

## Causal factors influencing the development of leadership potential in sports organizations

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**Abstract:** This research aimed to examine the relationships between leadership factors affecting the development of leadership potential in sports organizations. The study employed a quantitative research design with a sample of 200 sports organization leaders from Chonburi Province, selected through simple random sampling. The research instruments consisted of questionnaires measuring leadership potential development in sports organizations, technological literacy, team leadership, and flexibility and adaptability. Data were analyzed using stepwise multiple regression. The findings revealed that: 1) All three leadership potential factors were significantly correlated with the development of leadership potential in sports organizations at the .05 significance level, with a multiple correlation coefficient of 0.324, indicating that these three factors accounted for 32.40% of the variance in leadership potential development in sports organizations. 2) All three factors significantly influenced the development of leadership potential in sports organizations at the .05 significance level, with standardized regression weights of 0.374, 0.372, and 0.351, respectively. This factor serves as a critical form of organizational immunity, enabling leaders to navigate volatile environments by pivoting business models away from traditional revenue streams toward digital innovation. Furthermore, technological utilization potential is established as a vital differentiator for data-driven decision-making, while sports team building acts as the human capital foundation necessary for aligning diverse talents toward a unified vision. Ultimately, effective sports organizational team leadership in the modern era is defined by the ability to bridge high-tech data proficiency with high-touch interpersonal cohesion to ensure long-term institutional sustainability and stakeholder confidence.

**Keywords:** *Flexibility and adaptability, Leadership potential in sports organizations, Team leadership, Technological literacy.*

### 1. Introduction

Sports organizations have experienced growth driven by the rising tide of health consciousness and wellness awareness, propelling the sports industry forward as one of the few sectors that continue to expand despite challenging economic conditions and unfavorable purchasing power. Growth in the sports industry stems from crucial factors that promote and drive the domestic sports sector to compete and gain recognition on the global stage [1]. In reality, a significant portion of the sports industry's growth results from health and wellness trends, various forms of physical exercise, the popularity of numerous sports competitions, and the inspirational influence of several renowned Thai athletes. These key factors have catalyzed rapid growth in the sports industry and among businesses involved in sports service activities across various domains, including sports event management, rental services for facilities, equipment, and other amenities used in sporting activities, sports marketing services, and more. Amid this competitive market landscape, both direct and indirect forces have effectively compelled sports organizations to rely on building distinctive organizations through leaders with the potential to guide their institutions effectively [2].

Critical adaptation requires the sports vision of sports organization leaders, who must be leaders that embrace continuous learning and transform their sports organizations into spaces for knowledge exchange among those in the sports community. Given the dynamic environmental changes impacting sports organizations, these institutions must cultivate leaders with comprehensive potential encompassing technological proficiency, sports team building, and sports organizational leadership. These capabilities necessitate that leaders possess an understanding of technology, team leadership, organizational culture development, and flexibility and adaptability. This reflects the ability to motivate and guide others toward achieving collective goals, demonstrating leadership in seeking methods to motivate and inspire organizational members, establishing the organization's vision, and elevating performance standards to greater levels of efficiency [3]. Furthermore, in the digital age, an organizational leader is one who employs skills and frameworks that enable individuals or organizations to guide other members in surviving the digital era. Essential leadership competencies in the digital age include analytical thinking, adaptability, and technological utilization, among others. This represents a leadership model focused on the capacity to implement digital transformation within organizations, enabling various organizations to compete, sustain themselves, and adapt their work environments and learning cultures to the digital paradigm [4].

The study by Afrifa Jnr et al. [3] demonstrates that multiple factors influence the development of sports leadership potential, which is especially crucial in an era of constant technological transformation. Sports organizations must demonstrate their capacity for team leadership and fostering organizational cohesion within sports institutions. Consequently, this research examines various factors affecting leadership development in sports organizations to provide guidelines for practical application in their ongoing development.

