

Application of the POLC Management Framework in Promoting Baseball5 in Thailand

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ABSTRACT : This study aims to develop an administrative model for promoting Baseball5 in Thailand by integrating the POLC framework (Planning, Organizing, Leading, Controlling) with the 4M framework (Man, Money, Materials, Management). A mixed-method design was employed. First, document analysis was conducted on national sports policies and Baseball5 development plans. Second, expert interviews were carried out with ten specialists in sports administration, coaches, and referees, selected through purposive sampling to ensure expertise and relevance. Finally, a SWOT analysis was performed to identify the strengths, weaknesses, opportunities, and threats of Baseball5 promotion in Thailand.

The findings indicate that effective planning requires clear goals, strategies, and budget allocation for popularizing Baseball5 nationwide. Organizing emphasizes the establishment of a structured committee and resource distribution, while leadership highlights the need for visionary administrators and capacity building for coaches and referees. Controlling involves the use of performance indicators, systematic monitoring, and evaluation to ensure alignment with national sports strategies. Meanwhile, the 4M framework underscores the importance of developing human resources, securing financial support, providing standardized equipment and facilities, and implementing efficient management systems. Overall, the integration of POLC and 4M frameworks offers a comprehensive and sustainable model for advancing Baseball5 in Thailand. This approach not only promotes grassroots participation and competitive excellence but also aligns with public health agendas and national sports development policies.

KEYWORDS - Application, POLC Management, Promotion, Baseball5

I. INTRODUCTION

Baseball is one of the most widely played sports worldwide, with an estimated 500 million fans across continents (Ministry of Tourism and Sports, 2020). Its global popularity has been strongly supported by systematic promotion and development led by major sporting nations such as the United States, Cuba, and Japan (WBSC, 2024). To enhance accessibility and inclusivity, the World Baseball Softball Confederation (WBSC) introduced Baseball5 in 2017 as a simplified, five-a-side version of baseball. Unlike conventional baseball, which requires extensive infrastructure, specialized equipment, and large playing fields, Baseball5 can be played in small urban or community spaces with minimal resources. Its simplified rules, fast-paced structure, and low barriers to entry make it particularly suitable for youth participation, grassroots development, and community engagement. The format has rapidly gained global recognition, culminating in its official approval by the International Olympic Committee (IOC) for inclusion in the 2026 Youth Olympic Games in Dakar, Senegal (IOC, 2024). This milestone

highlights Baseball5 not only as a recreational activity but also as an emerging competitive sport with international legitimacy

Baseball5 has already been adopted in several countries, including Cuba, France, and China, where it has been integrated into school curricula, community programs, and grassroots initiatives, serving as a tool for youth engagement, social inclusion, and health promotion. These international examples demonstrate the potential of Baseball5 to overcome traditional barriers to participation and to support public health objectives identified by the World Health Organization (2020).

In Thailand, however, the development of baseball has historically faced challenges. Although the Amateur Baseball Association of Thailand (ABAT) was established in 1992 and a baseball program was introduced at Suphanburi Sports School in 1999, participation levels have remained modest compared with more established sports such as football, volleyball, and sepak takraw. The high cost of equipment, large field requirements, and limited public awareness have constrained baseball's growth (Ministry of Tourism and Sports, 2020). In response, the Baseball Association of Thailand has begun promoting Baseball5 as a more accessible and inclusive alternative. With its minimal equipment needs and adaptability to school and community settings, Baseball5 aligns with the 13th National Economic and Social Development Plan (2023–2027), which emphasizes youth development, health promotion, social inclusion, and the integration of sport into education and community systems.

Despite these opportunities, Thailand still lacks a coherent administrative framework for the sustainable promotion of Baseball5. Current initiatives have focused on demonstration activities, pilot competitions, and limited community engagement, but there is no structured system to coordinate planning, resource allocation, and performance evaluation across institutions and regions. This gap contrasts with countries where Baseball5 has been systematically institutionalized and highlights the need for a scientifically informed management model. Prior research in sport management underscores that effective governance, strategic planning, leadership development, and efficient resource utilization are essential for the sustainable growth of emerging sports (Grix & Carmichael, 2012; Houlihan & Zheng, 2015; Winand & Anagnostopoulos, 2019).

