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Enhancing International Tourist Brand Awareness in the Digital Economy: A Case Study of Bangkok in Thailand

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ABSTRACT

Objective: In an era dominated by the digital economy, an effective marketing communication strategy that leverages online platforms is essential for building brand awareness of Bangkok among international tourists. The study's objective is to investigate and gain a comprehensive understanding of the perspectives and preferences of tourists who choose to visit Bangkok, the capital of Thailand. Specifically, through demographic factors, the research aims to identify effective marketing communication strategies that can be employed to build and enhance brand awareness for Bangkok among international tourists.

Methodology: A quantitative approach was utilised, collecting data from European tourists visiting Bangkok in Thailand. The data was collected from 400 respondents through the use of online questionnaires. Statistical methods adopted percentages, means, standard deviations, T-tests, and one-way ANOVA (F test), to extract meaningful statistical insights.

Results: European tourists show a keen interest in Bangkok's cultural experiences, natural beauty, and modern amenities, contributing to the city's positive brand image as a tourist destination. Age and income significantly affect tourists' brand perceptions, while factors like marital status, education level, and occupation have a lesser impact. This information can guide marketing and service strategies to enhance Bangkok's appeal to European tourists.

Implications: This research serves not only academic purposes but also offers practical applications for stakeholders in the hospitality and tourism sector. It empowers businesses, marketers, and policymakers to make informed decisions that can enhance the overall tourism experience in Bangkok, support the industry's continued growth and beyond.

Keywords: *Brand Awareness, International, Tourism Industry, Bangkok*

INTRODUCTION

Tourism is a significant industry for many countries, and it continues to grow steadily and consistently. This growth is driven by advancements in technology, transportation, and communication systems, which have led to more organised and developed tourism industries on a large scale. These advancements include the dissemination of information about various travel destinations, convenience, and speed in travel arrangements. Tourism is of great importance to a country's economy, as it generates revenue and spreads income throughout the region. This leads to job creation, provides widespread employment opportunities, and the income generated from tourism has a multiplier effect on the economic system. In Thailand, tourism is one of the major and critical industries that contribute to the income of both Thai and international citizens entering the country (Buhalis et al., 2019; Kariyapol & Agarwal, 2020; Pencarelli, 2020; Siripipattanakul et al., 2022; Siripipatthanakul et al., 2022).

According to AIContentfy (2023), brand awareness in the tourism industry refers to the level of recognition and recall that a specific destination, region, or travel-related business enjoys among potential tourists and travellers. It plays a vital role in attracting visitors, establishing a positive image, and gaining a competitive edge. Building brand awareness involves various strategies such as marketing campaigns, online presence, consistency in branding, and fostering positive reviews and recommendations. Measuring brand awareness can be done through surveys, social media metrics, and web analytics. However, the industry's competitiveness, changing travel trends, and the need for crisis management pose challenges in maintaining brand recognition. Overall, brand awareness is crucial for the success of tourism-related entities and their ability to attract and retain travellers (Dupeyras & MacCallum, 2013; Almeyda-Ibáñez & George, 2017; Yoshida & Chotchaicharin, 2019; Wang, 2022).

Bangkok, Thailand's capital, is a vibrant and diverse tourist destination known for its rich cultural heritage, delectable street food, excellent shopping opportunities, and lively nightlife. Visitors can explore historic temples, savour mouth watering street food, indulge in shopping sprees at markets and malls, experience the city's vibrant nightlife scene, and enjoy boat rides along the Chao Phraya River. Cultural shows and wellness activities are also abundant, offering relaxation and entertainment. Bangkok serves as a gateway to nearby attractions and provides a wide range of accommodation options. With its unique blend of tradition and modernity, Bangkok continues to be a top choice for travellers seeking diverse and memorable experiences in Southeast Asia. As demonstrated by the Netherlands Embassy (2017), tourism in Bangkok is considered a top destination in Asia, attracting a large number of international tourists who visit and stay in the city. The majority of these tourists are primarily from China and Japan, with an increasing number from India, the Middle East, the United Kingdom, and the United States. Bangkok itself continues to focus on promoting and developing its tourism potential consistently (Chanchomsri, 2023; Nanuam, 2023; Wattanacharoensil et al., 2023).

The researchers are therefore keenly aware of the perspectives of tourists who choose to visit Bangkok, seeking answers on how marketing communication strategies can effectively build brand awareness for Bangkok among international tourists. This includes strategies related to perception and consumer behaviour towards the brand of Bangkok. The study’s findings may provide valuable insights into tourist preferences, the identification of marketing strategies, a deeper understanding of consumer behaviour, potential improvements in Bangkok's image as a tourist destination, and support for the growth of the tourism industry in the region.

LITERATURE REVIEW

The hospitality and tourism industry is a complex and diverse field that offers both challenges and opportunities. It is a significant global sector, one of the largest in the world, covering various activities such as hotels, tourism services, event planning, and transportation, contributing billions of dollars to the economy. This industry generates an astonishing $7.6 trillion in revenue and provides jobs for around 292 million people, accounting for nearly 10% of the global GDP and one in every ten jobs. Its success is largely attributed to a focus on service quality and customer satisfaction. Exceptional service is crucial for attracting and retaining guests, and this emphasis on service excellence is expected to continue driving growth and employment opportunities in the future (Limna & Kraiwanit, 2023).

Yoshida and Chotchaicharin (2019) conducted a study focusing on Japanese tourists travelling to Thailand. The study revealed that the majority of Japanese tourists were male, aged between 40 and 49, with undergraduate education, full-time employment, and an average monthly income exceeding 500,000 yen. Most of them were married and had visited Thailand more than three times. The primary motivating factor for visiting Thailand was the appeal of delicious food. Travellers typically obtained information about Thailand through the internet, travelled with their families via package tours, and preferred visiting during the months of July to September. They also tended to spend more than seven days in Thailand. The common health tourism experience among them was Thai massage, and they expressed a desire to return to Thailand for future trips. In addition, the study found that the factor with the highest level of brand awareness in Thailand's health tourism image among Japanese tourists was Thailand's reputation as a tourist destination for massage. In contrast, Thailand's image as a destination for onsen (hot springs) was less significant in terms of brand awareness. Furthermore, the research showed that Japanese tourists of different genders, ages, and average monthly incomes had varying perceptions of Thailand's health tourism brand awareness.

Wadeecharoen et al. (2020) focused on Thailand's cultural heritage and its impact on international tourists' choice of leisure destinations. The Tourism Authority of Thailand initiated the Discovery Thainess campaign in 2015 to enhance Thailand's global cultural leisure destination image. The research targets British tourists, known for their conservative spending behaviour and significant contribution to the global tourism market. Data from 550 British tourists were collected through questionnaires and a focus group interview at Suvarnabhumi International Airport. Findings revealed that British tourists showed a preference for Thai massage, spa, cultural tours, Thai cooking, classical dance, and handmade products. Thailand was perceived as a fantastic destination offering freedom and relaxation, with the majority expressing positive perceptions and intentions to return in the next two years.

Wongsunopparat and Jing (2021) investigated the factors influencing the selection of Bangkok as a tourist destination among Chinese travellers. The research involves a sample of 400 Chinese tourists who have visited Bangkok, aiming to uncover the key factors affecting their choice of this destination. The results indicate that food, emotional factors related to food and cultural experiences, and physical factors like architecture and transportation significantly influence the choice of tourist destination among Chinese travellers.

Liew et al. (2021) conducted a study in Malaysia to assess the expectations and satisfaction of destination attributes among senior tourists. They divided the tourists into two groups: future seniors (40–54 years old) and seniors (55 years old and above). The study aimed to promote equal travel opportunities for senior tourists and future senior tourists. They employed an importance-performance analysis (IPA) and paired sample t-tests to evaluate senior tourists' perceptions of senior-friendly destination attributes, which included attractions, accessibility, amenities, and ancillary services (the "4As"). The survey, which included 227 respondents, revealed that safety and cleanliness were the most important attributes for a senior-friendly destination. Other significant attributes included the availability of leisure facilities and barrier-free public transportation. These findings provide insights for the tourism industry to enhance tourists' satisfaction and gain a competitive edge in the market.

RESEARCH METHODOLOGY

This quantitative study employed survey questionnaires as the research tool. It aimed to investigate the opinions of European tourists regarding marketing communication strategies that influence their perception of Bangkok as a destination among international travellers. To develop the research instrument, the researcher collected data on various factors related to the opinions of European tourists in making travel decisions in Thailand. The questionnaire was developed using checklists and rating scales, and its content was validated by experts in the field. In addition, the questionnaire was pre-tested on 30 respondents to obtain a dedicated questionnaire, as recommended by Duangsin et al. (2023), Jangjarat et al. (2023) and Thetlek et al. (2023). The research population included European tourists who had visited Thailand in 2023, and their exact number was not known. The researcher decided on the sample size using purposive sampling, with a focus on European tourists, then selected participants using a combination of random and convenient sampling methods.

The data collection process involved the following steps. First, the researcher distributed the questionnaires to employees of A&E Travel Travel Agency in the Bang Rak district of Bangkok, who helped distribute them to European tourists using their services. Next, the researcher collaborated with tour guides leading sightseeing tours, specifically the Grand Palace and Bangkok City Temple Tour, to distribute questionnaires to European tourists. Last but not least, the questionnaires were distributed to European tourists in the Khao San Road area of Bangkok. The researcher collected the questionnaires from the mentioned three methods and selected only those that were fully completed, resulting in a total of 400 valid samples. The collected data from the questionnaires were analysed using various statistical methods in social science research, including percentages, means, standard deviations, T-tests, and one-way ANOVA (F test), to extract meaningful statistical insights.

RESULTS

The study’s results on the personal characteristics revealed that the majority of tourists were females (55.8%), aged between 41 and 50 years old (46.0%), married (40.8%), had education levels below a bachelor's degree (67.3%), were employed in government positions (59.0%), and had a monthly income ranging from 3,001 to 4,000 EUR/2,597-3,461 GBP (44.3%). Regarding the findings on tourist behaviour in Thailand, it was found that the primary travel purpose was relaxation (57.3%), followed by returning to Bangkok for a second visit (40.8%). Decision-makers for the trip were mostly friends or acquaintances (70.3%), and a significant

portion of tourists travelled to Bangkok with their families (53.9%). On average, tourists spent one week on each trip to Bangkok (55.8%). The preferred accommodation type was guesthouses or 1-star hotels (51.3%), and popular souvenirs included silk and handwoven fabric (42.3%). Tourists' favourite places in Bangkok were mountains, forests, and waterfalls (47.3%), and many expressed intentions to return to Bangkok for future visits. The study also found that, overall, European tourists had a highly positive perception of Bangkok.

Table 1: Mean, Standard Deviation, and Level of Perception of Tourists

Aspect	Mean	Standard Deviation	Perception Level
Tourist Attractions	3.93	0.684	High
Tourism Services	3.90	0.639	High
Overall	**3.89**	**0.641**	**High**

From Table 1, it can be observed that both tourist attractions and tourism services are perceived at a high level, with mean scores of 3.93 and 3.90, respectively. For tourist attractions, the tourists expressed the highest interest in actively participating in and learning about local community activities related to Muay Thai. The landscape and natural beauty of Thailand, such as mountains and seas, played a critical role in attracting tourists. There was a strong inclination towards participating in and learning about traditional Thai clothing and enjoying convenient amenities and public facilities. Bangkok's global reputation also contributed to its appeal. For tourism services, tourists rated modern and well-equipped airports as the most appealing aspect of tourism services. Safety during travel, reasonably priced and high-quality Thai cuisine, excellent and clean services, and convenient tour company locations also received positive evaluations. Overall, European tourists held a highly positive perception of Bangkok as a brand, with both tourist attractions and tourism services contributing to this favourable perception.

Table 2: Comparison of Brand Awareness Creation, Segmented by Age

Aspect	Gender	SS	df	MS	F	Sig
Tourist Attractions	Between Groups	51.067	4	12.767	37.246	0.000
	Within Groups	135.393	395	0.343		
	Total	186.460	399			
Tourism Services	Between Groups	81.997	4	20.499	99.821	0.000
	Within Groups	81.117	395	0.205		
	Total	163.114	399			
Overall	**Between Groups**	94.544	4	23.626	134.698	0.000
	Within Groups	63.312	395	0.175		
	Total	163.856	399			

As shown in Table 2, it can be observed that there is statistically significant variation in the perception of brand awareness creation for Bangkok among tourists of different age groups at the 0.05 significance level. The overall perceptions regarding tourist attractions and tourism services differ significantly among tourists of different ages.

Table 3: Comparison of Brand Awareness Creation, Segmented by Marital Status

Aspect	Gender	SS	df	MS	F	Sig
Tourist Attractions	Between Groups	1.164	4	0.291	0.620	0.648
	Within Groups	185.296	395	0.469		
	Total	186.460	399			
Tourism Services	Between Groups	1.880	4	0.470	1.151	0.332
	Within Groups	161.235	395	0.408		
	Total	163.114	399			
Overall	**Between Groups**	1.807	4	0.452	1.101	3.560
	Within Groups	162.049	395	0.410		
	Total	163.856	399			

As indicated in Table 3, it can be observed that marital status does not have statistically significant variation in the perception of brand awareness creation for Bangkok among tourists at the 0.05 significance level. The overall perceptions regarding tourist attractions and tourism services do not significantly differ among tourists with different marital statuses.

Table 4: Comparison of Brand Awareness Creation, Segmented by Education Level

Aspect	Gender	SS	df	MS	F	Sig
Tourist Attractions	Between Groups	1.374	2	0.687	1.473	2.300
	Within Groups	185.086	397	0.466		
	Total	186.460	399			
Tourism Services	Between Groups	1.503	2	0.752	1.846	0.159
	Within Groups	161.611	397	0.407		
	Total	163.114	399			
Overall	**Between Groups**	1.400	2	0.700	1.710	0.182
	Within Groups	162.456	397	0.409		
	Total	163.856	399			

From Table 4, it can be observed that education level does not have statistically significant variation in the perception of brand awareness creation for Bangkok among tourists at the 0.05 significance level. The overall perceptions regarding tourist attractions and tourism services do not significantly differ among tourists with different education levels.

