STRATEGIC LEVERS FOR GROWTH AND SUSTAINABILITY: A POST-COVID-19 SEM ANALYSIS OF LARGE THAI ORGANIZATIONS

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Abstract

This study investigates the strategic drivers of organizational growth and sustainability in the post-COVID-19 era. Utilizing Structural Equation Modeling (SEM) on data from 680 professionals in large publicly listed Thai corporations, the research examines the interrelationships among leadership, organizational policy, employee engagement, and innovation/technology. The findings indicate that employee capabilities and innovation strongly predict both growth and sustainability. Organizational policies significantly influence growth, while leadership has a stronger effect on sustainability. These results suggest that aligning internal strategies with innovation and inclusive leadership is vital for competitiveness and resilience. The integrated framework emphasizes the central roles of employee empowerment, collaborative teams, and strategic leadership. While contextualized to the Thai setting, the results provide valuable insights for corporate managers and policymakers globally seeking to promote sustainable organizational development in a rapidly changing environment. The limitations of the study, such as its cross-sectional design and focus on Thai firms, are also acknowledged, paving the way for future research.
Keywords: Organizational Growth, Sustainability, Post-COVID-19, Strategic Management, Thailand

Introduction

The emergence of COVID-19 caused unprecedented disruptions to global public health and economic systems, compelling organizations to pivot operations, adopt crisis strategies, and reconfigure internal processes to support recovery and future resilience (Luna-Pereira et al., 2022). Business closures, employee layoffs, and supply chain disruptions created a need for rapid adaptation, especially in large organizations navigating complex environments (Carmeli & Halevi, 2009). Public organizations likewise transformed service delivery approaches to maintain responsiveness during times of uncertainty (Suchitwarasan et al., 2024). In response to these disruptions, organizations began redefining operational priorities by emphasizing sustainability, ethical practices, and innovation to endure external shocks and promote long-term resilience (Avery & Bergsteiner, 2011). A sustainable organization must integrate economic growth objectives with governance systems that foster ethical behavior, social responsibility, and environmental stewardship (Bossel, 1999). To thrive in a post-pandemic world, organizations need to manage uncertainty through strategic flexibility, internal engagement, and knowledge-based innovation (Ceko, 2023). This study is conceptually informed by stakeholder theory and the resource-based view (Wright & McMahan, 1992), which emphasizes the importance of internal strategic capabilities in creating long-term competitive advantage. Building on this proposition, the study investigates how leadership, policy frameworks, team engagement, and technological innovation collectively determine an organization's ability to recover and adapt after large-scale disruption (Jabbar & Hussein, 2017; Kesting et al., 2015). Rather than examining each variable in isolation, the research adopts a holistic approach to assess how these components interact and influence outcomes across growth and sustainability domains.

To guide this analysis, the study poses three core research questions: 1) What are the key factors that influence organizational growth in the post-COVID-19 era? 2) What are the key factors that influence organizational sustainability in the post-COVID-19 era? 3) How are these factors interrelated, and in what ways do they influence one another?

To address these questions, a SEM approach is employed to test hypotheses on direct and indirect relationships among leadership, policy, innovation, employee engagement, and technology.

This research contributes to strategic management literature by offering insights into how large organizations can enhance resilience, innovation, and performance. Data were collected from experienced employees within publicly listed corporations in Thailand that have demonstrated post-crisis recovery and sustained performance. By empirically analyzing the relationships among key internal factors, the study offers guidance for organizational leaders, government agencies, and policymakers in building high-performing, future-ready institutions.

Despite the growing attention to post-pandemic strategic sustainability, several critical gaps remain in current literature. First, prior research tends to isolate leadership, innovation, or human capital rather than integrating them into a comprehensive framework (Singh et al., 2019). Second, few studies have used SEM to examine causal pathways between growth and sustainability, particularly in post-crisis contexts (Hair et al., 2014; Schumacker & Lomax, 2010). Third, while conceptual links between growth and sustainability exist, few empirical studies measure them jointly. Finally, most literature is Western-centric, often neglecting emerging economies like Thailand, where contextual variables such as institutional structure and digital infrastructure vary significantly (Vargas-Hernández, 2021).