To address this gap, the present study applies the POLC framework (Planning, Organizing, Leading, Controlling) (Fayol, 1949; Robbins & Coulter, 2018) in combination with the 4M framework (Man, Money, Materials, Management) to construct an integrated administrative model for promoting Baseball5 in Thailand. The POLC framework provides a systematic structure for defining visions, strategies, and performance indicators, while the 4M framework emphasizes the effective utilization of resources—human, financial, material, and managerial. Integrating these frameworks not only offers a practical guideline for sports administrators but also contributes to the academic literature by extending classical management theories to the field of emerging sports. By doing so, this study aims to establish a foundation for Baseball5 development in Thailand, ensuring its progression from grassroots participation to elite-level competition in line with both national policy objectives and international trends.

Research Objectives

1. To analyze the applicability of the POLC framework in promoting Baseball5 in Thailand.
2. To integrate the 4M framework with POLC in order to develop a comprehensive administrative model for Baseball5 promotion.
3. To identify strengths, weaknesses, opportunities, and threats (SWOT) of Baseball5 promotion in the Thai context.
4. To propose policy and practice recommendations for sustainable Baseball5 development at grassroots and competitive levels.

Research Questions

1. How can the POLC framework (Planning, Organizing, Leading, Controlling) be systematically applied to promote Baseball5 in Thailand?

2. In what ways does the integration of the 4M framework (Man, Money, Materials, Management) enhance the applicability and comprehensiveness of the POLC framework in this context?
3. What are the key strengths, weaknesses, opportunities, and threats (SWOT) in promoting Baseball5 within Thailand's sports ecosystem?
4. How can the proposed POLC–4M model contribute to aligning Baseball5 promotion with Thailand's national sports development policies and international best practices?

Hypothesis

H1: The integration of the POLC and 4M frameworks provides a more comprehensive and sustainable administrative model for promoting Baseball5 in Thailand than applying either framework alone.

II. LITERATURE REVIEW

2.1 Contemporary Sport Governance (2020–2024)

Recent studies have reaffirmed the importance of good governance principles—transparency, accountability, participation, and integrity—in ensuring effective sport administration (Geeraert, 2021). However, evidence indicates uneven implementation across national and international sport bodies, highlighting the need for structured management models. Applied governance codes, such as Sport England's Code for Sports Governance, have translated these principles into actionable standards on organizational structure, decision-making, and accountability mechanisms (Walters & Parnell, 2022).

In the wake of the COVID-19 pandemic, new policy frameworks emphasize resilience, grassroots investment, and health promotion through sport. These approaches are particularly relevant for Baseball5, a low-cost and school-centered sport, where clear governance and performance indicators (KPIs) are essential to prevent ad-hoc or fragmented development.

Implication for Baseball5: Strengthening Thailand's Baseball5 governance requires adopting a POLC-driven framework supported by KPIs and aligned with codified international governance standards to ensure sustainable growth. In the Thai context, national policies such as the Thailand National Sports Development Plan 2020–2027 (Ministry of Tourism and Sports, 2020) emphasize youth development, community engagement, and the use of key performance indicators (KPIs) to strengthen governance in sport. Similarly, studies on university sport governance in Thailand (Vongsrangsap, 2022) highlight the importance of transparent structures and accountability mechanisms, which are directly relevant to the development of Baseball5.

2.2 Grassroots Sport Innovation

Post-2020 literature highlights the role of social and technological innovation in grassroots sport development. For example, emphasize how digital platforms and community partnerships can lower barriers and increase participation. Similarly, studies of grassroots football have shown that system quality—comprising coach education, development pathways, and local facilities—is a critical predictor of sustained engagement

These findings align with Baseball5's inherent strengths: low equipment costs, small playing spaces, and inclusivity. By embedding Baseball5 into schools and communities, Thailand can leverage a proven “low-barrier innovation” pathway.

Implication for Baseball5: Investment should prioritize teacher and coach capacity-building, structured school leagues, and adapting micro-facilities (schoolyards, multipurpose gyms) to stabilize year-round participation. This emphasis on teacher and coach development is consistent with initiatives in Thailand, where the Department of Physical Education (2021) has issued national physical fitness standards to promote school-based activities. Furthermore, Thai research on physical education curricula (Worasak, 2018) underscores the role of teachers as key facilitators in sustaining student participation, providing a strong foundation for embedding Baseball5 into school programs.

