

FROM FLOUR TO FIGURES: VISUALIZING JOB COSTING IN THE BAKERY INDUSTRY

Suzana San^{1*}, Nik Zam Nik Wan², Syuhaila Razak³, Azilawati Abdullah @ Abd Aziz⁴
& Noraida Saidi⁵

^{1,2,3,4,5} Faculty of Accountancy, Universiti Teknologi MARA Cawangan Kelantan

*Corresponding author: suzan786@uitm.edu.my

ABSTRACT

Job Costing is perceived as a difficult topic for non-accounting students to understand, as it requires thorough calculations and numerical data. An infographic illustration was designed to present the Job Costing process in a simple and more visual way to address the issue. The bakery industry was selected to provide relatable real business and visually engaging materials to further enhance students' comprehension of the concepts. The infographic breaks down the cost elements of Job Costing, making it easier for students to grasp the concepts and facilitate the cost calculation. An interactive quiz was created to foster fun and engaging classroom experiences for both students and lecturers. The novelty of these interactive tools is the ability to transform traditional teaching approaches into visual and engaging experiences, thereby improving students' performance and lecturers' teaching methods. The use of familiar industry also increases students' relatability and comprehension of this concept. Furthermore, the adaptability of this innovation to e-learning platforms, educational content, and teaching materials offers potential commercial applications. In conclusion, the integration of infographics and interactive quizzes developed effective teaching methods for Job Costing. Consequently, these interactive tools transformed the difficult topic into an enjoyable and engaging learning experience for non-accounting students.

KEYWORDS: *Infographic Illustration, Interactive Quiz, Job Costing, Non-Accounting Students*

PROBLEM AND OBJECTIVE

Razak, Kassim and Daud (2019) assert that teaching Costing and Management Accounting to non-accounting students can be challenging due to their fear of accounting subjects. Job Costing is one of the topics covered in the Costing course for non-accounting students at Universiti Teknologi MARA (UiTM). Job Costing is perceived as a difficult topic because it requires detailed calculations and strong numerical and analytical skills. Most students encounter difficulty differentiating the cost elements of Job Costing, and they find that the illustrative examples given in the classroom do not connect to real-life situations. Prior researchers found that infographics help simplify complex topics to enhance students' engagement, retention, and critical thinking (Bhat & Alyahya, 2024). Thus, this project created an infographic illustration to present Job Costing in a simple and more visual way to make the teaching and learning process attractive. The bakery industry, as a familiar and practical example, was used in the classroom to help students understand the concepts through relatable and visually engaging materials. An interactive quiz was created to assess students' comprehension and foster an active classroom environment. Razak et al. (2019) discovered that educational games in Costing subjects were more effective, motivating, and engaging than traditional teaching methods. It is an effective method, benefiting both teachers and students while improving the quality of education.

(Lampropoulos, 2023) and comprehension of the learning (Ucus, 2015). Conceicao (2022) advocates for the use of interactive tools as active learning tools to encourage students to actively participate in the learning process.

DESIGN DESCRIPTION

The first step is the lecturer transforms Job Costing notes into infographic illustrations that break down the elements of direct materials, direct labour, production overhead, and non-production overhead. For example, the lecturer identifies the breakdown of cost elements of making a cake in the bakery industry. The infographics facilitate students' comprehension of the cost calculations involved in cake production. Thereafter, set a suitable selling price to calculate the profitability for the business. The second step is that the lecturer created an interactive quiz to assess students' understanding of this topic and make the learning process fun and engaging for students.

