

# An Exploration of Experiential Learning Using Business Simulation and Gamification: A Case Study

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**To cite this article (APA):** Tan, R. F., Kamaruzzaman, Z. A., Kamaruzzaman, Z. A., & Murti, G. T. (2023). An exploration of experiential learning using business simulation and gamification: A case study. *Journal of ICT in Education*, 10(2), 98-112. <https://doi.org/10.37134/jictie.vol10.2.6.2023>

**To link to this article:** <https://doi.org/10.37134/jictie.vol10.2.6.2023>

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## Abstract

Education with advanced technologies improves the learning of students. Experiential learning prepares students to thrive in today's digital world. Experiential learning and advanced technologies in education offer a lot of room to be explored. Thus, the objective of this study is to explore the student's experience in using a business simulation and gamification platform on the student's knowledge of business competency and soft skills. This study also aimed to discover the experiential learning experience using the MonsoonSIM platform as a case study. This study used content analysis and narrative analysis to analyse the results. The focus group interview was carried out with the Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) from Gambang and Pekan students who have played MonsoonSIM more than 10 times. The results indicated that business simulation and gamification can improve the students' knowledge and soft skills by using MonsoonSIM. This study also provided significant implications for experiential learning, business simulation and gamification in the future for Malaysian education.

**Keywords:** experiential learning, business simulation, gamification, MonsoonSIM.

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## INTRODUCTION

Education 4.0, driven by advanced technologies and the adoption of 21st-century pedagogies, significantly enhances student learning. In today's business environment, characterized by volatility,

uncertainty, complexity, and ambiguity (VUCA), students need preparation for such conditions (Jonathan & Laik, 2019; Sudin et al., 2022; Abdul Ghafar et al., 2023). Both the public and private sectors benefit from the progress of education provided by business simulation and gamification, which are described as serious games or mental training using computer games with set rules (Michael, 2006). Moreover, as highlighted by Aries et al. (2020), gamification influences and motivates participants in the learning process, leading to the achievement of desired learning outcomes. According to the Association to Advance Collegiate Schools of Business (AACSB), "Students engage in experiential learning designed to be inclusive different for each student, and increase the knowledge in practice".

However, there are insufficient studies of business simulation and gamification as an educational tool, especially in Malaysia (Mohd Yatim et al., 2018). The effectiveness of these tools in higher education settings is mixed and still uncertain due to the complex environment within the higher education contexts (Khaldi et al., 2023; Ahmad Shahrizal et al., 2022). In other developed countries, over the past decade, the usage of business games has continued to increase significantly. Business simulation and gamification are widely accepted as educational tools despite the lack of supporting evidence about their effectiveness in the learning process and outcome especially in developing countries (Alkaabi, 2023). Thus, Malaysia Higher Education Institutions should implement business simulation and gamification to support the national education agenda. Furthermore, business simulation has not kept up with technological advancements in several areas (Dharmastuti et al., 2022). Universities must use diverse technologies and efficient communication systems in their business education practices in order to close the gap with the real business world and adjust to the trend of globalisation. This is because university technology education has not kept up with the demands of the modern business world (Dharmastuti et al., 2022). Malaysia Higher Education Institutions should continuously improve the learning process by applying technology and information systems to help students learn new knowledge and skills through the practice application of real-case business scenarios via simulation and gamification.

Thus, the aims of this study were:

RO1: To understand the impact of the student experience in using a business simulation and gamification platform on students' business knowledge and understanding.

RO2: To study the impact of the students' experiences in using a business simulation and gamification platform on their soft skills.

This study would also offer a new perspective on the findings of previous studies. This study probed the research questions as follows:

RQ1: How do students' experiences in using a business simulation and gamification platform impact the students' business knowledge and understanding?

RQ2: How do the students' experiences in using a business simulation and gamification platform impact the student's soft skills?

In this qualitative case study, the researcher bridges the theoretical and practical gap of previous literature. Business simulation and gamification are known as an effective way to learn business processes and management in modern enterprises but there is a limitation in research that links the relationship together (Mohd Yatim et al., 2018). Besides that, business simulation and gamification have their challenge to be practiced in business education (Dharmastuti et al., 2022). In addition, the Experiential Learning Theory (ELT) have limitations in the method, based on the observations made by Jonathan and Laik (2019). There is a knowledge gap that elucidates the factors that influenced the student's usage of business simulation games (Mohd Yatim et al., 2018). There is also a large gap between the knowledge and skills required for the real world of business and the academic knowledge and skills acquired through education (Farashahi & Tajeddin, 2018). Other than that, previous studies used different types of business simulation games (Mohd Yatim et al., 2018), while this study will focus on MonsoonSIM (<http://www.monsoonsim.com/>).

