



The Essential Needs for Managing Esports Curricula in Private Universities in Thailand Based on the Concept of Sustainable Esports Entrepreneurship

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Abstract

This study examines the essential needs for managing esports curricula in private universities in Thailand based on the concept of sustainable esports entrepreneurship. The research aimed to investigate the current conditions, desired conditions, and priority needs for academic administration aligned with sustainable esports entrepreneurship principles. A quantitative needs assessment research design was employed. The population consisted of seven private universities in Thailand offering esports-related programs, and data were collected using a questionnaire assessing both current and desired states of academic management. Data were analyzed using mean, standard deviation, and the Priority Needs Index Modified (PNI_{modified}). The findings indicated that the overall current condition of academic administration supporting sustainable esports entrepreneurship was at a high level, with assessment and evaluation receiving the highest mean score, followed by learning process development and curriculum development. The desired conditions were also rated at a high level, with learning process development ranking highest, followed by curriculum development and learning assessment. Based on the PNI_{modified} analysis, curriculum development showed the highest priority need, followed by learning process development and learning assessment.

These findings highlight the importance of curriculum design, learning processes, and assessment systems aligned with industry needs in developing sustainable esports entrepreneurs. The study contributes to educational management literature by providing a needs-based framework for academic management in emerging esports education programs.

Keywords: Sustainable Esports Entrepreneurship, Esports Curriculum Management, Private Universities

Introduction

In the rapidly changing global economy, Thailand has outlined its development pathway in the 13th National Economic and Social Development Plan (2023-2027), which emphasizes four strategic dimensions: an innovation-driven economy, social equity, environmental sustainability, and the enhancement of human capital and public sector capacity. Within this framework, the sports industry has been recognized as a priority sector, with esports officially acknowledged as a professional sport under Thai law. Esports has emerged as a rapidly expanding business sector, generating substantial economic value, attracting both public and private investment, and exerting a significant influence on young people. Consequently, esports has been increasingly integrated into the education system to enhance students' potential and prepare the workforce for new labor markets (Office of the National Economic and Social Development Council, 2022).

In response, several private universities in Thailand have launched esports-related academic programs aimed at preparing students for future careers through technology, creativity, and sustainability. These initiatives align with the country's 20-Year National Strategy and the goals of Industry 4.0. However, the current emphasis remains largely on entrepreneurial ventures driven by profit generation, while neglecting the balance between profitability and sustainability (SCG Foundation, 2023).

The concept of Sustainable Esports Entrepreneurship (SEE) highlights the essential qualities of entrepreneurs, including achievement orientation, self-confidence, leadership and management skills, innovation and creativity, adaptability to change, and responsibility for transparent and ethical business practices (Allal-Chérif et al., 2024)

Accordingly, both businesses and higher education institutions must develop management approaches that respond to ongoing transformations by fostering sustainable entrepreneurs. This requires the cultivation of highly competent leaders, the appropriate use of digital technologies, and the development of specialized skills to drive Thailand's economy and society in the twenty-first century. Given its accelerating growth trajectory, the esports industry should be advanced on the foundation of sustainable entrepreneurship in order to generate knowledge, produce skilled human resources, and ensure that both business and education progress in tandem toward long-term sustainability.

Research objectives

To examine the current conditions, the desired conditions, and the essential needs for developing academic management in private universities based on the concept of sustainable esports entrepreneurship.

Literature review

Concept of esports

Esports, or electronic sports, refers to organized competitive video gaming conducted under structured rules and professional management systems similar to traditional sports. Esports competitions occur at both amateur and professional levels and are broadcast globally through digital platforms, contributing to the rapid growth of the esports ecosystem, which includes players, teams, event organizers, streaming platforms, sponsors, and educational institutions (Formosa et al, 2022; Kanellopoulos, & Giossos, 2024). Beyond entertainment, esports has increasingly become part of the digital economy and education sector, particularly in higher education, where universities have begun to develop esports-related academic programs to prepare students for careers in digital media, sports management, and game industries.

Sustainable esports entrepreneurship

The concept of sustainable esports entrepreneurship extends traditional entrepreneurship by emphasizing long-term economic, social, and ethical sustainability within the esports ecosystem. According to Allal-Chérif et al. (2024), sustainable esports entrepreneurship consists of several interrelated dimensions, including positive social impact, creativity and innovation, adaptability under constraints, and resilience in adversity. These dimensions suggest that esports entrepreneurs must not only possess business and technological skills but also demonstrate social responsibility, innovation capability, and adaptability in rapidly changing digital environments.

