



A Strategic Framework for Transforming Thailand's Esports Ecosystem into a Sustainable Revenue-Generating Industry

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Abstract

The transformation of the global esports industry from a leisure subculture into a multi-billion-dollar digital economy presents a significant opportunity for Thailand. Despite a gamer population exceeding 30 million, the Thai ecosystem remains trapped in a consumption-heavy model, leading to value leakage to foreign platforms and a lack of sustainable revenue streams for domestic organizations. This research proposes that the path to industrialization requires a paradigm shift driven by two key factors: Service Innovation based on Service-Dominant Logic (S-D Logic) and Intercultural Communication Competence (ICC).

This study employs a Sequential Explanatory Mixed-Methods Design. Quantitative data were collected from 400 professional esports stakeholders and analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). Qualitative data were obtained from in-depth interviews with 15 key informants.

PLS-SEM results reveal that service innovation has the most significant direct effect on revenue generation ($\beta = 0.442$, $p < 0.001$). Crucially, the study identifies a significant positive moderating effect of ICC ($\beta = 0.187$, $p < 0.01$), suggesting that service innovation yields higher economic returns when executed by culturally competent teams. The model explains 62.8% of the variance in revenue generation ($R^2 = 0.628$). Qualitative findings highlight "communication lag" and "regulatory backwardness" as significant barriers. Based on these findings, the study proposes the "SI-ICC Strategic Matrix," a framework encompassing guidelines for government deregulation, private sector value co-creation, and educational curriculum reform to elevate Thailand from a regional market to a global esports hub, aligning with the national "Soft Power" strategy.

Keywords: 1) Service Innovation 2) Intercultural Communication Competence (ICC) 3) Service-Dominant Logic (S-D Logic) 4) Esports Industry 5) PLS-SEM

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Introduction

The global economic landscape of the twenty-first century is being fundamentally reshaped by a transition from traditional manufacturing-based models to a service-oriented "Experience Economy" (Scholz, 2019, p. 12). Within this paradigm, value is no longer solely derived from the exchange of physical goods but is increasingly co-created through meaningful, memorable, and interactive digital experiences (Vargo and Lusch, 2004, pp. 1-17). Esports, defined as organized and competitive video gaming, has emerged as a vanguard of this transformation, growing at a rate that consistently outpaces traditional entertainment sectors (Hamari and Sjöblom, 2017, pp. 211-232). By 2024, global esports revenue reached approximately 2,396.9 million USD, with forecasts suggesting a valuation of 7.46 billion USD by 2030, supported by an impressive compound annual growth rate (CAGR) of 23.1% (Scholz, 2019, pp. 45-48). This rapid expansion is fueled by hyperconnectivity, the integration of 5G infrastructure, and the creativity of game developers who have shifted from viewing games as products to viewing them as evolving service platforms (Vargo and Lusch, 2016, pp. 5-23).

Thailand currently stands at a critical economic junction. The necessity to escape the "Middle-Income Trap" has prompted national policies focused on high-value creative and digital industries (Nambisan, et al., 2017, pp. 223-238). With over 30 million active gamers—representing nearly half the population—the Thai market size reached 1,514.25 million USD in 2024 and is projected to soar

to over 3 billion USD by 2033 (Cranmer, et al., 2021, p. 106671). Despite this massive domestic participation, the industry suffers from a profound "Digital Deficit" (Johnson and Woodcock, 2019, pp. 670-688). Most revenue generated within the Thai ecosystem flows outward to foreign game publishers through licensing fees and microtransactions. At the same time, domestic organizations—including professional teams, tournament organizers, and media outlets—find themselves relegated to the low-margin end of the value chain (Scholz, 2019, p. 85). Many local entities remain tethered to outdated "Goods-Dominant" business models that rely almost exclusively on volatile sponsorships, which currently account for 60% of total revenue (Jenny, et al., 2017, pp. 1-18). This reliance creates "sponsorship fatigue" and leaves the industry vulnerable to external market fluctuations (Scholz, 2019, pp. 102-105).

To secure sustainable growth, the Thai esports ecosystem requires a paradigm shift toward Service-Dominant Logic (S-D Logic). This logic, pioneered by Vargo and Lusch (2004, p. 5; 2016, p. 8), suggests that service—the application of specialized knowledge and skills—is the fundamental basis of all exchange. In the esports context, this means organizations must evolve from selling "match tickets" or "sponsorship logos" to orchestrating "value co-creation" where fans are active "prosumers" rather than passive recipients (Grönroos and Voima, 2013, pp. 133-150). However, as the industry is "Born Global," innovation alone is insufficient (Nambisan, 2017, pp. 1029-1055). Because Thai teams must interact with international talent, global sponsors, and



multicultural fan bases, they face significant intercultural communication barriers (Ang, et al., 2007, pp. 335-371). Traditional Thai cultural norms, such as "Kreng Jai" (compliance and saving face), may hinder the direct, agile communication necessary in professional, high-stakes environments (Lin, Xu, and Xie, 2023, pp. 718-730).