This study addresses these gaps by developing and empirically validating an integrated model that explains how leadership, policy, innovation, and employee engagement collectively affect both growth and sustainability in large Thai organizations.

Literature Review

Strategic Management: From Classical Roots to Post-COVID Adaptation

Strategic management has evolved from stable, efficiency-driven models to dynamic, resilience-focused systems in response to global disruptions like the COVID-19 pandemic. To understand this transformation, it is essential to explore the historical underpinnings of strategy and how recent crises have shifted priorities in organizational design, leadership, and innovation. This section is structured around two themes: (1) historical foundations of strategic management, and (2) strategic responses to post-COVID challenges.

Historical Foundations of Strategic Management

Classical theories of management form the basis of modern strategic thinking. Weber (1947) emphasized bureaucratic structures, defined authority, and rule-based administration to ensure efficiency. Fayol (1950) identified core managerial functions including planning, organizing, commanding, coordinating, and controlling. The McKinsey 7S framework later introduced a more holistic perspective, integrating both structural and cultural dimensions to promote internal consistency. Building on these foundations, the resource-based view argued that sustainable competitive advantage arises from unique internal assets such as leadership, organizational culture, and innovation. Open innovation further highlights the importance of cross-boundary knowledge exchange in enabling organizational adaptability and long-term growth.

Strategic Shifts in the Post-COVID Era

The COVID-19 crisis reshaped strategic management, emphasizing agility, resilience, and digital readiness (Paeffgen et al., 2024). This shift heightened the relevance of the Dynamic Capabilities Framework, which focuses on sensing, seizing, and transforming to sustain competitiveness (Teece et al., 1997). Leadership today demands emotional intelligence, adaptability, and effective communication (Sukphon, 2022). Post-pandemic strategies prioritize human capital, remote collaboration, and resilient supply chains (Hickel, 2020). Employee well-being, empowerment, and continuous learning are now central goals, supported by automation and AI (Luna-Pereira et al., 2022; Kamolsin et al., 2023). Yet, as Ditkaew & Pitchayatheeranart (2019) caution, technology must align with strategy. In Thailand, innovation in public organizations hinges on leadership and employee capacity (Vinidwattanakomol & Sangmahachai, 2023). Strategic management now centers on adaptability, innovation, and learning, integrating RBV and dynamic capabilities for long-term sustainability.

Strategic Drivers of Organizational Growth

Organizational growth is not merely a product of scale or output but reflects an institution's ability to adapt, innovate, and align internal capabilities with external demands. Drawing from the Resource-Based View (RBV) and Dynamic Capabilities Theory, this section explores how internal strategic elements, including leadership, policy, employees, and innovation, drive growth in dynamic environments. Empirical and conceptual literature, including comparative views, helps establish the rationale for each hypothesis.

Leadership as a Growth Catalyst

Authority and responsibility are critical in organizations, encompassing orders, reinforcement, and penalties to motivate effective and consistent task performance (Fayol, 1950; Weber, 1947). Effective leadership is pivotal for organizational success, fostering a shared culture and encouraging adherence to organizational values. Leadership is repeatedly identified in strategic literature as a decisive factor in organizational growth. According to RBV, leadership is a rare and valuable resource capable of mobilizing other organizational assets (Wright & McMahan, 1992). From a Dynamic Capabilities perspective, leaders help reconfigure internal processes to adapt to turbulent conditions (Teece, 2007).

Key leadership qualities impact organizational efficiency and effectiveness across four dimensions, including inspiring motivation (Huang et al., 2022), influential and visionary leadership (Yukl, 2013), fostering intellectual stimulation (Hackman & Johnson, 2018), considering individual concerns (Pendleton et al., 2009), and leaders also enhance organizational resource utilization (May-Chiun et al., 2015).

Although leadership is intrinsically linked to organizational growth and successful transformation (Jabbar & Hussein, 2017). Critically, while Yukl (2013) and Hackman & Johnson (2018) emphasize transformational leadership for inspiring innovation and resilience, others, such as Klijn (2008), caution that overly centralized leadership may limit team creativity and responsiveness. Sukphon (2022) highlights this in Thai organizations, where participatory leadership boosts both engagement and adaptive capacity.