Importantly, these characteristics have direct implications for higher education curriculum design. If universities aim to develop sustainable esports entrepreneurs, academic programs must move beyond teaching technical gaming skills or business management alone and instead integrate interdisciplinary knowledge, innovation skills, ethical awareness, and real-world problem-solving abilities. Therefore, the concept of sustainable esports entrepreneurship provides a theoretical foundation for designing academic management systems and curricula in esports education.

Academic management in esports programs

In response to the rapid growth of esports education, several scholars have proposed academic management approaches for esports programs (Lee, 2020; Camilleri et al., 2022; Scott et al., 2021). These studies suggest that esports curricula should include interdisciplinary curriculum structures, experiential learning approaches, competency-based assessment, and industry collaboration. However, these studies mainly focus on curriculum components and program structures rather than the overall academic management system.

From an educational management perspective, academic management typically consists of three major components: curriculum development, learning process development, and assessment and evaluation (Harnwises & Rojratanavanit, 2023). These components are essential mechanisms through which universities translate educational concepts and industry needs into actual teaching and learning practices. Therefore, if sustainable esports entrepreneurship is the desired graduate outcome, academic management systems must be designed to support curriculum structures, learning processes, and assessment methods that develop innovation, entrepreneurship, adaptability, and social responsibility among students.

Curriculum management in private universities

Curriculum management in private universities refers to the systematic planning, development, implementation, evaluation, and continuous improvement of academic programs to ensure alignment with institutional missions, market demand, and societal needs (Knight, 2015). Private universities often emphasize flexibility, responsiveness, and innovation in curriculum development in order to remain competitive and financially sustainable (Altbach et al., 2009). This flexibility makes private universities particularly important in emerging fields such as esports education, where curricula must adapt quickly to technological change and industry development.

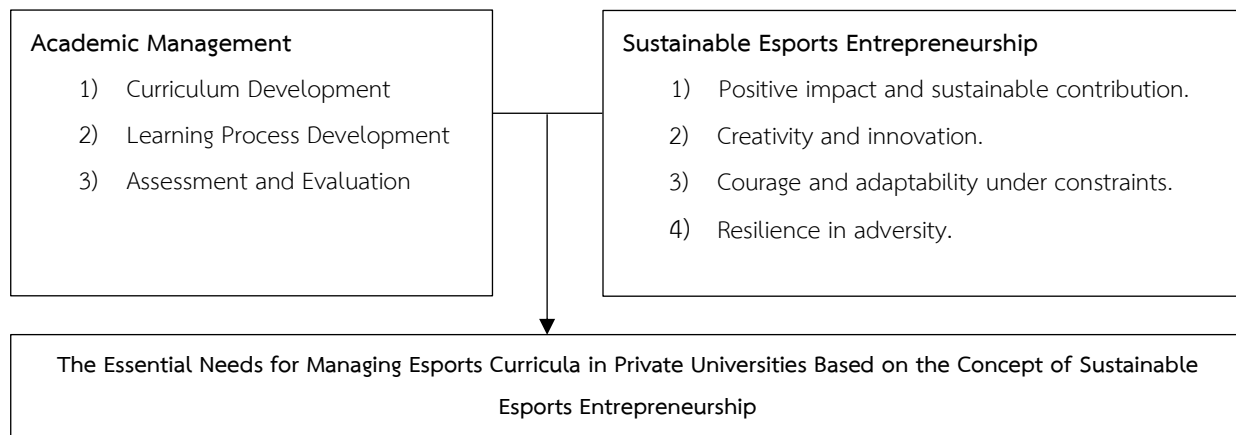
Effective curriculum management integrates outcome-based education, industry collaboration, and quality assurance mechanisms to enhance graduate employability and program relevance. It also requires collaboration among academic administrators, faculty members, industry partners, and external stakeholders. In the context of esports education, curriculum management must therefore align sustainable entrepreneurship concepts with curriculum design, learning processes, and assessment systems.

Conceptual linkage and research framework

From the literature reviewed, it can be argued that sustainable esports entrepreneurship represents the desired graduate characteristics, while academic management represents the institutional

mechanism used to develop those characteristics. Academic management through curriculum development, learning process development, and assessment and evaluation serves as the operational framework through which sustainable esports entrepreneurship competencies can be developed in students. Therefore, this study adopts these three components of academic management as the main dimensions for investigating the current conditions, desired conditions, and essential needs for managing esports curricula in private universities.

