need to pay close attention to these students, and the students themselves must show full commitment (Thein, 2006) to overcome these difficulties. Lack of knowledge on basic accounting, loss of memory retention on topic learnt, and lack of practical field experience (Thein, 2006) are among the difficulties listed when learning accounting subject. Many studies depicted that educators should create an authentic environment, by using available innovative technologies in class to ease the learning process (Fauziyyah, 2020; Narayanasamy, 2020; Panigrahi, 2012; Sari, 2018; Thein, 2006; Kashora et al, 2016; Camacho-Miñano & Del Campo, 2012, Din et al., 2018).

Nowadays, the extensive use of smart technology and devices among students is inevitable. Prensky (2001) even named the generation of young people born since 1980 as digital native – the native users of the digital language of computers, video games and the Internet. To cope with this matter, it is important for educators to quickly adapt and apply teaching and learning approaches that enables the knowledge transfer process to become more engaging and interesting. In this era, conventional approach (or teacher-centric mode) with the restricted size of classroom, synchronous way of teaching and one-way learning seems insufficient to make the students actively participate and hook their interests in the learning process (Gupta, 2023). Additionally, conventional or traditional classes tend to promote surface-level learning in which students memorise information without seeking further knowledge of the subject, whereby their primary focus is often on completing

assessments to pass the subject (Hall et al, 2004). In contrast, students who learned through e-learning reported positive experiences, claiming better performance and attitude (Aljaser, 2019), flexibility in learning (Shamsudin, et al, 2023; Gupta, 2023) and enhance their self-confidence and creativity (Alneyadi et al, 2023). Therefore, it is highly recommended that educators adapt to this "new environment" and implement new tools and technologies in the learning process to foster a relationship between educators and learners (Fauziyyah, 2020). A study by Chaves et al (2016) stated a relationship between attitudes of students regarding learning and the teaching methods used by teachers. Thus, to have an attractive, interesting, and fun learning environment, educator must be ready to improvise their conventional methods by integrating innovative tools in the process of delivering the knowledge.

Indeed, various studies have shown that innovative tool contributes to higher students' performance and perceived the learning process to be more interesting, interactive, and engaging (Din et al, 2018; Fauziyyah, 2020; Thein, 2006; and Joshi & Chugh, 2009; Pedron, 2006), increasing the level of knowledge and enhance understanding of participants (Panigrahi, 2012). Moreover, these alternative learning tools improve the comprehension and students' attention in subjects and learning motivation (Camacho-Miñano & Del Campo, 2012). For instance, comics approach creates new learning atmosphere which can help students to improve their understanding and attract students' attention in learning accounting cycle (Sari, 2018).

Nevertheless, educators must possess the ability to learn and be innovative in adapting with the current trends of students' learning approach (Fauziyyah, 2020). Therefore, educators need to be more open-minded, innovative, and creative persons in developing learning methods to ensure best results can be obtained from the education system..

Research Objective

The general objective of this paper is to enhance understanding and the importance of using innovative tools in teaching and learning of management accounting subject. Additionally, specific objectives are discussed as follows:

- 1. To consider the adoption of innovative tools in face-to-face learning/conventional approach.
- 2. To promote Cost-It-Right (CIR) System as a teaching and learning tool in Management Accounting in tertiary education.

Research Methodology

This study is a secondary research, focusing on the importance of teaching and learning process in Management Accounting using innovative tools. The findings from previous studies were analysed and linked to this paper. Sixteen (16) sources of references were collected and analysed for this study, consisting of eleven (11) latest excerpts from scholarly journal articles, three (3) e-proceedings, one (1) unpublished master's dissertation and one (1) research report available on the Internet, relevant to the topic discussed.

Findings and Discussion

The accounting subjects cover the areas of financial accounting and reporting, management accounting, auditing, taxation, and accounting information systems. As for management accounting, this area concerns with managing the internal operation of an organisation. In addition, management accounting also emphasises in improving organisation's/ business's performance and position, thus, increasing the stakeholder's value. In fact, management accounting has been taught since the 1950s, with a strong focus on the decision-making process (Kashora et al, 2016).

According to Thein (2006), management accounting is often regarded as one of the tough subjects for undergraduate level students in universities. High standard of examination and specific continuous assessment are designed to test cognitive and problem-solving skills aligned with the requirement set by professional bodies and industries.

Management accounting subject also necessitates students to work in groups to enhance their ability to work in teams in the workplace (Kashora et al, 2016) and requires students to possess several skills such as ICT literacy and effective communication skills. On top of that, students are expected to do a lot of exercises to ensure they really understand on the management accounting topics because it requires different approaches or techniques in solving the problems.