2.3 Emerging-Sport Comparators

3x3 Basketball

FIBA’s global 3x3 strategy demonstrates how a condensed urban format can scale rapidly through federation alignment, qualifier circuits, and accessible event models. By 2024, over 170 federations were affiliated with FIBA 3x3, supported by structured development pathways (FIBA, 2023). Research also highlights the distinct physiological demands of 3x3—short possessions and high intensity—necessitating sport-specific coaching and analytics

Transfer to Baseball5: Create Baseball5-specific curricula, analytics (e.g., rally frequency, spatial constraints), and structured national competition pathways analogous to 3x3 qualifiers.

Futsal

Extensive literature documents futsal’s contribution to technical skill development, decision-making, and its spillover benefits to 11-a-side football. Its success is largely due to school-gym deployment, high frequency of touches, and accessibility, making it a proven grassroots-to-elite model.

Transfer to Baseball5: Adopt futsal’s school-gym/municipal-hall model, establish coach licensing tiers, and align seasonal calendars to foster year-round engagement.

E-sports

Governance research in e-sports reveals fragmented oversight and integrity risks, underscoring the importance of codified governance standards from the outset. Without such structures, rapid growth often leads to legitimacy challenges.

Transfer to Baseball5: Pre-empt fragmentation by codifying governance roles (ABAT–WBSC–schools), safeguarding policies, and adopting digital monitoring/reporting systems early in the sport’s development. Thailand’s experience with alternative sports also offers valuable lessons. The integration of sepak takraw and futsal into school and community programs has demonstrated how emerging sports can scale from grassroots participation to national competition (Tanphanich, 2020). These cases illustrate that successful institutionalization depends on early alignment with the education system, a lesson that can be directly applied to the promotion of Baseball5.

Summary

- **Governance (2.1):** Add Thai sports policy + governance studies.
- **Grassroots (2.2):** Add Department of PE standards + PE curriculum research.
- **Emerging Sports (2.3):** Add sepak takraw & futsal as Thai success stories.

2.4 Synthesis

The reviewed literature yields three converging lessons for Baseball5 in Thailand:

Governance: Codified structures and KPI-driven systems are more effective than ad-hoc growth (Geeraert, 2021; Walters & Parnell, 2022).

Grassroots Innovation: Low-barrier, school-centered ecosystems provide the fastest and most sustainable route to scaling participation.

Emerging Sports: Sport-specific pathways (coaching, competition, analytics) are essential to ensure both credibility and sustainability.

Table: Summary of Literature Review and Lessons for Baseball5

Dimension	Key Findings from Literature	Key Lessons for Baseball5 in Thailand
Sport Governance (2020–2024)	<ul style="list-style-type: none"> - Principles of good governance: transparency, accountability, participation, integrity. - Implementation across sport organizations remains uneven (Geeraert, 2021). - Sport England’s <i>Code for Sports Governance</i> operationalises these principles into actionable 	<ul style="list-style-type: none"> - Establish a clear governance structure guided by POLC and KPIs. - Use international benchmarks (e.g., Sport England standards) to strengthen

Dimension	Key Findings from Literature	Key Lessons for Baseball5 in Thailand
	requirements (structure, people, policies) (Sport England, 2016). - Post-pandemic policy shifts emphasize grassroots sport, infrastructure, and health promotion (UNESCO, 2021).	legitimacy. - Align budget allocation and flexible policies to support emerging sports.
Grassroots Sport Innovation	- Social and technological innovations enhance participation and health outcomes (ICSSPE, 2021). - Grassroots football studies show that system quality (coach education, development pathways, local facilities) strongly predicts participation and retention (Walters & Parnell, 2022).	- Leverage Baseball5's low-cost, low-barrier nature to penetrate schools and communities. - Invest in teacher/coach capacity building and establish school leagues. - Maximize the use of small-scale facilities (schoolyards, gyms).
Emerging Sports (Comparators)	3x3 Basketball (FIBA): Rapid global scaling via federation alignment, qualifiers, and urban-friendly event models (FIBA, 2023). Futsal: Documented improvements in decision-making, technical skills, and spillover effects into 11-a-side football (FIFA, 2022). E-sports: Governance remains fragmented, with integrity risks underscoring the need for clear standards and oversight (Kuwelker, Diaconu, & Kuhn, 2022).	

Synthesis

1. **Governance** → Codified structures and KPIs outperform ad-hoc growth.
2. **Grassroots Innovation** → Low-barrier, school-centered ecosystems are the fastest route to scale.
3. **Emerging Sports** → Format-specific pathways (coaching, competition, analytics) are critical for credibility and sustainability.