While prior studies have explored esports viewer motivations and team performance, there is a distinct conceptual gap in explaining how service innovation translates into measurable financial outcomes, particularly under the influence of intercultural communication competence (ICC) (Hamari and Sjöblom, 2017, p. 215). Existing literature lacks a systematic analysis of ICC as a strategic asset in the digital economy (Jiao, Xu and Yan, 2020, pp. 53-67). This research addresses this gap by investigating the causal relationships between government support, technology acceptance, service innovation, and ICC as drivers of revenue generation. By integrating S-D Logic and Byram's ICC framework, this study offers a novel theoretical lens for understanding the digital content industry as a service ecosystem (Vargo and Lusch, 2016, p. 12).

The primary objectives of this research are to measure the structural relationships between these variables using Partial Least Squares Structural Equation Modeling (PLS-SEM) and to examine the moderating role of cultural competence in amplifying the economic impact of service innovation (Hair, et al., 2021, pp. 1-20). Furthermore, the study explores qualitative barriers—such as regulatory lag and communication bottlenecks—through

in-depth interviews with 15 key informants. These findings are synthesized into the "SI-ICC Strategic Matrix," providing a roadmap for transforming Thailand from a regional consumption market into a global esports hub, aligning with the "Ignite Thailand: Thailand Vision 2030" project to position the country as a leader in the regional digital economy (Nambisan, Wright, and Feldman, 2019, p. 103773).

Literature Review and Hypothesis Development: Service-Dominant Logic and Service Innovation in Esports

Service-Dominant Logic (S-D Logic) represents a fundamental shift in marketing and economic theory, moving away from the Goods-Dominant (G-D) perspective that views value as something "delivered" by producers to consumers (Vargo and Lusch, 2004, pp. 1-17). S-D Logic posits that value is always co-created by multiple actors, including the beneficiary, through the integration of operant resources—intangible resources such as knowledge and skills (Vargo and Lusch, 2008, pp. 1-10). In the digital age, service innovation is defined not just as the output of a single firm but as the result of interactions among players in a service ecosystem (Lusch and Nambisan, 2015, pp. 155-175).

In the esports industry, the application of S-D Logic transforms the organization's role from a "content provider" to a "value orchestrator" (Lusch and Nambisan, 2015, p. 162). Unlike traditional sports, where revenue is primarily derived from ticket sales and media rights, esports revenue models are increasingly diversified through digital-native channels (Hamari and Sjöblom, 2017, p. 220). Service innovation

in this context involves three key mechanisms: (1) New Service Concepts, such as building lifestyle brands rather than just competitive rosters; (2) New Customer Interfaces, leveraging Augmented Reality (AR), Virtual Reality (VR), and interactive streaming to create immersive "servicescapes"; and (3) Value Co-creation Mechanisms, such as fan tokens and blockchain-based platforms that allow fans to participate in organizational decision-making (Witell, et al., 2016, pp. 2863-2872). Recent findings suggest that fans who participate in these co-creation activities are up to 55% more likely to maintain long-term engagement and spend on organizational offerings (Roth, Naderer and Matthes, 2023, pp. 204-216). Therefore, organizations that implement high levels of service innovation are expected to achieve superior revenue diversification and financial performance (Snyder, et al., 2016, pp. 2401-2408). H1: Service Innovation has a significant positive influence on esports revenue generation (Witell, et al., 2016, p. 2865).

Intercultural Communication Competence (ICC) as a Strategic Resource

Because esports platforms such as Twitch, YouTube Gaming, and Bilibili facilitate instantaneous cross-border cultural exchange, the industry is inherently transnational (Johnson and Woodcock, 2019, p. 675). Intercultural Communication Competence (ICC) is defined as the ability to function effectively in culturally diverse environments, encompassing cognitive, affective, and behavioral dimensions (Ang, et al., 2007, pp. 335-371). Byram's model emphasizes that ICC is not merely linguistic proficiency but involves cultural awareness, empathy,

and the ability to negotiate shared meanings in interactive situations (Xu, 2025, p. 1).

In professional esports, teams often represent multiple nationalities, which can lead to higher performance through a wider variety of strategic perspectives and experiences (Lin, Xu and Xie, 2023, pp. 718-730). Research demonstrates that cultural diversity is positively associated with team success in League of Legends (Stahl, et al., 2010, pp. 690-709). However, an organization's ability to generate revenue also depends on its capacity to manage global "servicescapes"—hybrid physical and digital environments in which value is co-created with a global audience (McCaughey, et al., 2025, pp. 1-24). Organizations with high ICC can bridge the "Waterline of Culture," moving beyond superficial behaviors to understand the deep-seated values of global fanbases, thereby converting cultural capital into economic capital (Thomas, et al., 2008, pp. 123-143). H2: Intercultural Communication Competence has a significant positive influence on esports revenue generation (Ang, et al., 2007, p. 340).

