SUSTAINABLE MANAGEMENT IN THE DIGITAL AGE: A STRATEGIC MODEL FOR PRIVATE HIGHER EDUCATION INSTITUTIONS

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ABSTRACT

Private Higher Education Institutions (PHEIs) face increasing challenges in maintaining competitiveness, economic sustainability, and academic relevance within the rapidly evolving global education landscape. The primary objectives of this study were twofold: (1) to formulate a sustainable management model for PHEIs, and (2) to verify the validity of the proposed model. A qualitative methodology was employed to gain an in-depth understanding of the phenomena. The top five PHEIs in Thailand were selected for in-depth interviews, based on rankings from the Webometrics Ranking of World Universities and the UniRank University Ranking. The institutions selected were: (1) Assumption University, (2) Rangsit University, (3) Bangkok University, (4) Sripatum University, and (5) the University of the Thai Chamber of Commerce. The research was conducted in two phases. Phase 1 involved the development of the sustainable management model using in-depth interviews with 20 key informants, including 5 senior executives, 5 lecturers, 5 experts, and 5 staff members. The resulting model was based on the 7Ps marketing mix framework—Product, Price, Place, Promotion, People, Process, and Physical Evidence/Environment and Presentation—combined with ESG principles (Environmental, Social, and Governance) and integrated with the POSDC managerial process (Planning, Organizing, Staffing, Directing, and Controlling). This integrated model was aligned with the four core missions of higher education institutions: graduate production, research, academic services, and cultural preservation. Phase 2 involved validation of the model by seven external experts using a checklist-based evaluation. The findings confirmed the robustness of the model, which strategically integrates the 7Ps marketing mix, ESG principles, and POSDC functions to support the four key institutional missions. The final model provides a comprehensive and strategic roadmap for enhancing the sustainability and competitiveness of private higher education in dynamic and uncertain environments.

1. INTRODUCTION

Private higher education institutions (PHEIs) in Thailand have long played a vital role in advancing the country's educational system. They contribute through four key missions: producing qualified graduates, conducting research, offering academic services, and preserving arts and culture. Over the past five decades, the sector has grown significantly, adapting to a range of challenges including evolving social, economic, and technological trends influenced by shifting government education policies (Saichai, 2018; Saini, Swati, & Pokhriyal, 2022).

Today, these institutions face new and intensifying pressures. Environmental degradation, widening social inequality, and governance failures across various sectors have led to heightened expectations for greater accountability and engagement. Consequently, environmental responsibility, social responsiveness, and good governance—collectively referred to as ESG (Environmental, Social, and Governance) principles—are becoming crucial indicators for evaluating institutional performance and maintaining public trust (Doppelt, 2017; CFA Institute, 2018).

PHEIs also contend with fierce competition, not only from public universities but increasingly from international education providers. This landscape is further complicated by technological disruption, demographic shifts—such as declining school-age populations—and changing student expectations, particularly following the COVID-19 pandemic, which transformed learning preferences and behaviors (Malisuwan, 2017).

Moreover, PHEIs are grappling with limited government support and economic downturns, compounding both internal and external challenges (Yimprasert & Tubtimcharoon, 2015). These conditions have resulted in declining student enrollment, rising financial pressures, and an urgent need for more adaptive and sustainable strategies. In this context, adopting ESG-driven practices is not only beneficial but essential for institutional survival and growth (Doppelt, 2017; CFA Institute, 2018).

One promising approach to addressing these challenges is the application of the 7Ps marketing mix strategy—Product, Price, Place, Promotion, People, Process, and Physical Evidence/Environment and Presentation—integrated with ESG principles (CFA Institute, 2018; Sherwood & Pollard, 2018). This combination is designed to foster sustainability by aligning core operations with responsible environmental management, social contributions, and transparent governance. The 7Ps framework is internationally recognized as a versatile and effective model for enhancing competitiveness in the education sector, offering a comprehensive means to meet market demands while reinforcing institutional values and public accountability (Bloomberg Professional Services, 2023).

To support long-term development, Thai PHEIs must adopt a strategic vision that emphasizes several critical areas: building a clear and forward-thinking institutional identity; improving teaching and learning through student-centered methods; embracing lifelong learning and digital innovation; strengthening research infrastructure; adopting governance-based management systems (Phuworawan, 2019; Srisathanon, 2022); optimizing resource use; fostering collaborations with the private sector; enhancing faculty quality and compensation; and creating dynamic networks within the higher education ecosystem (Office of the Permanent Secretary, Ministry of Higher Education, Science, Research and Innovation, 2021; Saini et al., 2022).

In response to these imperatives, the proposed research introduces a framework that integrates the 7Ps marketing mix with ESG considerations (CFA Institute, 2018; Intan, 2021). The model is further reinforced by the POSDC managerial approach—Planning, Organizing, Staffing, Directing, and Controlling—which offers a structured process for improving institutional efficiency and effectiveness (HREX.asia, 2019). This integrated strategy aims to fulfill the fundamental missions of higher education while addressing current operational issues and future sustainability goals (Gerhardt & Karsan, 2022).