In this study, the theoretical significance is that this research will contribute to the enhancement of the experiential learning theory by uplifting the business and entrepreneurship body of knowledge via understanding through experiences. The practical significance of this study is that business simulation and gamification promote the development of 21st-century skills and promote the 4th industrial revolution (IR 4.0) as a valuable resource for acquiring practical knowledge in business education and for facilitating teaching and learning in universities with a focus on economics and management. Additionally, business simulation and gamification offer an effective learning environment that encourages reflective observation and hands-on experimentation through interactive decision-making and trial-and-error learning. Thus, these benefit both students and lecturers, young fresh graduates, and the education sector.

The content of this paper is provided as follows: Section 2 summarizes the literature review and Section 3 explains the methodology of this study. The findings and outcomes of this study are provided in Section 4. Lastly, conclusions and future studies are reported in the final section.

## **LITERATURE REVIEW**

This section summarizes the main literature related to the research topic, starting with experiential learning theory, business simulation and gamification, as well as its benefits and impact on students, and finally, the platform used in business simulation and gamification.

### **Experiential Learning Theory**

The theory of Experiential Learning, as described by Huang and Yang (2022) and Karami and Tang (2019), outlines the process of translating experiences into practical knowledge. This transformation occurs through reflection on experience, beliefs, and assumptions. Experiential Learning methods focus on the student. Learners have the opportunity to examine the problem from multiple perspectives and devise suitable solutions without being influenced. This process enhances skills, abilities,

behaviours, and ways of thinking through knowledge consolidation (Nguyen, 2022). Meanwhile, Obi et al. (2022) highlight that experiential learning activities bolster student's critical thinking abilities, enabling them to assess and appreciate contrasting viewpoints. On the other hand, educators have discussed and encouraged the integration of community service learning and experiential learning into the course of study. The goal is to actively involve students in real-world problems and projects. In addition, experiential learning in education should purposefully immerse students in educational settings that encompass the community, academia, and real-world applications (Chang & Huang, 2022). Experiential learning offers a range of educational benefits, including problem-solving, increased engagement and retention, deeper understanding of topics, the cultivation of transferable abilities like communication and self-motivation, an appreciation of the pertinence of academic curriculum, and the fostering of stronger relationships between students, organizations, and communities (Chang & Huang, 2022). Experiential learning, incidentally, is the use of theory to help students retain information and recall lectures better.

### **Business Simulation**

Simulations fall under the umbrella of digital game-based learning (DGBL) and are founded upon experiential learning, in which students are given a safe space to tackle real-world issues (Faisal et al., 2022). This simulation of reality enables pupils to implement their knowledge of the subject in practical situations. Combined with constructivist pedagogy, simulation games provide hands-on experience in business topics, including management, finance, marketing, and other relevant areas, and are also an integral part of DGBL (Faisal et al., 2022). In addition, simulations enable students to apply theoretical knowledge to practical scenarios, enhance critical thinking skills, and serve as motivating tools to encourage active participation (Humpherys et al., 2021). Simulation games have widespread use in various sectors such as private industry, the military, schools, and others, for educational purposes (Chang & Huang, 2022). The benefits of interactive active learning and the impact of games on student learning have been the subject of several studies conducted in a variety of sectors, including engineering, management, mathematics, business and medicine (Chang & Huang, 2022; Hallinger et al., 2020; Roslin et al., 2022; Mohamad Samuri et al., 2019). Several studies have explored the favourable outcomes of commercial simulation games across a range of locations, such as the United States, the United Kingdom, Australia, and Taiwan (Schmuck, 2021). According to Hallinger et al. (2020) in their bibliometric review of simulation-based learning in management education, they found a rapidly growing number of publications demonstrating a wide range of applications and academic achievements. Lastly, role-playing simulations have the student assume and solve a business issue. These simulations are used in business curricula in many areas including finance, management, marketing operations management, and information systems.

