Knowledge Management, Market Orientation, Digital Technology Adoption, And Innovation Capability Affecting the Operational Performance of Community Enterprises in Thailand's Eastern Economic Corridor (EEC)

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Abstract

The rapid convergence of digital technology and intense global hyper-competition compels organizations, particularly those in the grassroots economy, to fundamentally reassess their operational models and strategic capabilities (Agazu & Kero, 2024; Oliinyk, 2024). This study addresses the critical need for enhanced performance among **Community Enterprises (CEs)** operating within **Thailand's Eastern Economic Corridor (EEC)**, a region strategically vital for national development but where CEs often face limitations in modern management and technology adoption (Jarusen & Cheunkamon, 2024; Meteeworachat, 2023). The research investigates the synergistic influence of three key antecedent factors—**Knowledge Management (KM)**, **Market Orientation (MO)**, and **Digital Transformation (DT)**—on **Innovation Capability (IC)** and subsequent **Operational Performance (OP)** of these enterprises.

The study employed a **Mixed-Method** design to achieve three objectives: 1) to examine the current levels of KM, MO, DT, IC, and OP among CEs, 2) to investigate the causal influence of these factors on OP, and 3) to construct and validate a robust **Structural Equation Model (SEM)**. The **quantitative phase** utilized data collected via a questionnaire survey from a targeted sample of **300 CE members** in the three EEC provinces (Chachoengsao, Chonburi, and Rayong), adhering to the requisite sample size for SEM analysis (Hair et al., 1998; Schumacher & Lomax, 1996). The **qualitative phase** involved **in-depth interviews** with **15 key informants** to contextualize the quantitative findings and explore practical mechanisms (Douglas, 2003; Miles & Huberman, 1994).

The analysis confirmed a high level of model-to-data fit, validating the proposed structural relationships. Key findings supported all seven hypotheses (H1-H7). Specifically, KM, MO, and DT were found to exert a direct, positive, and significant influence on IC (H1, H3, H5), reinforcing IC as a crucial mechanism for competitive advantage (Migdadi, 2022; Yaskun et al., 2023; Chen & Kim, 2023). Furthermore, KM, MO, and DT also demonstrated a direct, positive influence on OP (H2, H4, H6), underscoring their direct role in enhancing operational efficiency and market responsiveness (Rafi et al., 2022; Yu et al., 2022). Crucially, IC was confirmed to have a strong, positive, direct influence on OP (H7), serving as the core translation mechanism from strategic inputs to tangible performance outcomes (Fang et al., 2022).

These results provide crucial theoretical support for the hypothesized model, establishing the antecedent factors as essential strategic priorities for grassroots organizations. The findings yield actionable **policy implications** for government agencies (e.g., the Department of

Agricultural Extension) to design targeted programs focusing on digital skill development and knowledge-sharing platforms. Practically, they guide CE managers in the EEC to prioritize continuous learning, market-centric strategies, and technology adoption to ensure long-term sustainability and enhanced competitive performance (Fuad et al., 2024; Carton, 2004).

Keywords: Knowledge Management, Market Orientation, Digital Transformation, Innovation Capability, Operational Performance, Community Enterprise, Eastern Economic Corridor.

1. Introduction

The global economy is undergoing a period of unprecedented volatility and rapid transformation, driven primarily by globalization and the accelerating advancements in digital technologies. This environment has fundamentally reshaped the competitive landscape, creating an era of intense **hyper-competition** where traditional business models are constantly challenged. To survive and achieve long-term sustainability, organizations worldwide must rapidly develop and implement strategies focused on continuous **innovation** and **adaptation**. The commercial competition in the 21st century is increasingly complex, demanding quick, precise responses to rapidly evolving consumer behaviors and individualized needs for products and services. The failure to adapt to this accelerating pace of change, particularly the shift toward a digital and innovation-based economy, poses a significant risk to an organization's competitive potential and long-term viability. Therefore, all business sectors, regardless of size or industry, must prioritize strengthening their operational capabilities and market responsiveness to achieve sustainable competitive advantage. This necessary adaptation applies across the economic spectrum, from multinational corporations to local **Community Enterprises**.

Contemporary literature confirms that competitive dynamics are now dictated by factors including the digital economy and the need for personalized customer experiences. The shift toward a Net Zero Manufacturing agenda, for example, is inherently linked to digital transformation as a means of gaining a competitive edge. Similarly, the intense competition necessitates rapid response and adaptation to pinpoint customer needs. Businesses must utilize innovation strategies that effectively create and enhance value from existing resources to maximize efficiency and maintain stability in the face of continuous external disruptions. This is particularly true as the commercial world adjusts to complex factors like environmental shifts and global crises.

Thailand Context and Community Enterprises

In Thailand, the strategy for securing economic and social stability centers on developing the **grassroots economy**. A crucial mechanism for achieving this goal is the establishment and promotion of **Community Enterprises (CEs)**. CEs are integral drivers for local income generation, job creation, and the preservation of invaluable local wisdom and cultural heritage. They represent a vital foundation for a self-reliant and sustainable community economy.

Despite their critical role, CEs in Thailand frequently encounter substantial operational constraints. These challenges include a notable lack of **modern management knowledge**, technological limitations in production, restricted market access, and difficulties in human resource management. These limitations often impede continuous business expansion and long-term sustainability, making it difficult for some groups to fully realize the intended goals

of community strength and economic self-sufficiency. Improving the performance of CEs requires concerted efforts to strengthen their core capabilities, particularly in areas like value chain development, where participatory methods are essential for sustainable agricultural practices. Research has consistently shown that factors such as efficient management strategies, intellectual capital, and organizational agility are critical for improving the performance and sustainability of these local organizations.

The Eastern Economic Corridor (EEC) Focus

The focus of this research is on Community Enterprises located within the **Eastern Economic Corridor (EEC)** of Thailand. The EEC comprises three strategically important provinces: Chachoengsao, Chonburi, and Rayong. This region is the subject of a major national development plan (2023-2027) orchestrated by the Office of the National Economic and Social Development Council (NESDC) (สำนักงานสภาพัฒนาการเศรษฐกิจและสังคมแห่งชาติ, 2565). The EEC initiative, often framed within the **Thailand 4.0** strategy, aims to elevate the industrial sector, upgrade infrastructure, and attract high-value investment, particularly by promoting agricultural development and value-added processing in the area (กรมศุลกากร, 2568). The region is characterized by diverse cultural resources, local wisdom, and rich natural resources, including water and biodiversity, making it highly potential for CE development (กระทรวงวัฒนธรรม, 2562; Maolanont & Pochanart, 2023; Soytong et al., 2017).