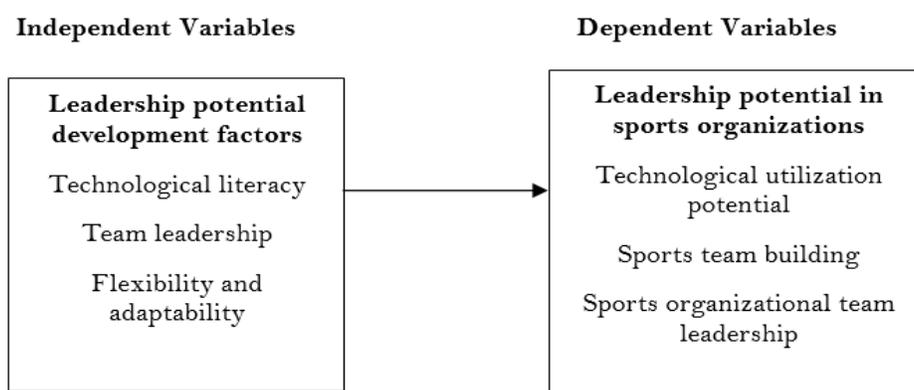
### 1.1. Research Objectives

To examine the relationships between the factors of technological literacy, team leadership, and flexibility and adaptability that influence the development of leadership potential in sports organizations.

### 1.2. Research Hypothesis

Leadership potential development factors, namely technological literacy, team leadership, and flexibility and adaptability, influence the development of leadership potential in sports organizations.

### 1.3. Research Framework



**Figure 1.**  
Causal Factors Influencing the Development of Leadership Potential in Sports Organizations.

## 2. Literature Review

### 2.1. *Technological Literacy and Leadership Potential in Sports Organizations*

The technological literacy of sports organization leaders serves as a significant determinant of competitive advantage. Innovation is not merely a supporting technological tool but rather a mechanism for data-driven decision-making, particularly in the implementation of sports performance analysis systems to assess athlete potential [4] or the utilization of digital platforms to manage sponsorships and fan bases. This profound understanding enables leaders to genuinely transition their organizations toward digital transformation, thereby mitigating risks associated with investments in unsuitable technology and creating opportunities for revenue growth through novel channels. This constitutes a key success indicator for leaders in managing international sports organizations, Thanaiudompat and Singgram [5].

Afrifa Jnr et al. [3] further emphasize the creation of innovation ecosystems and data governance. In the dimension of human resource management and organizational culture, this relationship manifests through the establishment of a learning ecosystem. High-potential leaders leverage technological literacy to design transparent and auditable structures, such as implementing Blockchain systems for ticket management or budget administration, thereby elevating governance within sports organizations. Moreover, Ashkanasy [6] notes that technological understanding enables leaders to communicate more effectively with the younger generation and specialized technical professionals, fostering innovation-driven initiatives from grassroots to policy levels. Consequently, sports organizations develop agility, enabling them to respond to rapidly emerging disruptive technologies while maintaining long-term organizational sustainability.

### 2.2. *Team Leadership and Leadership Potential in Sports Organizations*

The potential of sports organization leaders is not measured solely by strategic planning, but rather the true test lies in the ability to foster engagement and guide teams toward shared objectives. High-potential leaders can integrate the diversity of personnel, encompassing technical sports departments, marketing divisions, and administrative functions, toward a unified vision. Effective team leadership thus represents the manifestation of leadership potential that transforms policies into tangible outcomes, both in terms of competitive performance and business results Ashkanasy [6].

Thanaiudompat [7]. Research into leadership underscores that sports team leadership, specifically regarding talent development, currently prioritizes the leader's ability to act as a catalyst for team synergy. Sports leaders are expected to provide concrete evidence of their ability to build unity and instill a sense of shared purpose. Within a sports organization, leaders act as the primary decision-makers and reflect the organization's collective strength. It is therefore essential that they effectively communicate organizational values to external stakeholders to build and maintain the brand's professional reputation.