The Moderating Role of ICC in Innovation Efficacy.

A critical inquiry in contemporary service research is how communication capabilities enhance the returns on innovation (Barrett, et al., 2015, pp. 135-154). Innovation serves as the "vehicle" for value, while intercultural communication serves as the "fuel" (Rockstuhl, et al., 2011, pp. 825-840). If an organization designs a sophisticated service innovation, such as a multi-national streaming platform, but lacks the ICC to manage cross-cultural



team dynamics or interact with a global audience, the co-creation of value breaks down (Prahalad and Ramaswamy, 2004, pp. 5-14).

High levels of ICC enable organizations to leverage diversity to enhance problem-solving and creativity, reducing "foreign language anxiety" and increasing trust within the service ecosystem (Gudykunst, 2005, pp. 419-457). This synergy suggests a "Cultural Multiplier Effect," where service innovation yields higher economic returns when executed by culturally competent teams (Moon, 2013, pp. 2414-2425). Conversely, organizations that innovate without a cultural foundation may encounter "cultural walls" in global markets, leading to diminishing returns regardless of their technological sophistication (Tajfel, 1982, pp. 1-39). H3: Intercultural Communication Competence plays a significant moderating role in the relationship between service innovation and revenue generation (Balakrishnan, Harji and Angusamy, 2021, pp. 82-96).

Determinants of Service Innovation:

Government Support and Technology Acceptance.

Service innovation does not occur in a vacuum; it requires a conducive institutional and technological environment (Yoo, Henfridsson, and Lyytinen, 2010, pp. 724-735). Government Support refers to the legal frameworks, funding, and recognition of esports as a professional sector (Nambisan, Wright and Feldman, 2019, p. 103773). In Thailand, the official recognition of esports as a professional sport in 2021 and the proposal of the Game Industry Promotion Act B.E. 2568 aim to provide tax benefits and subsidies to local developers,

directly stimulating innovation (Nambisan, 2017, p. 1035).

Simultaneously, Technology Acceptance (TAM), based on perceived usefulness and ease of use, determines the speed at which new service concepts are adopted (Davis, 1989, pp. 319-340). The expansion of 5G networks, cloud gaming, and fintech solutions for digital transactions in Thailand has laid the foundation for mobile esports titles such as Arena of Valor and PUBG Mobile (Venkatesh, et al., 2003, pp. 425-478). Technological infrastructure improvements expand the addressable population and facilitate the creation of high-value digital services (Venkatesh, Thong and Xu, 2012, pp. 157-178). H4: Government support has a significant positive influence on service innovation (Bharadwaj, et al., 2013, pp. 471-482). H5: Technology acceptance has a significant positive influence on service innovation (Dwivedi, et al., 2019, pp. 719-734).

Research Methodology, Research Design, and Integration:

This study adopts a Sequential Explanatory Mixed-Methods Design to ensure both statistical rigor and contextual depth (Johnson and Onwuegbuzie, 2004, pp. 14-26). The integration of these methods allows the qualitative findings to explain the causal mechanisms identified in the quantitative analysis, particularly the moderating role of ICC (Fetters, Curry and Creswell, 2013, pp. 2134-2156). Phase 1 (Quantitative): A cross-sectional survey to test the hypothesized model using PLS-SEM (Hair, et al., 2021, pp. 1-20). Phase 2 (Qualitative): Semi-structured in-depth interviews with 15 key informants to explore the "human factor"

of digital transformation and explain statistical results (Tashakkori and Teddlie, 2010, pp. 1-50).

Population and Stratified Random Sampling

The sampling frame consists of stakeholders registered with the Thailand Esports Federation (TESF), totaling approximately 1,362 individuals (Cranmer, et al., 2021, p. 106671). To ensure representativeness, Stratified Random Sampling was employed based on game genres, which reflect distinct sub-ecosystems within the industry (Scholz, 2019, pp. 50-60):

- MOBA: 45% (Sample Size 180) - Dominant in viewership (RoV, Dota 2)
- FPS: 25% (Sample Size 100) - High international competition (Valorant)
- Battle Royale: 20% (Sample Size 80) - Widespread mobile penetration (PUBG)
- Sports/Other: 10% (Sample Size 40) - Niche but loyal community (FIFA)

Using Yamane's formula at a 95% confidence level, the minimum required sample was 309; however, 400 respondents were collected to maximize the power of the PLS-SEM analysis and account for potential outliers (Hair, et al., 2019, pp. 2-24).