Table 5: Comparison of Brand Awareness Creation, Segmented by Occupation

Aspect	Gender	SS	df	MS	F	Sig
Tourist Attractions	Between Groups	3.241	6	0.540	1.159	0.328
	Within Groups	183.219	393	0.466		
	Total	186.460	399			
Tourism Services	Between Groups	3.647	6	0.608	1.498	0.177
	Within Groups	159.467	393	0.406		
	Total	163.114	399			
Overall	**Between Groups**	3.025	6	0.504	1.232	0.289
	Within Groups	160.831	393	0.409		
	Total	163.856	399			

As shown in Table 5, it can be observed that occupation does not have statistically significant variation in the perception of brand awareness creation for Bangkok among tourists at the 0.05 significance level. The overall perceptions regarding tourist attractions and tourism services do not significantly differ among tourists with different occupations.

Table 6: Comparison of Brand Awareness Creation, Segmented by Average Monthly Income

Aspect	Gender	SS	df	MS	F	Sig
Tourist Attractions	Between Groups	7.617	4	1.904	4.206	0.002
	Within Groups	178.843	395	0.453		
	Total	186.460	399			
Tourism Services	Between Groups	7.999	4	2.000	0.092	0.001
	Within Groups	155.115	395	0.393		
	Total	163.114	399			
Overall	**Between Groups**	8.577	4	2.144	5.455	0.000
	Within Groups	155.279	395	3.930		
	Total	163.856	399			

From Table 6, it can be observed that average monthly income has statistically significant variation in the perception of brand awareness creation for Bangkok among tourists at the 0.05 significance level. The overall perceptions regarding tourist attractions and tourism services significantly differ among tourists with different average monthly incomes.

DISCUSSION

This study examined and gained a comprehensive understanding of the perspectives and preferences of tourists who choose to visit Bangkok. The European tourists expressed a high level of interest in various aspects of Bangkok, ranging from cultural experiences to natural beauty and modern amenities. Bangkok's brand as a tourist destination appears to be positively reinforced by both its attractions and the quality of services it offers to visitors. Wichaidit and Punyasiri (2020) studied Bangkok nightlife's destination image perception of foreign female tourists, and found that the perception of a tourist destination plays a crucial role in shaping travellers' decisions and their likelihood to return. Specifically, the image associated with nightlife destinations significantly influences overall satisfaction and indirectly impacts future behavioural intentions, with satisfaction serving as a mediator in this relationship.

The analysis of tourists' perceptions of brand awareness for Bangkok based on demographic characteristics yields significant insights into the dynamics of tourist preferences. It is evident that age plays a crucial role in shaping how tourists perceive Bangkok as a brand. The variations among different age groups highlight the importance of tailoring marketing strategies and tourism offerings to cater to the diverse preferences and expectations of tourists from various generations. The study's findings were in line with previous studies. For instance, Yoshida and Chotchaicharin (2019) revealed that the Japanese tourists with different ages had different overview opinions to brand awareness of Thailand health tourism. Pantaratorn and Phondon (2021) found that different age groups within the Thai millennial generation tourist group in Thailand significantly differed in their perceptions of the concept of sustainable tourism, particularly regarding the conservation and utilisation of tourist resources for sustainability.

Conversely, variables such as marital status, education level, and occupation do not exhibit significant variations in perception, indicating that Bangkok's attractiveness extends beyond these demographic factors. The impact of average monthly income on brand perception emphasises the importance of tailored strategies to cater to tourists with diverse financial capacities. Pantaratorn and Phondon (2021) found that Thai millennial generation tourist groups in Thailand with different statuses differed significantly in their perceptions on the concept of sustainable tourism in the aspects of gaining benefits from sustainable tourism, and conservation and utilisation of tourist resources for sustainability.

CONCLUSION

This study aimed to comprehensively explore the perspectives and preferences of tourists visiting Bangkok, a capital of Thailand, with the objective of identifying effective marketing communication strategies to enhance brand awareness for the city among international tourists. The results indicated that European tourists exhibit a strong interest in Bangkok's cultural experiences, natural beauty, and modern amenities, contributing positively to the city's tourist destination image. Notably, age and income levels significantly influence tourists' perceptions of the Bangkok brand, while factors like marital status, education, and occupation have a

comparatively lesser impact. These insights can inform marketing and service strategies aimed at increasing Bangkok's appeal to European tourists. This research holds implications beyond academia, offering practical applications for stakeholders in the hospitality and tourism sector. It provides valuable insights for businesses, marketers, and policymakers to make informed decisions that can enhance the overall tourism experience in Bangkok and support the industry's sustained growth. However, it is important to acknowledge certain limitations of the study, including its restricted geographic scope and reliance on self-reported data. Therefore, future research should consider expanding the study's scope and employing diverse data collection methods to further enrich our understanding of the dynamic tourism landscape in Bangkok.

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Teaching Innovation Among Chinese Teachers of Music Education

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ABSTRACT

Objective: This research addresses the pressing need for understanding and enhancing teaching innovation in music education among Chinese educators. This study aims to bridge existing gaps in the literature by examining the current state of technology implementation and teaching practices among music teachers in China in recognising the dynamic nature of education and technology. The significance lies in the potential to inform policies and interventions that can elevate the quality of music education. The primary objectives include assessing the level of technology implementation, exploring differences in teaching innovation based on profile variables, and identifying effective strategies for overcoming obstacles to innovation.

Methods: Data was collected through a survey administered to music teachers in China utilising a quantitative research design. The participants, comprising a diverse range of age groups, genders, educational backgrounds, and teaching experience, were selected through a stratified random sampling technique. Respondents were the Chinese music teachers of 5 private schools. The researcher chose High school teachers who have been handling Music courses for five years and are licensed in their respective fields of specialisation.

Results: Results revealed that most respondents are 29 years old and below, female, have obtained a bachelor's degree, and have taught for 5 to 10 years. In addition, the most beneficial to students is using headphones; the music technology used in the course is the final smart board. The results indicate that gender significantly influences teaching innovation, particularly in personal computer use, current instructional practices, and technology implementation.

Conclusion and Recommendation: Key findings emphasise the prevalence of technology use in music education, with certain disparities based on gender. The research contributes new insights into the specific areas where gender differences impact teaching innovation, guiding targeted interventions for professional development. The study recommends tailored training programs to empower educators, fostering an inclusive and innovative music education environment in China.

Keywords: *Music Education, Teaching Innovation, Technology, Implementation, Teachers*

INTRODUCTION

Music education fosters creativity, critical thinking, and cultural appreciation among students. In the context of China, a nation with a rich cultural heritage and a growing emphasis on education, exploring avenues for innovation within music education becomes imperative. This research focuses on the innovative practices among Chinese music education teachers, aiming to understand the current landscape and identify potential areas for improvement (Ho, 2023).

The music education scenario in China reflects a blend of traditional teaching methods and modern influences. While there is a recognition of the importance of music education, a need exists to assess the extent to which teachers embrace innovative techniques. Integrating technology, such as digital learning tools and online resources, presents challenges and opportunities for music educators. Additionally, variations in curriculum design and the availability of professional development opportunities contribute to the diverse experiences of music teachers across different regions and educational institutions in China (Yang, 2022).

Effective teaching is essential for fostering learning in instrumental and vocal music education. The role of the teacher in music lessons must be considered from a multidimensional perspective since it involves different personal and professional aspects in a one-to-one educational relationship to improve teaching in the music field. It is necessary to understand all these elements, their connections, and their impact on music teachers, both personal and professional expertise. (Pellegrino, 2011). Teaching innovation nowadays is the application of technology to enhance the teaching-learning process. They are branches of science and have different theories and techniques, but they are used together to improve the quality of learning and teaching environments. This use reveals a new discipline, namely education technology.

Music teachers must establish themselves as teachers and move from the periphery of the teaching community into the teaching collective as members, not simply music teachers but the educational school community (Skaalvik & Skaalvik, 2010). Self-efficacy for music teachers is the belief in one's ability to conduct the behaviour in his work on teaching processes. Self-efficacy is the strongest predictor of motivation and beliefs. The individual's efficacy beliefs are instrumental in defining tasks and selecting cognitive tools to interpret, plan and make decisions that individuals make throughout their lives. Many teachers emphasise the value of perfection in music, but this can have the unintended consequence of making pupils fearful of making mistakes, causing them to be less willing to take risks or try again after they fail for fear of embarrassment. Instead, music teachers might attempt to create a classroom culture where making mistakes is acceptable (and expected!) so students will persevere through difficulties (Potter, 2021). A study of 150 Filipino teachers' attitudes toward technology and their determinants and associations with technology integration practice revealed that most respondents strongly agreed that technology in any computer application benefits them as teachers (Nueva, 2019). Teacher's involvement in Technology integration practices is critical in determining the extent to which children benefit from school-based technology use; it is vital to understand how instructors can more effectively harness these tools in their classrooms to innovate instruction and the learning environment (Ottenbreit-Leftwich et al., 2010).

Technology-based tools have been indispensable to music and music education for decades. In music education, students and teachers should be able to closely track and implement technological advancements because, in the current era, technology dictates the future and is crucial for the future of education. Since education technologies play a significant role in learning and teaching, music teachers must possess the knowledge and skills to utilise these technologies" (Parasız, 2018). Technology in music education is not intended to eliminate communication between teacher and student or to dismantle the classical education system, but rather to take advantage of the benefits they provide as a supplementary resource. Technology has made traditional music education more efficient and multifaceted, while new technologies have converted the music learning environment into a "technical learning centre" (Bauer, 2020; Dammers & Lo Presti, 2020)

Thus, incorporating digital tools into the classroom can significantly improve students' learning, ensuring they can keep up with the technological demands of the modern world.; thus, teachers have a crucial role in ensuring that students effectively engage with technology specific to music education. The significance of this research lies in its potential to inform policies and interventions that can enhance music education in China. By addressing the identified gaps and providing insights into effective teaching practices, the study aims to contribute to the overall improvement of music education quality. The findings may guide curriculum development, teacher training programs, and the implementation of innovative tools, thereby fostering a more dynamic and enriching music education environment for students in China.

Research Objective

This study evaluates music teachers' self-efficacy and teaching performance. More specifically, it describes Music teachers according to age, sex, number of years teaching music, and General and Instrumental Music teaching areas. It also assesses their self-efficacy and teaching performance as public and private Music professors regarding planning, development, and results, tests significant differences when demographic variables are grouped and tests relationships when grouped as public and private teachers.

LITERATURE REVIEW

Technology and Teaching Innovation in Music Education

The integration of technology into music education has been a significant catalyst for pedagogical innovation. Information technology has been leveraged to reconstruct the form of music education, optimise teaching processes, and enrich teaching materials, allowing for a more comprehensive understanding of music content by students (Ma, 2022). In the Volta Region of Ghana, the use of computer technology in music education has been explored, revealing that despite the high qualifications of music tutors, a lack of competence in handling computer technology and inconsistent ICT initiatives have been barriers to its effective application (Mawusi et al. 2020; Mawusi & Kwadwo, 2020). The advent of digital multimedia and virtual reality (VR)

technologies has challenged traditional music education methods, with studies showing that implementing digital multimedia VR art courses has effectively enhanced the music education experience (Xiao, 2022). Similarly, the progression of music technology, including high-tech hardware and software, has been identified as a significant contributor to music studies, with the potential for more effective education if technical backgrounds are strengthened and software is taught well (Arıcı, 2017). Furthermore, the rapid development of network technology has revolutionised teaching objectives, methods, and means, necessitating the modernisation of music education to meet the demands of quality education (Xinyuan, 2015). The increasing application of artificial intelligence (AI) and wireless network technologies, such as 5G, VR, AR, and big data, has been recognised for their potential to improve teaching modes, methods, and interactive experiences in music education (Jiang, 2022). The use of multimedia technology in music teaching has been shown to have clear advantages over traditional methods, providing a theoretical basis for its application in music education (Yi, 2016). Additionally, network teaching platforms have emerged as a new means for knowledge acquisition, potentially making vocal music education more scientific, standardised, interactive, and engaging (Han, 2022). Lastly, combining computer technology with music knowledge has been found to enrich music teaching content and make abstract music theory more vivid and accessible (Liu & Liang, 2021).

Personal Computer Use

Music education offers multifaceted benefits across composition and arrangement, music theory and ear training, and recording and editing (Snodgrass, 2020). With software like Ableton Live, Logic Pro, or FL Studio, students can digitally compose and arrange music, experimenting with diverse sounds and arrangements independently of physical instruments (Rando, et al. 2019). Various software applications and online tools also facilitate music theory learning and ear training through interactive exercises and games, enhancing engagement and effectiveness (Ruthmann & Hebert, 2012). Moreover, equipped with audio interfaces and digital audio workstation (DAW) software, students can record performances, edit audio tracks, and produce high-quality recordings, fostering hands-on experience in audio engineering and production and enriching their music technology skill set (Testa, 2021).

Current Instructional Practices

Music education reflects a shift towards blended learning, where traditional instruction is complemented by online resources and technology-based activities, fostering personalised learning experiences adapted to students' individual needs and preferences. Additionally, project-based learning initiatives integrate technology into music education, enabling collaborative music production projects, multimedia presentations, and the development of interactive music apps or games. Moreover, virtual music ensembles have gained popularity in response to the COVID-19 pandemic, facilitating remote rehearsal and performance opportunities for students through video conferencing platforms and specialised software, enhancing accessibility and flexibility in music education (Zhang, 2023).

Technology Implementation

Technology implementation in music education necessitates several vital components (Kilag,et al. 2021). Firstly, ongoing professional development for teachers must ensure they remain abreast of the latest software tools, instructional strategies, and best practices in music technology integration (Bauer, 2020; Borbon, et al. 2021). Secondly, schools must invest in adequate infrastructure and resources, encompassing computers, software licences, audio equipment, and high-speed internet access, to effectively facilitate technology-enhanced music education initiatives (Kaliraj, et al. 2024). Finally, educators require pedagogical support and guidance to effectively integrate technology into their teaching practices while balancing technology use and traditional instruction methods, ensuring students' seamless and effective learning experience (Rapanta, et al. 2021).

Student Centre and Self-Efficacy

The concept of student self-efficacy, which refers to a student's belief in their ability to succeed in specific situations or accomplish a task (Bandura, 1977), is a critical factor in academic performance and is influenced by various elements, including student engagement and the educational environment (Alvarex, 2023; Listyotami et al. 2018). Academic procrastination, a behaviour characterised by the deliberate delay in completing academic assignments, is negatively correlated with self-efficacy; students with higher self-efficacy are less likely to procrastinate, particularly in tasks such as thesis completion (Mardiana, 2023). Moreover, students' relationships and interactions with faculty and staff can impact their self-efficacy, with supportive environments and well-trained faculty contributing positively to student self-efficacy (Ferguson, 2021). It suggests that a student-centred approach could be beneficial, where the educational environment is tailored to support and enhance student self-efficacy. In the context of teaching, science student teachers preparing to teach in English exhibit varying levels of self-efficacy, which can influence their readiness and teaching performance (Sidabutar, 2021). This further underscores the importance of preparation and support in fostering self-efficacy. While the papers focused on self-efficacy in educational settings, they do not explicitly address the concept of a "Student Centre." If "Student Centre" refers to a physical or virtual space designed to support students, it can be inferred that such a centre could enhance self-efficacy by providing resources, support, and opportunities for engagement. However, without specific information on the "Student Centre," it is not possible to directly link the concept to the findings of the papers provided (Mustofa, 2022).