By embracing this model, PHEIs in Thailand can strengthen their capacity to navigate the evolving educational landscape, enhance their relevance in a competitive global environment, and ensure long-term viability through socially responsible and environmentally conscious governance, leveraging marketing management to achieve sustainable higher education management (Intan, 2021; Kotler & Keller, 2021; Kotler, Armstrong, Harris, & He, 2020).

1.1. Objectives Of This Research

1) To formulate the sustainable management of private higher education institution model.
2) To verify the sustainable management of private higher education institutions (PHEIs) model.

2. LITERATURE REVIEW

This research will compose of 4 Main concepts as follow: 1) Management Concept: Marketing Mix Concept (7P's) 2) Principles of Sustainable

Management of Organizations (ESG) 3) POSDC principal method and 4) Four Mission or Core Functions of Higher Education Institutions

2.1. Management Concept: Marketing Mix Concept (7p's)

Professor Philip Kotler, one of the world's leading marketing experts, introduced the concept of the Service Marketing Mix, which is specifically tailored for service-based businesses—businesses that differ from those offering tangible consumer goods. To effectively formulate marketing strategies for such businesses, the 7P's of the Marketing Mix must be employed (Kotler et al., 2020).

These include:

1) Product, this refers to what satisfies human needs and wants—what the seller provides and what the customer receives in return. The product delivers value and benefits to the customer. Products can generally be categorized into: 1) Tangible Products: Physical goods that can be touched. 2) Intangible Products: Services or experiences that cannot be physically touched.

2) Price, the price shows the financial value of the product or service. Customers compare the value of the service and price. If they recognize more value than the price, they tend to buy. Therefore, the service price determination should be reasonable and in line with the quality of service. It should be clear and easy for customers to distinguish different service levels.

3) Place (Distribution Channels), This includes all activities related to delivering the service to the customer and shaping the service environment. It greatly affects customer perception of value and benefit. Key considerations include location (where the service is provided). And also, channels (how the service is delivered or made accessible).

4) Promotion, this involves all communication efforts aimed at informing or persuading customers, shaping attitudes, and encouraging service usage. It is essential for creating awareness, building relationships with customers and influencing customer behavior through advertising, PR, sales promotions, etc.

5) People, this particularly employees, play a critical role in delivering services. Success depends on proper recruitment, training, and motivation. Staff having the ability to engage customers, solve problems, and uphold organizational values. Employees must be capable, responsive, courteous, and empowered to provide excellent customer service.

6) Physical Evidence / Environment and Presentation, this means tangible elements such as providing services to customers, and institute environment which these things make customers assess and decide on the service. These include clean and professional appearance, having courteous communication, having fast and efficient delivery service.

7) Process, are the procedures, mechanisms, and flow of activities involved in delivering the service. Effective processes should be accurate and speed, create a smooth and satisfying experience for the customer. In addition, it will contribute to overall customer satisfaction and service impression.

Table 1: 7ps Related to Sustainable Management in The Digital Age for Pheis.

7Ps Element	Strategic Focus in Digital & Sustainable Context	Application to PHEIs	Sources
Product	LL learning, Curriculum innovation, digital learning integration, sustainability education	Develop interdisciplinary, sustainability-focused programs using blended, online learning	Kotler & Keller (2021); Filho et al. (2020)
Price	Value-based tuition, flexible pricing models, scholarships for access	Offer tiered pricing, financial aid, and ROI-driven pricing aligned with long-term value	Armstrong et al. (2022); Marginson (2016)
Place	Online, hybrid, and global campus delivery; smart campuses	Expand reach via digital platforms and international partnerships	OECD (2021)
Promotion	Digital marketing, social media, sustainability branding	Promote institutional green credentials and digital innovation through online campaigns	Popp et al. (2022); Chaffey & Ellis-Chadwick (2019)
People	Digital competency development, inclusive and ethical leadership	Train faculty/staff in digital pedagogy and sustainable leadership practices	Fullan & Scott (2009); Sursock (2015)
Process	Digitalized and student-centered service systems	Implement CRM, AI chatbots, LMS, and sustainability performance tracking	Almarabeh et al. (2020)
Physical Evidence	Virtual presence, green campus indicators, digital documentation, e-document	Use LEED-certified buildings, carbon footprint reports, and immersive virtual tours	United Nations (2021)

When applied to private higher education, the 7Ps framework highlights the need to integrate sustainability and digital transformation across all marketing and service dimensions. PHEIs should not

only promote their educational offerings (Product) but also deliver value through cost-effective models (Price), ensure digital accessibility (Place), and adopt environmentally conscious branding strategies (Promotion). Human capital (People), service innovation (Process), and transparent operations (Physical Evidence) are all essential components in building a resilient, future-ready institution in the digital era.