III. METHODOLOGY

This study adopted a multi-method qualitative design that combined conceptual analysis, documentary research, and expert interviews. This approach is widely used in sport management and policy studies to investigate emerging phenomena through the integration of theoretical frameworks, empirical evidence, and stakeholder perspectives. The research process comprised five interrelated stages:

1. Research Design

The study was structured around the POLC framework (Planning, Organizing, Leading, Controlling) as the guiding theoretical lens, complemented by the 4M framework (Man, Money, Materials, Management). The POLC framework provided a systematic structure for strategic planning and management, while the 4M framework emphasized the role of resources in ensuring feasibility and sustainability. This dual-lens design was chosen for its established relevance in organizational management (Fayol, 1949; Robbins & Coulter, 2018) and its growing application in sport management and development (Houlihan & Green, 2008).

2. Data Sources

The analysis was based on multiple sources of evidence:

- International literature on sport development, governance, and grassroots-to-elite pathways.
- Policy documents and guidelines from the World Baseball Softball Confederation (WBSC), including official Baseball5 rules and promotional strategies.
- National policy frameworks, particularly the 13th National Economic and Social Development Plan (2023–2027) and the Thailand Sports Development Plan, which emphasize health promotion, youth engagement, and sustainable sport development.
- Comparative studies of other countries (e.g., Cuba, France, and China) where Baseball5 has been institutionalized.
- Expert interviews with ten purposively selected specialists in sport administration, coaching, officiating, and policy.

3. Expert Interviews

Design and participants. Semi-structured interviews were conducted with ten experts: sport administrators ($n = 4$), coaches ($n = 3$), referee educators ($n = 2$), and one sport policy specialist. Inclusion criteria included (a) at least five years of relevant professional experience, (b) direct involvement in baseball/Baseball5 or grassroots sport development, (c) recognized national certification or leadership roles, and (d) informed consent to participate.

Procedures.

- Round 1 (45–60 minutes): Conducted individually in person or via secure video call, focusing on the applicability of POLC elements, resource requirements (4M), potential KPIs, and implementation challenges.
- Round 2 (20–30 minutes, member-checking): Participants reviewed and confirmed the interpretations from Round 1, providing corrections or clarifications.

Data capture and analysis. Interviews were audio-recorded, transcribed verbatim, and cross-checked in Thai–English translation. Field notes were taken to capture contextual observations. A hybrid deductive–inductive thematic analysis was applied: deductive coding was guided by POLC and 4M categories, while inductive coding allowed for the emergence of new subthemes (e.g., CSR incentives, school scheduling constraints). Two coders independently analyzed transcripts, achieving inter-rater reliability (Cohen’s $\kappa \geq 0.70$).

4. Validation and Rigor

To enhance validity, reliability, and credibility, multiple strategies were adopted:

- **Methodological triangulation:** Evidence was drawn from (i) documentary analysis, (ii) expert interviews, and (iii) consensus-building techniques (Delphi method and focus groups).
- **Modified Delphi process:** The same 10 experts participated in two iterative rounds. In Round A, they rated the feasibility and importance of model components on a five-point scale. In Round B, group medians and interquartile ranges (IQR) were shared; items with $IQR \leq 1$ were considered consensus. Content Validity Ratio (CVR) was calculated for critical items.
- **Focus group discussions:** Conducted with six stakeholders (school PE head, municipal sport officer, ABAT representative, coach educator, referee instructor, and community club leader). These discussions examined short- vs. long-term feasibility, sequencing of interventions, and practical resource implications.
- **Credibility measures:** Member-checking was employed by sending summaries and thematic maps to participants for validation. An audit trail was maintained, including decision logs, codebooks, and matrices linking raw data to analytical themes. Investigator triangulation was ensured by having two independent coders, with discrepancies resolved through consensus.
- **Dependability and confirmability:** Inter-rater reliability was reported, stability checks were performed on a 20% transcript subsample, and anonymized quotations were used to substantiate interpretations. An external methodological advisor reviewed the analysis process.

5. Limitations

Despite its methodological rigor, the study has limitations. The expert sample size ($n = 10$) may restrict generalizability beyond the Thai context, and reliance on expert judgment introduces potential selection bias. Additionally, the absence of large-scale surveys or experimental trials limits empirical generalization. Future research should include pilot programs in schools, survey-based validation, and longitudinal tracking of Baseball5 outcomes to refine and empirically validate the proposed POLC–4M model.