In highly volatile sports environments, leadership potential is reflected through delegating decision-making authority. Modern team leadership is not characterized by top-down command structures but by creating an environment where teams feel psychologically safe to innovate and make decisions. Leaders who understand team leadership dynamics can manage conflicts and cultivate group emotional intelligence, which is a critical factor enabling sports organizations to rapidly adapt to crises or on-field defeats [8].

McCarthy et al. [9] posit that leadership potential represents intellectual and skill capital, while team leadership serves as the process of converting that capital into success. If leaders possess high potential but lack appropriate team leadership skills, organizational stagnation will ensue. Conversely, when strong team leadership operates under visionary leaders, sports organizations can transcend existing limitations and establish new standards for the international sports industry.

### 2.3. Flexibility, Adaptability, and Leadership Potential in Sports Organizations

The potential of sports organization leaders is tested through their ability to confront unpredictable crises, such as changes in international competition regulations or pandemic situations that impact sports event organization. Leaders with high flexibility transform pressure into a driving force through business model pivots [10], transitioning from sole reliance on venue-based revenue to value creation through digital content or novel innovations. This relationship demonstrates that the greater a leader's agility, the stronger their potential to maintain stability and build stakeholder confidence becomes Ashkanasy [6].

Thanaiudompat [7] notes that structurally, leadership flexibility manifests through the design of fluid organizational structures as an integral component of contemporary management potential. Leaders adept at adaptation do not adhere to rigid hierarchies but rather promote cross-functional teams to respond to evolving global sports trends. This relationship indicates that leadership potential as a change agent represents the crucial key enabling sports organizations not merely to survive but to thrive amid rapidly changing technology and consumer behavior [8].

Flexibility and adaptability serve as immunity that transforms into the most impactful leadership potential in the contemporary era. Leaders lacking flexibility inevitably lead organizations toward fragility, whereas leaders with high adaptive capacity can build sports organizations that demonstrate resilience and long-term sustainability amid global challenges [11].

Leadership potential in modern sports organizations is no longer a measure of static management, but rather a leader's capacity to navigate unpredictable volatility. As highlighted by Nielsen [10] and Ashkanasy [6], high-potential leaders utilize strategic agility to transform external pressures, such as global pandemics or shifting international regulations, into opportunities for business model innovation. This involves a fundamental shift from traditional, venue-based revenue streams toward digital value creation and technological innovation. Structurally, this flexibility is manifested through the dismantling of rigid hierarchies in favor of fluid, cross-functional teams [7]. By fostering an environment that prioritizes responsiveness over bureaucracy, leaders ensure that their organizations remain aligned with rapidly evolving global trends and consumer behaviors.

Ultimately, flexibility serves as a critical form of organizational "immunity," distinguishing resilient entities from those prone to terminal fragility. Research by Seepui et al. [11] and Fox and Spector [8] underscores that the modern sports leader must function as a proactive change agent; those who fail to adapt inevitably guide their organizations toward obsolescence in an increasingly digital landscape. The conclusion is clear: leadership potential is synonymous with adaptive capacity. By embedding fluidity into the organizational DNA, leaders do more than just survive crises; they build long-term sustainability and reinforce stakeholder confidence. In the contemporary era, the ability to pivot is the primary driver of institutional credibility and competitive survival.

### 2.4. Leadership Potential in Sports Organizations

In the contemporary landscape of sports management, leadership potential is no longer measured solely by historical win-loss records but by a leader's capacity to navigate complex, volatile environments. At its core, sports organizational team leadership requires an individual to act as a strategic "change agent" who embodies the organization's values while maintaining institutional credibility. This involves a sophisticated balance between high-stakes decision-making and serving as the primary representative to external stakeholders. A leader with high potential can dismantle traditional, rigid hierarchies in favor of fluid structures that allow an organization to remain resilient against global crises, ensuring that the entity does not merely survive but evolves alongside shifting industry standards [1].

According to Hanisch et al. [12], the integration of technological utilization potential has become a non-negotiable differentiator for modern sports leaders. Beyond simply adopting new gadgets, this potential refers to the strategic ability to pivot business models through data-informed insights and digital innovation. Whether it is leveraging advanced analytics to optimize athlete performance or

utilizing digital platforms to create new revenue streams beyond the physical stadium, technology serves as the engine of modern growth. A leader's proficiency in this area dictates the organization's "technological immunity," allowing them to transform digital disruptions into competitive advantages and long-term sustainability.