### **Gamification**

Gamification, which refers to the incorporation of game design elements in non-gaming contexts (Luo, 2021), has gained popularity in the education sector over the last two decades. It is valued for its

potential to enhance student engagement and improve academic performance (Luo, 2021; Zolkipli et al., 2023). However, in addition to this, the term also encompasses a method of designing services and activities to create a pleasurable and entertaining experience, akin to that encountered by game users (Tanouri et al., 2022). According to Keepers et al. (2022), gamification can be used as a marketing tool, but its potential goes far beyond that. Its premise is based on human nature to compete. It can bring about positive change in various ways, such as motivating users, stimulating learning, and improving collaboration. To promote critical reflection on the creation of projects that improve student's learning experiences, gamification is being introduced and used more frequently in teaching and learning environments (Khaldi et al., 2023). Educational gamification, also referred to as gamified learning, gamification in education, or the use of gamification for educational purposes involves the application of gamification techniques to enhance teaching or learning.

### **Business Simulation and Gamification**

In recent years, simulation and gamification have gained increasing importance as teaching and learning methods in higher education (Grijalvo et al., 2022). Simulations and games used by educators act as a liaison between conventional classroom instruction and practical application in the real world (Budhiastuti et al., 2023). Their objective is to imitate or depict aspects of the real world to support learning. For instance, in a computer-based business simulation game, students can make decisions about various aspects of marketing, finance, production, or human resources and observe the outcomes of those decisions in the marketplace, all without the need to engage with real companies and navigate the associated risks, costs, and time constraints (Lean et al., 2021). Furthermore, from an educational standpoint, students can derive benefit from the experience of making mistakes since individuals tend to be more interested in understanding the reasons behind their failures rather than their successes (Grijalvo et al., 2022). This learning experience creates and transforms knowledge by adapting and continuing to transform the experience and repeating the experience by learning from the extended experience (Grijalvo et al., 2022), business simulation and gamification which are experiential learning tools in which students learn about business processes through the management of a simulated company in a risk-free, interactive and realistic environment. Students, either individually or in teams, make all strategic decisions and compete against each other.

### **Benefits of Business Simulation Games**

According to an author, Bach et al. (2023), simulation games improve the employee's analysis, strategy, troubleshooting, social, and communication skills, increase their ability to negotiate effectively and efficiently, and help them to gain mutual knowledge and make decisions in teams. Simulation games not only encourage learners to gain new knowledge but also increase learning efficiency, enhance student's performance within the educational system, and promote effective communication among students (Bach et al., 2023). Finally, business simulations emulate the decision-making procedures typically involved in commencing or operating a business and have the potential to amplify management competencies among students (Yen & Lin, 2020).

## **Benefits of Gamification**

Gamification has been linked to various advantages in improving learning in both academic and workplace environments. For instance, studies have demonstrated that gamification enhances personal participation and encourages learning conduct. This supports the push toward utilizing gamification as a motivational tool (McHenry & Makarius, 2023). Furthermore, research has shown that gamification benefits course performance (Bai et al., 2020), reduces failure rates, increases retention, and improves learning outcomes (McHenry & Makarius, 2023). In addition, many business contexts have found gamification to be effective (Krath et al., 2021). Examples of this include increasing the engagement of employees and customers and also incentivizing employees to share knowledge (Friedrich et al., 2020). It is therefore no surprise that this phenomenon has attracted worldwide interest, research, and application (Ermakov, 2020).

## **Impact Toward Business Knowledge and Understanding**

In the digital sphere, knowledge plays a pivotal role in the establishment and expansion of the entrepreneur's businesses (Scuotto et al., 2022). The potential of the knowledge management processes is consistently highlighted as a significant factor in obtaining a competitive advantage (Scuotto et al., 2022), the role of knowledge in innovative firms has been the subject of both theoretical and empirical research (Moser et al., 2020). In addition, the management and business literature emphasizes the importance of gaining a competitive advantage through knowledge (Ahmad et al., 2014). Knowledge sharing is revolutionizing the way social and commercial enterprises are managed and is becoming the new trend in the digital economy.

## **Impact on Business Soft Skills and Understanding**

Companies see soft skills as critical to business success (Kačamakovic, 2021). According to Lok et al. (2021) and Mabe and Bwalya (2022), skills are more significant than hard skills. Historically, hard skills have been linked to technical and administrative abilities when differentiating between hard and soft skills. On the other hand, soft skills encompass people, leadership, interpersonal, and conceptual skills (Mabe & Bwalya, 2022). One advantage of soft skills over hard skills is that certain hard skills can become outdated and lack transferability across different contexts (Mabe & Bwalya, 2022). Soft skills also pose a greater challenge for monitoring and measurement as they encompass both intrapersonal and interpersonal aspects (Lok et al., 2021). Given their significance in achieving business success, business leaders are dedicated to developing these skills (Kačamakovic, 2021).