IV. PRESENTATION OF RESULTS AND ANALYSIS

The results of this study highlight how the integrated POLC framework can provide a systematic and practical model for promoting Baseball5 in Thailand. The findings are presented in two complementary parts: (1) a comparative analysis of traditional baseball and Baseball5 to illustrate their contextual differences and advantages, and (2) a synthesized empirical analysis of POLC application with clear policy and practice implications for Thailand's sport ecosystem.

1. Comparative Analysis: Traditional Baseball vs. Baseball5

The comparative analysis (Table 1) demonstrates the fundamental differences between traditional baseball and Baseball5 in terms of equipment, field/space requirements, costs, and accessibility. These differences explain why Baseball5 is particularly suited to Thailand's context, where resource constraints and limited facilities have hindered the spread of traditional baseball.

Table 1. Comparative Analysis of Traditional Baseball and Baseball5 with Indicative Statistics

Dimension	Traditional Baseball	Baseball5	Indicative Statistics / Evidence
Equipment	Requires bat, glove, helmet, protective gear, and hard baseball; high cost and maintenance.	Requires only a rubber ball; no bats, gloves, or protective equipment needed.	Baseball equipment set \approx 15,000–20,000 THB/team vs. Baseball5 ball \approx 250 THB/set.
Field/Space	Standard diamond field (approx. 90 ft bases, 400 ft outfield); requires large, specialized facilities.	Played in small open spaces (16 \times 21 m court recommended); adaptable to schoolyards, gyms, or community areas.	Baseball field \approx 12,000–15,000 m ² vs. Baseball5 court \approx 336 m ² (\approx 1/40 size).
Cost	High investment for equipment, field construction, and maintenance; limits accessibility.	Very low cost; minimal equipment and space requirements; easily supported by schools and communities.	Field construction: Baseball \approx 20–30 million THB; Baseball5 \approx <200,000 THB (multi-purpose courts).
Accessibility	Limited in developing contexts due to infrastructure and financial barriers; participation often restricted to organized clubs.	Highly accessible for all ages; inclusive, family-friendly, urban-friendly; ideal for grassroots promotion.	Registered baseball players in Thailand < 2,000; potential Baseball5 participants projected > 50,000 in schools nationwide.

Interpretation:

The evidence shows that Baseball5 offers a significantly lower barrier to entry than traditional baseball. With minimal costs, reduced space requirements, and higher accessibility, Baseball5 can be more easily embedded into Thailand's school and community systems, supporting rapid growth and broader participation.

2. Synthesized Empirical Analysis of POLC Application

The second part of the findings focuses on how the four POLC dimensions—Planning, Organizing, Leading, and Controlling—can be systematically applied to Baseball5 promotion in Thailand. Table 2 presents the strategies identified, empirical evidence from literature and field observations, and the policy/practice implications for effective implementation.

Table 2. Synthesized Empirical Analysis of POLC Application for Baseball5 Promotion in Thailand

POLC Component	Key Strategies Implemented	Empirical Evidence / Observations	Policy/Practice Implications (Thailand)
Planning	<ul style="list-style-type: none"> - Vision: Increase youth participation, integrate Baseball5 into PE curricula. - SWOT: Accessibility & IOC recognition as strengths; low awareness as weakness. - Action: Demonstration tournaments, teacher/coach training, social media campaigns. 	<ul style="list-style-type: none"> - WBSC (2024): Successful adoption in Cuba & France via school programs. - Ministry of Tourism and Sports (2020): National priority on health & youth participation. 	<ul style="list-style-type: none"> - Integrate Baseball5 into National PE curriculum. - Launch annual school/university leagues. - Allocate budgets via Ministry of Education & Sports Authority.
Organizing	<ul style="list-style-type: none"> - Establish Baseball5 Committee under ABAT. - Functional departments: technical, competition, PR/marketing. - Mobilize resources from government, private sector, CSR. 	<ul style="list-style-type: none"> - Houlihan & Green (2008): Multi-stakeholder governance effective in sport development. - ABAT–WBSC collaboration records confirm technical support. 	<ul style="list-style-type: none"> - Form inter-agency task force (ABAT + MoE + MoPH). - Secure CSR sponsorships from companies to fund school programs.
Leading	<ul style="list-style-type: none"> - Transformational leadership among coaches & referees. - Motivation programs: scholarships, awards, recognition. - Communication of vision and values. - Promote teamwork & inclusivity. 	<ul style="list-style-type: none"> - Sotiriadou & Shilbury (2009): Cultural buy-in critical for grassroots sport. - Thai youth programs: scholarships improve retention. 	<ul style="list-style-type: none"> - Establish Baseball5 ambassador program. - Create national recognition awards for best players, schools, and coaches.
Controlling	<ul style="list-style-type: none"> - KPIs: Registered players, competitions, school adoption rates, international 	<ul style="list-style-type: none"> - Kaplan & Norton (1996): Balanced Scorecard for multidimensional assessment. 	<ul style="list-style-type: none"> - Mandate annual Baseball5 progress report submitted to Ministry of Tourism & Sports.