Measurement and Reliability

Constructs were measured using items adapted from established literature to ensure construct validity. The Service Innovation (SI) scale was adapted from established scales that assess uniqueness and value to customers (Witell, et al., 2016, pp. 2863-2872). The ICC scale was based on the four-factor Cultural Intelligence Scale (CQS) (Van Dyne, Ang, and Koh, 2008, pp. 16-38). Measurement was

conducted on a 5-point Likert scale. Content validity was established through a panel of three experts. A pilot test with 30 stakeholders confirmed Cronbach's alpha values above 0.70 for all scales (Hair, et al., 2021, p. 10).

Qualitative Thematic Analysis Rigor: The 15 key informants included CEOs from clubs such as Buriram United and Bacon Time, marketing directors from hardware firms, and officials from the Digital Economy Promotion Agency (DEPA). Thematic analysis was conducted using NVivo 12 software (Braun and Clarke, 2006, pp. 77-101). To ensure trustworthiness, the researchers applied Member Checking and Triangulation (Nowell, et al., 2017, pp. 1-13). Theoretical saturation was reached by the 12th interview (O'Reilly and Parker, 2013, pp. 190-197).

Empirical Results (Quantitative): Respondent Profile and Descriptive Analysis. The analysis of 400 respondents reveals a youth-centric industry predominantly driven by the "Gamer Generation" (ages 18–25), who account for 52.5% of the sample (Reitman, et al., 2020, pp. 32-50). Notably, women represent 25.5% of the professional stakeholders and 44% of the region's total esports viewers, signaling a significant underserved market for targeted service innovation (Macey and Hamari, 2019, pp. 20-41).

As shown in Table 1, the study presents descriptive statistics and interpretation levels for the primary constructs analyzed among 400 professional esports stakeholders.

**Table 1** Descriptive Statistics and Interpretation Levels for Primary Constructs (n = 400)

Variable	Mean	Std. Deviation	Interpretation
GOV	3.32	0.88	Moderate
TAM	4.15	0.65	High
SI	3.84	0.72	High
ICC	3.68	0.81	High
REV	3.52	0.94	High

The current level of government support is perceived as moderate. At the same time, technology acceptance is the highest-rated variable, suggesting that the industry's technical infrastructure is maturing faster than its institutional support (Nambisan, Wright, and Feldman, 2019, p. 103773).

Measurement Model Evaluation

The measurement model was assessed using SmartPLS 4.0. Reliability was

confirmed through Composite Reliability (CR) and Cronbach's alpha, all exceeding 0.70 (Hair, et al., 2019, pp. 2-24). Convergent validity was established with AVE values above 0.50 (Hair, et al., 2021, p. 15). As shown in Table 2, the study evaluates the quality of the measurement model by assessing the reliability and validity of each construct.

Table 2 Construct Reliability and Validity Results

Construct	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
GOV	0.812	0.874	0.635
TAM	0.845	0.892	0.678
SI	0.887	0.915	0.712
ICC	0.903	0.928	0.745
REV	0.864	0.902	0.698

Discriminant validity was assessed using the Heterotrait-Monotrait (HTMT) ratio (Henseler, et al., 2015, pp. 115-135). All values were below the 0.85 threshold, confirming the distinctiveness of each construct (Henseler, 2017, pp. 178-192). As shown in Table 3, the study assesses discriminant validity using the Heterotrait-Monotrait (HTMT) ratio. This test ensures that each psychological construct

in the model is statistically distinct from the others.

Table 3 Discriminant Validity via HTMT Ratio

	GOV	TAM	SI	ICC	REV
GOV					
TAM	0.492				
SI	0.531	0.612			
ICC	0.354	0.408	0.489		
REV	0.502	0.545	0.687	0.598	

Common Method Bias (CMB)

To address potential bias, the study employed a full collinearity VIF test (Kock, 2015, pp. 1-10). All inner VIF values were below the 3.3 threshold, indicating that the model is not substantially contaminated by CMB (Hair and Alamer, 2022, p. 100027).

Structural Model Assessment and Hypothesis Testing

Hypotheses were tested using bootstrapping with 5,000 sub-samples (Aguirre-Urreta and Rönkkö, 2018, pp. 1001-1020). The

model fit was confirmed with an SRMR of 0.052, which is below the 0.08 threshold (Hair, et al., 2021, p. 35). The model demonstrated strong explanatory power for revenue generation ($R^2 = 0.628$), indicating that 62.8% of the variance in revenue is explained (Hair, et al., 2019, p. 15). The predictive relevance (Q^2) was 0.412, indicating strong capability (Shmueli, et al., 2019, pp. 2322-2347). As shown in Table 4, the research presents the structural path coefficients and the final decisions for each of the five hypotheses tested using PLS-SEM.