Conceptual framework



Methodology

This study employed a survey research design to investigate the current conditions, desired conditions, and essential needs for academic administration in private universities based on the concept of Sustainable Esports Entrepreneurship.

Population and participants

The population consisted of seven private universities offering esports-related academic programs. The target respondents included program administrators, curriculum coordinators, full-time lecturers, and instructors involved in esports programs. Ten respondents were selected from each university, including two program administrators or curriculum coordinators and eight instructors, resulting in a total target sample of 70 respondents.

Data collection resulted in 58 completed questionnaires, representing a response rate of 82.86%. These 58 respondents were used for data analysis.

Research instrument

The research instrument was a questionnaire designed to assess the current and desired conditions of academic administration in private universities based on the concept of Sustainable Esports Entrepreneurship. The questionnaire employed a five-point Likert scale ranging from 1 (lowest level) to 5 (highest level).

Instrument development and validation

The questionnaire items were developed based on a comprehensive review of theories, concepts, and previous studies related to sustainable esports entrepreneurship and academic management. The draft questionnaire was evaluated by five experts to determine content validity using the Item-Objective Congruence (IOC) index. The IOC values ranged from 0.60 to 1.00, indicating acceptable content validity.

The instrument was then pilot tested with 30 respondents from universities offering esports-related programs. Reliability analysis using Cronbach's alpha produced a coefficient of 0.741, indicating acceptable internal consistency reliability.

Data collection

Data were collected through cooperation with universities offering esports programs. Questionnaires were distributed to 70 respondents, and 58 completed questionnaires were returned, representing a response rate of 82.86%.

Data analysis

Data were analyzed using descriptive statistics, including frequency, percentage, mean, and standard deviation. The Priority Needs Index Modified (PNI_{modified}) was used to determine priority needs.

Research results

This study employed a survey research design. The research procedures were as follows:

Population

The population consisted of universities offering academic programs related to esports.

Participants

The respondents consisted of 58 academic staff members from universities offering esports-related programs. Table 1 presents the demographic characteristics of the respondents, including professional experience, current position, teaching experience, gender, age, and educational qualifications.

Table 1 Number and percentages of respondents.

Demographic	Number	Percentage
1. Length of Professional Experience		
1.1 Less than 2 years	3	5.17
1.2 2-5 years	23	39.66
1.3 6-10 years	22	37.93
1.4 11-15 years	9	15.52
1.5 More than 15 years	1	1.72
Total	58	100.00
2. Current Position (multiple responses allowed)		
2.1 Program Director / Program Coordinator	4	6.90
2.2 Full-time Lecturer	42	72.41
2.3 Other	12	20.69
Total	58	100.00
3. Teaching Experience at the Current University		
3.1 Less than 2 years	13	22.41
3.2 2-5 years	12	20.69
3.3 6-10 years	25	43.10
3.4 11-15 years	8	13.79
3.5 More than 15 years	0	0.00
Total	58	100.00
4. Gender		
4.1 Female	2	3.45
4.2 Male	56	96.55
4.3 Prefer not to disclose	0	0.00
Total	58	100.00
5. Age		
5.1 Under 31 years	3	5.17
5.2 31-40 years	51	87.93
5.3 41-50 years	4	6.90
5.4 51 years and above	0	0.00
Total	58	100.00

Demographic	Number	Percentage
6. Highest Educational Qualification		
6.1 Certificate/Diploma	0	0
6.2 Bachelor's degree	0	0
6.3 Master's degree	53	91.38
6.4 Doctoral degree	12	20.69
6.5 Other	0	0
Total	58	100

Most respondents had 2-5 years of professional experience (39.66%), followed by 6-10 years (37.693%) and 11-15 years (15.52%). Regarding current position, the majority were full-time lecturers (72.41%), while 20.69% held other academic positions and 6.90% served as program directors or program coordinators.

In terms of teaching experience at the current university, most respondents had worked 6-10 years (43.10%), followed by less than 2 years (22.41%) and 2-5 years (20.69%). Regarding gender, male respondents accounted for 96.55%, while female respondents accounted for 3.45%. The majority of respondents were aged 31-40 years (87.93%). In terms of educational qualifications, most respondents held a master's degree (91.38%), while 20.69% held doctoral degrees.