The 7Ps of marketing provide a comprehensive framework for service-based organizations to design and implement strategies that align with customer expectations, encourage brand loyalty, and sustain competitive advantage. In the context of PHEIs, these elements are effectively integrated with sustainable management principles through the ESG (Environmental, Social, and Governance) framework.

2.2. Principles Of Sustainable Management of Organizations (Esg)

The principles of sustainable management in organizations consist of three key dimensions: Environmental, Social, and Governance, collectively referred to as ESG.
ESG represents a framework for sustainable development within organizations. Today, ESG has gained widespread popularity among investors globally, as it serves as an important framework in investment decision-making. ESG principle as follows:

1) Environmental (E): This refers to the criteria used to evaluate a company's responsibility toward the environment, including how it manages its ecological footprint and environmental impact.

2) Social (S): This dimension assesses how a company manages relationships and communication with its employees, suppliers, customers, and other stakeholders, emphasizing social responsibility and ethical engagement.

3) Governance (G): This focuses on how a company governs itself with regard to transparency, efficiency, and accountability, ensuring effective oversight and ethical decision-making.

The ESG concept strengthens business credibility by demonstrating a company's commitment to responsible stakeholder engagement and sustainable growth (Doppelt, 2017; CFA Institute, 2018).
The Three Dimensions of Sustainable Management:

1) Environmental Dimension: This involves the management of key environmental issues such as climate change, biodiversity, energy consumption, and resource efficiency. It also includes considerations of bio capacity, ecosystem quality, air and water pollution, natural resource usage, and sustainable water management.

2) Social Dimension: This includes a broad range of social factors, such as human rights, labor practices, workforce diversity, talent development, customer relationships, product responsibility, and health and safety standards.

3) Governance Dimension: This dimension addresses issues related to business integrity, shareholder rights, executive compensation, auditing practices, fiduciary responsibility, board independence and expertise, transparency, accountability, related-party transactions, and dual-class share structures.

Table 2: Esg-Driven Strategic Model for Sustainable Management in Private Higher Education Institutions in the Digital Age

ESG Dimension	Strategic Focus in Digital & Sustainable Context	Application to PHEIs	Scholarly References
E-Environmental	Green infrastructure, digital efficiency, carbon neutrality	Adopt energy-saving technologies, virtual learning, green university operations	Lozano et al. (2015); Filho et al. (2019); United Nations (2021)
S-Social	Inclusivity, digital equity, student/staff well-being	Ensure access to digital tools, promote mental health and inclusive governance	Marginson (2016); Zawacki-Richter et al. (2020)
G-Governance	Ethical leadership, transparency, data governance	Establish ethical data use, AI governance, and participatory decision-making	Christensen et al. (2018); Sursock (2015); OECD (2021)

Environmental, Social, and Governance (ESG) principles offer a powerful framework for sustainable strategic planning in private higher education institutions. Environmental responsibility emphasizes the development of green campuses and carbon-conscious digital operations. Social responsibility requires inclusive education, access to mental health services, and digital equity to ensure all students have the tools for success. Governance highlights the importance of ethical leadership, robust data protection, and institutional transparency. Together, these ESG principles help ensure institutional resilience, strengthen reputation, and promote alignment with societal values in an increasingly globalized educational environment.

2.3. The Posdc Principal Method

According to Good's Dictionary of Education

(1973), the term "model" is defined in four key ways:

1. A model is a prototype or example that serves as a guide for creation or replication.
2. A model functions as a standard to imitate—for instance, a pronunciation model in a foreign language used by learners.
3. A model is a diagram or three-dimensional representation that symbolizes concepts or principles.
4. A model is a system of interrelated variables or factors, expressed either mathematically or descriptively, representing a social or conceptual structure.

From these definitions, it is clear that a "model" is more than a simple prototype; it encompasses frameworks for imitation, symbolic representations, and organized systems of interconnected components. A comprehensive understanding of the term enables its effective application in education, communication, and academic development.

Management is a critical mechanism that enables organizations to achieve their objectives. Harold D. Koontz, a renowned American organizational theorist and professor of business administration at the University of California, Los Angeles (UCLA), proposed a foundational management model known as the POSDC method. This model consists of five essential managerial functions: Planning, Organizing, Staffing, Directing, and Controlling.

The POSDC model has been widely adopted in modern management theory and adapted to contexts such as information system development (HREX.asia, 2019). This POSDC principal method was developed from the same foundation as other classical management processes. The originator of this management process is Harold D. Koontz (1909-1984), a famous American organization theorist and professor of business administration at the University of California, Los Angeles (UCLA). Koontz, alongside Cyril O'Donnell, co-authored the influential book Principles of Management: An Analysis of Managerial Functions, first published in 1972, which laid the foundation for the POSDC framework. This classical approach to management remains a valuable tool for guiding strategic operations and achieving institutional effectiveness. This principle consists of 5 management processes as follows: 1) P-Planning 2) O-Organizing 3) S-Staffing 4) D-Directing 5) C-Controlling

1) P - Planning > Planning

Planning begins with setting organizational goals, establishing structures, creating policies, and determining the sequence of operational processes in each department from start to finish. The planning process must also include the ability to recognize, monitor, understand, and analyze both internal and external situations that can benefit the organization's management.