Effective leaders bridge vision with execution, promote collaboration, and build psychological safety for growth in post-COVID (Vargas-Hernández, 2021).

H1: Leadership influences the growth of large organizations.

This hypothesis is grounded in empirical findings and theory that connect leadership to team performance, innovation readiness, and strategic adaptability.

Organizational Policy and Strategic Clarity

Strategic policy defines the rules, norms, and direction of an organization. From a structural-functional lens (Fayol, 1950), policies channel managerial planning and decision-making. From a dynamic perspective, policies that are continuously reviewed and aligned with market trends enhance growth potential (Mintzberg, 1993; Hambrick, 2007).

The strategic management policy is crucial for organizational growth, providing a clear roadmap for initiatives (Hambrick, 2007), optimizing resources (Eisenhardt, 1989), engaging employees (Wright & McMahan, 1992), and measuring performance (Pfeffer & Sutton, 2000). Effective policy includes risk management (Cormican, 2014), environmental scanning (Ansoff, 1965), promoting agility (Mintzberg, 1993), and enhancing competitive advantage and reputation (Fischer & Rosenzweig, 1995).

Comparatively, while Pfeffer & Sutton (2000) emphasize discipline and execution in policy frameworks, Ditkaew & Pitchayatheeranart (2019) suggest that performance depends on strategic feedback loops. In Thailand, Kamolsin et al. (2023) and Raksudjarit et al. (2024) show that policy clarity improves firm outcomes by guiding innovation investment and KPI alignment.

H2: Organizational policy influences the growth of large organizations.

Supported by studies demonstrating how formal strategy enhances alignment, accountability, and market responsiveness.

Employee Engagement and Collaborative Teams

During the COVID-19 era, resource limitations challenged productivity. Effective human resource management and collaboration contribute to organizational goals through innovation and problem-solving (de Dreu et al., 2014), skills sharing (Wright & McMahan, 1992), motivation and commitment (Murray & Holmes, 2021), and adaptability to change (Carmeli et al., 2020). Effective teamwork leverages individual strengths, fostering growth, performance, and customer satisfaction (Tripathy, 2018).

Analytically, de Dreu et al. (2014) argue that team dynamics are shaped by leadership structure and cultural norms, while Tripathy (2018) emphasizes cross-functional collaboration for customer satisfaction and continuous improvement. Thai scholars, such as Sukphon (2022), affirm that employee voice, recognition, and role clarity significantly influence performance and productivity.

H3: Employees and teams influence the growth of large organizations.

This hypothesis is justified by a convergence of organizational behavior theories and regional empirical validation.

Innovation and Technology as Growth Engines

Innovation is critical for driving organizational growth (Barsh et al., 2008). Organizations that create products, services, and business models catering to evolving needs and embracing digital experiences thrive (Chesbrough, 2020). Innovation across management functions improves resilience, competitiveness, and brand image (Paeffgen et al., 2024). Technologies enhance management processes and data-driven decision-making, and service delivery in both private and public sectors (Suchitwarasan et al., 2024). Employees are vital sources of organizational innovation (Kesting et al., 2015; Yi et al., 2017; Huang et al., 2022).

In comparison, Barsh et al. (2008) emphasize structured innovation pipelines, while Luna-Pereira et al. (2022) discuss decentralized innovation driven by employee-led initiatives. In the Thai context, Vinidwattanakomol & Sangmahachai (2023) highlight innovation governance as key to public-sector agility. Technology is not a plug-and-play solution—it must be embedded within a strategic framework to yield value (Kamolsin et al., 2023).

H4: Innovation and technology influence the growth of large organizations.

This hypothesis is substantiated by cross-sectoral evidence linking innovation adoption with market expansion, process efficiency, and stakeholder value.

Strategic Drivers of Organizational Sustainability

Organizational sustainability requires more than compliance with environmental or Corporate Social Responsibility (CSR) standards—it involves strategic integration of ethics, long-term stakeholder value, adaptability, and innovation into all aspects of the enterprise. This section evaluates four key internal drivers of sustainability—leadership, policy, teams, and innovation—through the lens of the RBV, Dynamic Capabilities, and stakeholder-oriented sustainability frameworks.