## **Platform of Business Simulation and Gamification**

Web-based learning enhances the classroom learning process by incorporating technology such as business simulation games and prototype development tools (Alkaabi, 2023). These captivating and enjoyable tools provide a virtual environment where critical analysis can take place within real-life

scenarios. As the simulation develops, students respond proactively to the challenges they encounter by comprehending the consequences of their decisions and utilizing their existing knowledge to select the most appropriate course of action (Alkaabi, 2023). For instance, Malliarakis et al. (2017) analysed the effects of integrating massive multiplayer online role-playing games (MMORPGs) into a computer programming course for first-year undergraduate students (Alkaabi, 2023; Malliarakis et al., 2017) and the business simulation platform used was MonsoonSIM. A virtual business simulation training was conducted at the School of Information Technology using the MonsoonSIM software, which aimed to introduce students to business processes in which the ERP concept was applied. MonsoonSIM is a fun and unique business simulation game that can be accessed at <http://www.monsoonsim.com/>. Some of the exciting learning methods for understanding the ERP concept are in the form of simulation games. This is an exciting learning method in comparison to case studies or theoretical explanations. Lastly, in addition, students learn through their successes and failures, as well as from each other, as they encounter and practice business concepts. They are the managers of 'virtual companies' with a maximum of 13 departments: finance, retail, marketing, planning, warehousing, logistics, e-commerce and business-to-business, procurement, planning, e-commerce, warehouse/logistics, business-to-business, production, materials planning, maintenance, and service. In addition, CapsimCore is another tool for incorporating a simulation-based training approach into management education. It provides students with the ability to put theory into practice in a realistic and risk-free environment. Each student takes on the role of a business decision-maker, managing a multi-million-dollar company during the game, covering four major business areas: production, finance, marketing, and research and development (Morin & Tamberelli, 2021). However, MonsoonSIM offers a more comprehensive experience by incorporating additional departments, allowing students to better understand the complexities of the business world and connect with real-world situations.

## **RESEARCH METHODOLOGY**

In the previous section the research problems, questions, and objectives were determined. In this section, the research methodology is advanced to answer the research questions. Moreover, this section focuses on research design, subjects, and data analysis to be described and explained when conducting this study.

### **Research Design**

Research design is a conceptual structure within which research is conducted. The objective of having a research design is to determine the approach or strategy to examine the study and enable the exploration of the correct way to diverge from the study.

This study adopts a qualitative research approach based on interpretivist and constructivist paradigms, which aims to gain an in-depth understanding of the research subject rather than predicting outcomes, unlike the positivist paradigm. To achieve this, appropriate research designs must be applied.

Tomaszewski et al. (2020) suggested four research designs, namely case study, ethnography, narrative, and phenomenology, which have been considered in this study.

### Qualitative Research Design

This section describes four common qualitative research designs: case study, phenomenology, ethnography, and narrative as shown in Table 1. Among the four types of qualitative research design, the most relevant research design for the study is a case study. A case study focuses on a specific location, in this case, the UMPSA, which enables a better understanding of the research problem. The selection of a case study allows the exploration of a complex phenomenon through the identification and examination of the different factors that interact with each other (Tomaszewski et al., 2020).

**Table 1:** The qualitative research design

	<b>Case Study</b>	<b>Ethnography</b>	<b>Narrative</b>	<b>Phenomenology</b>
Goal	Describe case/ case to develop an in-depth understanding of the context of specific case/cases	Describe the shared and learned cultural practices of a specific group of people (culture)	Describe the stories people tell about their lives and lived experiences	Describe the meaning of the lived experiences of a phenomenon by the people who lived it
Formulating research questions sampling	What are the qualities/ characteristics of the unique/ representative case? People with roles that exist within the boundaries/ criteria/ context of the case	What are the shared practices of the culture?  People who participate in or experience the culture of interest	What is the story of the lived experiences?  People who contribute to the story of the experience	What is the essence of the phenomenon of interest?  People who have lived the phenomenon of interest
Data collection	One-on-one Interviews or Focus groups in which participants describe the case. Observations of participants in the context of the case being studied; Observations of the setting(s) where the case(s) occur. Documents (physical or digital) that are representative of the case(s)	One-on-one interviews or Focus groups in which participants describe the culture. Observations of participants in the context of their culture; Observations of the cultural setting. Documents (physical or digital) that are representative of the cultural	One-on-one Interviews in which participants tell a story about their experience. Observations of participants during story-telling or enactment of the story. Documents (physical or digital) that are representative of the narrative	One-on-one Interviews or Focus Groups in which participants describe the experience. Observations of the phenomena of interest  Documents (physical or digital) that are representative of the phenomena
Data analysis	Constant comparative; Thematic	Constant comparative; Thematic	Narrative analysis	Phenomenological analysis