2) O - Organizing > Organizational Management

Organizational management starts with defining the organizational structure, job positions, and assigning human resources to specific job roles. It also includes organizing the overall work system. The organizational structure should be clearly defined, with distinct duties for each department to avoid overlap and ensure seamless cooperation. All areas of work should be covered without issues. The number of employees should be appropriate—not too many or too few—and positions should be prioritized with clearly defined roles, responsibilities, and appropriate levels of authority.

3) S - Staffing > Personnel Allocation and Management

Personnel management begins with selecting qualified and suitable individuals for various positions in the organization. Once selected, personnel must be supported throughout their tenure until their departure from the organization. This includes personnel management, welfare, human resource development, promotions, and transfers.

4) D - Directing > Directing

Directing involves managing and coordinating all activities to ensure smooth operations and the achievement of established goals. It encompasses managing both human and other resources to promote effective collaboration and workflow. Directing also includes issuing orders, granting authority, and ensuring operations proceed efficiently, along with addressing any issues that arise. Effective communication is a critical element of successful directing.

5) C - Controlling > Controlling

Controlling involves ensuring that all operations align with the established plan and timeline. This includes managing resources, machinery, and personnel to guarantee smooth workflow and successful implementation of plans and standards. It also involves issuing instructions, setting schedules, providing guidance and support, reporting outcomes, and regularly evaluating performance to monitor processes and prevent errors.

Table 3: POSDC Framework for Sustainable Management in The Digital Age in Private Higher Education Institutions (Pheis).

Function (POSDC)	Strategic Focus in Digital & Sustainable Context	Application in PHEIs	Scholarly References
P - Planning	Long-term digital and sustainability integration; scenario-based strategic planning	Develop digital transformation roadmaps with SDG alignment and climate resilience goals	Mintzberg (1994); United Nations (2021); Mupepi & Mupepi (2020)
O -Organizing	Restructure for flexibility, decentralization, and digital governance	Create cross-functional sustainability offices and digital innovation units	Daft (2021); Almarabeh et al. (2020)
S -Staffing	Recruit for digital and ESG literacy; promote inclusive workforce development	Hire faculty with EdTech/ESG experience, provide upskilling programs	Fullan & Scott (2009); Zawacki-Richter et al. (2020)
D -Directing	Lead with vision, change management, and ethical decision-making in digital settings	Use transformational leadership to drive green policies and innovation culture	Sursock (2015)
C - Controlling	Digital performance metrics, ESG indicators, continuous improvement loops	Monitor digital learning outcomes, carbon footprint, and stakeholder satisfaction	Kaplan & Norton (2004); Filho et al. (2019)

The POSDC framework transforms traditional management into a digital, sustainability-focused strategy. Planning integrates the vision with long-term digital and ESG objectives. Organizing promotes structural agility and digital integration. Staffing encourages ESG literacy and inclusive recruiting. Directing focuses on ethical leadership and change management. Controlling uses data-driven methods to track academic, environmental, and operational performance. This yields an adaptive and future-proof management structure.

2.4. Four Mission or Core Functions of Higher Education Institutions

Higher Education plays a crucial role in developing individuals with the knowledge and skills necessary for professional careers.
Therefore, before delving into the key principles of higher education, it is important to understand its core purposes, which are summarized as follows (Wijit Sisa-arn, 1975: 10–11):
Universal Objectives of Higher Education:
1. To pioneer, seek, preserve, and disseminate knowledge for the advancement and excellence of academic endeavors.
2. To apply knowledge for the benefit of society, recognizing universities as centers of advanced learning that contribute to the development of humanity.
3. To promote the arts and culture.
Based on these universal objectives, higher education institutions have four primary functions:

1) Instruction in Academic and Professional Fields to Meet Societal Needs

Higher Education institutions are responsible for admitting students with the required qualifications in accordance with planned enrollment targets. They must ensure graduates meet the institution's defined characteristics and goals. Institutions should provide transparent public information regarding curricula, teaching and learning processes, faculty qualifications, and extracurricular activities that promote both academic and personal development, all while addressing student needs.

2) Research and Innovation for Academic Advancement

Institutions are tasked with conducting quality and efficient research, aligned with their specific focus areas. This includes implementing policies, plans, and budgets to support research and enhancing faculty and staff capabilities. Institutions should encourage partnerships with external organizations to produce high-quality research, inventions, innovation, and creative works that contribute to national development strategies and respond to broad societal needs, ultimately benefiting the public.

3) Academic Services to Society

Higher education institutions provide academic services to a wide range of target groups, both domestically and internationally. These services can include consultations, research studies, problem-solving for social issues, short-term training programs, continuing education, and public services. These can be offered free of charge or as revenue-generating commercial services. The insights and feedback gained through these services can be used to enhance and create new knowledge.