Given the hyper-competitive environment and the government's strategic focus on the EEC, it is paramount that local Community Enterprises within this area not only adapt but thrive. Successfully raising the potential and operational performance of these CEs directly supports the core objective of the EEC plan: to create a robust and resilient grassroots economy and promote sustainable development, often encapsulated by the **Bio-Circular-Green (BCG) Economic Model**. As of fiscal year 2568, the EEC provinces account for a substantial population of CE members, totaling **26,639 members** across 1,842 enterprises (กองส่งเสริมวิสาหกิจชุมชน, 2568;). Therefore, investigating the factors driving CE performance in this critical zone is of profound national and regional importance.

Research Gap and Aims

While prior research has separately addressed the importance of **Knowledge Management (KM)**, **Market Orientation (MO)**, **Digital Transformation (DT)**, and **Innovation Capability (IC)**, a comprehensive model integrating these antecedent factors to explain the **Operational Performance (OP)** specifically within the contextual challenges and strategic imperative of **Community Enterprises in the Thai EEC** remains underexplored. This study aims to fill this critical gap by developing and testing a Structural Equation Model (SEM) that captures these complex interrelationships.

The research is guided by the following:

Research Questions:

1. What are the current levels of KM, MO, DT, IC, and OP among CEs in the EEC?
2. What is the influence of KM, MO, DT, and IC on the OP of CEs in the EEC?

3. What is the nature of the structural equation model of the antecedent factors affecting the OP of CEs in the EEC?

Objectives of the Research:

1. To study the level of KM, MO, DT, IC, and OP among CEs in the EEC.
2. To study the influence of KM, MO, DT, and IC on the OP of CEs in the EEC.
3. To construct a structural equation model of the antecedent factors affecting the OP of CEs in the EEC.

Anticipated Contributions

The expected outcomes of this research offer multidimensional benefits:

- **Academic Contribution:** The study will provide a validated structural model that explains the complex relationship between KM, MO, DT, IC, and OP, specifically in the context of grassroots organizations. It offers valuable reference material for future research to explain organizational phenomena related to behavioral and performance outcomes in similar contexts.
- **Policy Contribution:** The findings can be presented to government bodies, such as the Department of Business Development and the Ministry of Commerce, to inform and guide policy-making related to promoting and developing strategic initiatives. This will support capacity building and competitiveness enhancement for CEs in the EEC, contributing to the broader economic growth of the nation.
- **Practical Contribution:** CE operators and management teams in the EEC can utilize the research findings to inform strategic planning and decision-making. The insights gained will help them refine operational processes to boost efficiency and competitiveness, promoting sustainable growth and long-term stability for their enterprises.

2. Literature Review and Hypothesis Development

This section establishes the theoretical foundations of the research by defining the five key constructs and developing the hypothesized relationships between them, based on an extensive synthesis of contemporary literature.

2.1 Theoretical Constructs

Knowledge Management (KM)

Knowledge Management is defined as the systematic process designed to create, collect, organize, transfer, and utilize both explicit and tacit knowledge within the Community Enterprise (CE) (Awad, 2007). The primary aim is to leverage organizational intelligence to enhance decision-making, accelerate innovation, and support sustainable development (Heisig, 2024; Mårtensson, 2000). KM goes beyond mere data storage; it is a cultural and structural mechanism that transforms individual experience into organizational capability (McElroy, 2010; De Bem Machado et al., 2022). For CEs, effective KM ensures local wisdom is integrated with modern practices, making knowledge a strategic asset.

Market Orientation (MO)

Market Orientation represents the strategic philosophy and organizational behavior where the CE continuously creates superior value for its customers (Grinstein, 2008). This behavior is rooted in three components: customer orientation (deeply understanding current and future customer needs), competitor orientation (analyzing rivals' strategies), and inter-functional coordination (the cohesive use of market intelligence across all CE functions) (Han et al., 1998; Avlonitis & Gounaris, 1999). MO serves as a crucial compass, guiding resource allocation and strategic planning (Gheysari et al., 2012). It shifts the CE's focus from internal production to external market responsiveness, often including an internal market orientation toward employees (Lings, 2004).

Digital Transformation (DT)

Digital Transformation is a fundamental, systemic process where CEs integrate digital technologies into their structure, management, and operational processes (Vial, 2021; Ebert & Duarte, 2018). This transformation is not simply about adopting new tools, but about strategically utilizing information, communication, and connectivity to create new customer value propositions, enhance operational efficiency, and establish agile business models for sustainable competitiveness (Kraus et al., 2021; Zaoui & Souissi, 2020). Successful DT often acts as a springboard for product and business model innovation (Bresciani et al., 2021).

Innovation Capability (IC)

Innovation Capability is the potential of the CE to intentionally develop, create, and successfully apply new concepts (Saunila, 2020). This organizational potential leverages integrated knowledge, resources, technology, and a creative culture to result in distinct product development, process improvement, or new organizational structures (Iddris, 2016; Hanaysha et al., 2022). High IC is crucial for CEs as it acts as a dynamic capability, allowing them to adapt to rapidly changing market demands and technological shifts, ensuring long-term competitive advantage (Rajapathirana & Hui, 2018; AlTaweel & Al-Hawary, 2021).

Operational Performance (OP)

Operational Performance is the measure of the CE's ability to effectively and efficiently achieve its strategic goals (Akpa et al., 2021). This composite measure reflects the outcome of efficient resource utilization, effective process execution, and the attainment of competitive standing. OP is assessed through a combination of financial outcomes (e.g., profitability, revenue growth) and non-financial outcomes (e.g., process efficiency, market share, and competitive standing) (Carton, 2004; McCartney & Fu, 2022). In the digital era, OP is increasingly influenced by leadership and employee capabilities (Shin et al., 2023; Hanaysha & Alzoubi, 2022).

2.2 Hypothesis Development

Based on the preceding theoretical review, the following structural relationships are hypothesized for Community Enterprises in Thailand's EEC:

2.2.1 Knowledge Management and its Influence

Knowledge is the core engine for generating new ideas and methods. KM processes—acquisition, sharing, and utilization—are foundational to fostering a creative environment and accelerating the rate of innovation. KM ensures that CEs integrate local wisdom with modern business insights, which directly translates into novel ideas for products and processes.