Research instrument

The research instrument was a questionnaire assessing the current and desirable conditions for the development of academic management in private universities based on the concept of sustainable esports entrepreneurship. The questionnaire employed a five-point Likert scale. The analysis of the current conditions, desirable conditions, and essential needs for adopting academic administration approaches in private universities to promote the concept of sustainable esports entrepreneurship is presented in Table 2.

Table 2 Results of the analysis of current conditions, desirable conditions, and essential needs for adopting academic administration approaches in private universities to promote sustainable esports entrepreneurship (overall perspective).

Managing Esports Curricula in Private Universities Based on the Concept of Sustainable Esports Entrepreneurship	Overall Results					
	Current Conditions		Desired Conditions		PNI _{modified}	Rank
	(D)		(I)			
	M	SD	M	SD		
1. Curriculum Development	3.874	0.731	4.404	0.659	0.137	1
1.1 Sustainable entrepreneurs with a positive impact.	3.786	0.703	4.373	0.705	0.155	1
1.2 Creativity and innovation.	3.892	0.71	4.415	0.710	0.134	2
1.3 Audacity and resourcefulness in the face of scarcity.	3.932	0.76	4.435	0.630	0.128	4
1.4 Resilience in adversity.	3.885	0.75	4.394	0.590	0.131	3
2. Learning Process Development	3.891	0.696	4.412	0.598	0.134	2
2.1 Sustainable entrepreneurs with a positive impact.	3.891	0.74	4.415	0.590	0.135	2
2.2 Creativity and innovation.	3.845	0.58	4.390	0.560	0.142	1
2.3 Audacity and resourcefulness in the face of scarcity.	3.931	0.742	4.434	0.670	0.128	4
2.4 Resilience in adversity.	3.895	0.72	4.408	0.570	0.132	3
3. Assessment and Evaluation	3.930	0.681	4.401	0.688	0.120	3
3.1 Sustainable entrepreneurs with a positive impact.	3.842	0.610	4.392	0.680	0.143	1
3.2 Creativity and innovation.	3.892	0.680	4.408	0.620	0.133	2
3.3 Audacity and resourcefulness in the face of scarcity.	3.985	0.734	4.452	0.746	0.117	3
3.4 Resilience in adversity.	4.001	0.700	4.353	0.706	0.088	4
รวม	3.898	0.702	4.406	0.648	0.131	

Table 2 presents the current conditions, desired conditions, and priority needs for academic administration in private universities to support Sustainable Esports Entrepreneurship. The findings indicate that the overall current condition of academic administration was rated at a high level ($M = 3.898$, $SD = 0.702$). When considering individual components, Assessment and Evaluation recorded the highest mean score ($M = 3.930$, $SD = 0.681$), followed by Learning Process Development ($M = 3.891$, $SD = 0.696$) and Curriculum Development ($M = 3.874$, $SD = 0.731$).

For the desirable conditions, the overall level was also rated at a high level ($M = 4.406$, $SD = 0.648$). Learning Process Development showed the highest mean score ($M = 4.412$, $SD = 0.598$), followed by Curriculum Development ($M = 4.404$, $SD = 0.659$), while Assessment and Evaluation had the lowest mean among the three components ($M = 4.401$, $S.D. = 0.688$). This indicates that respondents placed the highest expectations on improving learning processes, particularly those that foster creativity, innovation, and entrepreneurial competencies.

Regarding priority needs based on the Priority Needs Index Modified (PNI_{modified}), Curriculum Development showed the highest priority need ($PNI_{\text{modified}} = 0.137$), followed by Learning Process Development ($PNI_{\text{modified}} = 0.134$), and Assessment and Evaluation ($PNI_{\text{modified}} = 0.120$). This suggests that curriculum development is the most critical area requiring improvement in order to support sustainable esports entrepreneurship in private universities.

Conclusion

The findings presented in Table 1 indicate that the overall condition of academic administration in private universities for promoting Sustainable Esports Entrepreneurship was rated at a high level. This result suggests that many universities have already established foundational structures in curriculum design, learning process development, and assessment systems aligned with the expanding esports and digital industry. The high mean scores across all dimensions reflect increasing recognition of esports not only as an entertainment sector but also as an emerging professional and entrepreneurial field requiring structured academic preparation. This aligns with Jenny, Gawrysiak, & Besombes, (2021) who highlighted the growing integration of esports into higher education through the development of academic programs and curricula designed to prepare students for the expanding esports ecosystem.