Leadership and Sustainability Commitment

Leadership plays a pivotal role in embedding sustainability into an organization's identity and practices. From the RBV, leaders are key intangible resources who shape ethical norms, vision, and decision-making (Wright & McMahan, 1992). Meanwhile, Dynamic Capabilities Theory posits that visionary leadership is necessary for sensing environmental risks, seizing green opportunities, and transforming internal processes (Teece et al., 1997).

Leaders with a strategic vision are crucial for developing sustainability through effective collaboration of planning and stakeholders (Frostenson et al., 2022). Internal cooperation and positive leader-employee relationships are essential for successful sustainability initiatives (Baumgartner, 2009; Vargas-Hernández, 2021). Leaders can foster this cooperation by acting as role models for sustainable practices and fostering open communication channels (Vargas-Hernández, 2021). Additionally, leaders must cultivate collaboration with stakeholders, including external environmental communities and charitable organizations, to develop and implement effective sustainability initiatives (Avery & Bergsteiner, 2011).

Critically, while Avery & Bergsteiner (2011) and Frostenson et al. (2022) argue for long-termism and sustainability values in leadership, Klijn (2008) and Carlsen (2016) caution that sustainability outcomes depend on collaborative, not solely top-down, leadership. Turulja et al. (2023) emphasize psychological intelligence and values alignment in leader-employee relationships.

In Thailand, Vargas-Hernández (2021) and Trongwattanawuth & Siriprasertsin (2022) highlight that sustainability-oriented leadership enhances stakeholder trust and industry certification.

H5: The attributes of a leader influence the sustainability of large organizations.

This hypothesis is based on consistent theoretical and empirical evidence linking leadership style and vision to sustainable performance and stakeholder legitimacy.

Policy Integration and Strategic Sustainability

Strategic policies integrating sustainability goals are crucial for long-term organizational success. This involves planning, organizing, and implementing interventions to modify practices in response to environmental factors (Vargas-Hernández, 2021; Cummings & Worley, 2014). Furthermore, integrating CSR strengthens ethical practices and governance, contributing to sustainable development (Wheelen et al., 2018). This approach aligns long-term business objectives with investor and stakeholder interests (Vargas-Hernández, 2021).

Developing such policies involves three steps: 1) formulating sustainable strategies, 2) testing strategies through top-down and bottom-up approaches, and 3) establishing shared evaluation methods (Mitchell et al., 2022; Trongwattanawuth & Siriprasertsin, 2022).

Contrasting perspectives show that while top-down sustainability policies provide structure (Mitchell et al., 2022), overly rigid compliance mechanisms may stifle innovation (Dyllick & Hockerts, 2002). Effective sustainability policies often involve top-down visioning with bottom-up feedback for contextual adaptation (Vargas-Hernández, 2021).

In the Thai context, research by Kamolsin et al. (2023) shows that firms adopting integrated sustainability policies outperform peers in both efficiency and ethical compliance.

H6: The organizational policy influences the sustainability of large organizations.

This is supported by studies indicating that sustainability governance structures improve environmental performance and long-term competitiveness.

Employee Engagement and Sustainable Culture

Employees are the operational link between sustainability values and actual impact. The RBV recognizes employees as vital assets in creating non-replicable sustainable routines (Barney, 1991). Multiple studies highlight the critical role of employees and teams in achieving organizational sustainability (Sim-im et al., 2019). Empowering employees through decision-making authority fosters a sense of ownership and promotes sustainable practices (Turulja et al., 2023). Additionally, cultivating a strong organizational, sustainable identity, shared by both managers and employees, enhances employee engagement in sustainable initiatives (Carlsen, 2016). Effective human resource management fosters sustained growth by facilitating the development of roles and practical tasks that embed sustainability practices within the organization (Vargas-Hernández, 2021).

H7: The employee and team influence the sustainability of large organizations.

This hypothesis draws on behavioral, cultural, and HRM literature, as well as local studies showing the centrality of team-based practices in embedding sustainability.