Parallel to technological growth is the fundamental pillar of sports team building, which focuses on the "human capital" of the organization. Effective leadership in this domain is characterized by the ability to act as a "pivotal harmonizer," aligning diverse individual talents, from medical staff and analytics experts to the athletes themselves, toward a unified vision. By fostering a culture of shared values and cross-functional synergy, leaders create a cohesive environment where collective goals supersede individual egos. This human-centric approach ensures that the "social capital" of the team remains strong, providing the necessary psychological foundation for the organization to perform under pressure and maintain a consistent professional reputation [13].

In summary, the evolution of sports management demands a holistic leadership model that synthesizes strategic governance, technological mastery, and interpersonal cohesion. The most successful sports organizations are those led by individuals who can bridge the gap between High-Tech (data and innovation) and High-Touch (empathy and team unity). When a leader successfully integrates these four pillars, they build an organization that possesses the adaptive immunity required to thrive in the face of technological shifts and global challenges, ultimately securing the organization's legacy and stakeholder confidence.

### 3. Research Methodology

#### 3.1. Population and Sample

The research population consisted of sports organization leaders from Chon Buri Province, namely sports team managers and heads of sports administration departments within sports organizations in Chonburi Province, totaling 200 individuals, who were selected through simple random sampling.

#### 3.2. Research Instruments

The researcher developed a questionnaire through the following procedures:

1. Relevant literature, documents, and research articles were examined to construct questions and establish the research conceptual framework, determining the focus and scope of questions to align with the research objectives and benefits.
2. A draft questionnaire was created and submitted to experts for content validity assessment, evaluating content coverage and linguistic accuracy.
3. Following expert validation, the questionnaire was pilot tested with 30 individuals from a population sharing similar characteristics with the target study population. The data were analyzed to determine reliability using Cronbach's Alpha coefficient for individual items and the overall questionnaire.
4. The finalized questionnaire was created using Google Forms, and a QR code was generated to facilitate data collection.

#### 3.3. Research Findings

This research found that among 200 sports organization leaders from Chonburi Province, 78 percent were female and 22 percent were male. The majority (82 percent) were heads of sports departments, 12 percent were sports team managers, and 6 percent were other sports organization leaders.

### 3.4. Hypothesis Testing Results

Hypothesis 1: Leadership potential development factors, namely technological literacy, team leadership, and flexibility and adaptability, influence the development of leadership potential in sports organizations.

**Table 1.**

Stepwise Multiple Regression Analysis of leadership potential development factors, technological literacy, team leadership, and flexibility and adaptability, on the development of leadership potential in sports organizations.

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.501	0.151		7.654	0.000
Technological literacy	0.372	0.044	0.369	7.102	0.000
Team leadership	0.351	0.031	0.351	7.241	0.000
Flexibility and adaptability	0.374	0.042	0.314	6.111	0.000

**Note:** R = .532; R Square = .374; Adjust R Square = .324; Standard Error of The Estimate = .213; Sig = .000; F = 79.475.

Table 1 reveals that leadership potential development factors significantly influence leadership potential in sports organizations, as indicated by a significant value of 0.00. Examining the multiple regression equation analysis, the multiple correlation coefficient (R) equals 0.532, with an adjusted R-squared of 0.324, meaning this model can predict 32.4% of the dependent variable. Upon examining individual variables, flexibility and adaptability exert the greatest influence on leadership potential in sports organizations in both raw and standardized scores, followed by technological literacy and team leadership, with raw score coefficients of 0.374, 0.372, and 0.351, and standardized score coefficients of 0.369, 0.351, and 0.314, respectively, all statistically significant at the 0.05 level.