Table 4 Structural Path Coefficients and Hypothesis Decisions

Hypothesis	Relationship	Path Coeff (β)	T-Stats	P-Values	Effect Size (f^2)	Decision
H1	SI $\rightarrow$ REV	0.442	8.521	0.000***	0.352	Supported
H2	ICC $\rightarrow$ REV	0.295	5.134	0.000***	0.184	Supported
H3	SI x ICC $\rightarrow$ REV	0.187	3.442	0.001**	0.098	Supported
H4	GOV $\rightarrow$ SI	0.215	3.890	0.000***	0.112	Supported
H5	TAM $\rightarrow$ SI	0.388	6.772	0.000***	0.245	Supported

Note: Significance Levels: *** $p < 0.001$, $p < 0.01$. Interpretation f^2 : 0,02 (Small), 0,15 (Medium), 0,35 (Large) (Hair, et al., 2019, p. 18). The results show that service innovation has a large effect size ($f^2 = 0.352$) on revenue, while technology acceptance is the primary driver of innovation adoption (Venkatesh et al., 2003, p. 430). The confirmation of H3 validates the "cultural amplifier" theory (Moon, 2013, p. 2415).

The results of the structural model analysis are presented in Figure 2, highlighting the significant path coefficients and the mod-

el's explanatory power ($R^2 = 0.628$ for Revenue Generation).

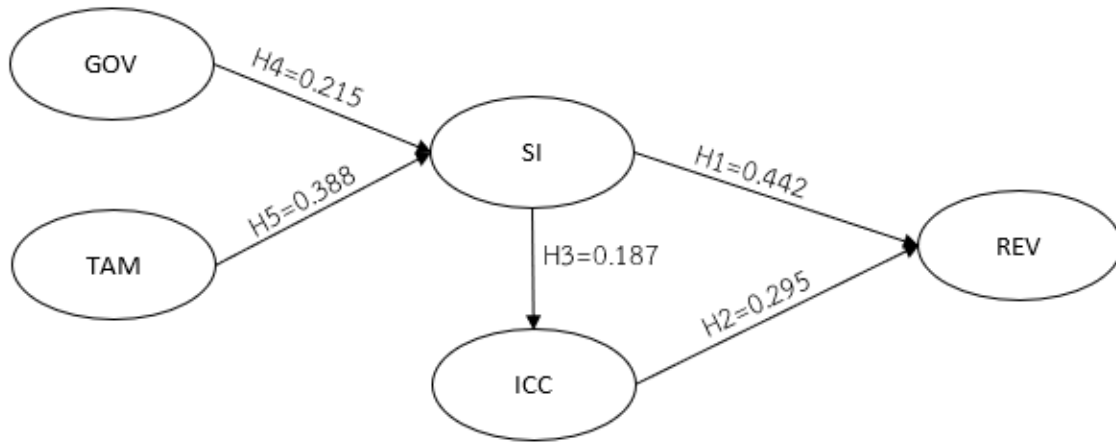


Figure 1 The Proposed Research Model for Esports Revenue Generation

Moderation Analysis and Interaction Plot:

The significant interaction term indicates that the relationship between SI and REV is moderated by ICC (Becker, et al., 2013, pp. 665-694). Simple slope analysis reveals that at high ICC levels, the slope is significantly steeper, suggesting that organizations with high cultural competence transform innovations into revenue exponentially faster (Rockstuhl, et al., 2011, pp. 825-840).

Qualitative Results (Thematic Analysis)

The interviews revealed three overarching themes: (1) Service-First Paradigm Shift, (2) The Cultural Ceiling, and (3) Regulatory Backwardness (Braun and Clarke, 2006, p. 85).

Theme 1: Service-First Paradigm Shift (Explaining H1) Informants corroborated the statistical link between innovation and revenue by emphasizing that winning is no longer a viable business model (Scholz, 2019, p. 95). This reflects the move from "Value-in-Exchange" to "Value-in-Use" in S-D Logic (Vargo and Lusch, 2004, p. 12). Co-creation makes fans 55% more likely to spend (Roth et al., 2023, p. 210).

Theme 2: The Cultural Ceiling (Explaining H2 and H3) Qualitative data clarified the moderation effect. A "Communication Lag" was noted as a bottleneck (Ting-Toomey, 2005, pp. 71-92). ICC is considered "Revenue Capital" for global sponsorship (Thomas, et al., 2008, p. 130). This supports findings that cultural diversity enhances team success only when it is coordinated (Stahl, et al., 2010, p. 700).

Theme 3: Regulatory Backwardness (Context for H4) Despite high TAM, legal ambiguity hinders innovation (Nambisan, Wright, and Feldman, 2019, p. 103774). Bureaucratic speed lags behind technological advances, thereby slowing global competition (Rachinger, et al., 2019, pp. 1143-1160).