Innovation and Technology for Long-Term Value

According to Vargas-Hernández (2021), organizational core competencies are fundamental to developing organizational sustainability, such as building infrastructure, improving knowledge, and innovativeness (Spence & Mulligan, 1995; Bossel, 1999). Both the private and public sectors in Thailand share common themes in their strategies for sustainable growth (The Ministry of Industry, 2017). They prioritize stakeholders, emphasize human resource management for optimal performance, and advocate for organizational flexibility and technological advancements to adapt to volatile circumstances.

However, different schools of thought emphasize various aspects. Bossel (1999) and Tso & Li (2012) focus on systemic indicators of sustainability, while Castro & Lopes (2022) link innovation with e-government and public sector transparency. In the Thai public sector, Vinidwattanakomol & Sangmahachai (2023) confirm that digital tools enable more sustainable and data-informed decision-making. Dynamic capabilities play a crucial role here: organizations must not only acquire technologies but also embed them into learning and reconfiguration routines (Teece et al., 1997).

H8: Innovation and technology influence the sustainability of large organizations.

This is validated by both global and Thai evidence showing innovation as a mediator between strategy and sustainable impact.

Organizational Growth as a Driver of Sustainability

Trongwattanawuth & Siriprasertsin's (2022) research highlights a direct positive impact of organizational capabilities on sustainability outcomes. This suggests that a focus on long-term problem-solving and continuous improvement processes, with a sustainability lens, is key to achieving sustainable growth (Iacob, 2020). Organizational learning further strengthens this connection by fostering the ability to adapt and innovate for long-term competitive advantage in a sustainable context (Naudé, 2012).

However, not all growth contributes to sustainability. Scholars propose a framework for sustainability that emphasizes stakeholder engagement (Singh et al., 2019). This framework underscores the potential shift from prioritizing solely economic growth to a more balanced approach that integrates sustainability goals. However, achieving this balance can be challenging, as some scholars advocate for prioritizing short-term profits alongside sustainability efforts (Sarni & Capozucca, 2012). Ultimately, the diverse capabilities of an organization will influence its path towards sustainable growth (Bossel, 1999).

In the Thai context, Sim-im et al. (2019) found that firms demonstrating strategic growth—characterized by capacity building, innovation adoption, and proactive HR policies—are more likely to institutionalize sustainability objectives. This reinforces the view that growth, when strategically oriented, can enhance rather than hinder long-term sustainability.

H9: The growth of an organization relates to the sustainability of large organizations.

This hypothesis is grounded in both theoretical models and empirical studies showing that sustainable development is more achievable when supported by organizational growth trajectories that prioritize capacity-building, stakeholder alignment, and learning.

Conceptual Framework

Based on the literature review mentioned above, the researcher has synthesized the academic concepts into a conceptual framework for the upcoming study.
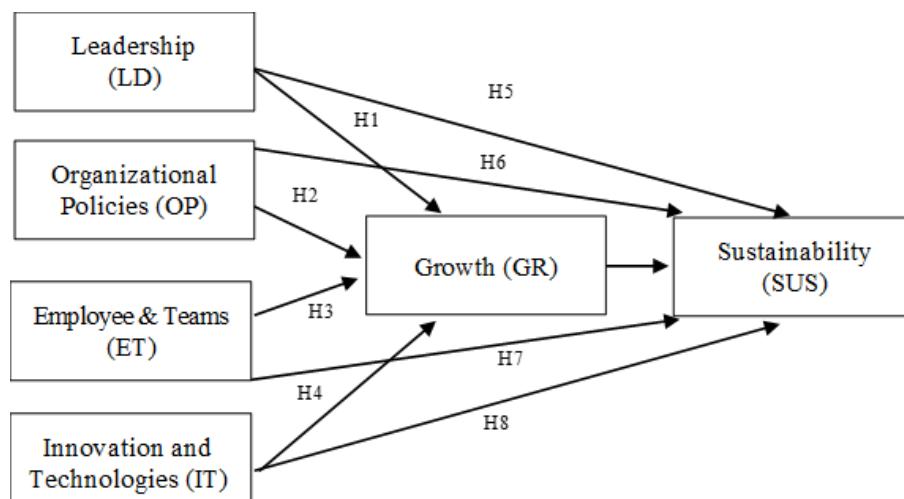
Figure 1 Conceptual Framework

Measurement of Growth

Strategic growth plans, aligned with mission and context, guide organizations toward achieving set goals (Campbell, 1977). This approach aligns with findings by Ditkaew & Pitchayatheeranart (2019), who applied SEM to evaluate how accounting tools and innovation policy contribute to firm performance in Thailand's industrial sector. Increased competition has spurred the development of diverse growth strategies (Quinn & Rohrbaugh, 1983).