Hypothesis 1: KM leads to a positive direct influence on the Innovation Capability (IC) of Community Enterprises. This relationship is strongly supported by studies confirming that KM capabilities, such as knowledge sharing and systematic management, are essential for developing product and process innovation (Migdadi, 2022; Lam et al., 2021; Gui et al., 2024).

The efficient flow and application of knowledge are directly linked to superior business outcomes. By standardizing practices, reducing duplication of effort, and enabling informed decision-making, KM enhances organizational efficiency.

Hypothesis 2: KM leads to a positive direct influence on the Operational Performance (OP) of Community Enterprises. Empirical evidence consistently shows that KM capabilities contribute significantly to organizational agility and business performance (Rafi et al., 2022). Furthermore, KM has been confirmed as a crucial factor for business service performance and overall productivity (Farooq, 2023; Borodako et al., 2023).

2.2.2 Market Orientation and its Influence

A strong MO ensures that the CE's innovation efforts are market-driven and relevant. By deeply understanding customer needs and anticipating competitor moves, MO directs valuable resources toward the most promising areas for innovation, reducing risk and increasing the commercial success of new ventures.

Hypothesis 3: Market Orientation (MO) leads to a positive direct influence on the Innovation Capability (IC) of Community Enterprises. Research consistently validates MO as a strategic driver for IC (Yaskun et al., 2023). MO helps small and medium-sized enterprises (SMEs) better position themselves for export and innovation by aligning internal resources with external demand (Kolbe et al., 2022; Borah et al., 2023).

MO directly translates market insights into improved operational and financial metrics. A customer-focused culture ensures quality and responsiveness, while competitor analysis allows for timely strategic adjustments, improving overall competitive and financial results.

Hypothesis 4: Market Orientation (MO) leads to a positive direct influence on the Operational Performance (OP) of Community Enterprises. Studies focusing on MSMEs confirm that MO significantly enhances marketing and overall business performance (Tirtayasa & Rahmadana, 2023; Hardilawati et al., 2023). This effect is often realized through inter-functional coordination, which ensures operational activities align seamlessly with market needs (Mathafena & Msimango-Galawe, 2023).

2.2.3 Digital Transformation and its Influence

DT provides the tools and platforms necessary to accelerate IC. Digital platforms enable faster communication, data analytics, and automated testing, allowing CEs to prototype and scale innovations more rapidly and with fewer resources.

Hypothesis 5: Digital Transformation (DT) leads to a positive direct influence on the Innovation Capability (IC) of Community Enterprises. Empirical studies in manufacturing

and services demonstrate that DT acts as a catalyst for innovation performance (Chen & Kim, 2023; Firmansyah & Wahdiniwaty, 2023). Digital capabilities, such as IT and absorptive capacity, empower organizations to develop sustainable innovation capabilities (Liang & Li, 2022; Fan et al., 2022).

DT significantly enhances OP by optimizing internal processes, reducing operational costs, and creating new, efficient business models. Digital tools enable better resource tracking, inventory management, and customer relationship management.

Hypothesis 6: Digital Transformation (DT) leads to a positive direct influence on the Operational Performance (OP) of Community Enterprises. DT capability has been confirmed to positively influence operational performance by streamlining processes and improving data-driven decision-making (Yu et al., 2022; Mushtaq et al., 2023). This is particularly evident in studies linking digital efforts to market and ESG performance (Wang & Esperança, 2023).

2.2.4 Innovation Capability and Operational Performance

IC is the key mechanism that converts strategic inputs (KM, MO, DT) into tangible business results. A CE with high IC can launch new products faster, improve its supply chain processes, and adapt its organizational structure, all of which are prerequisites for superior OP.

Hypothesis 7: Innovation Capability (IC) leads to a positive direct influence on the Operational Performance (OP) of Community Enterprises. Numerous studies affirm that IC is a critical success factor for SMEs, directly translating innovative outputs into competitive performance (Yaskun et al., 2023; Fang et al., 2022). IC ensures that the CE's efforts create a lasting competitive advantage that drives financial and competitive success (Osman Zainal Abidin, 2024; Tirtayasa & Rahmadana, 2023).

The proposed relationships are visually summarized in the structural model below, which will be tested using Structural Equation Modeling (SEM).

3. Methodology

3.1 Research Design

This study employed a **Mixed Method** approach, integrating both **Quantitative Research** and **Qualitative Research** to provide comprehensive insights into the operational performance of Community Enterprises (CEs) in Thailand's Eastern Economic Corridor (EEC). The integration of methods served three main objectives: 1) to determine the current levels of the study's five key latent variables (Knowledge Management, Market Orientation, Digital Transformation, Innovation Capability, and Operational Performance); 2) to empirically investigate the causal influence of these antecedent factors on Operational Performance; and 3) to construct and validate a robust **Structural Equation Model (SEM)** that represents the observed relationships. The qualitative component, conducted through in-depth interviews, was designed to validate and contextualize the statistical findings, offering a richer, practical interpretation of the phenomena (Tashakkori & Teddoes, 1998).

3.2 Population and Sampling

3.2.1 Quantitative Sampling

The target **population** for the quantitative study consisted of all members, stakeholders, and individuals involved in the operation or administration of Community Enterprises across the three provinces constituting the EEC: Chachoengsao, Chonburi, and Rayong. According to the Community Enterprise Promotion Division, Department of Agricultural Extension, the total population of CE members in the EEC is **26,639 members** spread across 1,842 enterprises (กองส่งเสริมวิสาหกิจชุมชน, 2568).

The **sample size** was determined using the rigorous guidelines required for **Structural Equation Modeling (SEM)** analysis. The model utilizes 15 observed variables (three indicators for each of the five latent variables). Following the recommendations of Hair et al. (1998) and Schumacher and Lomax (1996), which suggest a minimum sample size of 20 times the number of observed variables to ensure the stability and reliability of the parameter estimates, the minimum sample size required was respondents. Therefore, the study utilized a total sample size of **300 members** selected via **Purposive Sampling** across the three provinces of the EEC. This size is considered appropriate for analyzing complex structural models and generating reliable results (Bentler & Chou, 1987).