Moreover, educators will design scenario or problem-based questions so that students may gain exposure and be familiarised with real-life scenarios. This approach enables students to answer questions accordingly. Hence, deep understanding and special guidance are crucial for students to answer the question well. For instance, in Job and Batch costing topic, students are required to differentiate types of costing method to be applied, either in batch or job costing scenario, and they are also required to prepare and compute the job or batch cost card accordingly.

Applying Cost-It-Right (CIR) System to Enhance the Teaching of Job and Batch Costing

Educators are responsible to ensure that the learning objective is achieved regardless of how tough the subject is in the eyes of the students. Due to that, various learning tools have been created to improvise the existing conventional approach. Many studies have proven that the use of innovative tools in delivering knowledge to students provide positive effects even though the subject matter is difficult to understand (Din et.al, 2018; Sari, 2018; Panigrahi, 2012; Camacho-Minano & Del Campo, 2012; Othman & Zambi, 2021; Pedron, 2006).

In the context of learning job and batch costing, specifically, for MAF151 – Fundamental Cost Accounting, which is taken by Semester 2 students of Diploma in Accountancy, students are required to understand the concepts and application of basic costing. Particularly, they need to understand how to use the cost information provided to determine relevant costs and selling price of a product. Specifically, the students must know the correct way to ascertain cost and selling price because there will be implications if the ascertainment of cost is applied wrongly. Lectures and sufficient examples will be delivered to students in class to ensure their students understand easily. However, using conventional method to deliver lectures may face difficulties to attract the students' interests or making them actively engaged in class discussions. Therefore, innovation is required to capture the students' interests and turn the learning process into an enjoyable learning journey.

Hence, to promote students' engagement while learning about job and batch costing, Cost-It-Right (CIR) comes into hand. This alternative learning tool is created to help students gain knowledge on basic costing and how to calculate each cost unit accurately. CIR is a system that provides users with hands-on experience in determining cost of a product and setting selling price (Rahman et al, 2021). This learning process can help educators in delivering lectures to their students in a creative way. Students will be guided on how to use the system and absorb the knowledge of job and batch costing simultaneously. In order to ease the teaching and learning process, a simple case study is constructed where the students will fill out relevant information in the case study at the appropriate columns before a statement of a job cost card is completed. At the end of the learning process, students should be able to calculate the selling price per unit of the product, totals costs involved and the estimated profit.

Undeniably, CIR can be an alternative learning tool in fulfilling the syllabus requirement in basic costing level. Mostly, undergraduate students in universities are lack of practical field experience, lack of and/or forgetfulness of required background knowledge of financial accounting and cost accounting (Thein, 2006). Thus, by adopting CIR system during lectures for job and batch costing topic, it may help to provide positive impacts in teaching and learning process (Rahman et al, 2021; Mustafa et al, 2021).

Conclusion

Based on the literature collected and analysed for this study, it can be concluded that students who learn accounting subjects, especially management accounting, using innovative tools may find the learning process more engaging. Consequently, they can quickly improve their understanding.

Innovative tools such as gamification, teleconferencing, comics and softwares have proven positive impacts in delivering knowledge where students become more participative in class when compared to conventional teaching method.

This study offers valuable insights into the benefits of employing innovative tools in both educators and students' experiences, enhancing the teaching and learning journey. One such alternative learning tool is Cost-It-Right (CIR), a system designed to help users grasp the determination of relevant costs and setting selling price. This innovative tool is suitable to be adopted for Job and Batch Costing topic, as it provides students with hands-on experience and assists educators to deliver lectures in a creative manner. However, there are limitations in this study where it primarily discusses on reviewing previous researches regarding the advantages of innovative tool in teaching and learning, and the role of educators in creating the learning process more interesting and effective. Hence, future research endeavours should consider including primary data on how the Cost-It-Right (CIR) system benefits students studying Cost Accounting within the Diploma in Accountancy program. Additionally, conducting comparisons between the performance of students using CIR and those taught through conventional teaching method could provide valuable statistical evidence for further analysis.