Selecting appropriate growth metrics is crucial, with scholars debating the merits of wealth (LaDue, 1977) versus traditional measures like employment and sales (Weinzimmer et al., 1998). The multifaceted nature of growth is further highlighted by studies linking it to entrepreneurial networks (Hansen, 1995) and the limitations of common metrics (Janssen, 2009). While maximizing growth is a common objective (Quinn & Rohrbaugh, 1983), organizations may also pursue diverse goals like customer acquisition, workforce expansion, or geographical expansion (Campbell, 1977).

Theories and Measurement of Sustainable Development

Sustainable development has various definitions from historical perspectives (Pearce et al., 1989; Bell & Morse, 1999), leading to the creation of the Sustainable Development Index (SDI). The primary measurements of this index include the state of resources; human development and capabilities; environmental conditions and sustainability; and dimensions of quality of life and societal well-being, including the ethical governance of personnel, community and social responsibility, community and social preservation, and social-environmental sphere (Hickel, 2020; Tso & Li, 2012). Moreover, international standards and stakeholders' engagement play a crucial role in supporting sustainable development in the context of SDGs (Ceko, 2023; Naudé, 2012; Singh et al., 2019).

Methodology

This study employed a quantitative survey research approach to investigate "Structural equation modeling for growth and sustainable development in a post-COVID-19 era: Strategic management of large organizations". A self-administered questionnaire served as the primary research instrument for data collection. Descriptive and inferential statistics were utilized to analyze the collected data.

Population and Sample

The target population for this study comprised employees working in large-sized business organizations listed on the Thai stock market. The inclusion criteria for participants were: (a) a minimum of ten years of professional experience, (b) an age range of 25-60 years old, and (c) employment within companies located in Bangkok and its surrounding provinces. This specific age range was chosen to target experienced professionals with established careers. The minimum experience requirement aimed to capture insights from individuals with a comprehensive understanding of organizational dynamics. The geographical limitation ensured a relatively homogeneous sample in terms of economic development and business environment.

Hair et al.'s (2010) approach for sample size determination in SEM was employed. Considering a minimum of 10 participants per observed variable and a total of 34 variables in the questionnaire, the calculated sample size was 340. To enhance the generalizability of the findings, a larger sample of 680 participants was recruited.

Data Collection

A self-administered questionnaire was developed based on relevant literature and theoretical frameworks to address the research objectives. Content validity was verified by three qualified experts, with an Index of Item-Objective Congruence (IOC) of 0.89, exceeding the acceptable threshold of 0.5 (Rovinelli & Hambleton, 1977). Reliability was confirmed through a pre-test with 50 participants, yielding a Cronbach's Alpha of 0.92, indicating high internal consistency (Hair et al., 2010).

The questionnaire was divided into several sections, each corresponding to key constructs such as leadership, organizational policy, employee and team dynamics, innovation and technology, organizational growth, and sustainability. Each construct was measured using multiple items adapted from established research to ensure theoretical consistency and contextual relevance.

All questionnaire items were measured using a 5-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. This scale was chosen for its effectiveness in capturing degrees of agreement or perception across a range of attitudinal and behavioral variables in social science research. The Likert-type format also facilitates statistical analysis using techniques such as factor analysis and SEM.

Data collection employed a multi-mode approach to cater to participant convenience. The questionnaire was administered in paper-based format, distributed electronically via Google Forms, and made accessible through a QR code from September 2023 to January 2024. This approach ensured wider accessibility for participants who preferred digital completion on mobile devices. As a result, the study achieved a response rate exceeding 80%, which is considered acceptable and robust for survey-based research in the social sciences. The high response rate enhances the representativeness and credibility of the dataset.