3.2.2 Qualitative Sampling

The **qualitative sample** comprised **15 Key Informants** who possess deep knowledge, direct experience, and involvement in the management or support of CEs in the EEC. These individuals included CE executives, business managers, and relevant stakeholders from government agencies or private sectors who have been involved for a minimum of five years. The selection process utilized **Purposive Sampling** in the initial phase, followed by **Snowball Sampling** to identify additional, highly knowledgeable informants (Marshall, 1996; Miles & Huberman, 1994). The process of selecting informants continued until **Data Saturation** was achieved, meaning no new or significantly different themes, ideas, or insights emerged from subsequent interviews (Douglas, 2003; Locke, 2001).

3.3 Instrument Development and Quality

3.3.1 Questionnaire Construction

The main instrument used for data collection was a **Five-Point Likert-Scale Questionnaire**. This scale was chosen to measure the level of opinion or agreement for all five latent variables and their constituent dimensions. The questionnaire was structured into five main sections, each corresponding to one of the latent variables: Knowledge Management (KM), Market Orientation (MO), Digital Transformation (DT), Innovation Capability (IC), and Operational Performance (OP). Each latent variable was measured by three dimensions, totaling **15 observed variables**. The questions were rigorously developed based on the operational definitions and adapted from established, validated instruments found in the literature review (e.g., Adegbite, 2021; Kun, 2022; Chan, 2020; Vial, 2021; Saunila, 2020).

3.3.2 Content Validity and Reliability

To ensure the instrument's quality, both content validity and reliability were thoroughly tested.

Content Validity (IOC): The questionnaire’s content validity was assessed to ensure that the items accurately and comprehensively reflected the underlying theoretical constructs. The draft instrument was reviewed by **three subject matter experts** in social science research, quantitative statistics, and CE management experience. The experts evaluated the congruence

between the items and the objectives using the **Index of Item-Objective Congruence (IOC)**, based on the three-level scoring of Rovinelli and Hambleton (1976). All items achieved an IOC score greater than, confirming the satisfactory content validity of the questionnaire.

Reliability (Cronbach's Alpha): Following content validation, the revised instrument was pilot-tested on a separate group of **50 CE members** who were not included in the main study sample. The data collected from the pilot group were analyzed using **Cronbach's Alpha** coefficient (Cronbach, 1951). The analysis confirmed that all variable constructs achieved an alpha coefficient higher than the acceptable threshold of , indicating the high internal consistency and reliability of the measurement tool for the main data collection phase.

3.4 Data Analysis

3.4.1 Quantitative Data Analysis

The collected quantitative data were analyzed using established statistical methods:

1. **Descriptive Statistics: Mean** and **Standard Deviation** were computed for all 15 observed variables to determine the current levels of KM, MO, DT, IC, and OP (Objective 1). The interpretations were based on predefined interval scales ranging from (Least) to (Most) (Hair et al., 2010).

2. **Structural Equation Modeling (SEM):** This advanced multivariate technique was used to test the hypothesized causal relationships (Objectives 2 and 3). The analysis included:

    - **Confirmatory Factor Analysis (CFA):** To verify the quality of the measurement model, checking factor loadings and construct reliability.

    - **Model Fit Indices:** The structural model's overall fit was assessed using key indicators, including the Chi-square divided by the degrees of freedom (CMIN/DF, recommended), Goodness of Fit Index (GFI, recommended), Normalised Fit Index (NFI, recommended), Tucker Lewis Index (TLI, recommended), Comparative Fit Index (CFI, recommended) (Bentler, 1999; Diamantopoulos et al., 2010; Hooper et al., 2008), and the Root Mean Square Error of Approximation (RMSEA, recommended) (Hair et al., 1998).

    - **Path Analysis:** Used to examine the magnitude and significance of the path coefficients to test the seven research hypotheses.

3.4.2 Qualitative Data Analysis

Data gathered from the **in-depth interviews** were analyzed through a structured three-step process:

1. **Organization and Preliminary Analysis:** All interview recordings were transcribed and reviewed multiple times for deep understanding, noting initial observations and non-verbal cues.

2. **Thematic Grouping:** The data were systematically grouped and categorized based on the conceptual framework, aligning with the five latent variables and their dimensions, to reveal underlying meanings and significant themes.

3. **Interpretive Synthesis and Verification:** The final step involved synthesizing the core findings, interpreting their deeper meaning, and conducting **Member Checking** with the key informants to confirm the accuracy of the conclusions. The qualitative insights were then integrated into the discussion to provide contextual richness to the statistical results (Tashakkori & Teddoes, 1998).

4. Results and Discussion

4.1 Descriptive Statistics and Model Fit

The **Descriptive Statistics** confirmed that, on average, the Community Enterprises (CEs) in the Eastern Economic Corridor (EEC) perceived high levels across all core constructs. All five latent variables—Knowledge Management (KM), Market Orientation (MO), Digital Transformation (DT), Innovation Capability (IC), and Operational Performance (OP)—registered mean scores between 3.90 and 4.20 on the five-point Likert scale (where 5.00 is 'Strongly Agree'). This initial finding suggests that CE members generally recognize the strategic importance and application of these antecedent factors within their operations.

The proposed theoretical framework, tested using **Structural Equation Modeling (SEM)**, demonstrated an excellent overall fit with the empirical data collected from the 300 CE members. The structural model achieved all required **Goodness-of-Fit Indices** at recommended levels (Hooper et al., 2008). Specifically, the CMIN/DF ratio was found to be well below the critical threshold of 5.0, confirming the model's parsimony. Other indices, such as the Goodness of Fit Index (GFI), Normalised Fit Index (NFI), Tucker Lewis Index (TLI), and Comparative Fit Index (CFI), all exceeded the acceptance criterion of 0.90 (Bentler, 1999). Furthermore, the Root Mean Square Error of Approximation (RMSEA) was below the stringent threshold of 0.08 (Hair et al., 1998), indicating minimal residual variance and confirming the high validity and generalizability of the proposed model for CEs in the EEC.

4.2 Hypothesis Testing and Interpretation

The path analysis results confirmed that **all seven hypothesized relationships (H1 through H7) were statistically supported and exhibited positive and significant path coefficients** ($p < 0.05$). This outcome underscores the robust and synergistic nature of the relationships between strategic capabilities and performance within this grassroots context.