4) Preservation and Promotion of Arts and Culture

Institutions are responsible for maintaining and promoting national arts and culture at both departmental and institutional levels. They should have systems and mechanisms in place to support the integration of arts and culture into both formal and informal learning. This fosters awareness, appreciation, and aesthetic sensibility among students and staff, allowing them to incorporate cultural values into their lives and professions. Institutions should also promote desirable cultural practices and address undesirable ones through effective cultural management. These activities should be conducted with quality and efficiency in line with institutional strategic plans for cultural development.

Table 4: University Missions Related to Sustainable Management in The Digital Age for Pheis.

Mission	Strategic Focus in the Digital Age	Application to Sustainable PHEI Management	Scholarly References
1. Instruction in Academic and Professional Fields to Meet Societal Needs	Digital pedagogy, sustainability curriculum, future-ready skills	Integrate SDGs into curricula; offer hybrid learning for equity and employability	Zawacki-Richter et al. (2020); United Nations (2021); Phongpreecha et al. (2022)
2. Research & Innovation for Academic Advancement	Sustainable research agendas, digital collaboration tools	Promote interdisciplinary ESG research, use AI/Big Data for policy-relevant outputs	Etzkowitz & Zhou (2017); Filho et al. (2019); OECD (2021)
3. Academic Services to Society	Digital outreach, community innovation platforms	Use tech-enabled outreach (e.g., MOOCs, tele-consulting) to address community needs	Sutharoj & Ratchaneekorn (2021); Chatterton et al. (2018)
4. Preservation and Promotion of Arts and Culture	Digitization, cultural sustainability, creative innovation	Promote local wisdom through digital archives, VR/AR exhibitions, and global sharing	Siripipatthanakul (2020); UNESCO (2020); Cummings (2021)

When evaluated through a sustainability and digital lens, Thailand's university missions emerge as strategic transformation pillars. Instruction must provide learners with digital and sustainability competencies. Researchers should use digital collaborative platforms to solve real-world ESG concerns. Academic services must be redefined through digital outreach and community-driven innovation. Cultural preservation can thrive with digitization and global sharing. These missions, when innovatively aligned, enhance PHEIs' societal role and resilience.

3. METHODOLOGY

This research was conducted in two phases. Phase 1 involved interviews with 20 participants from the top five private higher education institutions (PHEIs): 1) Assumption University, 2) Rangsit University, 3) Bangkok University, 4) Sripatum University, and 5) University of the Thai Chamber of Commerce. The participants included 5 senior executives, 5 lecturers, 5 experts, and 5 staff members. The objective of this phase was to formulate a sustainable management model for PHEIs using a qualitative approach (Lawshe, 1975). The inclusion of a structured interview guide with in-depth questions significantly enhances the study's transparency and replicability. For example, one question asks, "What are your thoughts on sustainable management in terms of the product—such as academic programs and student outcomes-at present? Please explain or provide concrete examples." This question directly investigates the sustainability of educational offerings. Another example is, "What are your thoughts on sustainable management in terms of people—such as the recruitment and training of faculty and staff to align with organizational values?" These well-defined questions are organized around the 7Ps marketing mix and ESG (Environmental, Social, and Governance) dimensions, offering a clear and theoretically grounded structure that future researchers can easily replicate or adapt in similar studies of higher education management.

The selection of the top five universities was based on rankings from two sources: Webometrics Ranking of World Universities and UniRank University Ranking. The use of Webometrics and UniRank to identify colleges improves the study's credibility by providing a more complete and validated sampling approach. These globally recognized rankings serve to explain the inclusion of universities that have a constant online presence and educational impact, which aligns with the research's focus on sustainable higher education management. Phase 2 focused on verifying the proposed sustainable management model for PHEIs through expert validation. A checklist was used to assess the model, and feedback was obtained from 7 external experts. Data were analyzed using content analysis (Bryman & Emma, 2011) and SPSS version 22 to determine frequencies and percentages.

To establish analytical rigor, qualitative data from in-depth interviews were subjected to thematic content analysis. Transcripts were thoroughly examined and open-coded using both deductive codes (based on the 7Ps and ESG dimensions) and inductive codes (data themes that emerged). The coding categories were as follows: Sustainable Curriculum (Product), Tuition and HR Costs (Price), Service Channels (Place), Promotion Strategies, People Management, Service Process, Physical Environment, Environmental Practices, Social Responsibility, and Governance Ethics. The data was coded independently by two researchers, and Cohen's Kappa was used to test inter-coder reliability, yielding a coefficient of 0.82, suggesting substantial agreement. Discrepancies were resolved through consensus meetings to improve credibility and uniformity in interpretation.

The conceptual framework is presented in Figure 1.

Figure 1: Conceptual Framework.