Effectiveness of Music Education

The effectiveness of music education is multifaceted, encompassing cognitive development, skill acquisition, and creative thinking. The In Harmony program integrates technology and learning theories and has successfully enhanced students' working memory, self-regulation, and cognitive flexibility through individual and group music activities (Portowitz et al., 2014). Similarly, the specialised online vocal training program Singorama demonstrated a significant increase in creative thinking skills among students, suggesting that conventional education systems may benefit from incorporating such programs (Chang, 2022). In the context of secondary schools in the United States, suggestions for curriculum changes aim to develop lifelong musicianship skills

and functional musicianship, indicating a need for a more flexible and student-centred approach (Williams, 2014). The deep-learning-based agile teaching framework, utilising IoT devices and genetic algorithms, has proven effective in music education software development courses to enhance students' music literacy and talent (Seng, 2022). Furthermore, life skills training programs, such as those focusing on assertive communication, are more effective when incorporating both cognitive development and self-efficacy formation into the teaching-learning process (Yamada, 2013). It suggests that similar approaches could be beneficial in music education. The discipline of music education itself is dynamic and ever-changing, influenced by historical, cultural, and educational systems, and is subject to the tension between tradition and research-informed change (Cronenberg, 2022). Sociological research has highlighted how variations in music education curricula can develop listening skills differently, shaping how students recognise musical sounds (Klett, 2018). Technology in music education offers possibilities for creative activities, but these are often limited by teachers' digital competencies, highlighting the importance of professional development in this area (Klett, 2018). Teacher Efficacy for music education can be enhanced through professional development programs, as demonstrated by the positive impact of a program focused on musical play (Nieuwmeijer et al. 2021). The COVID-19 pandemic has necessitated innovative approaches like e-activity for musical ensemble classes, effectively maintaining the learning process and improving students' self-education and critical self-assessment skills (Karkina et al., 2022).

METHODOLOGY

Research Design

This study is a quantitative research method. This research type is a powerful tool that permits a researcher to collect data and describe the demographics of the same with the help of statistical analysis (Creswell, 2021). The quantitative research adopted a descriptive approach to describe and interpret the status of Digital Self-Efficacy and Innovative Chinese Teachers of Music Education. It is quantitative as it attempts to collect information and statistically analyse it.

Population and Sampling

The population is indefinite and uses purposive sampling. The study's respondents were the Chinese music teachers of 5 private schools. The researcher chose High school teachers who have been handling Music courses for five years and are licensed in their respective fields of specialisation. The researcher believes they are best positioned to assess the Digital Self-Efficacy and Innovative Chinese Teachers of Music Education. The target is 100% retrieval from sample size to be calculated using Raosoft online sample size calculator. The calculation was based on population size, a 5% margin of error, and a 95% confidence level.

Data Collection

Part 1 presents the demographic profile of music teachers in terms of age, gender, highest educational attainment, years of teaching as music teachers, preferred digital technology beneficial to the students, and the teaching of music courses. Part 2 is the teaching innovation on personal computers and current instructional practices. It will cover the level of teaching innovation for which the researcher adopted the LoTi Digital-Age Survey for Teachers, comprising 32 items that measure classroom practices and their connections to higher-order thinking skills when technology is implemented in teaching and learning. The questionnaire has a Cronbach Alpha Coefficient of Personal Computer Use (0.943), Current Instructional Practices (0.939) and Technology Implementation (0.984), as shown in Table 1.

This research sought permission from the heads of various private schools in China to conduct the study and assure them that the respondents' answers would be kept entirely confidential. With the support of friends and school administrators, the research was distributed to the respondents, and the retrieval process was completed after two months.

Data Analysis

Frequency and Percentage distribution were used to present their demographic profile as Music teachers in terms of age, gender, highest educational attainment, years of teaching, preferred digital technology beneficial to the students and the teaching of Music courses. Weighted mean and ranking were used to determine the teaching innovation regarding using personal computers, current instructional practices, and level of technology implementation. Analysis of Variance (ANOVA) was employed to test the differences in teaching innovation when grouped to profile variables. ANOVA is typically used when one continuous dependent variable (such as a rating scale) and one or more categorical independent variables (such as groups). In this study, the "teaching innovation" measure is continuous (like a score or rating), and this study seeks to see if there are differences in this measure based on different profile variables (also categorical); ANOVA is appropriate to use.

Ethical Considerations

To protect respondents' privacy, the researcher provided them with a consent letter outlining the purpose and nature of the research and offered them the option of voluntarily completing the questionnaire. The respondents were given two months to consider their involvement, with explicit opportunities to withdraw at any time. Additionally, they were assured of the results' confidentiality and anonymity. The final paper or any other communication produced during this research included no information disclosing a participant's identity.

RESULTS

Table 1: Reliability Analysis

Indicators	Cronbach Alpha Value	Number of Items	Interpretation
Personal Computer Use	0.943	5	Excellent
Current Instructional Practices	0.939	5	Excellent
Technology Implementation	0.984	21	Excellent

George and Mallery (2003) provide Cronbach Alpha values for the following rules of thumb: "_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor, and_ < .5 – Unacceptable."

Table 2: Profile of the Respondents (n=209)

		Frequency	Percentage
Age	50 years old or above	22	10.50
	40-49 years old	11	5.30
	30-39 years old	11	5.30
	29 years old or below	165	78.90
Gender	Male	101	48.30
	Female	108	51.70
Highest Educational Attainment	Bachelor's degree	157	75.10
	Master's Degree	26	12.40
	Doctoral Degree	26	12.40
Number of Years Teaching Music	5-10 years	136	65.10
	11-15 years	46	22.00
	more than 15 years	27	12.90
Most Beneficial to Students	Headphone	77	36.80
	Tuning Device	27	12.90
	Electronic Organ	25	12.00
	Metronome	19	9.10
	Microphone	13	6.20
	Recorder	5	2.40
	Bluetooth Speaker	10	4.80
	Mixer	3	1.40
	Amphitheater	13	6.20
	Effect Processor	8	3.80
	Synthesiser 1 1.3	9	4.30
Music Technologies Used in the Music Course	Finale Smart Board	58	27.80
	You Tube	31	14.80
	Spotify	41	19.60
	Apple Music	42	20.10
	Google Play Music 5 + 1	18	8.60
	Sound System	19	9.10

Table 2 outlines the demographic profile. Most respondents, comprising 78.90% of the total, fall within the age bracket of 29 years old and below. Conversely, those aged 50 years old and above constitute 10.50%. Regarding gender distribution, 51.70% of the respondents are female, while the remaining 48.30% are male. Educational attainment reveals that 75.10% completed a bachelor's degree, and 12.40% attained either a Master's or Doctoral Degree. Regarding teaching experience, 65.10% have 5-10 years of experience, with those with over 15 years constituting the least at 12.90%. Notably, headphones are identified as the most beneficial tool by 36.80% of respondents, followed by turning devices (12.90%). Only 1.40% mentioned mixers as beneficial. Finally, regarding music technologies, 27.80% used Finale Smart Board, 20.10% utilised Apple Music, and 9.10% employed sound systems. In summary, the typical music teacher is a young individual with a bachelor's degree, possessing 5-10 years of teaching experience, and frequently utilising Finale Smart Board technology in the music course.

Table 3: Teaching innovation in terms of Personal Computer Use

Personal Computer Use	WM	VI	Rank
My students propose innovative ways to use our school's advanced digital tools (e.g., digital media authoring tools, graphics programs, probe ware with GPS systems) and resources (e.g., publishing software, media production software, advanced web design software)	3.17	Often	1.5
I model and facilitate the effective use of current and emerging digital tools and resources (e.g., streaming media, wikis, podcasting) to support teaching and learning in my classroom.	3.15	Often	3
I use different technology systems unique to my grade level or content area (e.g., online courseware, Moodle, WAN/LAN, interactive online curriculum tools) to support student success and innovation in class.	3.17	Often	1.5
I participate in local and global learning communities to explore creative applications of technology toward improving student learning.	3.12	Often	5
I promote the effective use of digital tools and resources on my campus and within my professional community and actively develop the technology skills of others.	3.14	Often	4
Composite Mean	**3.15**	**Often**	

Legend: 3.50 – 4.00 –Always; 2.50 – 3.49 – Often; 1.50 – 2.49 –Sometimes; 1.00 – 1.49 –Never

Table 3 indicates teaching innovation in terms of personal computer use. It can be gleaned from the table that respondents all often used personal computers in teaching innovation, as inferred from the computed composite mean of 3.15. In attributes, most of the respondents said that their students often propose innovative ways to use our school's advanced digital tools (e.g., digital media authoring tools, graphics programs, probe ware with GPS systems) and resources (e.g., publishing software, media production software, advanced web design software). They also often use technology systems unique to their grade level or content area to support student success and

innovation in class, with an equal-weighted mean of 3.17. In the middle rank, they often model and facilitate the effective use of current and emerging digital tools and resources to support teaching and learning in their classroom, with a weighted mean of 3.15. Teachers employing new and meaningful approaches, such as cloud technology, online education, or the use of digital tools and platforms to solve instructional challenges, are examples of innovation in teaching methods. Scherer et al. (2019) indicated that technology integration positively correlates with teacher motivation and the belief in ICT capabilities. On the other hand, ranked 4th, respondents often promote the effective use of digital tools and resources on their campus and within their professional community and actively develop the technology skills of others, with a weighted mean of 3.14. Though ranked least, respondents often participate in local and global learning communities to explore creative applications of technology toward improving student learning, with a weighted mean of 3.12. In this technology environment, teachers must be mindful of the learning objectives; educators might design learning experiences that allow students in a class to choose from a menu of learning experiences—writing essays, producing media, building websites, collaborating with experts across the globe in data collection—assessed via a standard rubric to demonstrate their learning. Such technology-enabled learning experiences can be more engaging and relevant to learners (Deng & Benckendorff, 2022; Verdonck et al., 2019)

Table 4: Teaching innovation in terms of Current Instructional Practices

Current Instructional Practices	WM	VI	Rank
I provide multiple and varied formative and summative assessment opportunities that encourage students to "showcase" their understanding of content in nontraditional ways.	3.15	Often	1
Students' use of information and inquiry skills to solve problems of personal relevance influences the instructional materials used in my classroom.	3.12	Often	3
I rely heavily on my students' questions and previous experiences when designing learning activities that address my teaching content.	3.09	Often	5
My students collaborate with me in setting both group and individual academic goals that provide opportunities for them to direct their learning aligned to the content standards.	3.14	Often	2
I consider how my students will apply what they have learned in class to the world they live in when planning instruction and assessment strategies.	3.11	Often	4
Composite Mean	**3.12**	**Often**	

Legend: 3.50 – 4.00 –Always; 2.50 – 3.49 – Often; 1.50 – 2.49 –Sometimes; 1.00 – 1.49 –Never

Table 4 presents the teaching innovation in terms of current instructional practices. Respondents agreed they often used current instructional practices in teaching innovation, as implied in the calculated composite mean of 3.12.

Most respondents often provide multiple and varied formative and summative assessment opportunities that encourage students to "showcase" their understanding of content in nontraditional ways, with the topmost weighted mean of 3.15 among the five items listed in the table. Following in rank is that their students often collaborate with them in setting both group and individual academic goals that provide opportunities for them to direct their learning aligned to the content standards, with a weighted mean of 3.14. In addition, ranked 3rd, respondents also agreed that the use of students' information and inquiry skills to solve problems of personal relevance influences the types of instructional materials used in their classroom, having a weighted mean of 3.12. Furthermore, ranked as the lowest two items, respondents often consider how their students will apply what they have learned in class to the world they live in when planning instruction and assessment strategies with a weighted mean of 3.11, and they also often rely heavily on my students' questions and previous experiences when designing learning activities that address the content that they teach with a weighted mean of 3.09 accordingly.

According to research findings, music educators believe that the limited time available in class poses a challenge in effectively delivering content and imparting digital skills to students (Kirkscey, 2012). Despite instructors feeling adequately trained and comfortable with incorporating technology into music education, the time constraints hinder their ability to teach students how to use such tools effectively. Various obstacles contribute to the reluctance to implement technology in the classroom, including the limited technical proficiency of music students, insufficient funding, feelings of isolation during the learning process, difficulties in connecting with peers, distractions from other applications, and challenges in establishing both class and personal boundaries (Sun & Gas, 2019; Sun & Mei, 2022). Nevertheless, music teachers can use thoughtful pedagogical strategies to navigate these challenges and leverage technology to enhance student success and engagement.