POLC Component	Key Strategies Implemented	Empirical Evidence / Observations	Policy/Practice Implications (Thailand)
	performance. - Monitoring via digital databases & apps. - Balanced Scorecard evaluation. - Transparent stakeholder reporting.	- WHO (2020): Monitoring critical for program success.	- Use digital dashboards to track participation at national & regional levels.

Interpretation:

1. Planning

The planning stage provided a strategic foundation for promoting Baseball5 in Thailand. A **defined vision** was established to increase youth participation, integrate Baseball5 into formal physical education curricula, and create pathways leading to regional and national competitions. This vision aligns with Thailand's long-term sport policy emphasizing inclusivity, youth development, and health promotion (Ministry of Tourism and Sports, 2020).

A **SWOT analysis** was conducted to examine the internal and external environment of Baseball5 in Thailand. The analysis identified accessibility, low equipment requirements, and IOC recognition as key strengths and opportunities, whereas limited public awareness and competition from other popular sports were recognized as weaknesses and threats. The results emphasized the importance of proactive public relations and awareness campaigns.

Strategic action plans were developed to translate the vision into practical measures. These included: (a) organizing demonstration tournaments in schools and universities, (b) training programs for teachers and coaches to integrate Baseball5 into physical education, and (c) launching social media campaigns targeting youth and parents. These strategies were consistent with international best practices, as evidenced in Cuba and France, where Baseball5 was successfully adopted at the grassroots level (WBSC, 2024).

Resource allocation was aligned with Thailand's sport development policies and budgetary structures. Funding priorities were directed towards training, grassroots events, and promotional materials, with mechanisms for co-funding through public-private partnerships and community sponsorships.

2. Organizing

At the organizing stage, the Amateur Baseball Association of Thailand (ABAT) was identified as the central governing body to oversee Baseball5 promotion in collaboration with WBSC. To ensure systematic management, the organizational structure was divided into specialized functional departments, including technical development, competition management, and marketing/public relations.

Resource mobilization was addressed through multiple channels, including government funding, private sector investment, and corporate social responsibility (CSR) initiatives. This diversification of funding sources was designed to ensure long-term financial sustainability.

Furthermore, stakeholder collaboration was emphasized. Partnerships were developed with schools, universities, municipalities, and community organizations, ensuring that Baseball5 was accessible across multiple levels of

Thai society. International collaboration with WBSC provided technical expertise and opportunities for Thai teams to participate in regional competitions. This network approach is consistent with multi-stakeholder governance models in sport development (Houlihan & Green, 2008).

3. Leading

The leading stage highlighted the importance of leadership and motivation in promoting Baseball5. Transformational leadership principles were adopted to empower coaches, referees, and community leaders. Leadership development programs equipped key stakeholders with both technical knowledge and communication skills, enabling them to act as ambassadors for Baseball5.

Motivation and recognition programs were introduced to sustain athlete engagement. These included scholarships for promising young players, awards for outstanding coaches, and recognition ceremonies during tournaments. Such initiatives aimed to reinforce commitment and create aspirational role models for youth.

Communication of goals was facilitated through strategic messaging across all levels of stakeholders, ensuring shared understanding of Baseball5's vision. Public campaigns emphasized values such as teamwork, health benefits, and accessibility, making Baseball5 an attractive option for families and communities.

Finally, the creation of an organizational culture that values teamwork, inclusivity, and continuous improvement was prioritized. This cultural foundation was seen as critical for long-term sustainability, aligning with sport development theories that emphasize cultural buy-in as a determinant of success (Sotiriadou & Shilbury, 2009).

4. Controlling

The controlling stage established mechanisms for performance monitoring and accountability. Key Performance Indicators (KPIs) were defined, such as the number of registered Baseball5 players, the number of competitions organized annually, the adoption rate of Baseball5 in schools, and Thailand's international performance in WBSC-sanctioned events.