## 4. Discussion of Research Findings

The research findings demonstrate that flexibility and adaptability, technological literacy, and team leadership are factors that collectively exert statistically significant influence ( $p < .05$ ) in determining leadership potential in sports organizations, jointly accounting for 32.4% of the variance in leadership potential. This figure reflects that within the contemporary sports context, these three leadership potential development factors serve as foundational elements in cultivating leadership competencies. Although approximately 67.6% is attributable to other factors not examined in this study, this confirms that the development model is appropriate and can be effectively applied as a framework for developing executive-level personnel in sports organizations. This aligns with the findings of Nielsen [10], which demonstrate that flexibility and adaptability, technological literacy, and team leadership are factors that collectively influence organizational leadership potential in driving organizational change and propelling sports organizations forward.

Comparing influence weights reveals that flexibility and adaptability exert the strongest influence on leadership potential, reflecting that the ability to remain responsive to change and adapt strategies according to circumstances constitutes the most critical attribute for contemporary sports leaders. This finding aligns with the nature of the sports industry, which experiences high volatility stemming from both external factors and international regulations. Leaders who demonstrate strong adaptability are perceived as possessing greater potential to navigate organizations through crises and maintain programmatic continuity compared to other factors.

Technological literacy and team leadership exhibit comparable influence levels and clearly produce positive directional effects. This suggests that sports leadership potential cannot fully manifest if either element is absent. Leaders must possess technological intelligence to leverage data for management purposes while simultaneously employing team leadership skills to cultivate organizational collaboration. These research findings demonstrate that future sports organizational leadership development cannot focus solely on traditional personnel management skills but must integrate digital

tools into team leadership processes to elevate potential in accordance with sports industry standards. These findings align with the research of McCarthy et al. [9] showing that technological literacy and team leadership possess comparable influence levels and significantly contribute positively to the development of leadership potential in sports organizations [14].

## 5. Research Recommendations

### 5.1. Recommendations for Practical Application of Research Findings

Based on the research findings, flexibility and adaptability, technological literacy, and team leadership significantly influence leadership potential. Relevant organizations should apply these findings in establishing personnel development standards. Sports organizations should incorporate these three factors into evaluation guidelines and development plans for department heads and team managers to align with the context of most executives in the field, creating proactive training programs that emphasize flexibility.

### 5.2. The New Contribution

This research offers a significant empirical contribution by validating a causal model where technological literacy, team leadership, and flexibility and adaptability serve as the primary drivers of leadership potential in sports organizations. Through stepwise multiple regression analysis, the study demonstrates that these three factors collectively explain 32.4 percent of the variance in potential development (Adjusted  $R^2 = 0.324$ ), establishing a quantifiable framework for executive assessment. A critical new insight is the identification of flexibility and adaptability as the most influential variable, functioning as a form of organizational immunity that allows leaders to navigate volatility. This attribute enables the dismantling of rigid hierarchies in favor of fluid, cross-functional teams, allowing organizations to pivot from traditional revenue models toward digital innovation and long-term sustainability.

Additionally, the article introduces a holistic leadership paradigm that synthesizes high-tech data proficiency with high-touch interpersonal cohesion, defining the modern leader as a pivotal harmonizer. While technological literacy acts as a differentiator for data-driven decision-making and digital transformation, team leadership provides the human capital foundation necessary to align diverse organizational talents toward a unified vision. This synthesis redefines leadership potential not as a static measure of past performance, but as a dynamic capacity for navigating unpredictable environments and maintaining stakeholder confidence in the digital age. Ultimately, the research provides a standardized framework for the Thai sports industry to develop proactive training programs that emphasize adaptive capacity and technological mastery.

### 5.3. Recommendations for Future Research

1. Additional research should examine other variables that may affect sports leadership potential to reveal greater diversity, including emotional intelligence, strategic vision, or relationship network management, to account for the unexplained variance.
2. This research employed only a quantitative approach. Future studies could incorporate qualitative research methods, including in-depth interviews with high-performing department heads, to elucidate how flexibility and technology utilization are applied in real-world situations, which would provide clearer insights than quantitative data alone.
3. Thanaiudompat [7] literature review identified several emerging areas in leadership competency development, including work-from-anywhere practices and generational differences. Given their relevance to Thailand's sports context, these topics present valuable opportunities for future research.

## Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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## References

- [1] K. Bonyasuwon and T. Thanaiudompat, "Dynamic capabilities and quality of logistics services and business competencies of the sports equipment distribution business in Thailand," *Dusit Thani College Journal*, vol. 18, no. 3, pp. 56-68, 2024.
- [2] N. Praphuntha *et al.*, "Supply chain management and business performance in sports equipment distribution business," *Santapol College Academic Journal*, vol. 11, no. 2, pp. 10-17, 2025.
- [3] S. Afrifa Jnr, T. C. Dzogbewu, D. Y. Dzansi, and D. J. De Beer, "3D printing leadership dynamics: Emotional intelligence, organizational emotional climate, job performance linkages in South Africa," *Management Dynamics in the Knowledge Economy*, vol. 12, no. 4, pp. 391-409, 2024. <https://doi.org/10.2478/mdke-2024-0023>
- [4] W. Dong and L. Zhong, "Responsible leadership fuels innovative behavior: The mediating roles of socially responsible human resource management and organizational pride," *Frontiers in Psychology*, vol. 12, p. 787833, 2021. <https://doi.org/10.3389/fpsyg.2021.787833>
- [5] T. Thanaiudompat and P. Singgram, "Dynamic capabilities, business alliances and value added of thailand's sports event management business," *Journal of Suvarnabhumi Institute of Technology Humanities and Social Sciences*, vol. 11, no. 2, pp. 386-399, 2025.
- [6] N. M. Ashkanasy, "Emotions in organizations: A multi-level perspective," *Multi-Level Issues in Organizational Behavior and Strategy*, vol. 2, pp. 9-54, 2003. [https://doi.org/10.1016/S1475-9144\(03\)02002-2](https://doi.org/10.1016/S1475-9144(03)02002-2)
- [7] T. Thanaiudompat, *Human resource management*. Bangkok: Protex Press, 2023.
- [8] S. Fox and P. E. Spector, "Emotions in the workplace: The neglected side of organizational life introduction," *Elsevier*, vol. 12, no. 2, pp. 167-171, 2002. [https://doi.org/10.1016/S1053-4822\(02\)00044-X](https://doi.org/10.1016/S1053-4822(02)00044-X)
- [9] P. McCarthy, D. Sammon, and I. Alhassan, "Digital transformation leadership characteristics: A literature analysis," *Journal of Decision Systems*, vol. 32, no. 1, pp. 79-109, 2022.
- [10] S. Nielsen, "Top management team diversity: A review of theories and methodologies," *International Journal of Management Reviews*, vol. 12, no. 3, pp. 301-316, 2010. <https://doi.org/10.1111/j.1468-2370.2009.00263.x>
- [11] P. Seepui, T. Bumroongsang, C. Rojwattanabun, P. Yaosiri, and K. Sakhonkaruhatej, "Relationship between the concept of marketing mix and the decision to use the badminton court rental business," *Academic Journal of Thailand National Sports University*, vol. 14, no. 3, pp. 281-290, 2022.
- [12] M. Hanisch, L. Graf-Vlachy, C. Haeussler, A. König, and T. S. Cho, "Kindred spirits: Cognitive frame similarity and good faith provisions in strategic alliance contracts," *Strategic Management Journal*, vol. 46, no. 2, pp. 436-469, 2025. <https://doi.org/10.1002/smj.3660>
- [13] A. A. Lado, N. G. Boyd, P. Wright, and M. Kroll, "Paradox and theorizing within the resource-based view," *Academy of Management Review*, vol. 31, no. 1, pp. 115-131, 2006.
- [14] P. Singgram and T. Thanaiudompat, "The development of a national sport event management model that affects the value added of the sport industry in Thailand," *Emerging Science Journal*, vol. 7, no. 2, pp. 445-454, 2023. <https://doi.org/10.28991/ESJ-2023-07-02-010>