## **Case Study**

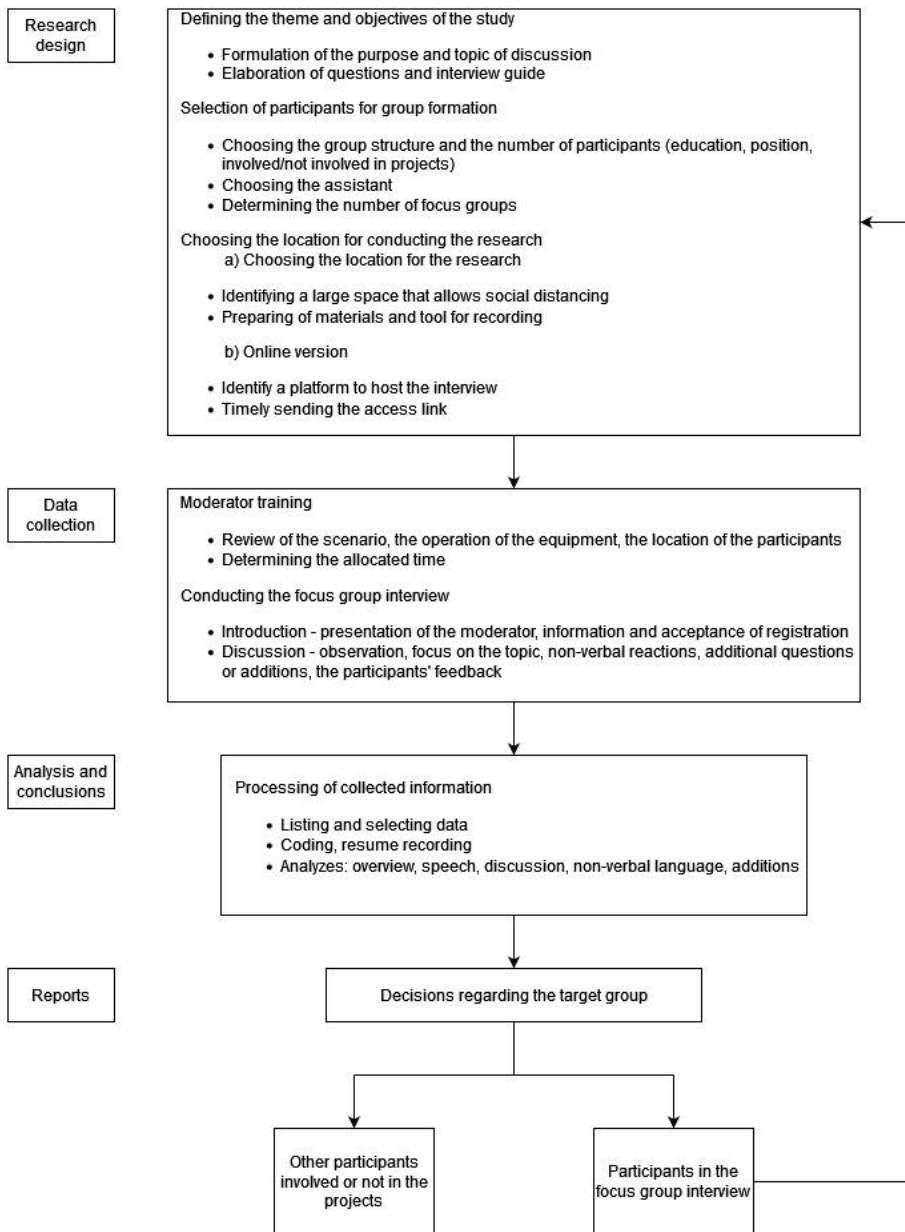
A case study is an examination of the particularity and complexity of a case, an understanding of its activities and particular circumstances. The key aspects of the case are outlined where, first, case studies examine "a current phenomenon in detail and its actual context, especially when the boundaries between the phenomenon and the setting are blurred". Although the phenomenon and its setting are intertwined, the case should be presented as a bounded system with clearly defined and delimited boundaries. Second, case studies involve multiple sources and types of information to address the complexity of a research problem. Case studies can also aid education by illustrating, testing, or extending theories, or assisting other educators in analysing or designing the practice (Tomaszewski et al., 2020).