Table 5: Teaching Innovation in Terms of Level of Technology Implementation

Level of Technology Implementation	WM	VI	Rank
I engage students in learning activities that require them to analyse information, think creatively, make predictions, and/or draw conclusions using the digital tools and resources (e.g., Inspiration/Kidspiration, Excel, InspireData) available in my classroom.	3.20	Often	1
Students in my classroom use digital tools and resources to create web-based multimedia presentations that digitally showcase their research on topics that I assign.	3.18	Often	2
I assign web-based projects to my students, emphasising complex thinking strategies aligned with the content standards.	3.16	Often	7
I use my classroom's digital tools and resources to promote student creativity and innovative thinking.	3.16	Often	7

I use different digital media and formats to communicate information effectively to students, parents, and peers.	3.17	Often	4
Our classroom's digital tools and resources are used exclusively for classroom management and professional communication (e.g., accessing the Internet, communicating with colleagues or parents, grading student work, and/or planning instructional activities).	3.17	Often	4
I use the digital tools and resources in my classroom during the instructional day, not my students.	3.17	Often	4
My students participate in collaborative projects involving face-to-face and/or virtual environments with students of other cultures that address current problems, issues, and/or themes.	3.11	Often	19.5
My students use the available digital tools and resources for (1) collaboration with others, (2) publishing, (3) communication, and (4) research to solve issues and problems of personal interest that address specific content standards.	3.15	Often	10
I model for my students the safe and legal use of digital tools and resources while I am delivering content and/or reinforcing their understanding of pertinent concepts using multimedia resources, web-based tools or an interactive whiteboard.	3.13	Often	14
I offer students learning activities emphasising digital tools and resources to solve "real-world" problems or issues.	3.15	Often	10
I prefer using standards-based instructional units and related student learning experiences recommended by colleagues that emphasise innovative thinking, student use of digital tools and resources, and student relevancy to the real world.	3.12	Often	17
I seek outside help with designing student-centred performance assessments using the available digital tools and resources that involve students transferring what they have learned to a real-world context.	3.09	Often	21
My students use the classroom digital tools and resources to engage in relevant, challenging, self-directed learning experiences that address the content standards.	3.12	Often	17
I design and implement web-based projects (e.g., WebQuests, web collaborations) in my classroom that emphasise the higher levels of student cognition (e.g., analysing, evaluating, creating).	3.14	Often	12

My students use the digital tools and resources in my classroom primarily to increase their content understanding or to improve their basic maths and literacy skills.	3.11	Often	19.5
My students use digital tools and resources for research purposes that require them to investigate an issue/problem, take a position, make decisions, and/or seek out a solution.	3.13	Often	14
My students apply their classroom content learning to real-world problems within the local or global community using the digital tools and resources at our disposal.	3.16	Often	7
My students and I use digital tools and resources (e.g., interactive whiteboard, digital student response system, online tutorials) primarily to supplement the curriculum and reinforce specific content standards.	3.12	Often	17
Problem-based learning occurs in my classroom because it allows students to use the classroom digital tools and resources for higher-order thinking and personal inquiry.	3.13	Often	14
My students use all forms of the most advanced digital tools and resources to pursue collaborative problem-solving opportunities surrounding issues of personal and/or social importance.	3.15	Often	10
Composite Mean	**3.14**	**Often**	

Legend: 3.50 – 4.00 –Always; 2.50 – 3.49 – Often; 1.50 – 2.49 –Sometimes; 1.00 – 1.49 –Never

Table 5 displays the teaching innovation in terms of the level of technology implementation. It can easily be seen from the table that the respondents often used the level of technology implementation as shown on the computed composite mean of 3.14. Most respondents often engage students in learning activities that require them to analyse information, think creatively, make predictions, and/or draw conclusions using the digital tools and resources available in their classroom, with the highest mean of 3.20. Next in rank, students in their classroom use digital tools and resources to create web-based or multimedia presentations that showcase their research digitally on topics that they assign, with a weighted mean of 3.18.

Such a level of teaching innovation on how technology is used in the performance in music class will be very effective, such as the need to provide different perspectives on performance practice and instrumental technique. Students gain insight into different performance styles, practice methods and pedagogical strategies and can compare these to their approaches to performance. Developed communities of practice provide a place for members to disseminate and share performance videos to connect to similar musicians online. This social aspect is essential, for one disadvantage of music class was a study by Zhukov (2015) that explores the use of YouTube technology in instrumental learning. She explains that showing YouTube videos of other performers and pedagogues to students is an essential resource for providing different perspectives on performance practice and instrumental technique.

Respondents often use different digital media and formats to communicate information effectively to students, parents, and peers. They also said their classroom's digital tools and resources are used exclusively for classroom management and professional communication. They also use digital tools and resources in their classroom during the instructional day and not by their students, with an equal-weighted mean of 3.17 ranked in mid. Next in rank are the three items of the same weighted mean of 3. 16. Respondents often assign web-based projects (e.g., web collaborations, WebQuests) to their students that emphasise complex thinking strategies aligned to the content standards. They also usually use digital tools and resources in their classroom to promote student creativity and innovative thinking. Using digital tools and resources, their students often apply their classroom content learning to real-world problems within the local or global community. Though ranked as the lowest three items in the table, respondents all agreed that their students often use the digital tools and resources in their classroom primarily to increase their content understanding or to improve their basic maths and literacy skills, and their students often participate in collaborative projects involving face-to-face and/or virtual environments with students of other cultures that address current problems, issues, and/or themes with an equal-weighted mean of 3.11. Still, respondents often seek outside help to design student-centred performance assessments using the available digital tools and resources that involve students transferring what they have learned to a real-world context, with the lowest mean of 3.09.

Summarising, students find technology more appealing due to its adaptability, accessibility, usability, and overall appeal. Studies indicate that students are generally satisfied with using educational technology because it enables them to engage in interactive learning (Miller et al., 2012). Additionally, students believe that technology facilitates more profound comprehension of course material, contributes to higher academic achievement, and better prepares them for a technology-dependent workforce (Schindler et al., 2017).

Table 6: Differences in Level of Teaching innovation when grouped to Profile Variables

Personal Computer Use	F-value	p-value	Interpretation
Age	2.010	0.114	Not Significant
Gender	4.488	0.035	Significant
Highest Educational Attainment	0.602	0.549	Not Significant
Number of Years Teaching Music	0.407	0.666	Not Significant
Most Beneficial to Students	1.104	0.361	Not Significant
Music Technologies Used in the Music Course	1.583	0.166	Not Significant
Current Instructional Practices			
Age	1.815	0.145	Not Significant
Gender	7.056	0.009	Significant
Highest Educational Attainment	0.836	0.435	Not Significant
Number of Years Teaching Music	1.076	0.343	Not Significant
Most Beneficial to Students	1.174	0.310	Not Significant
Music Technologies Used in the Music Course	1.407	0.223	Not Significant

Technology Implementation			
Age	2.077	0.104	Not Significant
Gender	4.539	0.034	Significant
Highest Educational Attainment	0.321	0.726	Not Significant
Number of Years Teaching Music	0.674	0.511	Not Significant
Most Beneficial to Students	1.209	0.287	Not Significant
Music Technologies Used in the Music Course	1.177	0.322	Not Significant

Legend: Significant at p-value < 0.05

Table 7 tests significant Differences in the Level of Teaching innovation when grouped into Profile Variables. Statistically, there is a significant difference in the level of teaching innovation when grouped according to gender since the computed p values are less than 0.05 level of significance. Therefore, the level of teaching innovation differs when grouped by gender.

Music teachers' male respondents had a higher level of teaching innovation regarding personal computer use, current instructional practices, and technology implementation. Gender differences and the use of ICT have been reported in several studies. In terms of personal computer use, the analysis reveals that gender is a significant factor affecting the level of teaching innovation, as indicated by a significant F-value of 4.488 and a p-value of 0.035. It suggests differences in teaching innovation levels between male and female educators regarding personal computer use. However, other profile variables do not show significant differences, including age, highest educational attainment, years teaching music, most beneficial tools to students, and music technologies used in the music course.

Moreover, there is no significant difference in the level of teaching innovation in terms of personal computer use, current instructional practices and technology implementation when grouped to gender, highest educational attainment, number of years teaching music, most beneficial to students and music technologies used in the music course since the computed p values are more significant than 0.05 level of significance. It implies that the level of teaching innovation in terms of personal computer use, current instructional practices and technology implementation does not vary when grouped by gender, highest educational attainment, number of years teaching music, most beneficial to students and music technologies used in the music course. Music producers in the early stages of computer development rely on already-existing computer technology, such as sound synthesis and sampling. Musicians anticipate that the advancement of computer technology will enhance musical composition and emotional expression using cutting-edge technical tools.

Modern science, technology, and the high-precision industry are accelerating the development of digital media and expanding the possibilities for contemporary music. In the network era, traditional sound recording, editing, and processing are gradually shifting toward networking, technology, and media. To effectively share music information and resources, computer technology in music composition is vital; thus, the responses of the music teachers did not vary.

DISCUSSIONS

Regarding the prevalent use of personal computers in teaching innovation within the surveyed population, the composite mean of 3.15 suggests that respondents frequently integrate personal computers into their teaching practices to foster innovation. Notably, respondents reported that their students often propose innovative uses of the school's advanced digital tools and resources, such as digital media authoring tools and graphics programs, indicating a collaborative approach to technology-enabled learning. Furthermore, utilising various technology systems unique to grade levels or content areas to support student success and innovation reflects a tailored approach to leveraging digital resources. While modelling and facilitating the effective use of current and emerging digital tools received a slightly lower weighted mean, it still indicates a significant level of engagement with technology-enhanced teaching methods. Additionally, the promotion of effective digital tool use within the campus and professional community and the active development of technology skills among peers underscores a commitment to advancing digital literacy and innovation in education.

The prevalent use of current instructional practices in teaching innovation among the surveyed respondents suggested that the calculated composite mean of 3.12 indicates that respondents frequently incorporate these practices into their teaching methodologies to foster innovation and enhance student learning outcomes. Notably, the top-ranking item indicates that respondents often provide multiple and varied formative and summative assessment opportunities, encouraging students to showcase their understanding of content in nontraditional ways. This approach emphasises the importance of student-centred assessment methods, allowing diverse expressions of knowledge and skills. Additionally, the collaborative setting of academic goals between students and teachers reflects a student-driven approach to learning that promotes autonomy and ownership over the learning process, as evidenced by the high weighted mean of 3.14. Furthermore, integrating students' information and inquiry skills to solve personally relevant problems influences instructional materials, highlighting a pedagogical emphasis on real-world application and relevance. While considerations of real-world application and reliance on students' questions and experiences received slightly lower weighted means, they still indicate a significant level of engagement with student-centred instructional approaches.

Regarding the teaching innovation concerning the level of technology implementation within the surveyed population, the calculated composite mean of 3.14 indicates a strong inclination towards frequently utilising digital tools and resources to enhance teaching and learning experiences. The highest-ranked item highlights students' engagement in learning activities that require critical thinking, creativity, and prediction using available digital tools such as Inspiration/Kidspiration and Excel, emphasising the integration of technology to foster analytical skills and innovation. Similarly, the frequent use of digital tools for creating web-based multimedia presentations and promoting student creativity underscores a commitment to leveraging technology for dynamic and interactive learning experiences. Notably, the emphasis on collaborative projects involving face-to-face and virtual environments signifies a global perspective and cross-cultural collaboration, aligning with the demands of the interconnected world. Furthermore, the preference for standards-based instructional units that emphasise innovative thinking and relevance to the real

world reflects a pedagogical approach to preparing students for contemporary challenges. It is seeking outside help with performance assessments and using digital tools primarily for content understanding of basic skills, and it received slightly lower rankings. The overall trend indicates a robust technology integration to facilitate higher-order thinking, problem-solving, and real-world application of knowledge. These findings highlight the pivotal role of technology in driving teaching innovation and empowering students to thrive in a digitally-driven society.

Lastly, significant differences in the level of teaching innovation among educators when grouped according to profile variables indicate a statistically significant difference in teaching innovation levels between male and female educators, as evidenced by p-values less than the 0.05 level of significance. It suggests variations in teaching innovation between genders concerning personal computer use in music education. While male and female educators may approach technology integration differently, further investigation is warranted to understand the specific factors contributing to these differences. On the other hand, no significant differences were observed across other profile variables, including age, highest educational attainment, number of years teaching music, most beneficial tools to students, and music technologies used in the music course. It indicates a consistent level of teaching innovation irrespective of these factors. However, it is vital to consider the context and nuances surrounding each profile variable to understand their influence on teaching innovation in music education. These findings underscore the importance of recognising gender differences in technology integration practices and the need for tailored support and professional development to promote equitable and inclusive teaching practices.

CONCLUSIONS

Most respondents are 29 years old and below, female, have obtained a bachelor's degree, and have taught for 5 to 10 years. In addition, the most beneficial to students is using headphones; the music technology used in the course is the final smart board. Teaching innovation regarding personal computer use confirmed current instructional practices and technology implementation were often used. Male music teachers' digital self-efficacy in music education was significantly higher. Male respondents had a higher level of teaching innovation regarding personal computer use, current instructional practices, and technology implementation. Furthermore, the most advantageous approach for pupils is to utilise headphones; the music technology employed in the course is the ultimate smart board. The findings suggest that gender substantially impacts teaching innovation, namely in the areas of personal computer utilisation, current instructional methods, and technological integration. The key results highlight the widespread use of technology in music education, with noticeable differences based on gender. The research provides novel perspectives on the specific domains in which gender disparities influence the advancement of teaching methods, therefore informing focused interventions for professional growth. The study suggests implementing customised training programmes to empower educators, cultivating an inclusive and innovative music education environment in China.

RECOMMENDATIONS

The Chinese Private institution may Increase technology-related courses in music education, and the application of technology-supported projects will enable the development of positive attitudes towards digital technology. It should merge knowledge, liveliness, fun and practicality into one. Music teachers may continuously attend training to stay informed about the latest technologies by organising in-service training programs. The factors underlying the music teachers'" inadequacy in technology can be investigated with qualitative research methods. It is thought that with the widespread use of online environments for teaching purposes, teachers'" competencies of technology integration may change. Future researchers may conduct similar studies but focus on other variables like challenges encountered.

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Assessing the Evolution of Educational Innovative Organizational Management Models in Twenty-First Century Schools: A Qualitative Case Study of Educational Institutions in Krabi, Thailand

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ABSTRACT

Objective: In the dynamic landscape of the twenty-first century, educational institutions face escalating pressure to embrace innovation and cultivate environments conducive to creativity and learning. Central to this endeavor is the development of organizational management models tailored to accommodate the imperatives of educational innovation. This study aims to explain the development of organizational management models tailored to educational innovation within schools in Krabi, Thailand, in the contemporary era.

Methodology: The research methodology employed in this study centers around a systematic review, integrating both documentary analysis and content examination methodologies. Furthermore, employing a qualitative approach, purposive sampling was employed to conduct in-depth interviews with six Thai key informants. Content analysis was then utilized to scrutinize and interpret the collected data.

Results: The findings underscore the critical importance of devising educational innovative organizational management models tailored to the exigencies of the twenty-first century. In particular, the emergence of the knowledge-based economy has foregrounded knowledge and innovation as indispensable drivers of national competitiveness. Education assumes a pivotal role in nurturing individual and organizational creativity and innovation, with innovative management practices within schools serving as catalysts for creativity education. By fostering a culture of innovation, schools are poised to augment their competitive prowess and sustain continuous development.

Implications: The implications of these findings are manifold, offering actionable insights for policymakers, educational administrators, and practitioners tasked with enhancing educational innovation within schools. By elucidating the imperative of educational innovative organizational management, this study informs the formulation of strategies geared towards fostering environments conducive to creativity, learning, and sustained development within educational institutions.