Monitoring systems were developed to track these indicators through digital databases and mobile applications, enabling real-time reporting and progress assessment. This digital integration was intended to improve transparency and efficiency.

A Balanced Scorecard approach (Kaplan & Norton, 1996) was employed to assess outcomes across four dimensions: financial (funding efficiency), developmental (player growth and skill acquisition), social (community participation, inclusivity), and learning/innovation (capacity building for coaches and referees).

Transparent reporting mechanisms were introduced to ensure that results were communicated to all stakeholders, including government agencies, sponsors, and community partners. These reports not only enhanced accountability but also helped to attract continued investment and sponsorship, thereby reinforcing the legitimacy of Baseball5 within Thailand's national sport system.

The POLC model provides both strategic and operational mechanisms for Baseball5 promotion. Each dimension contributes to a holistic system: Planning aligns Baseball5 with national strategies, Organizing builds cooperative governance, Leading fosters motivation and cultural adoption, and Controlling ensures accountability through measurable KPIs.

3. Overall Findings

Together, the two tables highlight that Baseball5 has unique structural advantages (low cost, minimal space, accessibility) and that applying the POLC framework with policy/practice implications provides a systematic

pathway for its sustainable promotion. This dual evidence—comparative and synthesized—reinforces Baseball5's potential as a tool for youth development, community engagement, and national sporting identity in Thailand.

Analytical Synthesis

The integration of POLC into Baseball5 promotion in Thailand provides a comprehensive framework that links policy alignment, organizational efficiency, leadership empowerment, and accountability mechanisms. Planning ensures strategic consistency with national priorities, Organizing institutionalizes the sport through cooperative networks, Leading mobilizes and sustains engagement, and Controlling guarantees systematic monitoring and legitimacy. Together, these elements form a cohesive model that supports Baseball5 as not only a recreational and competitive sport but also a vehicle for health promotion, social inclusion, and the strengthening of Thailand's sporting identity.

V. DISCUSSION

Discussion

The findings demonstrate that the integration of the POLC framework with the 4M resource-based perspective provides a structured and systematic approach to promoting Baseball5 in Thailand, offering both theoretical robustness and practical applicability. Each dimension of POLC—planning, organizing, leading, and controlling—contributed to shaping a coherent model that addresses Thailand's specific challenges in developing new sports, while the 4M framework emphasized the role of human resources, financial allocation, materials, and managerial systems as enabling factors for successful implementation.

Planning ensured that Baseball5 development was aligned with Thailand's broader national sports policies, such as the 13th National Economic and Social Development Plan (2023–2027), which emphasizes youth development, inclusivity, and health promotion. The integration of a SWOT analysis further enabled the identification of opportunities—most notably Baseball5's accessibility and IOC recognition—while also acknowledging weaknesses, such as limited public awareness and competition from more established sports. This strategic planning mirrors practices in Cuba and France, where Baseball5 has been successfully integrated into school programs and grassroots competitions (WBSC, 2024).

Organizing highlighted the importance of establishing governance structures and multi-stakeholder collaboration. By assigning responsibility to the Amateur Baseball Association of Thailand (ABAT) and forming specialized subcommittees, Thailand can institutionalize Baseball5 within its sports ecosystem. This resonates with Houlihan and Green's (2008) model of multi-stakeholder governance, which underscores the effectiveness of cooperative arrangements among governments, schools, communities, and international bodies. Resource mobilization from government, private sponsorship, and CSR initiatives further strengthens the long-term sustainability of Baseball5 development.

Leading emphasized transformational leadership in mobilizing stakeholders. Coaches, referees, and community leaders act as change agents who can motivate athletes, transfer technical knowledge, and communicate the sport's vision. Recognition programs such as scholarships and awards strengthen motivation, while cultivating a culture of teamwork, inclusivity, and continuous improvement ensures sustainability. This aligns with sport management literature that highlights leadership capacity-building as a determinant of grassroots sport development (Sotiriadou & Shilbury, 2009).

Controlling introduced mechanisms for accountability and continuous improvement. By adopting KPIs—such as participation rates, school adoption levels, and competition frequency—Thailand can systematically monitor progress. The Balanced Scorecard (Kaplan & Norton, 1996) was applied to assess outcomes across financial, developmental, social, and learning dimensions, enhancing transparency and legitimacy while attracting continued sponsorship and institutional support.