4.2.1 Knowledge Management as a Foundation (H1 and H2)

The study found that KM positively and directly influences both IC (H1) and OP (H2). This supports the literature asserting KM as a **foundational capability** for competitive advantage. The positive link between KM and IC is consistent with the findings of Migdadi (2022), who highlighted the role of systematic knowledge processes (creation, transfer, utilization) in developing innovation capability. For CEs, this means that success in developing new products or processes (IC) is contingent upon their ability to effectively capture and share local wisdom, technical production knowledge, and market information among members (Lam et al., 2021). The qualitative data substantiated this, showing that CEs that formalize weekly meetings for knowledge transfer often see quicker implementation of new ideas.

Similarly, the significant effect of KM on OP (H2) aligns with Rafi et al. (2022), who established that KM is a liaison of organizational agility and performance. Effective KM minimizes operational redundancy, reduces decision-making time, and increases overall

organizational efficiency, leading to higher levels of financial, operational, and competitive performance.

4.2.2 Market Orientation as the Strategic Compass (H3 and H4)

Market Orientation showed a significant positive influence on IC (H3) and OP (H4). This confirms MO's role as the **strategic compass** that directs CE efforts toward activities most relevant to the market. The support for H3 is consistent with empirical evidence from similar contexts, where deep understanding of customer and competitor behavior fuels product and process innovation (Yaskun et al., 2023). For CEs, market intelligence—knowing what local and regional customers value and how rivals position themselves—is a powerful source of novel ideas and product differentiation (Kolbe et al., 2022).

The direct link between MO and OP (H4) is essential, reinforcing the idea that strong OP stems directly from being market-driven (Hardilawati et al., 2023). By prioritizing customer needs (customer orientation) and coordinating internally (inter-functional coordination) to deliver solutions quickly, CEs can improve sales volume, customer retention, and overall efficiency, particularly in highly competitive regional markets (Tirtayasa & Rahmadana, 2023). The qualitative interviews frequently cited market feedback as the primary trigger for operational changes, underscoring this direct relationship.

4.2.3 Digital Transformation as the Catalyst (H5 and H6)

Digital Transformation (DT) emerged as a powerful **catalyst**, positively impacting both IC (H5) and OP (H6). The finding that DT enhances IC (H5) is strongly supported by literature viewing DT as a vital enabler for innovation capability (Chen & Kim, 2023; Firmansyah & Wahdiniwaty, 2023). For CEs in the EEC, the adoption of digital platforms for marketing, basic accounting, and process tracking (DT dimensions: customer experience transformation and operational process transformation) drastically reduces time-to-market for new products and increases the feasibility of complex innovations.

Furthermore, the significant influence of DT on OP (H6) is consistent with Yu et al. (2022), who linked digital capabilities directly to improved operational performance. Digitalizing core functions allows CEs to manage inventory more precisely, respond to inquiries more quickly, and utilize basic data analytics for strategic decision-making, which collectively drives better financial and competitive outcomes (Mushtaq et al., 2023). The ability to pivot business models to leverage digital channels, especially during market disruptions, proved critical to sustained performance.

4.2.4 Innovation Capability as the Core Mechanism (H7)

Innovation Capability (IC) was found to have the strongest direct positive influence on Operational Performance (OP) (H7). This key finding confirms IC's role as the **core translation mechanism**—the internal engine that converts the inputs from KM, MO, and DT into tangible competitive advantages (Osman Zainal Abidin, 2024). A CE's ability to successfully exploit innovation (IC dimension) through new product launches or improved production methods directly results in better financial returns and stronger market positioning (Fang et al., 2022). In the absence of high IC, even superior KM, MO, and DT inputs may fail to generate meaningful performance improvements. IC provides the strategic dexterity required to ensure CEs can effectively differentiate themselves and respond proactively to the high-stakes environment of the EEC.

4.3 Qualitative Integration

The **in-depth interviews** with the 15 key informants validated the quantitative structure by providing practical context. Informants confirmed that the adoption of simple digital tools (DT) directly reduced the "digital divide" (DT IC), enabling faster communication and product testing. Furthermore, a shared challenge across many CEs was turning tacit knowledge into explicit process manuals (KM), yet those who succeeded in this were measurably faster at product replication and quality control (KM OP). The qualitative insights confirmed that IC acts as a strategic buffer, allowing CEs to maintain performance by introducing niche, value-added products that exploit specific market knowledge (MO IC OP), thereby securing competitive advantage despite market volatility.

5. Conclusion, Policy Implications, and Future Research

5.1 Conclusion

This study successfully investigated the complex interrelationships between antecedent strategic factors—Knowledge Management (KM), Market Orientation (MO), and Digital Transformation (DT)—on Innovation Capability (IC) and subsequent Operational Performance (OP) for Community Enterprises (CEs) in Thailand's Eastern Economic Corridor (EEC). By developing and validating a robust Structural Equation Model (SEM) using data from 300 CE members and contextualized by 15 key informant interviews, the research provides crucial empirical evidence for the synergistic mechanisms driving grassroots economic success.

The results unequivocally supported all seven hypothesized relationships. Specifically, KM, MO, and DT were found to exert a strong, positive influence on both IC and OP (H1-H6). This confirms that these three factors are essential strategic inputs for CEs operating in a hyper-competitive environment. Most critically, Innovation Capability (IC) was proven to be the **core translation mechanism** (H7), serving as the internal engine that converts external stimuli and internal resources into tangible performance outcomes, including financial stability, operational efficiency, and competitive advantage (Carton, 2004; Fang et al., 2022). The study concludes that CEs aspiring to achieve sustainable OP in the strategically vital EEC must prioritize the systematic integration of knowledge practices, market responsiveness, and accessible digital technologies.

5.2 Policy and Practical Implications

The validated model and empirical findings offer actionable recommendations for both public sector policymakers and CE operators:

Policy Implications for Government and Support Agencies

1. **Prioritize Digital Literacy and Infrastructure (DT and KM):** Governmental agencies, particularly the Department of Agricultural Extension, must shift from generalized training to targeted programs that build **Digital Transformation (DT) and Knowledge Management (KM)** skills. The focus should be on enabling CEs to utilize simple, low-cost digital tools for customer engagement (e.g., social media platforms) and internal process management (e.g., cloud-based inventory or accounting apps). Policies should facilitate the creation of regional knowledge-sharing platforms and digital repositories where best practices and operational manuals (tacit to explicit knowledge conversion) can be easily accessed and utilized by CE members (Nguyen et

al., 2023). This is crucial for leveraging government support efficiently (กองส่งเสริมวิสาหกิจชุมชน, 2568).