References

- Alneyadi, S., Wardat, Y., Alshannag, Q., & Abu-Al-Aish, A. (2023). The effect of using smart elearning app on the academic achievement of eighth-grade students. *EURASIA Journal of Mathematics, Science and Technology Education*, 19(4), em2248.
- Aljaser, A. M. (2019). The effectiveness of e-learning environment in developing academic achievement and the attitude to learn English among primary students. *Turkish Online Journal of Distance Education*, 20(2), 176-194.
- Camacho-Miñano, M. M., & Del Campo, C. (2012). Useful interactive teaching tool for learning: Clickers in higher education. *Proceedings EDULEARN12*.
- Chaves, H.V., & Maia Filho, O., & Melo, A. (2016). Education in times net generation: how digital immigrants can teach digital natives. HOLOS, Year 32 Vol. 2, 347-356.
- Din, N. M., Tarmuji, N. H., Ahmad, M. A. N., Jamaluddin, J., Fadzillah, N. S. M., & Jabar, F. A. (2018). The Effectiveness of an Innovative Tool for Teaching Published Financial Statements. *International Journal of Academic Research in Business and Social Sciences*, 8(11), 1549-1560
- Fauziyyah, N. (2020). Smart Educators For Digital Age Students. *Insania*, Vol. 25 No. 1, 23-30.
- Gupta, Monika. "Technologies behind E-Learning: A New Paradigm of Higher Education." *Journal homepage: www. ijrpr. com ISSN* 2582: 7421.
- Hall, M., Ramsay, A., & Raven, J. (2004). Changing the learning environment to promote deep learning approaches in first-year accounting students. *Accounting education*, 13(4), 489-505.
- Husin, Z., Din, N. M., Jamaluddin, J., Fadzillah, N. S. M., & Ahmad, M. A. N. (2015). Accounting on the Block: An alternative teaching tool towards enhancing Malay students' performance heritage in accounting. Paper presented at the KONAKA 2015, UiTM Pahang.
- Joshi, M., & Chugh, R. (2009). New paradigms in the teaching and learning of accounting: Use of educational blogs for reflective thinking. *International Journal of Education and Development using Information and Communication Technology*, Vol. 5, Issue 3, 6-18.
- Kashora, T., Van der Poll, H. M., & Van der Poll, J. A. (2016). E-learning And Technologies For Open Distance Learning In Management Accounting. *Africa Education Review*, Vol. 12 No. 1, 1-19.
- Latt, S. H. L. (2012). Assessing the awareness and perception of students in using e-learning tools in a tertiary education: A case study on Sunway University Malaysia (Unpublished master's dissertation). Universiti Tunku Abdul Rahman, Kuala Lumpur.
- Mustafa, L. M., Rahman, N. H. W. A., Jamaluddin, S., Bahari, A. B. M., Yacob, N. H. M., & Fadzillah N. S. M. (2021). Optimizing Your Cost With Cost-It-Right. The 4th International Indonesia-Malaysia-Thailand Symposium on Innovation and Creativity. Symposium conducted at Universiti Teknologi MARA Jengka, Pahang.
- Narayanasamy, S. (2020). What makes accounting interesting for learners? Viewpoint of a teacher from India. *Asian Journal of Accounting Research*, Vol. 5 No. 1, 103-118.

- Othman, R., & Zambi, N. M. (2021). Social Media as Learning Tool in Cost and Management Accounting. *ANP Journal of Social Science and Humanities*, Vol. 2 No. 2, 39 46.
- Panigrahi, M. R. (2012). Capacity Building Of Teachers Through Distance Mode Using Teleconferencing As An Innovative Tool. *Turkish Online Journal of Distance Education*, Vol. 13 No. 2, 256-266.
- Pedron, C. (2006). *An innovative tool for teaching structural analysis and design: Research report.* Retrieved from website: https://doi.org/10.3929/ethz-a-005299673.
- Prensky, M. (2001). Digital Natives, Digital Immigrants Part 1. On the Horizon, Vol. 9 No. 5, 1-6.
- Rahman, N. H. W.A, Jamaluddin, S., Bahari, A. B. M., Mustafa, L. M., & Yacob, N. H. M. (2021). Cost-It-Right: Finding the best approach for product costing. *Gading (Online) Journal for Social Sciences, Universiti Teknologi MARA Cawangan Pahang*, Vol. 24(01), 16-21.
- Rosenberg, M. (2001). Defining eLearning. URL: http://www.nwlink.com~donclark/hrd/elearning/define.html. Accessed on 29 August 2022.
- Sari, V. F. (2018). Comics as an Alternative Learning Media for Introductory Accounting Course. *Advances in Economics, Business and Management Research*, Vol. 57, 73-78.
- Shamsudin, A., Mamat, S.N., Pauzi, N.F.M., & Karim, M.S. (2023). Adapting to Changing Expectations: Accounting Students in the Digital Learning Environment. *International Journal of Information and education Technology*, Vol. 13, No.1, 166-174.
- Thein, M. (2006). Teaching Managerial Accounting: A Discussion On Pedagogy. *ABAC Journal*, Vol. 26 No. 1, 31-40.
- Veeramani, M. (2010). E-learning: A Conceptual Framework. *International Journal of Educational Research and Technology*, Volume 1 (2), 20-24.