Data Analysis

Descriptive statistics, including percentages, means, and standard deviations, were utilized to provide an initial overview of the collected data. Inferential statistical techniques were subsequently employed for further analysis. Exploratory factor analysis was conducted to identify underlying factors within the data. Path analysis was then used to examine the hypothesized relationships between the identified factors and variables. Additionally, Z-tests were employed to test the formulated research hypotheses at a 95% confidence level.

SEM was conducted using AMOS software to assess the proposed research model. The evaluation of model fit employed established criteria, including Chi-square/degrees of freedom (χ^2/df) < 3, p-value > 0.05, Goodness-of-Fit Index (GFI) > 0.9, Adjusted Goodness-of-Fit Index (AGFI) > 0.9, Comparative Fit Index (CFI) > 0.9, Root Mean Squared Residual (RMR) < 0.1, and Root Mean Square Error of Approximation (RMSEA) < 0.1 (Schumacker & Lomax, 2010).

Results

Respondents' Descriptive Analysis

The sample (n = 680) skewed female (64.9%). Regarding age, the largest group was 40 and above (47.7%), followed by decreasing proportions in the 35-39 (31.2%), 30-34 (14.6%), and 25-29 (6.5%) age ranges. Educationally, a Bachelor's Degree was most prevalent (69.6%), followed by those below a Bachelor's Degree (22.3%) and those exceeding a Bachelor's Degree (8.1%). The majority held entry-level managerial positions (81.1%), with smaller proportions in middle-level (18.1%) and top-level management (0.8%). Work experience peaked at 15-20 years (55.8%), followed by over 20 years (22.8%) and 10-15 years (21.4%).

Reliability and Validity Analysis

Table 1 Confirmatory Factor Analysis (CFA), Reliability and Validity of Construct Indicators

Constructs		Mean	S.D.	Factor Loading	AVE.	CR.	Cronbach's alpha
(LD)	LD1	4.19	0.713	0.770	0.780	0.878	0.924
	LD2	4.04	0.774	0.826			0.930
	LD3	4.16	0.696	0.798			0.927
	LD4	4.10	0.735	0.732			0.928
	LD5	3.90	0.865	0.778			0.923
	LD6	4.21	0.728	0.778			0.924
(OP)	OP1	4.30	0.583	0.708	0.689	0.864	0.910
	OP2	4.33	0.601	0.654			0.909
	OP3	4.19	0.733	0.730			0.922
	OP4	4.40	0.628	0.655			0.921
	OP5	4.44	0.596	0.718			0.926
	OP6	4.11	0.745	0.668			0.922

Constructs		Mean	S.D.	Factor Loading	AVE.	CR.	Cronbach's alpha
(ET)	ET1	4.04	0.826	0.812	0.814	0.883	0.948
	ET2	4.03	0.778	0.857			0.948
	ET3	4.21	0.682	0.839			0.952
	ET4	4.18	0.703	0.824			0.948
	ET5	4.21	0.702	0.808			0.948
	ET6	4.16	0.766	0.741			0.952
(IT)	IT1	4.09	0.733	0.826	0.798	0.881	0.852
	IT2	4.19	0.693	0.900			0.873
	IT3	4.13	0.748	0.861			0.900
	IT4	4.20	0.675	0.741			0.850
	IT5	4.13	0.689	0.697			0.879
	IT6	4.26	0.692	0.765			0.873
(GR)	GR1	4.37	0.621	0.853	0.841	0.886	0.878
	GR2	4.35	0.626	0.858			0.884
	GR3	4.18	0.797	0.810			0.869
	GR4	4.25	0.677	0.825			0.865
	GR5	4.26	0.680	0.849			0.908
	GR6	4.28	0.643	0.848			0.883
(SUS)	SUS1	4.28	0.652	0.840	0.868	0.889	0.938
	SUS2	4.29	0.667	0.805			0.936
	SUS3	4.23	0.722	0.853			0.911
	SUS4	4.31	0.669	0.897			0.934
	SUS5	4.29	0.668	0.911			0.913
	SUS6	4.29	0.697	0.901			0.913