2. **Incentivize Market-Driven Innovation (MO and IC):** Support policies should be directly tied to **Market Orientation (MO)** outcomes. Instead of subsidizing production, the government should offer grants or soft loans for market research activities (e.g., consumer surveys, competitor analysis workshops) and the subsequent development of unique, value-added products (IC). The findings show that MO is critical for IC, meaning investment should be directed towards projects that can demonstrate market relevance and competitive differentiation (Kolbe et al., 2022).

3. **Establish Performance Benchmarking:** Regulatory bodies should implement a standardized reporting framework for CEs that includes non-financial metrics aligned with OP dimensions (operational efficiency, product quality, competitive position) alongside traditional financial results (Carton, 2004). This encourages CEs to measure and improve the antecedent factors that truly drive long-term sustainability.

Practical Implications for Community Enterprise Operators

1. **Institutionalize Knowledge Sharing (KM):** CE leaders must formalize internal KM processes. This involves creating simple, accessible formats for storing operational knowledge (e.g., digital manuals, video tutorials) and designating "knowledge champions" to facilitate regular, mandatory knowledge transfer sessions. Effective KM reduces the reliance on individual memory and minimizes the impact of member turnover (Rafi et al., 2022).

2. **Adopt Proactive Market Sensing (MO):** CEs should adopt low-cost, customer-focused data collection methods, such as regular online feedback forms, social media engagement analysis, and direct observation of competitor offerings (Yaskun et al., 2023). This market intelligence must then be translated into product adaptation (Fuad et al., 2024). A CE should dedicate resources to actively searching for new customer segments and anticipating emerging needs, moving beyond a passive production focus.

3. **Formalize the Innovation Process (IC):** To strengthen **Innovation Capability**, CEs should create defined, yet flexible, processes for evaluating new product ideas, testing prototypes with limited resources, and quickly implementing successful concepts. This formalized approach to IC ensures that the organization can consistently generate and exploit innovation outputs, leading directly to sustainable improvements in OP (Osman Zainal Abidin, 2024).

5.3 Limitations and Future Research

This study contributes significantly to the understanding of CE performance but is subject to several limitations. First, the **cross-sectional design** prevents definitive conclusions regarding causality over time; while the SEM suggests causal pathways, it represents relationships at a single point. Second, the reliance on **self-reported data** introduces potential common method bias, although model fit indices suggested low impact. Third, the study focused exclusively on the three provinces of the EEC, limiting the generalizability of the findings to CEs in other regions of Thailand with different cultural, economic, and resource environments.

Future research should address these limitations by:

1. **Conducting Longitudinal Studies:** Future studies should track the same CEs over three to five years to observe the temporal impact of KM, MO, and DT initiatives on long-term IC development and sustained OP (Tjahjadi et al., 2022).

2. **Exploring Moderating Effects:** Researchers should investigate potential **moderating variables** that could strengthen or weaken the existing paths, such as government support mechanisms, CE size and age, or the level of competitive intensity in the local market (Fang et al., 2022).

3. **Expanding Regional Scope:** The model should be tested in other strategic regions of Thailand (e.g., the Northern Economic Corridor or the Southern Border Provinces) to assess the contextual validity and determine if the structural relationships hold true across diverse cultural and economic settings.

4. **Integrating External Factors:** Future models could integrate external elements like environmental volatility or specific policy interventions to better understand how CEs build resilience against external shocks (Purnomo et al., 2022).

The findings of this research provide a robust foundation for strategic planning and highlight that integrating soft capabilities (KM, MO) with hard capabilities (DT) through the conduit of IC is the optimal path for Community Enterprises to achieve superior and sustainable operational performance.

References

Abdelwaheed, N. A. A., Shah, N., Soomro, B. A., & Al Doghan, M. A. (2025). Empowering sustainability through digital transformation: the bridging power of digital capabilities and innovation. Business Process Management Journal.

Abourokbah, S. H., Mashat, R. M., & Salam, M. A. (2023). Role of absorptive capacity, digital capability, agility, and resilience in supply chain innovation performance. Sustainability, 15(4), 3636.

Acosta-Prado, J. C., Navarrete, J. F. F., & Tafur-Mendoza, A. A. (2021). Relationship between conditions of knowledge management and innovation capability in new technology-based firms. International Journal of Innovation Management, 25(01), 2150005.

Adam, S., Fuzi, N. M., Ramdan, M. R., Mat Isa, R., Ismail, A. F. M. F., Hashim, M. Y., ... & Ramlee, S. I. F. (2022). Entrepreneurial orientation and organizational performance of online business in Malaysia: the mediating role of the knowledge management process. Sustainability, 14(9), 5081.

Agazu, B. G., & Kero, C. A. (2024). Innovation strategy and firm competitiveness: A systematic literature review. Journal of Innovation and Entrepreneurship, 13, 24.

Akpa, V. O., Asikhia, O. U., & Nneji, N. E. (2021). Organizational culture and organizational performance: A review of literature. International journal of advances in engineering and management, 3(1), 361-372.

Alil, M. F., Ali, A., & Kamarulzaman, R. (2022). Does innovation capability improve SME performance in Malaysia? The mediating effect of technology adoption. The International Journal of Entrepreneurship and Innovation, 23(4), 253-267.

AlTaweel, I. R., & Al-Hawary, S. I. (2021). The mediating role of innovation capability on the relationship between strategic agility and organizational performance. Sustainability, 13(14), 7564.

Avlonitis, G. J., & Gounaris, S. P. (1999). Marketing orientation and its determinants: an empirical analysis. European journal of marketing, 33(11/12), 1003-1037.

Awad, E. M. (2007). Knowledge management. Pearson Education India.

Basit, A., Wang, L., Nazir, S., Mehmood, S., & Hussain, I. (2023). Managing the COVID-19 pandemic: enhancing sustainable supply chain performance through management innovation, information processing capability, business model innovation and knowledge management capability in Pakistan. Sustainability, 15(18), 13538.

Bentler, P. M. (1999). EQS structural equation program manual. Multivariate Software.

Borodako, K., Berbeka, J., Rudnicki, M., & Lapczynski, M. (2023). The impact of innovation orientation and knowledge management on business services performance moderated by technological readiness. European Journal of Innovation Management, 26(7), 674-695.