Keywords: *Development of Organizational Management Models, Educational Innovation, Educational Institutions, Twenty-First Century*

INTRODUCTION

The contemporary landscape of education is deeply entrenched in an era characterized by rapid technological advancement and the ubiquitous connectivity of global information networks. Concurrently, the twenty-first century witnesses a pronounced trajectory towards positive social transformation, significantly influencing societal norms and dynamics. This epoch is marked by heightened competition across all domains, necessitating a paradigm shift in educational institutions towards embracing technological prowess and fostering innovation to effectively address evolving needs and circumstances (Binkley et al., 2012; Li, 2020). In this dynamic milieu, the survival and success of educational organizations hinge crucially upon their ability to cultivate a culture of creativity, discovery, and innovation, thereby transcending the conventional hierarchical structures prevalent in traditional organizational frameworks. The imperative to transition towards educational innovation necessitates the formulation of novel educational management models, encompassing the cultivation of innovative mindsets among organizational stakeholders, notably educators and educational personnel. Central to this imperative is the cultivation of an ethos wherein educational institutions continually evolve their operational models, pedagogical materials, and instructional methodologies to remain abreast of contemporary trends and emerging paradigms. Creativity emerges as the cornerstone of organizational innovation, representing a form of intellectual capital that surpasses the intrinsic value of tangible assets (Adams et al., 2006; McDiarmid & Zhao, 2022).

Against the backdrop of the knowledge economy, characterized by a pronounced shift towards intangible assets such as knowledge, information technology, and culturally mediated cross-border trade, the cultivation of innovation assumes paramount significance. The cultivation of an innovative organizational ethos becomes imperative for institutions seeking to fortify their competitive stance and ensure sustainable growth and viability. The imperative for educational institutions to espouse an innovative organizational ethos extends beyond economic considerations, encompassing the imperative to navigate the multifaceted challenges of educational management within an increasingly globalized milieu. In this context, the efficacy of educational administration is contingent upon the deployment of professional management practices to effectively realize institutional objectives. The relentless pace of economic, social, and technological advancements, transcending geographical boundaries, underscores the indispensability of professionalized educational management practices in ensuring institutional efficacy and adherence to prescribed benchmarks (Changwong et al., 2018; Hays & Reinders, 2020; Riinawati, 2021; Raksanakorn et al., 2022). Thus, the imperative to develop innovative organizational management models tailored to the exigencies of twenty-first-century schooling emerges as a critical imperative

warranting scholarly inquiry and rigorous examination. This study aims to provide a comprehensive overview of the evolution of educational innovative organizational management models in twenty-first century schools. By examining the intersection of innovation, organizational management, and education, this study seeks to advance our understanding of how educational institutions can adapt and thrive in an increasingly complex and dynamic global landscape.

LITERATURE REVIEW

The twenty-first century has witnessed a profound evolution in the landscape of educational institutions, necessitating a reevaluation of organizational management models in response to dynamic societal changes and technological advancements. Central to this evolution is the imperative for educational institutions to embrace innovation in their organizational structures and management practices. This imperative stems from the recognition that traditional hierarchical frameworks are ill-equipped to meet the demands of contemporary educational environments characterized by rapid technological advancements, globalization, and shifting societal norms. In response to these imperatives, educational institutions are increasingly compelled to cultivate innovative organizational management models that foster creativity, adaptability, and resilience. This necessitates a departure from conventional top-down management paradigms towards more agile and innovative approaches that prioritize collaboration, experimentation, and continuous improvement.

Educational Innovation

Digital transformation and Education 4.0 represent significant departures from traditional educational paradigms, primarily owing to their profound reliance on and integration with advanced technologies such as artificial intelligence, data management systems, ubiquitous computing, robotics, cloud computing infrastructures, and sustainable technologies (González-Pérez & Ramírez-Montoya, 2022; Siripipattanakul et al., 2023). Education 4.0, in particular, underscores the indispensable role played by digital strategies, robust cybersecurity measures, and infrastructural frameworks in facilitating transformative educational experiences. Conversely, educational innovation embodies the evolutionary trajectory of pedagogical methodologies and instructional techniques in response to emergent socio-political, cultural, and technological trajectories. Notably, university maker spaces exemplify this ethos by fostering collaborative learning environments that accentuate the interconnectedness between theory and practice, thereby augmenting the teaching-learning continuum (Santos et al., 2021). Within the educational realm, innovation, as well as technology, serves as a catalyst for encouraging both students and educators to engage in rigorous inquiry, exploration, and utilization of diverse knowledge reservoirs to generate novel insights and solutions. By fostering a departure from conventional problem-solving approaches, innovation in education engenders a culture of critical inquiry and intellectual agility, thereby equipping learners with the requisite skills to navigate and address complex societal challenges (Jeffrey & Craft, 2004; Ingram et al., 2020; Muthmainnah et al., 2023).

Educational Innovative Organization

An innovative organization epitomizes a novel organizational archetype characterized by transformative organizational attributes conducive to fostering creativity emergence. A comprehensive model delineating seven fundamental factors comprising innovation

propensity, organizational constituency, organizational learning, creativity and empowerment, market orientation, value orientation, and implementation context is posited as an apt representation of an innovation culture scale (Day et al., 2001; Dobni, 2008). Education constitutes a socialization mechanism pivotal in facilitating the assimilation of societal norms and knowledge standards, thereby engendering a societal fabric informed by collective cognition and values. However, contemporary education transcends mere assimilation, manifesting as an open, dynamic system attuned to societal evolution and innovation imperatives. Contemporary education mandates active student engagement, positioning learners as co-creators and innovators within the societal milieu (Igor et al., 2015). Creative competencies emerge as indispensable assets requisite for navigating the complexities of modern society, underscoring the imperative for educational systems to embody innovative organizational frameworks (Kuzminov et al., 2019). Moreover, the contemporary educational agenda pivots towards the cultivation of adept specialists poised to drive innovative advancements across diverse sectors of the domestic economy, society, and cultural spheres. The formulation of education innovation policies arises from the dual exigencies of economic modernization and internal impetuses for educational reform, necessitating a paradigm shift encompassing organizational restructuring, cultural reorientations, and worldview realignments (Ardashkin, 2003; Igor et al., 2015).

School Management Models in the Twenty-First Century

Citizenship in the contemporary era necessitates the acquisition of twenty-first century competencies, knowledge, and ethical frameworks to effectively navigate the intricacies of digital, sustainable, and social domains with a humanistic ethos (González-Pérez & Ramírez-Montoya, 2022). Educational advancements over the past century have underscored the imperative for individuals to possess competencies far beyond those requisite in previous generations. The educational landscape of fifty years ago, while adequate for its time, no longer suffices to equip individuals for success in tertiary education, professional endeavors, and civic engagement. The multifaceted challenges posed by globalization, technological innovation, demographic shifts, international competition, evolving markets, and transnational environmental and political dynamics underscore the exigency of cultivating competencies and knowledge sets requisite for twenty-first century success (Limna et al., 2021). Central to the mission of education is the dual mandate of enhancing individuals' holistic development and fostering societal well-being (Baco & Elihami, 2021). Teachers, as conduits of educational transmission, play a pivotal role in shaping students' intellectual trajectories and value systems. Their pedagogical practices are inherently influenced by their knowledge frameworks, with their instructional decisions informed by their cognitive processes. Consequently, understanding the intricate interplay between teachers' knowledge systems, cognitive processes, and instructional behaviors is paramount in comprehending the dynamics of effective teaching practices (Mishra & Mehta, 2017).

METHODOLOGY

The investigation utilized a narrative synthesis, employing a systematic review methodology that heavily relies on textual analysis to compile and explicate findings (Jangjarat et al., 2023). This narrative synthesis facilitated an exhaustive examination of the evolution of an innovative organizational management model tailored to educational institutions in the twenty-first century. Relevant literature was meticulously curated from databases, such as Google Scholar, in addition to various online books and peer-reviewed research articles.

Inclusion criteria were rigorously applied to select studies offering clear delineations of the development of innovative organizational management models within contemporary educational contexts, written in English, and subjected to peer review.

Furthermore, employing a qualitative methodology, the study conducted in-depth interviews. Qualitative research endeavors to elucidate why specific phenomena occur by contextualizing the decision-making processes and behaviors of individuals or groups (Mohajan, 2018). In-depth interviews yield comprehensive insights into specific topics, thus facilitating the acquisition of accurate information to fulfill research objectives. The bidirectional communication inherent in interviews allows for the collection of additional data throughout the process (Rutledge & Hogg, 2020). To gather primary data, researchers utilized the documentary method to formulate key survey questions based on secondary data. Purposive sampling, a common technique in qualitative research, was employed to select participants deemed most informative, with the aim of comprehensively understanding the phenomenon or population under investigation (Shaheen & Pradhan, 2019; Woodeson et al., 2023). Participants meeting specific criteria, including being at least 18 years old, Thai citizens residing in Krabi, Thailand, and possessing recent knowledge and practical experience in the development of educational innovative organizational management models in the twenty-first century, were included in the study. This ensured participants' sufficient expertise and capacity to provide insightful opinions on the adoption and utilization of such models. Consequently, the study's respondents comprised six academics, educators, experts, and practitioners in the field of educational organizational management model development.

Employing qualitative content analysis, a methodological approach aimed at systematically and objectively describing phenomena through the interpretation of verbal, visual, or written data, the study conducted an analysis (Siripipattanakul et al., 2022). Given its flexibility and suitability for qualitative approach, content analysis was deemed appropriate. Thus, the study adopted a qualitative content analysis approach to analyze the collected data.

RESULTS

The perspectives of this study’s respondents emphasize the necessity of developing innovative organizational management models in educational institutions to meet the challenges of the twenty-first century. They argue that traditional educational approaches are inadequate for preparing individuals for contemporary demands in academics, careers, and civic engagement. Respondents stress the importance of incorporating formal, non-formal, and informal education to shape intellectual growth and societal involvement. They also highlight the need for innovative organizational structures to foster creativity and adaptability within educational settings. Additionally, there is a recognition of the value of creative competencies in modern society, necessitating reforms within the education sector. Moreover, respondents advocate for the cultivation of specialists capable of driving innovative progress across societal and cultural contexts. They suggest that educational innovation policies should address economic modernization and internal demands for educational reform, prompting significant changes in educational processes and broader societal norms.

> *The educational landscape of the past is insufficient for preparing individuals for success in contemporary collegiate pursuits, careers, and civic engagement. The traditional methods simply do not equip students with the necessary skills and competencies needed to thrive in today's rapidly evolving world* (Respondent 1).

Traditional educational approaches often focus solely on academic knowledge and overlook the development of critical thinking, problem-solving, and creativity. In today's interconnected and complex world, individuals need more than just rote memorization. They need to be able to adapt to change, think critically, and innovate. Moreover, traditional approaches often neglect the importance of non-formal and informal education, which play significant roles in shaping individuals' intellectual development and societal engagement (Respondent 2).

Innovative organizational structures create environments that foster creativity, collaboration, and innovation among students and educators alike. By breaking away from traditional hierarchies and embracing more flexible and collaborative approaches, educational institutions can better meet the diverse needs of learners and prepare them for the challenges of the future. Additionally, these structures empower educators to experiment with new teaching methods and technologies, ultimately enhancing the quality of education (Respondent 3).

Creative competencies are essential in modern society because they enable individuals to think outside the box, solve complex problems, and adapt to change. In today's knowledge-based economy, creativity and innovation drive economic growth and competitiveness. As such, individuals who possess creative competencies are highly sought after by employers and are better equipped to succeed in a rapidly evolving job market (Respondent 4).

The imperative for developing innovative organizational management models in educational institutions is closely tied to broader societal and economic shifts. As economies evolve and technologies advance, the skills and competencies required for success in the workforce also change. Educational systems must adapt accordingly, ensuring that students are prepared not only for existing job markets but also for emerging opportunities. This may require reimagining traditional educational processes, challenging entrenched norms, and fostering a culture of innovation and lifelong learning. By embracing these transformations, we can better meet the needs of students, societies, and economies in the twenty-first century (Respondent 5).

There are several key factors driving the need for educational innovation policies. Firstly, there is a growing recognition of the importance of education in driving economic modernization and social progress. Secondly, there are internal demands for educational reform to better meet the needs of diverse learners and prepare them for the challenges of the future. Finally, there is a realization that radical transformations are needed in educational processes, as well as societal norms, cultural values, and worldview foundations, to truly address the complex challenges facing our world today (Respondent 6).

DISCUSSIONS

The imperative for developing an innovative organizational management model tailored to educational institutions in the twenty-first century is underscored by various scholars. Limna et al. (2021) argue that the educational landscape of half a century ago no longer adequately prepares individuals for success in collegiate pursuits, careers, and civic engagement in the

contemporary era. Preparing students for the multifaceted challenges of twenty-first century life, including globalization, technological innovation, demographic shifts, international competition, market dynamics, and transnational environmental and political exigencies, presents a formidable task. Eshach (2007) and Rogers (2014) emphasize the significance of all three forms of education—formal, non-formal, and informal—in shaping individuals' intellectual development and societal engagement. Day et al. (2001) and Dobni (2008) contend that innovative organizational structures are pivotal, as they foster conditions conducive to creativity and innovation. Moreover, Kuzminov et al. (2019) assert that creative competencies are highly sought after in contemporary society, necessitating innovative reforms within the educational sphere. Ardashkin (2003), Rumyantseva (2008), and Igor et al. (2015) posit that modern education must cultivate specialists capable of driving innovative progress in the domestic economy and broader societal and cultural contexts. The formulation of education innovation policies, they argue, arises from imperatives for economic modernization and internal demands for educational reform. These mandates necessitate radical transformations not only in the organizational structures of educational processes, but also in societal norms, cultural values, and worldview foundations.

CONCLUSION AND RECOMMENDATIONS

The establishment of an innovative organizational management model tailored to educational institutions in the twenty-first century is imperative. With the ascendancy of the knowledge-based economy, knowledge and innovation have emerged as pivotal determinants of national competitive prowess. Education plays a central role in nurturing both individual and organizational creativity and innovation capacities. Embracing innovative approaches to school management facilitates the cultivation of creativity-centric education, thereby endowing schools with a competitive edge conducive to sustained growth. The implications of such endeavors extend to the development of effective strategies aimed at modernizing educational organizational management models within schools.