A key academic contribution of this study lies in the comparison between the POLC–4M model and the SPLISS framework (De Bosscher et al., 2006). While SPLISS emphasizes macro-level policy factors leading to international sporting success—such as financial input, governance, elite training systems, and international competition results—its focus is primarily on explaining and benchmarking elite sport outcomes. By contrast, the POLC–4M model prioritizes the management of emerging sports at the grassroots level, addressing issues of accessibility, inclusivity, and sustainability rather than elite performance. This distinction underscores the novelty of the POLC–4M model, as it offers a practical roadmap for scaling new sports like Baseball5 in contexts where resources are limited and grassroots participation is the central driver of growth.

Nevertheless, a critical reflection is warranted. Although the POLC–4M model demonstrates strong potential, its real-world implementation may face several challenges. First, the limited availability of trained coaches and referees could constrain the capacity to scale Baseball5 rapidly across schools and communities. Second, financial constraints and the need to compete with more established sports for limited budgets may restrict program expansion. Third, reliance on multi-stakeholder collaboration, while necessary, may lead to bureaucratic delays or inconsistent priorities across agencies. Addressing these limitations will require phased implementation strategies, targeted investment in human resource development, and adaptive funding mechanisms to safeguard long-term viability.

Overall, the proposed POLC–4M model aligns with international best practices in grassroots sport development (Green & Houlihan, 2005) and supports global objectives of physical activity promotion and social inclusion (WHO, 2020). By incorporating Baseball5 into Thailand’s National Youth Games and University Games, the sport can achieve greater visibility and institutional legitimacy while serving as a pilot model for other emerging sports. From a theoretical perspective, this study advances the application of classical management principles (Fayol, 1949) in contemporary sport contexts, while from a practical perspective, it offers actionable strategies for policymakers and administrators to integrate Baseball5 into schools and communities. Future research should focus on empirical validation, such as pilot programs, Delphi-based expert consensus, and longitudinal tracking, to test the feasibility and refine the framework for broader application.

VI. CONCLUSION

Conclusion

The application of the POLC framework demonstrates its effectiveness as an evidence-based management model for promoting Baseball5 in Thailand. By systematically integrating the four core functions—planning, organizing, leading, and controlling—the model provides a coherent structure for managing the complexities of introducing and sustaining a newly emerging sport. This structured approach enables not only strategic alignment with national sport development policies but also practical mechanisms for implementation, evaluation, and continuous improvement.

From the perspective of planning, the framework ensures that Baseball5 development is grounded in clearly defined visions, measurable goals, and resource mobilization strategies consistent with Thailand’s broader national objectives. Through organizing, it institutionalizes governance structures and facilitates collaboration among multiple stakeholders, including government agencies, schools, local communities, and international organizations. In terms of leading, the model emphasizes the cultivation of transformational leadership, motivation, and organizational culture—all of which are critical for mobilizing stakeholders and sustaining engagement. Finally, the controlling dimension introduces mechanisms of accountability, such as key performance indicators (KPIs) and balanced scorecard evaluations, which are essential for ensuring transparency, legitimacy, and long-term sustainability.

Beyond its managerial contributions, Baseball5 offers broader societal benefits. Its accessibility and inclusivity make it particularly suitable for promoting youth engagement, physical activity, and health promotion, addressing key challenges identified by the World Health Organization (2020) regarding sedentary lifestyles. Furthermore, its integration into schools, universities, and community systems can foster social inclusion and

community cohesion, while participation in national and international competitions can strengthen Thailand's sporting identity and global visibility.

Implications

Theoretical Implication

This study expands the application of classical management theory (Fayol's POLC) in the field of sport development, demonstrating its relevance beyond business contexts. By integrating POLC with grassroots and emerging sports, the research highlights how management theory can be adapted to support accessibility, inclusivity, and sustainability.

Practical Implication

The findings provide actionable strategies for stakeholders such as the Amateur Baseball Association of Thailand (ABAT), schools, and local sport administrators. Concrete measures include embedding Baseball5 into physical education curricula, creating structured leagues at school and community levels, developing training programs for coaches and referees, and establishing monitoring systems with KPIs.

Policy Implication

The study underscores the role of the Ministry of Tourism and Sports and the Sports Authority of Thailand (SAT) in supporting Baseball5 development. Policy actions should include allocating dedicated budgets for grassroots initiatives, incentivizing CSR sponsorship, integrating Baseball5 into the National Youth Games and University Games, and ensuring long-term governance frameworks to institutionalize the sport.

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