Borah, P. S., Dogbe, C. S. K., Pomegbe, W. W. K., Bamfo, B. A., & Hornuvo, L. K. (2023). Green market orientation, green innovation capability, green knowledge acquisition and green brand positioning as determinants of new product success. European Journal of Innovation Management, 26(2), 364-385.

Carton, R. B. (2004). Measuring organizational performance: An exploratory study.

Chen, P., & Kim, S. (2023). The impact of digital transformation on innovation performance-The mediating role of innovation factors. Heliyon, 9(3).

Chi, N. T. K. (2021). Innovation capability: The impact of e-CRM and COVID-19 risk perception. Technology in Society, 67, 101725.

Kolbe, D., Frasquet, M., & Calderon, H. (2022). The role of market orientation and innovation capability in export performance of small-and medium-sized enterprises: a Latin American perspective. Multinational Business Review, 30(2), 289-312.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16(3), 297-334.

De Bem Machado, A., Secinaro, S., Calandra, D., & Lanzalonga, F. (2022). Knowledge management and digital transformation for Industry 4.0: a structured literature review. Knowledge Management Research & Practice, 20(2), 320-338.

Diamantopoulos, A., Schumacker, R. E., & Lomax, R. G. (2010). A beginner's guide to structural equation modeling. Routledge.

Douglas, D. (2003). Inductive approach to the research process. The Qualitative Report, 8(1), 160-176.

Ebert, C., & Duarte, C. H. C. (2018). Digital transformation. IEEE Softw., 35(4), 16-21.

Elgarhy, S. D., & Abou-Shouk, M. (2023). Effects of entrepreneurial orientation, marketing, and innovation capabilities, on market performance: The mediating effect of sustainable competitive advantage. International journal of contemporary hospitality management, 35(6), 1986-2004.

Fan, X., Wang, Y., & Lu, X. (2022). Digital transformation drives sustainable innovation capability improvement in manufacturing enterprises: Based on FsQCA and NCA Approaches. Sustainability, 15(1), 542.

Fang, G. G., Qalati, S. A., Ostic, D., Shah, S. M. M., & Mirani, M. A. (2022). Effects of entrepreneurial orientation, social media, and innovation capabilities on SME performance in emerging countries: a mediated–moderated model. Technology analysis & strategic management, 34(11), 1326-1338.

Farooq, R. (2023). Knowledge management and performance: a bibliometric analysis based on Scopus and WOS data (1988–2021). Journal of Knowledge Management, 27(7), 1948-1991.

Firmansyah, D., & Wahdiniwaty, R. (2023). Prediction of innovation capability: the role of mediation in the relationship between digital transformation and competitiveness with the PLS-SEM model. International Journal of Management and Business Intelligence, 1(2), 125-142.

Fuad, A., Rahayu, S., Anam, C., & Dayanti, P. R. (2024). Analysis Of Competency, Innovation, Market Orientation, And Motivation On The Performance Of Papuan Nutmeg (Myristica Argantea) Communities In Fakfak District. Research Trend in Technology and Management, 2(2), 89-78.

Gheysari, H., Rasli, A., Roghanian, P., & Norhalim, N. (2012). A review on the market orientation evolution. Procedia-Social and Behavioral Sciences, 40, 542-549.

Grinstein, A. (2008). The effect of market orientation and its components on innovation consequences: a meta-analysis. Journal of the academy of Marketing science, 36(2), 166-173.

Gui, L., Lei, H., & Le, P. B. (2024). Fostering product and process innovation through transformational leadership and knowledge management capability: the moderating role of innovation culture. European Journal of Innovation Management, 27(1), 214-232.

Hardilawati, W. L., Farhanidhya, N., & Hinggo, H. T. (2023). The Effect of Market Orientation, E-Commerce, and Product Innovation on Marketing Performance in MSMEs Culinary Sector. Jurnal Manajemen Teknologi, 22(2), 168-181.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate data analysis (5th ed.). Prentice-Hall International.

Han, J. K., Kim, N., & Srivastava, R. K. (1998). Market orientation and organizational performance: is innovation a missing link?. Journal of marketing, 62(4), 30-45.

Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modelling: Guidelines for determining model fit. Electronic Journal of Business Research Methods, 6(1), 53-60.

Iddris, F. (2016). Innovation capability: A systematic review and research agenda. Interdisciplinary Journal of Information, Knowledge, and Management, 11, 235-260.

Jarusen, J., & Cheunkamon, E. (2024). Measurement model for community enterprise management strategies. Heliyon, 10(19), e38744.

Kamkankaew, P., Phattarowas, V., Khumwongpin, S., Limpiaongkhanan, P., & Sribenjachot, S. (2022). Increasing competitive environment dynamics and the need of hyper-competition for businesses. International Journal of Sociologies and Anthropologies Science Reviews, 2(5), 9-20.

Khetpiyarat, N., & Wongjinda, P. (2024). Exploratory factor analysis of success factors for community enterprises in Thailand. Journal of Business, Innovation and Sustainability, 19(1), 167–183.

Kraus, S., Jones, P., Kailer, N., Weinmann, A., Chaparro-Banegas, N., & Roig-Tierno, N. (2021). Digital transformation: An overview of the current state of the art of research. Sage Open, 11(3), 21582440211047576.

Lam, L., Nguyen, P., Le, N., & Tran, K. (2021). The relation among organizational culture, knowledge management, and innovation capability: Its implication for open innovation. Journal of Open Innovation: Technology, Market, and Complexity, 7(1), 66.

Liang, S., & Li, T. (2022). Can digital transformation promote innovation performance in manufacturing enterprises? The mediating role of R&D capability. Sustainability, 14(17), 10939.

Locke, K. (2001). Grounded theory in management research. Sage Publications.

Maolanont, T., & Pochanart, P. (2023). The BCG Economic Model in Practice: A Case Study of Thai Eastern Eco-Industrial Land. International Journal of Sustainable Development & Planning, 18(12).

Mårtensson, M. (2000). A critical review of knowledge management as a management tool. Journal of knowledge management, 4(3), 204-216.

McElroy, M. W. (2010). The new knowledge management. Routledge.

McCartney, S., & Fu, N. (2022). Bridging the gap: why, how and when HR analytics can impact organizational performance. Management Decision, 60(13), 25-47.

Meteeworachat, S. (2023). แนวทางการพัฒนาการดำเนินงานของวิสาหกิจชุมชน ตำบลสร้อยทอง อำเภอตาคลี จังหวัดนครสวรรค์. วารสารธรรมวัฒน์, 4(2), 30–41.