Among the three dimensions, Assessment and Evaluation demonstrated the highest mean score, implying that universities have developed mechanisms to measure students' competencies through authentic assessments, competitions, and project-based learning activities. The high rating of Audacity and resourcefulness in the face of scarcity indicates that both instructors and students demonstrate

adaptability, creativity, and resilience when operating under limited resources, which are essential competencies in the rapidly changing esports ecosystem. This finding is consistent with Beard (2015) and Lee (2020), who noted that esports education should incorporate real-world problem-solving and performance-based evaluation to prepare students for industry uncertainty and innovation-driven environments.

In contrast, the Curriculum Development dimension, although rated at a high level, showed the highest priority need ($PNI_{\text{modified}} = 0.137$). This indicates that sustainability-oriented entrepreneurial competencies, ethical awareness, and social responsibility are not yet fully integrated into existing curricula. This finding suggests that while current curricula provide a strong foundation in esports management and digital skills, further curriculum transformation is needed to incorporate responsible entrepreneurship, digital citizenship, and long-term industry sustainability. This corresponds with Camilleri et al. (2022), who argued that interdisciplinary curriculum design integrating business, technology, ethics, and social innovation is essential for preparing students as responsible digital entrepreneurs.

The Learning Process Development dimension also ranked high in both current and desirable conditions, reflecting the increasing adoption of experiential learning, project-based learning, and industry collaboration. The strong emphasis on Creativity and innovation suggests that teaching approaches are shifting toward hands-on learning environments where students develop practical skills, teamwork abilities, and entrepreneurial thinking. These learning approaches are particularly important for graduate employability, as the esports and digital media industries require graduates who possess not only technical knowledge but also soft skills, problem-solving abilities, and the capacity to work in multidisciplinary teams. This finding is consistent with Biggs and Tang (2011), who emphasized constructive alignment and experiential learning as key mechanisms for developing higher-order thinking skills and professional competencies.

From a broader social perspective, the development of Sustainable Esports Entrepreneurship curricula can contribute significantly to graduate employability and digital workforce development. The esports industry generates diverse career opportunities, including game production, event management, digital marketing, streaming, data analytics, and esports business management. Therefore, improving curriculum management in this field can help universities produce graduates who are better prepared for employment in the digital economy, self-employment, and entrepreneurship. Moreover, esports education can promote digital literacy, teamwork, intercultural communication, and inclusive participation, which are important competencies for the future workforce and knowledge-based society.

Overall, the findings highlight the importance of curriculum transformation that aligns academic administration with sustainable entrepreneurship principles, digital workforce development, and societal needs. Universities play a critical role in developing human capital for the digital economy by integrating ethical decision-making, social responsibility, creativity, and resilience into curriculum design, learning processes, and assessment systems. These findings support the argument of Allal-Chérif et al. (2024), Altbach et al. (2009), and Knight (2015), who emphasized that higher education institutions must align curriculum management with labor market changes, technological transformation, and societal development in order to remain relevant in the twenty-first century.

Recommendations

Recommendations for practice

Based on the findings, private universities offering esports-related programs should prioritize curriculum development as the primary area for improvement. Curricula should be systematically redesigned to explicitly integrate the principles of sustainable esports entrepreneurship, including social responsibility, ethical decision-making, creativity, and resilience under constraints. Academic administrators are encouraged to strengthen interdisciplinary collaboration by linking esports studies with business management, digital technology, innovation, and social sciences to enhance learners' holistic competencies.

In addition, universities should further develop experiential learning environments, such as esports laboratories, simulated competitions, industry-based projects, and partnerships with professional esports organizations. These practices will enable students to acquire real-world experience and foster entrepreneurial mindsets aligned with sustainability goals. Assessment and evaluation systems should also emphasize authentic and performance-based assessment methods that reflect industry realities and measure learners' adaptive capacity, innovation, and ethical awareness.

Recommendations for further research

Future studies should expand the scope of investigation by employing mixed-method or longitudinal research designs to examine the long-term outcomes of academic management models based on sustainable esports entrepreneurship. Comparative studies across public and private universities, as well as across different national contexts, would provide deeper insights into contextual factors influencing esports curriculum effectiveness.

Moreover, future research should explore learners' perspectives and learning experiences, particularly regarding the development of entrepreneurial competencies, resilience, and social

responsibility. Investigating the impact of industry collaboration and digital learning ecosystems on graduate employability would also contribute valuable empirical evidence to support sustainable development in esports education.

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