In this study, we used the MonsoonSIM platform to measure students' business knowledge and understanding as well as students' soft skills. According to statistics published, the MonsoonSIM website has been used by 282 Universities or organizations. This study was conducted at Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) to assess the learning experience of students who utilized MonsoonSIM in the years 2022 and 2023. Hence, UMPSA students who have played MonsoonSIM more than 10 times participated in this study.

## **Data Collection**

This study used a focus group interview to collect information from the students. The interview question was divided into three sections; the first section included general questions on the student's background and socio-demographic data such as gender, age, academic qualification, and cumulative grade point average. At the same time, the second section comprised questions about the student's knowledge. The third section assessed the soft skills of students.

Focus groups play a pivotal role in many triangulation systems, which involve integrating diverse methodologies to investigate a common issue. Focus groups serve multiple purposes as they encompass aspects of document analysis and social research methodology, and also stand as a significant research instrument. This method can help researchers explain, better comprehend, and explore the beliefs, actions, and experiences of research participants. Each focus-group interview adhered to methodological requirements by including 5–6 participants. The interviews followed a freestyle format, where participants were presented with open-ended questions. These questions were structured based on the interview themes that focused on the participants' personal experiences. The first section focused on the student's experience with business knowledge and understanding using MonsoonSIM. The following section explores the student's experience in using MonsoonSIM and its impact on their soft skills.



**Figure 1:** The flow for the focus group interview

Developing a focus group interview guide that corresponds with the discussion group's phases inside the focus group, referencing the identified source model and the flow map as shown in Figure 1 (Nyumba et al., 2018).

## Data Analysis

This study used Content Analysis and Narrative analysis. Content analysis is a research method used in the analysis of recorded communication to identify patterns that reveal the underlying messages, goals, and outcomes of the content. By examining the qualitative data derived from content analysis, researchers can gain insights into the nature and significance of the recorded communication.

In narrative analysis, a qualitative research approach, the researcher centres their focus on a specific subject and examines the data collected through methods such as case studies, surveys, observations, or similar approaches. Following the documentation of their findings, the researchers proceeded to review and analyse the gathered information.

## RESULT

Table 2 summarizes the respondent's profile in this study. In total, there were ten respondents from two groups, who were all students from UMPSA. Both groups represented Malaysia in the International MonsoonSIM Enterprise Resource Management Competition in 2022, with Avenger in the Enterprise category and Leaps in the Trading category.

**Table 2:** Respondent's profile

Group Name	Respondent	Degree	Experience with MonsoonSIM (year)
Avenger	Student 1	Bachelor of Industrial Technology Management with Honours	3
	Student 2	Bachelor of Industrial Technology Management with Honours	2.5
	Student 3	Bachelor of Project Management with Honours	2.5
	Student 4	Bachelor of Project Management with Honours	1
	Student 5	Bachelor of Computer Science with Honours (Graphics & Multimedia)	1
Leaps	Student 6	Bachelor of Business Engineering with Honours	2
	Student 7	Bachelor of Business Engineering with Honours	2
	Student 8	Bachelor of Business Engineering with Honours	2
	Student 9	Bachelor of Computer Science (Systems and Network) with Honours	1
	Student 10	Master of Business Administration	1

Tables 3 and 4 highlight the key findings of this study. Table 3 summarizes the impact of the student experience in using MonsoonSIM on student's business knowledge and understanding. Meanwhile, Table 4 summarizes the impact of the student experience in using MonsoonSIM on the student's soft skills.