VISUALS

The following are the infographics and an interactive quiz on Job Costing:



Figure 1.0: Infographic Illustrations of Job Costing

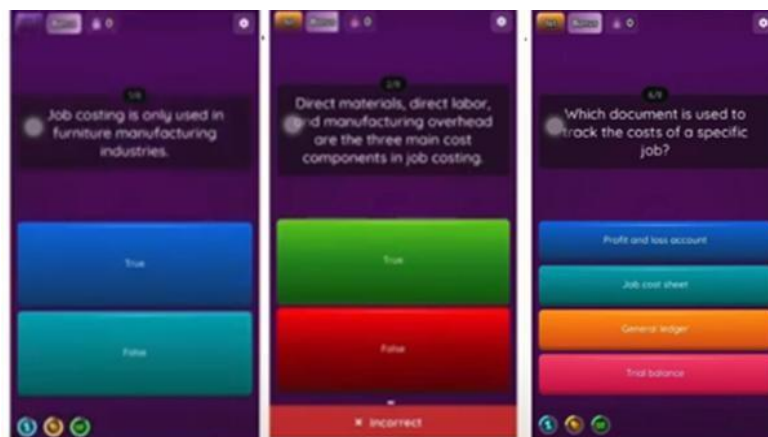


Figure 2.0: An interactive quiz on Job Costing

NOVELTY AND UNIQUENESS

The project is distinguished by its innovative use of infographic illustrations within a familiar industry designed to simplify the complex concept in the Costing course. In contrast to the traditional approach of teaching Job Costing, which depends on text materials that hinder students' comprehension of the concept. The essential cost elements in producing a cake in the bakery industry were depicted with icons or images to enhance engagement and facilitate students' comprehension of the idea. The interactive quizzes encourage active participation among non-accounting students, distinguishing them from traditional static learning materials. The lecturer can also provide immediate feedback on students' performance and easily identify areas for improvement to enhance their learning experience on this topic.

BENEFITS TO MANKIND

The integration of infographic illustrations with engaging quizzes provides many benefits to non-accounting students and the lecturer. The first benefit is that students easily understand the Job Costing calculation, as the infographic helps them better grasp the concept. Consequently, it can enhance students' performance on this topic. The second benefit is using the bakery industry as a relatable example allows students understand the application of Job Costing in real business. Additionally, the use of Quizizz to create fun online quizzes resulted in improved engagement and promoted active participation among non-accounting students. Therefore, these factors could foster a positive learning environment for both students and lecturers.

COMMERCIAL POTENTIAL

It has commercial potential as it enhances the effectiveness of the learning process of the Introduction to Cost Accounting course for non-accounting students at UiTM. The growing demand for online learning platforms presents the opportunity to offer industry-based learning tools for this course, which can be marketed to educational platforms and be adapted to different industries. This approach differs from the traditional method that relies on static learning materials. Consequently, these interactive learning tools suit the demand for cost-effective educational resources and make complex topics more accessible to a broader learner.

CONCLUSION

In conclusion, the integration of infographic illustrations and interactive quizzes is an innovative technique in teaching the Costing course to non-accounting students at UiTM. This approach has transformed traditional ways of teaching using text materials. Consequently, it offers several benefits in lecturers' teaching methods and positively impacts students' performance. Additionally, students' understanding is further improved by using the bakery industry as a relatable example in real business. Overall, these interactive learning tools create enjoyable and engaging educational experiences for non-accounting students. The commercial value of these interactive tools provides an opportunity for their integration into online educational platforms, thereby making them accessible to a wider range of learners.

REFERENCES

- Bhat, S. A., & Alyahya, S. (2024). Infographics in educational settings: A literature review. *IEEE Access*, 12, pp. 1633–1649.
- Conceição, A.C (2022). Dynamic and Interactive Tools to Support Teaching and Learning. *Mathematical and Computational Applications*, 27(1), pp. 1-19.
- Lampropoulos, G. (2023). Educational benefits of digital game-based learning: K-12 teachers' perspectives and attitudes. *Advances in Mobile Learning Educational Research*, 3(2), pp. 805- 814.

Razak, R. A., Kasim, E. S., & Daud, D. (2019). Smart Costing Kit: Game-based learning for cost and management accounting. *ESTEEM Academic Journal*, 15, pp. 1-10.

Ucus, S. (2015). Elementary school teachers' views on game-based learning as a teaching method. *Procedia-Social and Behavioral Sciences*, 186, pp. 401-409.