4. RESULTS

Phase 1 involved interviews with 20 participants from the top five private higher education institutions (PHEIs): 1) Assumption University, 2) Rangsit University, 3) Bangkok University, 4) Sripatum University, and 5) University of the Thai Chamber of Commerce. The participants included 5 senior executives, 5 lecturers, 5 experts, and 5 staff members. In this study, qualitative responses from in-depth interviews were examined using thematic content analysis. The responses were first transcribed and then systematically classified into predetermined categories associated with the 7Ps of sustainable management and ESG dimensions (e.g., Product, Price, People, Governance, and Environment). Emerging themes were identified inductively in order to capture fresh ideas beyond the original framework. To ensure dependability, the transcripts were examined and coded by two independent coders. Inter-coder reliability was determined using percentage agreement and Cohen's Kappa, with discrepancies addressed through discussion and consensus. Content analysis was employed to develop a sustainable management model for PHEIs. The resulting model is presented in Table 5.

Table 5: Content Analysis of Overall Opinions of 20 key Informants.

Variables	Overall Opinions of 20 key informants
1) Product	1. The product must be unique. 2. Meet the needs of the private and public sectors. 3. The results are graduates who are accepted by society. 4. A curriculum that is modern and diverse. 5. According to the country's policy direction. 6. Extracurricular activities to enhance potential.
2) Price	1. Prices are not different, except for institutions that aim to provide international services. 2. Having both internal and external networks. 3. The institution should communicate with consumers about sustainable pricing policies. 4. The main income of the institution comes mainly from registration fees and others fee. 5. Prepare equipment, readiness in terms of learning support, modern tools, supplementary learning equipment, and useful courses for learners. 6. Learners should consider value, cost-effectiveness, and benefits that learners will receive. 7. Have sufficient income.
3) Place	1. Policy and plan to promote modern distribution channels 2. Create a prominent project to create distribution channels 3. Promote awareness of new courses that are interesting products 4. A variety of distribution channels 5. Integrate with information technology that promotes coordination both domestically and internationally.
4) Promotion	1. Promote communication for users sustainably by using various techniques and channels 2. There must be new and interesting promotions that students and parents consider as incentives. 3. Produce various types of media and create international networks. 4. Have a high-performance marketing team that can use marketing techniques combined with the use of media and information technology.
5) People	1. Plans and actions to systematically develop personnel at all levels 2. Select reputable and quality personnel 3. Quality personnel with public spirit in providing services with a sense of service-mindedness 4. Maintain capable employees while promoting diversity, equality and human rights.
6) Process	1. Develop service quality, increase user satisfaction, and create a good image for the institution. 2. Provide fast and accurate services by using modern information technology systems that are convenient, and fast. 3. Operate efficiently and verifiably, considering the impact on the environment, society and governance according to the principles of reliable service.
7) Physical Evidence, Environment and Presentation	1. In the planning of the building and design of the appropriate environment, there is management to create a beautiful, refreshing and safe landscape. 2. There is a monitoring system to measure the results of sustainable environmental management in terms of environmental management. 3. Create an impression by creating a good atmosphere and a good experience for users.
8) Environment	1. Systematic environmental management in terms of natural resources and environmental conservation 2. Energy saving and pollution reduction 3. Clear waste management, Paperless concept 4. Creating an EV Charger installation site for the future, Solar installation 5. Creating awareness to create a green university that responds to the environment 6. There is ecosystem restoration, and the administrators have focused on developing to become a green university.
9) Social	1. Implement social responsibility initiatives that equally benefit all professional groups, such as collaborating with surrounding communities on research projects. 2. Foster unity and gain acceptance from local communities through various means, including creating jobs and generating income. 3. Enhance the organization's image to attract talented personnel and motivate employees to perform at their full potential. 4. Promote capacity building across all sectors within the organization, while upholding human rights and fostering fair labor relations.

10) Governance	1. Management in various aspects, whether it is transparency, auditability, reliability, and evaluation 2. Treating everyone equally, discrimination, and reducing inequality in all dimensions 3. Giving importance to help build confidence among stakeholders, attracting investors, customers, and partners 4. Instilling in students the ability to learn according to the principles of good governance through various courses and activities 5. Business honesty by conducting business correctly and complying with various laws and regulations

Phase 2: the sustainable management model for PHEIs Model was verified by 7 external experts. The check list was used for verifying the formulated model the sustainable management model for PHEIs model as present in Table 6.

Table 6: Model Verification by The Opinions Of 7 Experts.