Limitations of this study include its narrow focus solely on schools in Krabi, Thailand, potentially limiting the generalizability of findings. With only six Thai key informants, the sample size may not fully capture diverse perspectives within the educational community, while the reliance on qualitative methods could introduce subjectivity. Future research should consider expanding the study's scope to include diverse geographic settings, employing larger sample sizes, and incorporating mixed-methods approaches to provide a more comprehensive understanding of educational innovation and organizational management.

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Foreign Direct Investment (FDI) in Malaysia

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ABSTRACT

Objective: Foreign Direct Investment (FDI) plays a pivotal role in propelling the Malaysian economy forward, particularly within the realm of international business. This study explains the adoption of foreign direct investment (FDI) as Malaysia's competitive advantage.

Methods: This study employed a qualitative review study and utilized content analysis for data analysis. The papers were selected by purposive sampling based on reliable sources from Google Scholar, Web of Science, and Scopus databases in 2014-2024.

Results: A growing rivalry exists to draw foreign direct investment (FDI) globally. This competition is driven by the potential benefits of FDI on the host country's economy, including changes in market structures, employment opportunities, and technological knowledge transfers. Additionally, FDI can help firms gain a competitive edge, increasing investor returns. It is very interested in the role of foreign direct investment (FDI) in economic growth for decades, as academics and politicians have generally recognized the benefits of this investment. Foreign direct investment is one of the main forces influencing Malaysia's economic growth. The Investment Incentives Act of 1968 and special economic zones established by the Malaysian government since the 1970s, along with a stable financial system, macroeconomic conditions, and economic expansion, have all made Malaysia an appealing destination for foreign direct investment.

Conclusion and Recommendation for Future Studies: The paper provides the essentials of FDI for developing an inclusive future investigation. This approach can be considered to achieve a more comprehensive understanding of the subject matter of FDI. However, qualitative interviews and questionnaires are recommended for further studies.

Keywords: *Foreign Direct Investment, Competitive Advantage, International Business, Policy*

INTRODUCTION

Foreign Direct Investment (FDI) serves as a cornerstone in the advancement of the Malaysian economy, particularly in the sphere of international business. It plays a multifaceted role, acting not only as a primary source of the indispensable financing required for economic growth but also as a vital stimulant for export augmentation. Furthermore, FDI facilitates the transfer of cutting-edge technologies and management practices from developed to emerging markets, enhancing the competitive edge of the local industries. It is also instrumental in generating new employment opportunities, thereby contributing to the overall economic prosperity and reduction of unemployment rates within the country. In addition, FDI helps in the diversification of the Malaysian economy, reducing its dependence on traditional sectors and encouraging the growth of new industries. This influx of foreign capital and expertise supports Malaysia in positioning itself as a key player in the global market, driving both the growth and development of its economy. Through fostering an environment conducive to foreign investment, Malaysia continues to leverage FDI as a crucial lever for its economic expansion and as a catalyst for stimulating export growth, underscoring the indispensable role FDI plays in its economic strategy (Zhang, 2015; Palacios, 2018; Tang & Tan, 2018; Hamood et al., 2019).

Globally, a growing rivalry exists in drawing foreign direct investment (FDI). This competition is driven by the potential benefits of FDI on the host country's economy, including changes in market structures, employment opportunities, and technological knowledge transfers. Additionally, FDI can help firms gain a competitive edge, increasing investor returns. Researchers have been critically interested in the influence of inward foreign direct investment (FDI) on economic growth for many years, as the positive effects of this investment have been generally recognized by academics and policymakers (Oury Bah et al., 2015.; Ling et al., 2020; Hosani et al., 2021).

From a practical standpoint, FDI is well recognized for its importance to economic growth and positive spillover effects. Despite the severe implications of regional FDI distribution, attracting and holding onto FDI requires a deeper comprehension of how different regions within a nation have distinct overall competitive characteristics. When Multinational Corporation (MNC) evaluation of the local market environment indicates a misfit between the external conditions and their strategic choices, FDI may leave due to a lack of awareness and action on regional FDI competitiveness (Wang et al., 2016; Cook & Fallon, 2016; Smith & Thomas, 2017; Procher & Engel, 2018; Deng et al., 2019; Cui et al., 2020).

As a result, this review article highlights the role that FDI plays in forging a foreign company's competitive advantage as a critical factor in determining FDI, which drives economic growth in the country. Additionally, decision-makers' knowledge of investors and the conceptual nature of competitive advantage will rise with a deeper grasp of its components in producing competitive advantage, which may promote FDI and economic progress regarding three components of (1) factor conditions, (2) related supporting industries and (3) policies and regulations.

LITERATURE REVIEW

Foreign Direct Investment

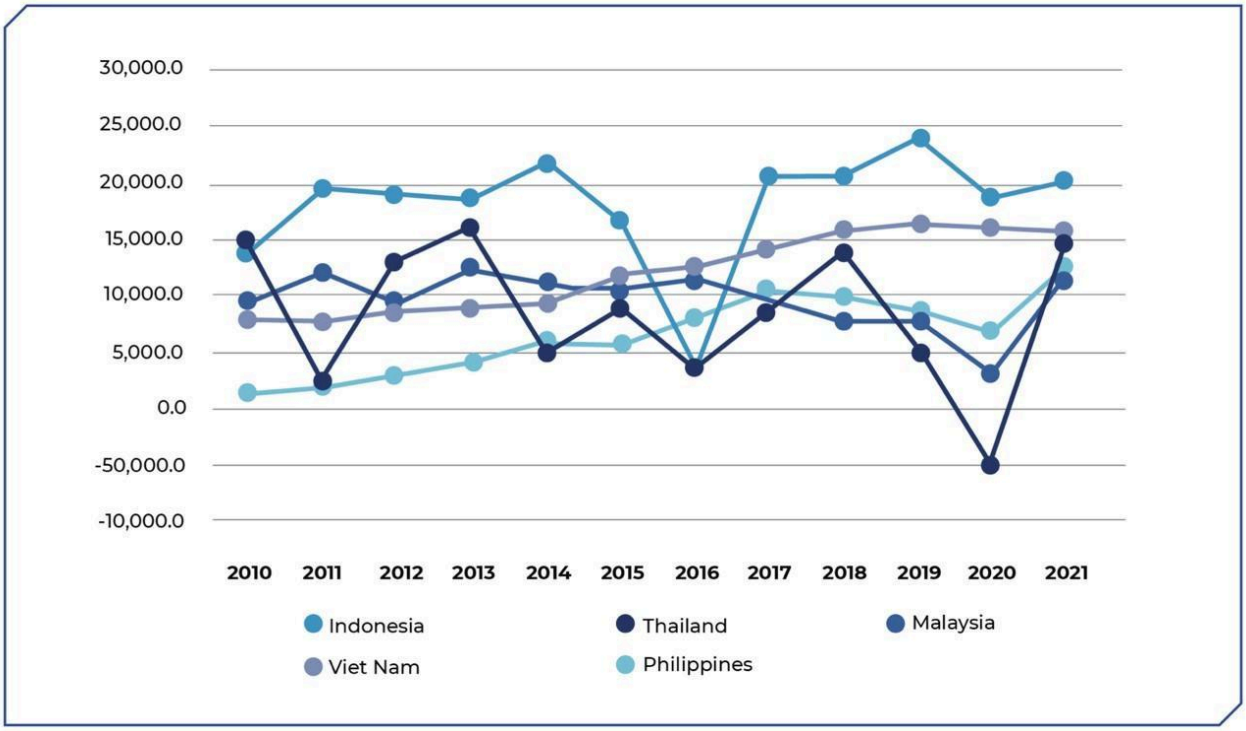

Figure 1: Inflows of FDI into ASEAN-5 (USD million)
Source: NIMP, 2023
https://www.miti.gov.my/index.php/announcements/view/474

Figure 1 shows Malaysia has been developed as a result of FDI brought in through the Free Trade Zone. Due to competition in FDIs, Malaysia's ability to participate in the global value chain is hampered, and as a result, domestic direct investment has been declining overall since 2017. This suggests that strategic steps need to be taken to encourage domestic investment. Moreover, there is an uneven distribution of manufacturing development throughout Malaysia's states. Inclusive growth is hampered by state-by-state differences in manufacturing activity (NIMP, 2023).

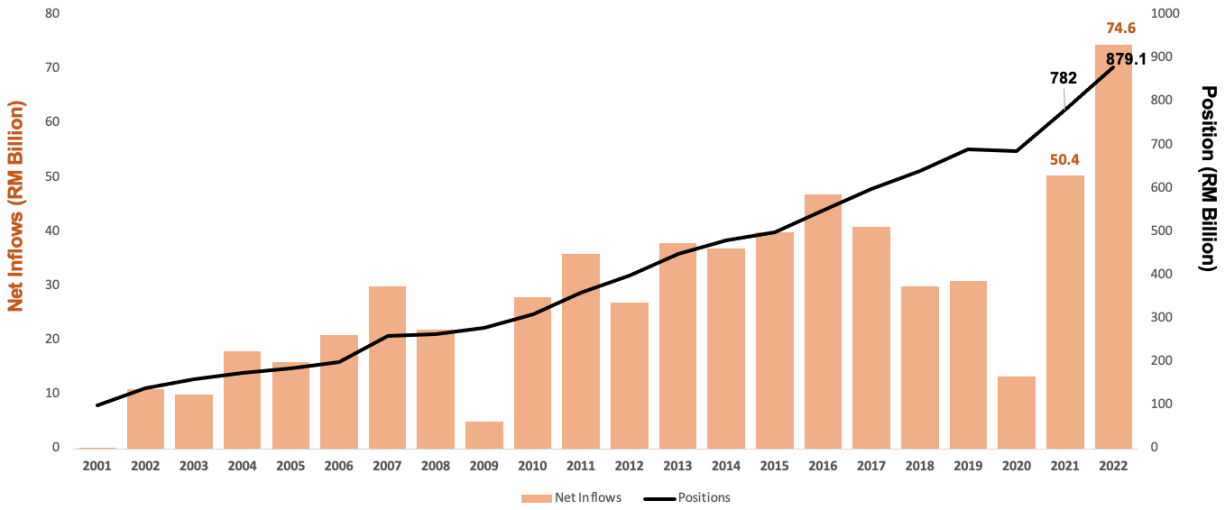

Figure 1.2: Foreign Direct Investment in Malaysia 2001 – 2022
Source: Department of Statistics, Malaysia (DOSM, 2023)
https://open.dosm.gov.my/publications?page=1

Figure 2 shows that FDI plays an essential role in the Malaysian economy. FDI roles include being a vital source of capital needed for economic growth, a driver for export growth, a source of technology transfer, and creating job opportunities in the economy. Malaysia FDIs registered up to RM74.6 billion net inflow in 2022, higher as compared to RM50.4 billion in the previous year, driven by the gradual global economic recovery from the aftermath of the COVID-19 pandemic as illustrated in Figure 1.2 based on the report by the Department of Statistics Malaysia (DOSM, 2023; Hamood et al., 2019; Zhang, 2015; Palacios, 2018; Tang & Tan, 2018).

METHODOLOGY

This study applied qualitative research methodologies. Qualitative research aims to clarify the context in which people or groups act in particular ways and make decisions. It also clarifies the causes of precisely observable events. The study employed a qualitative methodology to elucidate the causes of certain events. With the correct data, comprehensive insights into specific challenges can be quickly achieved to accomplish research goals (Jaipong, 2022; Jangjarat et al., 2023; Lim, 2023; Lim & Siripipatthanakul, 2023; Phuangsuwan et al., 2023; Boonpetchkaew et al., 2024).

This study used content analysis as a data analysis method in addition to a qualitative review study. Purposive sampling was used to choose the papers, and credible sources from the Scopus, Web of Science, and Google Scholar databases were used for the 2014–2024 period.

RESULTS

The three main components of FDI in Malaysia are factor conditions, related supporting industries, and policies and regulations, as shown in Figure 3 (Author generated, 2023).

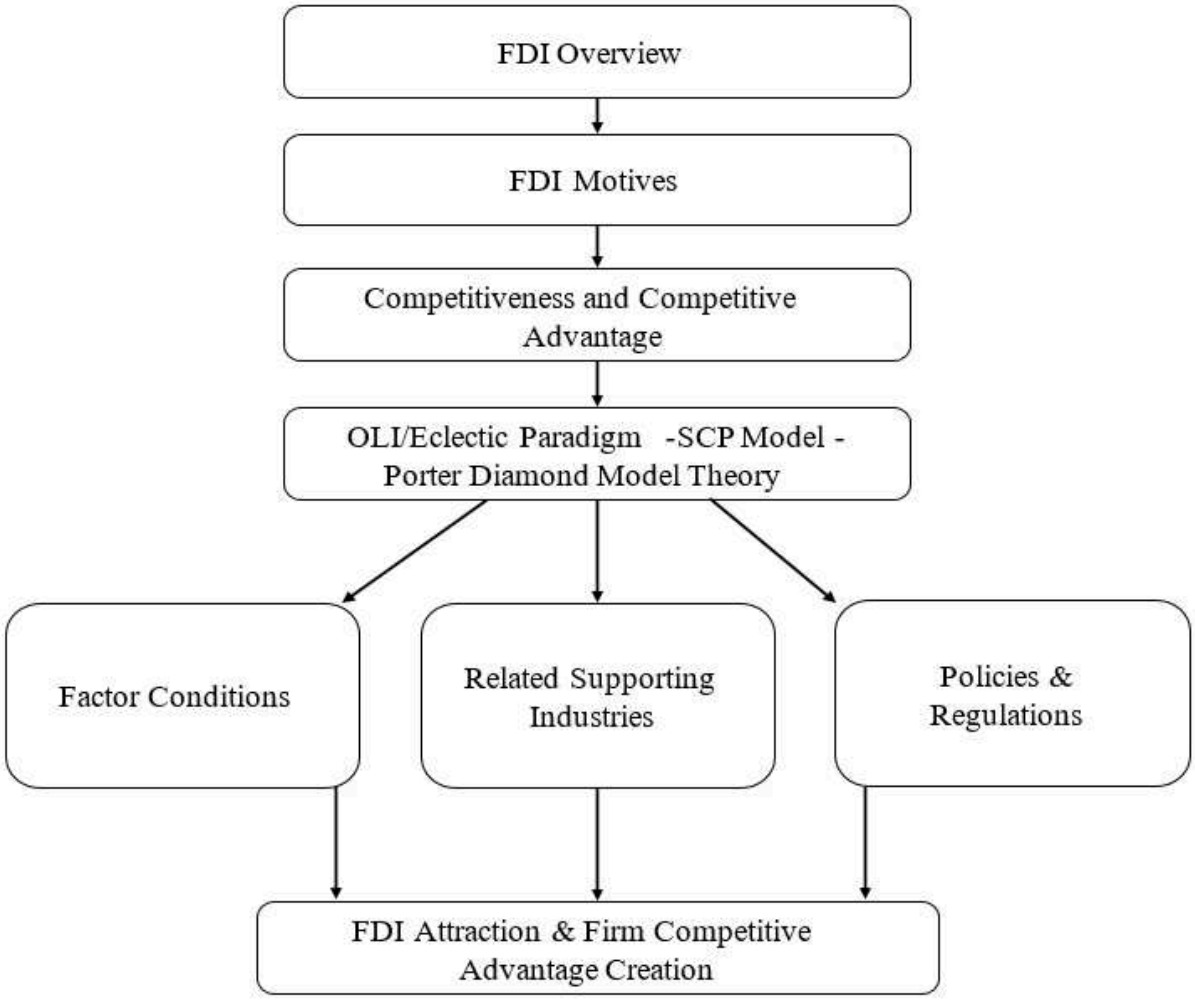

Figure 3. The Main Three Components of FDI in Malaysia (Author generated, 2023).