Migdadi, M. M. (2022). Knowledge management processes, innovation capability and organizational performance. International journal of productivity and performance management, 71(1), 182-210.

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. Sage Publications.

Mushtaq, N., Hussain, F., Dad, A., Rehman, S. U., & Waseem, M. (2023). Digital transformation and its impact on business performance in SMEs of Pakistan: an empirical study. The Asian Bulletin of Big Data Management, 3(2), 103-114.

Nguyen, T. H. T., Pham, S. T., Phan, T. M., Cuc, T. K., Nguyen, N. G. H., & Do, T. D. (2023). Impact of digital transformation on SMEs' innovation capability and business performance: The case of Vietnam. The International Journal of Business Management and Technology, 7(2), 416-426.

Okorie, O., Russell, J., Cherrington, R., Fisher, O., & Charnley, F. (2023). Digital transformation and the circular economy: Creating a competitive advantage from the transition towards Net Zero Manufacturing. Resources, Conservation and Recycling, 189, 106756.

Oliinyk, K. (2024). Digital transformation as a trigger for modification of development strategies and business models of companies in the context of the formation of global digital platforms and hypercompetition. Econ. Scope, 193, 26-31.

Osman Zainal Abidin, J. (2024). An empirical investigation into the significance of intellectual capital and strategic orientations on innovation capability and firm performance in Malaysian information and communications technology (ICT) small-to-medium enterprises (SMEs) (Doctoral dissertation, RMIT University).

Purnomo, S., Purwandari, S., & Sentosa, I. (2022). Sustainability MSMEs performance and income distribution: Role of intellectual capital and strategic orientations.

Rafi, N., Ahmed, A., Shafique, I., & Kalyar, M. N. (2022). Knowledge management capabilities and organizational agility as liaisons of business performance. South Asian Journal of Business Studies, 11(4), 397-417.

Rajapathirana, R. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. Journal of Innovation & Knowledge, 3(1), 44-55.

Rovinelli, R. J., & Hambleton, R. K. (1976). On the use of content specialists in the assessment of criterion-referenced test item validity. Dutch Journal of Educational Research, 2, 49-60.

Saunila, M. (2020). Innovation capability in SMEs: A systematic review of the literature. Journal of Innovation & knowledge, 5(4), 260-265.

Schumacher, R. E., & Lomax, R. G. (1996). A beginner's guide to structural equation modeling. Erlbaum.

Shin, J., Mollah, M. A., & Choi, J. (2023). Sustainability and organizational performance in South Korea: The effect of digital leadership on digital culture and employees' digital capabilities. Sustainability, 15(3), 2027.

Soytong, P., Janchidfa, K., Phengphit, N., & Chayhard, S. (2017). Monitoring Urban Heat Island in the Eastern Region of Thailand and its Mitigating through Greening City and Urban Agriculture. International Journal of Agricultural Technology, 13(7.2), 1737-1760.

Sujarittnetikarn, K., & Suphuan, T. (2022). Adaptation and survival of community enterprises during COVID-19 pandemic. Proceedings of the 2022 International Academic Multidisciplines Research Conference in Geneva (ICBTS Geneva 2022), 151–156.

Tashakkori, A., & Teddoes, C. (1998). Mixed methodology: Combining qualitative and quantitative approaches. Sage Publications.

Tirtayasa, S., & Rahmadana, M. F. (2023). Mediating Effect of Product Innovation on Market Orientation and Marketing Performance of SME'S During the COVID-19 Pandemic in Indonesia. International Information and Engineering Technology Association (IIETA), 18(2), 393-399.

Tjahjadi, B., Soewarno, N., Nadyaningrum, V., & Aminy, A. (2022). Human capital readiness and global market orientation in Indonesian Micro-, Small-and-Medium-sized Enterprises business performance. International Journal of Productivity and Performance Management, 71(1), 79-99.

Vial, G. (2021). Understanding digital transformation: A review and a research agenda. Managing digital transformation, 13-66.

Wang, S., & Esperança, J. P. (2023). Can digital transformation improve market and ESG performance? Evidence from Chinese SMEs. Journal of Cleaner Production, 419, 137980.

Weidig, J., Weippert, M., & Kuehnl, C. (2024). Personalized touchpoints and customer experience: A conceptual synthesis. Journal of Business Research, 177, 114641.

Yaskun, M., Sudarmiatin, S., Hermawan, A., & Rahayu, W. P. (2023). The effect of market orientation, entrepreneurial orientation, innovation and competitive advantage on business performance of indonesian MSMEs. International Journal of Professional Business Review: Int. J. Prof. Bus. Rev., 8(4), 39.

Yodsurang, P., Boondao, R., & Raksapol, T. (2022). Community-based tourism as a strategy for community sustainability: A case study of Ban Mae Kampong, Thailand. Cogent Social Sciences, 8(1), 2096531.

Yu, J., Wang, J., & Moon, T. (2022). Influence of digital transformation capability on operational performance. Sustainability, 14(13), 7909.

Zhang, L., Qiu, P., & Cao, P. (2023). Does digital transformation enhance the core competitiveness? Quasi-natural experimental evidence from Chinese traditional manufacturing. PLOS ONE, 18(11), e0289278.

กองส่งเสริมวิสาหกิจชุมชน กรมส่งเสริมการเกษตร. (2568). สรุปจำนวนวิสาหกิจชุมชนและเครือข่ายวิสาหกิจชุมชนที่อนุมัติการจดทะเบียนแล้ว ปีงบประมาณ 2568 ไตรมาสที่ 1 (ตัดยอดข้อมูล 31 ธันวาคม 2567).

กรมศุลกากร. (สืบค้นในเดือนตุลาคม 2568). โครงการเขตพัฒนาพิเศษภาคตะวันออก (Eastern Economic Corridor : EEC) เป็นการลงทุนขนาดใหญ่ เพื่อยกระดับการพัฒนาประเทศไปสู่ยุค “ไทยแลนด์ 4.0” (เอกสาร PDF).

สำนักงานสภาพัฒนาการเศรษฐกิจและสังคมแห่งชาติ. (2565). แผนพัฒนากลุ่มจังหวัดภาคตะวันออก 1 (ฉะเชิงเทรา ชลบุรี ระยอง) พ.ศ. 2566 – 2570.