**Table 3: Impact on student’s business knowledge and understanding**

<b>Group Name</b>	<b>Impact</b>
Avenger	MonsoonSIM can improve students in several areas. Firstly, there is business model knowledge, which involves critical thinking about the strategy to run a business. For example, just-in-time inventory management and cost-effective procurement of finished goods or raw materials. MonsoonSIM combines or applies theories like finance and economics to realistic scenarios, enabling students to acquire knowledge about gaming and business operations simultaneously. For example, students can adjust selling prices and observe their impact on the business. MonsoonSIM also helps students understand marketing and procurement concepts, such as how increasing demand can lead to higher prices and the need for increased raw material procurement. Additionally, MonsoonSIM provides opportunities for students to learn and practice running a business, applying theories learned from textbooks to real-world scenarios, including marketing strategies, business strategy, and strategic management within the game. Lastly, MonsoonSIM aids in understanding human resource management in a realistic context during the games.
Leaps	MonsoonSIM offers experiential learning opportunities that enable students to learn in realistic business scenarios. It helps students grasp essential business concepts and learn how to efficiently operate a business in practical and challenging situations. Students are required to analyse information to make decisions and evaluate the outcomes of their choices. Through this process, students can enhance their critical thinking and decision-making skills. MonsoonSIM is particularly valuable for non-management or business students as it provides insights into business processes, from product procurement to consumer sales. For example, Student 7, who is responsible for e-commerce, understands where to source products and how to make cost-effective purchasing decisions (sometimes finding cheaper prices). MonsoonSIM serves as an excellent platform for improving business knowledge in various fields. Student 4, who manages retail operations, learns how to procure products, work with different vendors, compare prices, and adapt to changing market environments, enabling faster decisions. MonsoonSIM also helps students learn how to manage employees in each department, as failure to do so can negatively affect the business.

**Table 4: Impact on student’s soft skill**

<b>Group Name</b>	<b>Impact</b>
Avenger	MonsoonSIM can enhance the student’s different soft skills during the game, due to its various modules and scenarios designed for learning. It helps students improve their communication skills by encouraging them to work together towards common goals and ensure everyone is aligned for success. Moreover, MonsoonSIM helps students adapt to different situations, including crisis scenarios within the game. These crises require students to make critical decisions and analyse real-world situations. In addition to fostering critical thinking, handling crises teaches students problem-solving skills, especially in financial crises or when facing shortages of raw materials. Students play together as a team, communicating and strategizing within short time frames to achieve their objectives. Therefore, effective communication skills become particularly significant in this context. Lastly, MonsoonSIM also aids students in learning time management as they practice decision-making during the game, especially when dealing with various crises.
Leaps	MonsoonSIM encourages students to engage in effective communication with their peers. During the game, students can collaborate and discuss the decisions they make by addressing various business challenges such as market crashes, COVID-19, financial crises, and more. This practice helps students refine their decision-making skills, develop strategies, and devise solutions for crises. Furthermore, MonsoonSIM fosters teamwork and problem-solving skills as students work together to analyse data, identify issues, and formulate solutions. It enhances their ability to tackle complex real-world problems. For instance, students can gain insights into the behaviour and personalities of their team members during the game. Additionally, MonsoonSIM helps students develop the skill of thinking holistically, requiring them to predict potential future challenges before and after the game. For example, anticipating a 2 to 3-day increase in sales allows them to proactively procure more stock to meet high demand or adjust prices accordingly, encouraging forward thinking in various business scenarios. Time management is crucial in MonsoonSIM as each game day lasts only 40-50 seconds, necessitating careful task analysis to achieve key performance indicators (KPIs). Lastly, MonsoonSIM enables students to build their leadership skills by promoting effective communication with team members and enhancing teamwork among students.

In summary, the researchers obtained outputs for the two groups in terms of business knowledge, which included business models, business concepts, financial and economic understanding, marketing strategies, procurement, and human resource knowledge. Additionally, the development of soft skills such as communication, decision-making, problem-solving, critical thinking, teamwork, leadership, and time management were evident.

## CONCLUSION

The findings of this study offer essential practical implications for research on business simulation and gamification in education. However, it's worth noting that this case study focused on a relatively small sample of respondents, as it primarily targeted more experienced students who had already engaged with MonsoonSIM. Therefore, future studies should analyse the practical applications of business simulation and gamification, not only in the education sector but also in other aspects of Artificial Intelligence (AI), considering various sectors.

## ACKNOWLEDGEMENTS

This research work is supported by the international matching grant of Universiti Malaysia Pahang Al-Sultan Abdullah, Malaysia, and Telkom University, Indonesia (RDU232711 & UIC231520). The author wishes to express gratitude to the anonymous referees whose suggestions, revisions, and comments significantly improved this paper.

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