Discussion

The Synergy of Innovation and Culture.

The findings provide robust support for the integration of S-D Logic and ICC in the digital economy (Vargo and Lusch, 2016, p. 15). The "Cultural Multiplier Effect" serves as the essential moderator, translating potential into economic capital (Jiao, Xu and Zhao, 2020, p. 3). Technology is a commodity; the advantage

is rooted in managing social complexities (Earley and Ang, 2003, p. 45). Organizations with high ICC navigate the "Waterline of Culture" better to export "Thainess" globally (Xu, 2025, p. 5).

The SI-ICC Strategic Matrix.

Synthesizing findings, this study proposes the SI-ICC Strategic Matrix (Bharadwaj, et al., 2013, p. 475). As shown in Table 5, the

study synthesizes the research findings into a comprehensive SI-ICC Strategic Development Matrix. This roadmap is designed to transition Thailand's esports industry from a consumption-heavy market to a global hub through collaboration among three key stakeholders: the government, the private sector, and the education sector.

Table 5 SI-ICC Strategic Development Matrix for Thailand's Esports Industry

Period	Government (Supporter)	Private Sector (Co-creator)	Education (Nurturer)
Short-term (1 Year)	Regulatory Sandbox: Open "Gaming Sand-boxes" for digital asset monetization. Visa Reform: Issue "Esports Specialist Visas".	Revenue Diversification: Move to a 50/50 model (Sponsorship / Direct-to-fan). ICC Audit: Assess English/cultural skills using CQS.	Urgent Skills: Launch courses: "English for Esports" and "Cross-Cultural Team Management".
Mid-term (3 Years)	Soft Power Integration: Integrate tournaments into tourism calendars (5F). Tax Incentives: 200% deduction for R&D.	Platformization: Develop independent apps for co-creation. Cultural Bridge: Hire "Cultural Managers".	Curriculum Reform: Integrate "Service Marketing" and "Cross-Cultural Psychology" into degrees.
Long-term (5 Years)	Global Hub Status: Host World Championships. Export Strategy: Subsidize Thai services to emerging markets.	Metaverse/Web3: Full adoption for virtual fan experiences. Global Franchise: Establish Thai branches in international leagues.	Innovation Center: Establish a "National Esports Research Center". Create a global alum network.

Managerial and Policy Implications

Managers must invest in human capital (Ang, et al., 2007, p. 355). ICC is linked to revenue; high-performing teams show empowered communication patterns (Stahl and Maznevski, 2021, pp. 4-22). Policymakers should shift from

"supporting events" to "building an ecosystem" (Nambisan, Wright, and Feldman, 2019, p. 103780). High TAM impact suggests subsidizing the internet is more effective than one-time tournaments (Venkatesh, et al., 2016, pp. 328-376).



Conclusion

This research mapped the causal mechanisms of Thailand's esports development (Scholz, 2019, p. 120). Service Innovation is the primary engine ($R^2 = 0.628$), and ICC amplifies this impact (Rockstuhl, et al., 2011, p. 838). The "consumption trap" can be overcome by arming the workforce with cultural intelligence (Xu, 2025, p. 10).

Limitations and Future Research

The study is cross-sectional; longitudinal designs should track mature ecosystems (Foss and Saebi, 2017, pp. 200-227). Comparative research in emerging markets would enhance generalizability (Zott, et al., 2011, pp. 1019-1042). Future studies should explore AI as a "hybrid operant resource" in S-D Logic (Nambisan, et al., 2017, p. 235).

Bibliography

- Aguirre-Urreta, M. I. and Rönkkö, M. (2018). Statistical inference with PLSc using bootstrap confidence intervals. **MIS Quarterly**, 42(3), 1001–1020.
- Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., Tay, C. and Chandrasekar, N. A. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance. **Management and Organization Review**, 3(3), 335–371.
- Balakrishnan, K., Harji, M. B. and Angusamy, A. (2021). Intercultural communication competence: Well-being and performance of multicultural teams. **Journal of Intercultural Communication**, 21(2), 82–96.
- Barrett, M., Davidson, E., Prabhu, J. and Vargo, S. L. (2015). Service innovation in the digital age: Key contributions and future directions. **MIS Quarterly**, 39(1), 135–154.
- Becker, J. M., Rai, A., Ringle, C. M. and Völckner, F. (2013). Discovering unobserved heterogeneity in structural equation models. **MIS Quarterly**, 37(3), 665–694.
- Bharadwaj, A., El Sawy, O. A., Pavlou, P. A. and Venkatraman, N. (2013). Digital business strategy: Toward a next generation of insights. **MIS Quarterly**, 37(2), 471–482.
- Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. **Qualitative Research in Psychology**, 3(2), 77–101.
- Cranmer, E. E., Han, D. I. D., van Gisbergen, M. and Jung, T. (2021). Esports matrix: Structuring the esports research agenda. **Computers in Human Behavior**, 117, 106671.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. **MIS Quarterly**, 13(3), 319–340.
- Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M. and Williams, M. D. (2019). Re-examining the unified theory of acceptance and use of technology. **Information Systems Frontiers**, 21(3), 719–734.
- Earley, P. C. and Ang, S. (2003). **Cultural intelligence: Individual interactions across cultures**. Stanford, CA: Stanford University Press.