Foreign Direct Investment (FDI) and Its Three Components

FDI's Components	Latent Variables
Factors Conditions (Porter, 1990)	* Human resources – the availability of abilities, skillsets, labour pool, and costs * Material resources – the availability of raw materials and other input factors at competitive costs * Knowledge resources – the availability of technological & and innovation capabilities such as universities, public research institutions * Information resources – level of business/scientific/market research information * Infrastructure & capital resources – Availability and quality of infrastructures and access to the domestic financial market.
Related Supporting Industries (Porter & Heppelmann, 2014; Frederico & colleagues, 2021)	* Capabilities * Technologies * Interoperability * Supply Chain Processes * Financial and Strategic Results.
Policies and Regulations (Wei & Liu, 2015; Han et al., 2017; Songling et al., 2018; Bretas et al., 2022).	* tax and incentives * political stability and security * institutional quality and efficiency * trade openness.

DISCUSSIONS

Factor Conditions

According to Porter (1990), the results confirm that the first component of FDI is the factor conditions identified. The factors comprise five broad dimensions, namely human resources – the availability of abilities, skill sets, labour pool and costs; material resources – the availability of raw materials and other input factors at competitive costs; knowledge resources – the availability of technological & and innovation capabilities such as universities, public research institutions; Information resources – level of business / scientific / market research information; and Infrastructure & capital resources – Availability and quality of infrastructures and access to the domestic financial market.

Related Supporting Industries

According to Porter & Heppelmann (2014) and Frederico et al. (2021), related and supporting industries refer to the supply chain network that affects how companies compete and value creation for their customers (highlighted five (5) main dimensions which measure a supply chain performance in the Industry 4.0 context, namely 1) Capabilities, 2) Technologies, 3) Interoperability, 4) Supply Chain Processes, and 5) Financial and Strategic Results.

Policies and Regulations

According to Wei & Liu (2015), Han et al. (2017), Songling et al., 2018, and Bretas et al. (2021), policies and regulations cover the institution aspects and its role in cultivating FDIs and improving the nation's FDI attraction and competitiveness, both at the national and firm level. There are four main aspects of policies and regulation determinants: 1) tax and incentives, 2) political stability and security, 3) institutional quality and efficiency, and 4) trade openness.

Competitive Advantages

According to Sigalas et al. (2013), a firm's competitive advantage is the sustainable competitive edge acquired through coordinating resources and factors to perform above the industry average, manifesting exploitation of market opportunities and neutralising competitive threats.

CONCLUSIONS

Local factor conditions, related supporting industries, policies, and regulations are some of the FDI components that could affect a firm's competitive advantage. This review article provides a foundation for creating a more thorough framework for upcoming research, suggesting that a mixed-methods neo-positivist research approach that combines elements of qualitative and quantitative research can be considered for a more comprehensive understanding of the subject matter. This study has helped to clarify the importance of a robust institutional framework in drawing in quality foreign direct investment and, eventually, reviving economic growth. Malaysia, an industrialised, emerging nation with positive FDI inflow, symbolises investor stability and confidence, promoting long-term economic success. By creating laws and regulations, the government plays a crucial role in controlling and encouraging quality investment into the domestic economy, particularly in the manufacturing and services sectors. In order to maximise financial resources, establish a stable macroeconomic climate, and encourage operational efficiencies at all levels, the government must have a clear vision and strategy.

Policymakers may find it easier to concentrate their support to accomplish the desired goals with the aid of this study. To maintain investors' confidence, the government must, from an institutional standpoint, prioritise FDI-friendly policies and trade openness and guarantee political and economic stability and administrational consistency. Investors also value rules of law, bureaucratic efficiency, and institutional excellence and integrity (free from corruption).

RECOMMENDATIONS

This article is a systematic review and may not include respondents. In further studies, the researchers suggest doing qualitative interviews and questionnaires for more insights regarding stakeholders' perceptions in FDI industries.

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Development of Higher Education Institutions Based on Education Criteria for Performance Excellence (EdPEx) in Thailand

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ABSTRACT

Objective: This academic article focuses on presenting important content regarding the concept of educational quality criteria for excellence (EdPEx). This research is a qualitative approach article.

Methods: This paper is a systematic review article related to educational measurement and evaluation. Purposive sampling was employed to select papers from valid sources, such as Scopus, Web of Science, and Google Scholar, from 2020 to 2024. Content analysis was used to interpret secondary data.

Results: Educators in higher education institutions under the Ministry of Higher Education, Science, Research, and Innovation know the importance of knowledge creation. It is essential to develop educational quality towards excellence for rapid development in educational organizations. Adopting the Education Criteria for Performance Excellence (EdPEx) as an organizational management tool could improve the quality of educational organization management. It facilitates the development of core processes and results in realistic results, helping educators identify integrated development opportunities.

Conclusion and Recommendation: Thailand follows the 20-year national strategy (2018-2027), the National Education Plan (2017-2036), and the 13th National Economic and Social Development Plan (P.E. 2023-2027). In 2024, 65 institutions at the faculty or institutional level chose to use the EdPEx (EdPExV) criteria for internal educational quality assurance, which is considered a challenge for higher education institutions. Educators and administrators of academic institutions in Thailand have made this choice.

Keywords: *Measurement, Evaluation, Education Criteria for Performance Excellence (EdPEx)*

INTRODUCTION

Developing social capital is essential for developing people and Thai society to move towards a knowledge-based society. Staying informed amid changing situations in the digital age: Rapid technology change comes in various forms. Ensuring quality education is crucial and requires immediate implementation. Educational institution administration is in an era of severe and continuous change. It is necessary to adjust a new paradigm in the management of educational institution administrators. Facing the coming world, the era of disruptive change is an unexpected dynamic. Good social capital supports economic, social, and academic development, essential in Thailand. Educational institutions must develop skills and knowledge, ideas, abilities, morals, and

ethics, produce a workforce, and develop human capital, consisting of intellectual capital, social capital, and emotional capital (Schultz, 1961; Siribannapitak, 2018; Scott & Guan, 2023).

The National Education Act 2019 (No. 4) emphasizes providing quality education and managing resources in the education system to be efficient and utilize them to the utmost with the Higher Education Commission. It is responsible for considering and proposing policies, development plans, and standards for higher education that are consistent with the needs of the National Economic and Social Development Plan. and the national education plan. Supporting resources, monitoring, inspecting, and evaluating higher education provision. Taking into account the independence and academic excellence of educational institutions. Degree level by the law on establishing each educational institution and related laws and Section 47, which is essential to have an educational quality assurance system. To develop the quality and educational standards of primary education. Higher education consists of an internal quality assurance system and an external quality assurance system. It is specified in Section 48 that the parent agency and educational institution must provide a quality assurance system within the educational institution. It considers its internal quality assurance. It is part of the educational administration process that must be carried out continuously. An annual report must be prepared and submitted to the parent agency. Related agencies and disclosed to the public. Section 49, paragraph one, states that there shall be an Office for Accreditation of Standards and Educational Quality Assessment withstanding to lead to the development of educational quality and to support external quality assurance. Is a public organization responsible for developing criteria? Methods for evaluating external quality and educational management are to inspect the quality of educational institutions by considering the aims, principles, and guidelines for organizing education at each level (Ministry of Education, 2019; Ministry of Education, 2023).

The educational quality assurance system to develop the quality and educational standards of basic education. and higher education in Thailand consists of an internal quality assurance system and an external quality assurance system. Internal quality assurance is one important mechanism that can drive the continuous development of educational quality. Work systematically has quality according to standards Graduates have the quality that parents, learners, stakeholders, communities, and organizations expect. Internal quality assurance in educational institutions is also preparation for external quality assurance assessments. In 2024, there were 65 faculty or institutional-level departments that chose to use EdPEx (EdPExV) criteria for internal educational quality assurance (Office of the Permanent Secretary, Ministry of Higher Education, Science, Research, and Innovation, 2024).

Therefore, educational institutions must establish policies and implement various strategies to prepare students for life beyond graduation. Educational management is crucial in supporting global dynamics in the digital age. Moreover, it is essential. Education is developing knowledge, thoughts, and abilities, including various behaviours, attitudes, values, and morals, in a person's life.

Research Question

What are the Educational Quality Criteria for Operational Excellence (EdPEx) that could encourage organizations to increase their competitive potential and strive for excellence?

Research Objective

This article identifies educational quality criteria for excellence (EdPEx) that could be applied to develop good organizational performance in education.

LITERATURE REVIEW

Education Criteria for Performance Excellence (EdPEx)

Educational quality assurance (quality assurance) is a planning process. and the management process of those responsible for organizing education that will guarantee that society is confident that it will develop learners to achieve complete learning according to the quality standards specified in the curriculum and meet the expectations of society. Parents, learners, stakeholders, and communities have the right to demand that educational institutions and agencies responsible for organizing education Arrange education as efficiently as possible so that learners have knowledge and ability. Skills, attitudes, and various characteristics reach each person's full potential in response to different interests, needs, and aptitudes. Learners have all the qualifications according to society's required quality standards (Sudsuk, 2023).

The educational quality assurance system is a system that develops the quality and educational standards of educational institutions to be equal. Therefore, those who directly guarantee the quality of education are educational institution administrators, faculty, and educational personnel, including stakeholders in education management. There must be shared responsibility for educational quality assurance. The emphasis is placed on agility and the ability to recover quickly. Enterprise learning: Focus on success and innovation. Create benefits for society regarding environmental sustainability and the circular economy, including cybersecurity. Therefore, educational quality assurance is an activity or a systematic performance of the primary mission according to the established plan to have quality control (quality control), quality inspection (quality auditing), and quality assessment (quality assessment) until confidence in quality. The production systems and processes focus on the output and results of educational management (Faculty of Industrial Education and Technology, 2019).

The Education Criteria for Performance Excellence (EdPEx) 2024–2027 edition of Thailand is the latest. Office of the Permanent Secretary, Ministry of Higher Education, Science, Research, and

Innovation by the Subcommittee on Development and Raising the Quality of Education to Excellence Converted from the US Baldrige Criteria for Performance Excellence 2023-2024. To suit the context of Thai education, higher education institutions can use it as a framework for developing the quality of teaching to reach international excellence according to educational quality criteria for excellent operations (Office of the Permanent Secretary, Ministry of Higher Education, Science, Research, and Innovation., 2024).

Baldrige Excellence Framework (Education) 2023–2024 demonstrates core values, concepts, and guidelines for evaluating organizational processes, and results are shown in Figure 1.

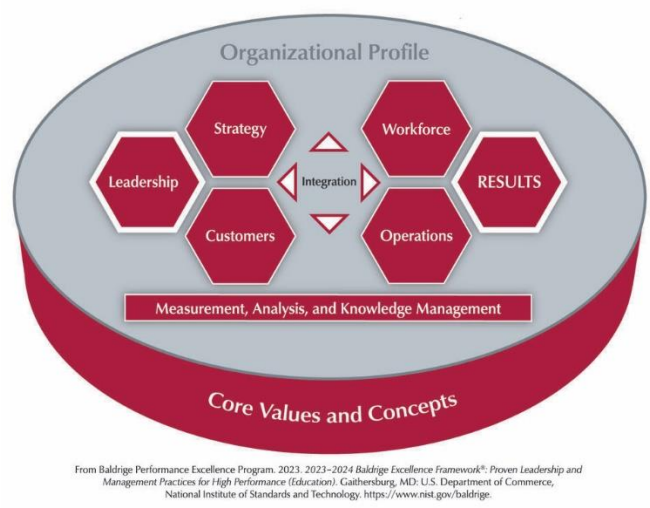

Figure 1. Baldrige Excellence Framework in Education for the years 2023–2024 (National Institute of Standards and Technology, 2023)

Organizations with excellent performance deeply ingrain the 11 values, which consist of beliefs and behaviors. These 11 principles guide the organization's management: 1) a systems perspective; 2) leading the organization with vision; 3) student-focused excellence; 4) a focus on people; 5) mobility and ability to recover quickly 6) Organizational learning 7) Focus on success and innovation. 8) Management using accurate data 9) Creating benefits for society 10) Ethics and transparency 11) Delivering Values and Results (National Institute of Standards and Technology, 2023)

Educational institutions can use the Baldrige Excellence Framework (Education) 2023–2024 for organizational development to analyze the strengths and weaknesses of the organization. Educational institutions face daily and long-term challenges. In addition, the Office of the

Permanent Secretary, Ministry of Higher Education, Science, Research, and Innovation (2020) identifies that the EdPEx criteria have important features in supporting a process or a systems perspective. This allows the institution to see the connection between various categories of criteria, which have a total of 7 categories as follows:

Category 1: Organizational Leadership
- 1.1 Organizational leadership by senior leaders
- 1.2 Organizational governance and its contribution to societal benefits

Category 2: Strategic Planning
- 2.1 Strategy preparation
- 2.2 Putting the strategy into practice

Category 3: Customer focus
- 3.1 Customer expectations
- 3.2 Customer engagement

Category 4: Measurement, Analysis, and Knowledge Management
- 4.1 Measuring, analyzing, and improving organizational performance
- 4.2 Information management and knowledge management

Category 5: Workforce focus
- 5.1 Personnel environment
- 5.2 Personnel engagement

Category 6: Operations Focus
- 6.1 Work Process
- 6.2 Effectiveness of operations

Category 7: Results
- 7.1 Student learning outcomes Responses to other customer groups and processes
- 7.2 Results for students and other customer groups
- 7.3 Personnel Results
- 7.4 Organizational Leadership Results and Corporate Governance.
- 7.5 Financial budget, market, and strategy results

The content of each category contributes to the management of the educational institution's operations. So that the goals are aligned in the same way throughout the organization.