Variables	Statements	% Agree
1. Product	1. Development of sustainable curricula or programs that meet the needs of society and entrepreneurs.	100
	2. Products that support national strategies by producing capable graduates and applying sustainability principles considering environment, society, and good governance.	100
2. Price	1. Proper tuition fee management should align with economic conditions, learner needs, and societal trends.	100
	2. Pricing should be clearly defined and appropriate for both domestic and international curricula and programs.	100
3. Place	1. Communication channels should maximize information dissemination to internal and external university stakeholders to support confident, consistent decisions and broad target group reach.	100
	2. Communicate constructively with society to raise awareness of equal access to distribution channels of the institution.	100
4. Promotion	1. Create opportunities for university enrollment by using modern communication tools to inform society or students of new products, advanced technologies, and reasonable prices for sustainable target engagement.	100
	2. Promote the university's positive image through research or community engagement activities, which are part of its mission to serve and develop society.	100
5. People	1. Performance evaluation of faculty and staff should follow principles of sustainable governance and transparency, with clear KPIs ensuring fairness for all in the institution.	100
	2. Personnel management processes should allow individuals at all levels to reflect, comment, and propose improvements equally, in line with principles of sustainable governance.	100
6. Process	1. Development of an information system in three phases (supervisors evaluating subordinates, subordinates evaluating supervisors, and external evaluations) should meet the needs of students and users and be transparent and auditable.	100
	2. Service delivery and process evaluation should be fast, convenient, and satisfactory for students or users. Processes should be simple, efficient, and non-complicated.	100
7. Physical Evidence/Environment and Presentation	1. Proper management of buildings, facilities, and surroundings to ensure cleanliness, safety, and a pleasant atmosphere that meets user needs, creating a positive impression and attracting students to enroll.	100
	2. Provision of modern and sufficient facilities and technologies to support learning, academic services, and surrounding communities, enhancing student pride through proper physical presentation.	100
8. Environment	1. Current environmental policies and activities sustainably meet the needs of students and service users.	100
	2. Environmental conservation processes, such as paperless practices and waste management, are efficient and aligned with the institution's long-term goals.	100
9. Social	1. Community needs assessments and curriculum development align with social expectations and sustainable development approaches.	100
	2. Academic and research activities in collaboration with communities effectively enhance the university's image and generate positive social impact.	100
10. Governance	1. The performance evaluation process using KPIs and performance reflection mechanisms is fair and transparent.	100
	2. Governance practices, including gender equality and religious diversity accommodation, meet the needs of staff and students.	100

5. DISCUSSION

The top 5 PHEIs were selected as follow: 1) Assumption University, 2) Rangsit University, 3) Bangkok University, 4) Sripathum University, and 5) University of the Thai Chamber of Commerce. 4 groups of informants were defined, totaling 20 individuals, including 5 senior executives or their assigned representatives, 5 lecturers, 5 staff, and 5 experts. In-depth interviews using a semi-structured format were conducted to examine the current state of sustainable management in PHEIs, using purposive sampling. The key informants were 4 groups, totaling 20 people.

Discussion of research findings on the sustainable management of PHEIs model, in-depth interviews were conducted with 5 lecturers, 5 staff, and 5 experts, totaling 20 individuals. The findings are discussed as follows, divided by variables:

1) Product: Educational offerings must be innovative, aligned with the needs of both private and public sectors, and produce graduates who are socially accepted. Curricula should be modern, diverse, aligned with national policy, and supported by co-curricular activities that enhance student competencies. These insights, drawn from informants with varied backgrounds, support the relevance of the 7P's and ESG frameworks for sustainable management. Findings also highlight the importance of curriculum development and IT-integrated educational media that meet local needs and gain acceptance from students and parents.

2) Price: Tuition fees are generally consistent across institutions, except for those aiming for international standards. Institutions must transparently communicate their pricing policies, emphasizing sustainability. Most revenue is generated through tuition and additional fees. Modern facilities and educational support tools should be provided to ensure value for students. Cost-effectiveness and educational return are key considerations for students and families.

3) Place (Distribution Channels): Institutions employ modern distribution strategies, implement prominent marketing campaigns, promote new academic programs, and diversify outreach channels. IT integration plays a key role in both internal coordination and external engagement.

4) Promotion: Communication with stakeholders must be sustainable, using diverse techniques and media platforms. Promotional campaigns should appeal to both students and parents. International networks and media diversity are critical. A capable marketing team must integrate media and technology effectively to maximize reach.

5) People: Institutions should have structured plans for recruiting, developing, and retaining qualified personnel at all levels. Recruitment should prioritize reputable, skilled individuals who embody a service-oriented mindset. Retention strategies must uphold principles of diversity, equity, and human rights. Clear career development paths and institutional support are essential for faculty growth and satisfaction.

6) Process: Service processes must be continuously enhanced to ensure customer satisfaction and uphold institutional reputation. Operations should be fast, accurate, and technology-enabled. Efficiency and accountability are essential, and processes should also consider environmental, social, and governance impacts.

7) Physical Evidence/Environment and Presentation: Campuses must be well-designed, safe, and visually appealing. Sustainability indicators, particularly environmental metrics, should be actively monitored. Creating aesthetically pleasing, environmentally friendly learning environments positively influences student and parent decisions.

8) Environment: Environmental management should focus on conserving resources, saving energy, and reducing pollution. Initiatives such as paperless policies, EV charging stations, and solar energy systems demonstrate a forward-thinking approach. Institutions must promote environmental awareness and actively restore ecosystems.

9) Social: PHEIs should implement inclusive social development projects that benefit all professions, encourage unity and community trust, attract talented faculty, and promote human rights and labor relations.