- Fetters, M. D., Curry, L. A. and Creswell, J. W. (2013). Achieving integration in mixed methods designs. **Health Services Research**, 48(6pt2), 2134–2156.
- Foss, N. J. and Saebi, T. (2017). Fifteen years of research on business model innovation: How far have we come, and where should we go?. **Journal of Management**, 43(1), 200–227.
- Grönroos, C. and Voima, P. (2013). Critical service logic: Making sense of value creation and co-creation. **Journal of the Academy of Marketing Science**, 41(2), 133–150.
- Gudykunst, W. B. (2005). An anxiety/uncertainty management theory of strangers' intercultural adjustment. **Theorizing about intercultural communication** (pp. 419-457). Thousand Oaks, CA: SAGE Publication.
- Hair, J. F. and Alamer, A. (2022). Partial least squares structural equation modeling (PLS-SEM) in second language and education research. **Research Methods in Applied Linguistics**, 1(3), 100027.
- Hair, J. F., Jr., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P. and Ray, S. (2021). **Partial least squares structural equation modeling (PLS-SEM) using R: A workbook**. Cham: Springer.
- Hair, J. F., Risher, J. J., Sarstedt, M. and Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. **European Business Review**, 31(1), 2–24.
- Hamari, J. and Sjöblom, M. (2017). What is eSports and why do people watch it?. **Internet Research**, 27(2), 211–232.
- Henseler, J. (2017). Bridging design and behavioral research with variance-based structural equation modeling. **Journal of Advertising**, 46(1), 178–192.
- Henseler, J., Ringle, C. M. and Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. **Journal of the Academy of Marketing Science**, 43(1), 115–135.
- Jenny, S. E., Manning, R. D., Keiper, M. C. and Olrich, T. W. (2017). Virtual(ly) athletes: Where eSports fit within the definition of “sport”. **Quest**, 69(1), 1–18.
- Jiao, J., Xu, D. and Zhao, X. (2020). The development and validation of an intercultural business communication competence scale: Evidence from Mainland China. **SAGE Open**, 10(4), 1–14.
- Johnson, M. R. and Woodcock, J. (2019). The impacts of live streaming and Twitch.tv on the video game industry. **Media, Culture & Society**, 41(5), 670–688.
- Johnson, R. B. and Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. **Educational Researcher**, 33(7), 14–26.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. **International Journal of e-Collaboration**, 11(4), 1–10.
- Lin, S., Xu, Z. and Xie, Z. (2023). Cultural diversity in semi-virtual teams: A multicultural esports team study. **Journal of International Business Studies**, 54(4), 718–730.



- Lusch, R. F. and Nambisan, S. (2015). Service innovation: A service-dominant logic perspective. **MIS Quarterly**, 39(1), 155–175.
- Macey, J. and Hamari, J. (2019). eSports, skins and loot boxes: Participants, practices and problematic behaviour associated with emergent forms of gambling. **New Media & Society**, 21(1), 20–41.
- McCauley, B., Nguyen, T. H. T., McDonald, M. and Wearing, S. (2025). Innovation in the esports servicescape: A media business research agenda. **Journal of Media Business Studies**, 22(2), 87–117.
- Moon, T. (2013). The effects of cultural intelligence on performance in multicultural teams. **Journal of Applied Social Psychology**, 43(12), 2414–2425.
- Nambisan, S. (2017). Digital entrepreneurship: Toward a digital technology perspective of entrepreneurship. **Entrepreneurship Theory and Practice**, 41(6), 1029–1055.
- Nambisan, S., Lyytinen, K., Majchrzak, A. and Song, M. (2017). Digital innovation management: Reinventing innovation management research in a digital world. **MIS Quarterly**, 41(1), 223–238.
- Nambisan, S., Wright, M. and Feldman, M. (2019). The digital transformation of innovation and entrepreneurship. **Research Policy**, 48(8), 103773.
- Nowell, L. S., Norris, J. M., White, D. E. and Moules, N. J. (2017). Thematic analysis: Striving to meet trustworthiness criteria. **International Journal of Qualitative Methods**, 16(1), 1–13.
- O'Reilly, M. and Parker, N. (2013). “Unsatisfactory saturation”: A critical exploration of the notion of saturated sample sizes in qualitative research. **Qualitative Research**, 13(2), 190–197.
- Prahalad, C. K. and Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. **Journal of Interactive Marketing**, 18(3), 5–14.
- Rachinger, M., Rauter, R., Müller, C., Vorraber, W. and Schirgi, E. (2019). Digitalization and its influence on business model innovation. **Journal of Manufacturing Technology Management**, 30(8), 1143–1160.
- Reitman, J. G., Anderson-Coto, M. J., Wu, M., Lee, J. S. and Steinkuehler, C. (2020). Esports research: A literature review. **Games and Culture**, 15(1), 32–50.
- Rockstuhl, T., Seiler, S., Ang, S., Van Dyne, L. and Annen, H. (2011). Beyond General Intelligence (IQ) and Emotional Intelligence (EQ): The Role of Cultural Intelligence (CQ) on Cross-Border Leadership Effectiveness in a Globalized World. **Journal of Social Issues**, 67(4), 825–840.
- Roth, A., Naderer, B. and Matthes, J. (2023). The players' perspective of value co-creation in esports. **Media and Communication**, 11(2), 204–216.
- Scholz, T. M. (2019). **eSports is business: Management in the world of competitive gaming**. Cham: Palgrave Pivot.

- Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J. H., Ting, H., Vaithilingam, S. and Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. **European Journal of Marketing**, 53(11), 2322–2347.
- Snyder, H., Witell, L., Gustafsson, A., Fombelle, P. and Kristensson, P. (2016). Identifying categories of service innovation: A review and synthesis of the literature. **Journal of Business Research**, 69(7), 2401–2408.
- Stahl, G. K. and Maznevski, M. L. (2021). Unraveling the effects of cultural diversity in teams: A retrospective and agenda for future research. **Journal of International Business Studies**, 52(1), 4–22.
- Stahl, G. K., Maznevski, M. L., Voigt, A. and Jonsen, K. (2010). Unraveling the effects of cultural diversity in teams: A meta-analysis. **Journal of International Business Studies**, 41(4), 690–709.
- Tajfel, H. (1982). Social psychology of intergroup relations. **Annual Review of Psychology**, 33, 1–39.
- Tashakkori, A. and Teddlie, C. (2010). **SAGE handbook of mixed methods in social & behavioral research** (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Thomas, D. C., Elron, E., Stahl, G., Ekelund, B. Z., Ravlin, E. C., Cerdin, J. L., Poelmans, S., Brislin, R., Pekerti, A., Aycan, Z., Maznevski, M., Au, K. and Lazaro, M. B. (2008). Cultural intelligence: Domain and assessment. **International Journal of Cross Cultural Management**, 8(2), 123–143.
- Ting-Toomey, S. (2005). The matrix of face: An updated face-negotiation theory. In W. B. Gudykunst (Eds.), **Theorizing about intercultural communication** (pp. 71-92). Thousand Oaks, CA: SAGE Publications.
- Van Dyne, L., Ang, S. and Koh, C. (2008). Development and validation of the CQS: The cultural intelligence scale. In S. Ang and L. Van Dyne (Eds.), **Handbook of cultural intelligence: Theory, measurement, and applications** (pp. 16-38). Armonk, NY: M.E. Sharpe.
- Vargo, S. L. and Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. **Journal of Marketing**, 68(1), 1–17.
- Vargo, S. L. and Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. **Journal of the Academy of Marketing Science**, 36(1), 1–10.
- Vargo, S. L. and Lusch, R. F. (2016). Institutions and axioms: An extension and update of service-dominant logic. **Journal of the Academy of Marketing Science**, 44(1), 5–23.
- Venkatesh, V., Morris, M. G., Davis, G. B. and Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. **MIS Quarterly**, 27(3), 425–478.
- Venkatesh, V., Thong, J. Y. L. and Xu, X. (2012). Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology. **MIS Quarterly**, 36(1), 157–178.



- Venkatesh, V., Thong, J. Y. L. and Xu, X. (2016). Unified theory of acceptance and use of technology: A synthesis and the road ahead. **Journal of the Association for Information Systems**, 17(5), 328–376.
- Witell, L., Snyder, H., Gustafsson, A., Fombelle, P. and Kristensson, P. (2016). Defining service innovation: A review and synthesis. **Journal of Business Research**, 69(8), 2863–2872.
- Xu, H., Wang, Y. and Ma, J. (2025). A comprehensive review of intercultural communicative competence in EFL education and global business. **Cogent Education**, 12(1), 2557608.
- Yoo, Y., Henfridsson, O. and Lyytinen, K. (2010). Research commentary: The new organizing logic of digital innovation: An agenda for information systems research. **Information Systems Research**, 21(4), 724–735.
- Zott, C., Amit, R. and Massa, L. (2011). The business model: Recent developments and future research. **Journal of Management**, 37(4), 1019–1042.