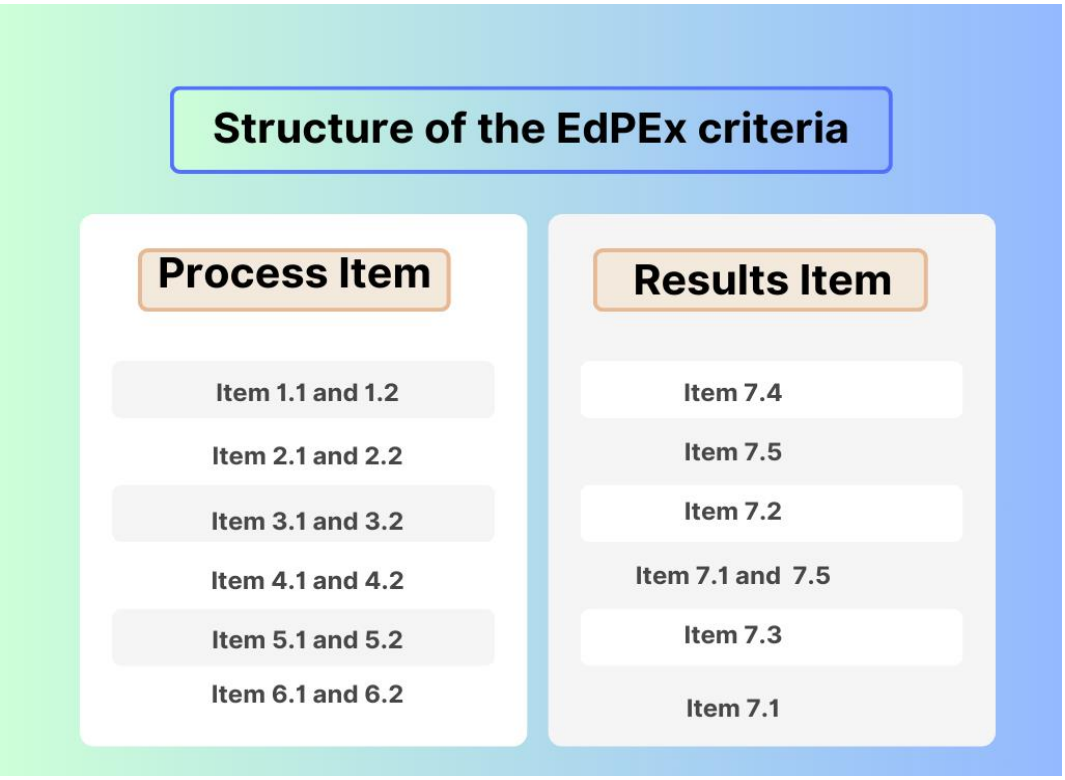

Figure 2. Structure of the EdPEx criteria (Kumprakob, 2023)

RESEARCH METHODOLOGY

Qualitative research methods were used in this research. Qualitative research aims to clarify the context in which individuals or groups make decisions and act in specific ways. It also explains why precisely observed phenomena occur. The study used a qualitative approach to explain why particular phenomena arise. Comprehensive insights into specific issues are obtained through the correct data to meet research goals quickly (Jaipong, 2022; Kok, 2023; Kok & Siripipatthanakul, 2023; Lim & Siripipatthanakul, 2023; Limna, 2023; Boonpetchkaew et al., 2024).

The researchers collected secondary data from documents, journal articles, and textbooks, including experience in organizing internal faculty quality assurance according to EdPEx criteria. This article was reviewed, and the writing employed a systematic review using theories based on sustainable development integrated with business in educational sectors. The scholarly articles

originated from credible sources such as Google Scholar, Scopus, and Web of Science databases. The research strategy is a qualitative approach employing purposive sampling and content analysis, which was analyzed by four business and education-trained researchers.

RESULTS

Educational institutions in Thailand have the freedom to choose an internal quality assurance system based on the principles of academic freedom and freedom of action. In 2024, 65 departments at the faculty or institutional level will choose to use the EdPEx (EdPExV) criteria for internal educational quality assurance. Assessment using the Education Criteria for Performance Excellence: EdPEx is a tool for managing organizations to develop quality in educational management to have quality in leaps and bounds. The source of the criteria is the Baldrige Education Criteria for Performance Excellence, which is accepted and known in the education industry. and has educational institutions. Many places in the United States, Australia, Singapore, Hong Kong, and Thailand have used this criterion for their development. Most use Baldrige's or similar criteria as a model for operational excellence.

There are three steps for selecting the EdPEx system as the agency's quality system at the faculty or institution level as follows:

1. Receive approval from the university council. Through consideration of readiness and suitability in selecting EdPEx criteria as the agency's quality system.
2. Prepare a letter from an educational institution and attach the council resolution that was approved according to item 1 to the Office of the Permanent Secretary, Ministry of Higher Education, Science, Research, and Innovation, to acknowledge the selection of EdPEx criteria as the agency's quality system.
3. Follow the operating guidelines for higher education institutions that adopt EdPEx criteria.

The Office of the Permanent Secretary, Ministry of Higher Education, Science, Research, and Innovation, has set guidelines for agencies that use EdPEx criteria to develop educational organizations towards excellence. The details of the operation and related documents are as follows:

Table 1. Operations of agencies that have chosen to use EdPEx criteria
(Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation, 2024)

Year	Operations of agencies that choose to use EdPEx criteria
First	1. Deliver organizational outlines and set goals for development towards excellence according to the vision of each department. To use as a goal for quality development and report on how to apply EdPEx criteria in the agency to see what the guidelines are for implementation. 2. Create a plan to develop educational quality using EdPEx criteria. 3. Submit basic common data. Enter the data into the CHE QA Online system.
Second	1. Submit a progress report on operating results as determined by the agency in the first year. 2. Submit basic common data. Enter the data into the CHE QA Online system.
Third	1. Submit a progress report on operating results as determined by the agency in the first year. 2. Submit a complete EdPEx self-assessment report. 3. Submit basic common data. Enter the data into the CHE QA Online system.

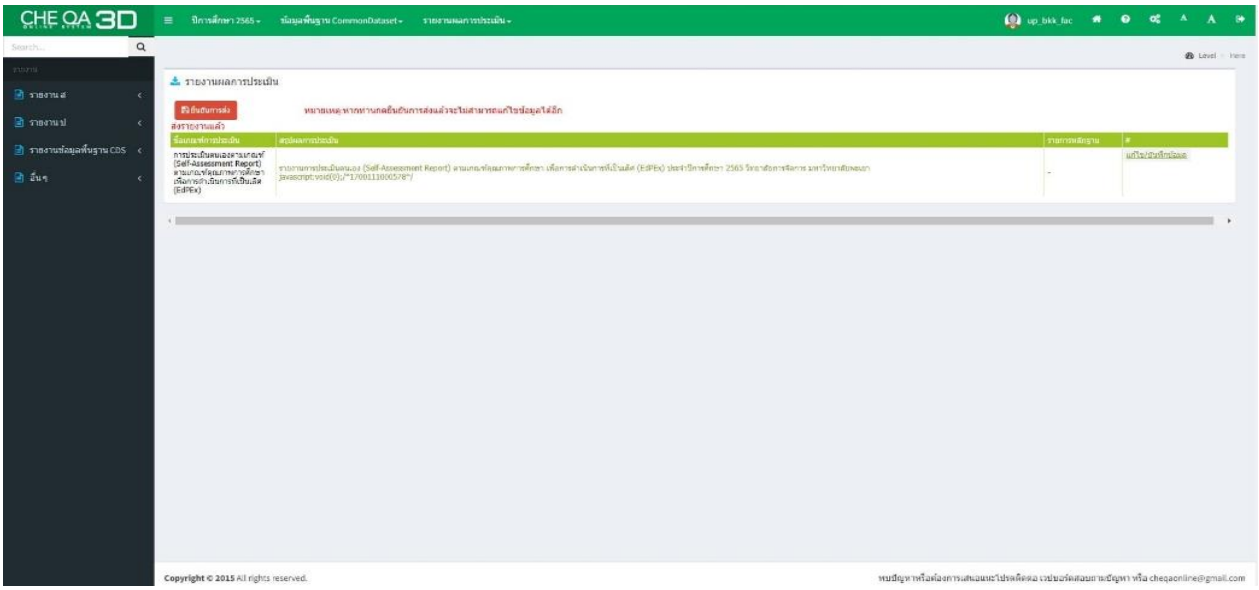

Figure 3. Self-Assessment Report for the academic year 2022 (1 June 2022–31 May 2023) following the educational quality criteria for operational excellence (EdPEx) in the CHE QA Online System. (Phuangsuwan, 2023)

Table 2. Scoring guidelines for each category for Items 1-6
(Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation, 2024)

Score	Description
0% or 5% (Band 1)	A: There is no systematic approach in sight. There is only superficial information. D: There is no systematic approach to transfer to implementation. or only a little L: Does not show any ideas for improvement. Updates are made when problems arise. I: It does not show that there is any consistency in the same approach at the institutional level. Each section or agency operates independently.
10%,15%, 20% or 25% (Band 2)	A: shows that a systematic approach is beginning to emerge that responds to the basic requirements of the topic. D: Leading the guidelines into practice is only at the beginning stage in almost every section or agency. This hinders the achievement of the basic requirements of the subject. L: It shows that there has begun to be a change from accepting problems to basic improvement ideas. I: Have guidelines that are consistent with those of other sections or departments. Mostly caused by problem-solving together
30%, 35%, 40% or 45% (Band 3)	A: demonstrates a systematic and effective approach that addresses the fundamental requirements of the topic. D: Guidelines are being transferred and put into practice. Even though some parts or departments are just in the beginning stages. L: Shows that a systematic approach to evaluating and improving key processes is beginning. I: The guidelines began to be consistent with the basic needs of the institution. As specified in the organization outline and other criteria.
50%,55%, 60% or 65% (Band 4)	A: Demonstrate a systematic and effective approach that responds to the overall requirements of the topic. D: The guidelines have been transferred and put into practice very well. Although the practice may be different in some parts or departments. L: A systematic evaluation and improvement process uses real data. and began to learn at the organizational level. This includes creating innovation to improve the efficiency and effectiveness of critical processes. I: The guidelines are consistent with the overall needs of the institution as stated in the organizational outline and other criteria.

70%,75%, 80% or 85% (Band 5)	A: Demonstrate a systematic and effective approach that responds to the overall requirements of the topic. D: The guidelines were transferred and implemented well, with no significant differences in practice. L: A systematic evaluation and improvement process uses real data. And beginning to learn at the organizational level, which includes creating innovation as an important tool in management. Clear evidence of improvement as a result of analysis and Learning at the organizational level. I: The guidelines are integrated with the needs of the institution. both present and future. As specified in the organization outline and criteria, other categories
90%, 95% or 100% (Band 6)	A: Demonstrate a systematic and effective approach that fully addresses the overall requirements of the topic. D: Guidelines for complete implementation without significant weaknesses or differences between sections or departments. L: A systematic evaluation and improvement process is using real data and learning at the organizational level through innovation is an important tool used throughout the organization in management. There is clear evidence of development and innovation throughout the organization. The analysis and sharing have led to significant progress and innovation within the organization. I : The approach is fully integrated with the current and future needs of the institution, as outlined in the organizational framework and other criteria.

DISCUSSIONS

According to The Education Criteria for Performance Excellence (EdPEx) 2024–2027; Baldrige Excellence Framework (Education) 2023–2024 and Kesaporn et al. (2022), it could be discussed as follows;

The EdPEx criteria have essential features to support a process or a systems perspective. It allows the institution to see the connection between various criteria, which have a total of 7 categories and have a systematic and practical approach to essential processes. It is essential to translate the strategic plans into practice. It is managing mission implementation using strategic plans and annual action plans. Organizational operations that consider the impact and well-being of the community and potential development personnel in the organization regularly Have such guidelines that help promote and support personnel operations, resulting in a commitment to the institution. Create a corporate culture. It is committed to creating research results, education, and academic services. And innovation increases more effectively in response to changes in

competitiveness. The results confirmed Kesaporn et al. (2022) that factors affecting the success of quality assurance according to the Education Quality Criteria for Operational Excellence (EdPEx) include organizational culture, management and budget, leadership, and policymaking.

Educational institutions in Thailand could adopt the internal educational quality assurance system based on the principles of academic freedom and independence of operations. The educational quality assurance system chosen may be the system developed by the Higher Education Internal Quality Assurance Committee or internationally. Based on the ideas of academic freedom and operational independence, educational institutions are free to select their own internal quality assurance method. The Higher Education Internal Quality Assurance Committee's system or an international one may be used as the educational quality assurance system.

Educational institutions in Thailand have adopted EdPEx criteria for internal educational quality assurance Senior leaders of an educational institution must demonstrate commitment to leading the organization to achieve the institution's vision. Senior leaders must listen to the voices of those wanting and expectations of students and stakeholders. Information on personnel potential is conveyed to personnel through various communications. There is planning and strategy. based on important feedback, such as strategic challenges strategic advantages core competencies of the faculty and institution including transferring it to work plans. including related work systems throughout the organization that are consistent with the values of the faculty and institution.

CONCLUSIONS

The preparation of a self-evaluation report is required. (Self-Assessment Report) according to educational quality criteria for operational excellence (EdPEx) for the academic year and there is an evaluation committee. Consider evaluating the self-evaluation report according to the criteria for developing educational quality towards excellence (EdPEx) by preparing an independent report. Meeting to find common conclusions. Visiting the agency to inquire about and confirm information prepare a report summarizing the evaluation results and recommendations for development. The evaluation committee will send the evaluation report (feedback report) for the academic year to the educational institution.

Factors that make operations successful depend on the level of cooperation among personnel and senior management. including results from operations consistent with the duties and missions of the agency. Must be aware of problems, obstacles, and the development of Thai higher education institutions. According to the concept of Educational Quality Criteria for Excellence (EdPEx), it is the path to success in driving.

LIMITATION AND RECOMMENDATION

This research is a review article. Respondents may not be included in this study. The researchers recommend continuing quantitative and qualitative analysis for further analysis to obtain comprehensive results. Therefore, the development of Thai higher education institutions According to the concept of educational quality criteria for excellent implementation (EdPEx), should be based on research and development.

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