10) Governance: Institutional management must be transparent, auditable, trustworthy, and fair. Practices should promote equality, reduce disparities, and instill good governance values among students. Integrity and compliance should be embedded in the institutional culture.

This study is an important step toward addressing the mounting sustainability problems that private higher education institutions (PHEIs) face in today's turbulent and competitive global education scene. This research provides a theoretically grounded and contextually applicable strategic framework by developing and expertly validating an integrated sustainable management model that combines the 7Ps marketing mix, ESG principles, and POSDC management roles. However, additional research is required to confirm the resilience and generalizability of this model beyond its initial qualitative scope.

6. FUTURE RESEARCH

Future research should focus on quantitatively validating the model with larger and more diverse samples from other geographies and institutional kinds. Comparative research between private and public colleges could shed light on unique management difficulties and sustainability measures. Furthermore, longitudinal study would help to understand how the suggested model's adoption affects institutional outcomes over time, such as student happiness, financial stability, academic quality, and social effect. Researchers may also investigate the incorporation of emerging variables such as artificial intelligence, digital governance, and personalized learning technologies to increase the model's relevance in an age of rapid technological transition.

7. CONTRIBUTION

This study makes three distinct contributions. It theoretically combines many conceptual frameworks-marketing, sustainability, and management-into a unified strategy paradigm designed specifically for PHEIs. This multidimensional integration considers both operational efficiency and ethical responsibility. Empirically, the study draws on in-depth interviews with stakeholders from five of Thailand's top-ranked PHEIs, giving legitimacy and richness to the model's development. Practically, it provides institutional leaders with a viable strategic roadmap for managing complexity, increasing stakeholder value, and aligning their operations with both global sustainability goals and higher education's traditional missions of instruction, research, academic services, and cultural preservation.

Several suggestions are made for different stakeholders, building on these contributions. In order to promote institutional change, stakeholder engagement, and digital innovation, institutional leaders are urged to embrace and modify the model in response to their internal and external circumstances. Policymakers should think about incorporating ESG standards into private institution funding and performance reviews in order to match regulatory frameworks with sustainability goals. At the same time, researchers are invited to extend the academic inquiry through enlarged case studies, cross-national comparisons, and practical action research that promotes iterative improvement of the model in real-time institutional settings.

Lastly, in order to encourage regional and global cooperation on sustainable higher education management, a more comprehensive agenda is required. The concept could serve as a foundation for PHEI networks in ASEAN and other developing regions to exchange best practices, jointly develop tools, and adjust their strategic orientations to meet the needs of the ecological and digital era. By doing this, private colleges can more effectively carry out their responsibilities as proactive agents of long-term social change in addition to being suppliers of education.

8. LIMITATIONS

This study recognizes several limitations. First, the findings are based on a qualitative approach using a purposeful sample of key informants, which may limit the results' applicability to other types of institutions or settings. Second, the use of in-depth interviews results in interpretive and context-specific data that represent the participants' subjective experiences and perspectives. While the study provides useful insights, further research could involve a larger sample size, quantitative validation, or cross-national comparisons to increase applicability.

9. CONCLUSION AND RECOMMENDATIONS

The study revealed that product innovation and the introduction of new programs are vital components of effective management for sustainable higher education institutions. Curricula must meet the needs of both private and public sectors, be socially accepted, align with national policies, and incorporate co-curricular activities to enhance graduate capabilities. Regarding pricing, most institutions set similar tuition fees, except for those aiming at international standards. Reasonable pricing and the provision of modern educational tools are core values for both students and parents.

In terms of distribution channels (place), institutions utilize modern strategies, including diversified platforms and IT integration, to improve accessibility to their programs.

Under the people dimension, PHEIs must prioritize the recruitment of qualified personnel, foster a service-oriented culture, and embrace diversity, equality, and human rights.

Institutions should also enhance their service processes to ensure efficiency and provide tech-enabled services that increase satisfaction among students and parents.

Physical campuses should be well-designed, safe, and aesthetically pleasing, with measurable sustainability outcomes. These outcomes should be tracked systematically.

Environmental management requires structured

efforts in resource conservation, energy efficiency, and pollution reduction through initiatives such as paperless policies and the adoption of renewable energy.

Social responsibility involves implementing inclusive community projects, promoting unity, respecting human rights, and maintaining fair labor relations, all of which contribute to enhancing the institution's reputation. Finally, governance must be transparent, fair, and driven by integrity, with strong ethical principles embedded in the management system.

Sustainable management in PHEIs requires a holistic approach that integrates innovative academic offerings, strategic pricing, targeted marketing, and human capital investment. At the same time, institutions must strengthen operational efficiency, promote environmentally responsible practices, ensure social inclusiveness, and uphold strong governance. To support these goals, PHEIs should enhance fair pricing policies, expand sustainability education for faculty and staff, and deepen environmental initiatives through technological innovation and community engagement.

Permission: Permission has been obtained to publish all photos, datasets and other material provided by authors in this manuscript.

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