According to Table 1, the SEM analysis was conducted to investigate the influence of various factors on a large organization. The final results show that the model is consistent with the empirical data: It was observed that the variables could indeed be components of latent variables. Factor loadings ranged from 0.654 to 0.911, all of which were greater than the threshold of 0.50 (Hair et al., 2014). The validity test results of the question items, as indicated by Cronbach's alpha coefficients, ranged from 0.852 to 0.948, exceeding the 0.70 threshold. Composite reliability (CR) values ranged from 0.864 to 0.889 and were also above the minimum of 0.70, while the average variance extracted (AVE) ranged from 0.689 to 0.868, surpassing the 0.50 threshold. The model's goodness of fit indices were as follows: $\chi^2/df = 2.728$, df = 561, P = 0.085, GFI = 0.900, RMSEA = 0.047, RMR = 0.015, *P < 0.05, indicating that the test results for congruence between the measurement model and the empirical data met the established criteria.

Table 2 Model fit indices

Indicators	Comparative indices	Acceptable level	Initial Model	Revised Model	Interpretation
χ^2/df	<3	<3	5.883	2.728	
GFI	0 to 1	>0.90	0.792	0.901	Accepted
CFI	0 to 1	>0.90	0.846	0.928	Accepted
NFI	0 to 1	>0.90	0.858	0.936	Accepted
RMR	0.00 to 0.08	<0.08	0.196	0.015	Accepted
RMSEA	0.00 to 0.08	<0.08	0.79	0.047	Accepted

The results from Table 2, summarized through the model's criteria, align well with the empirical data. This confirmation was derived from the analysis of the SEM. The findings indicate that the statistics possess a good fit to the data. Specifically, the ratio of the Chi-square statistic comparing the tested model and the independent model to the degrees of freedom (χ^2/df) was 2.728. The Goodness of Fit Index (GFI) was 0.901, the Normed Fit Index (NFI) was 0.936, the Root Mean Square Error of Approximation (RMSEA) was 0.047, and the Root Mean Square Residual (RMR) was 0.015. These values are in accordance with the established criteria.
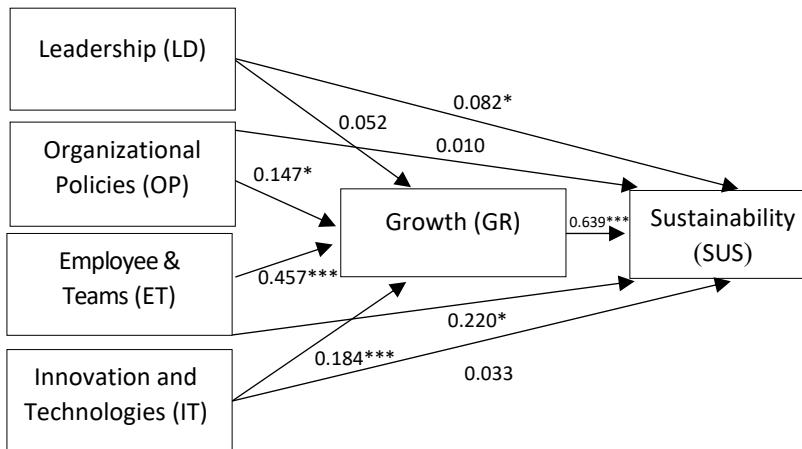
Figure 2 SEM Results – Drivers of Organizational Growth and Sustainability
χ^2/df = 2.728, df = 561, P = 0.085, GFI = 0.900, RMSEA = 0.047, RMR = 0.015, *P < 0.05

In this research, hypotheses were formulated to study the causal relationship among policy management, leadership, innovation strategy, and employee and team performance related to organizational growth and sustainability. The results can be summarized as presented in Table 3.

Table 3 Research results from hypothesis testing

Direct influence			β	P-Value	Hypothesis
H1	The leadership factors influence the growth of a large organization.	LD→GR	0.052	0.307	Reject
H2	The organizational policy influences the growth of a large organization.	OP→GR	0.147	0.004**	Accept
H3	The employee and team influence the growth of a large organization.	ET→GR	0.457	0.000***	Accept
H4	Innovation and technology influence the growth of a large organization.	IT→GR	0.184	0.000***	Accept
H5	The attributes of a leader influence the sustainability of a large organization.	LD→SUS	0.082	0.037*	Accept
H6	The organizational policy influences the sustainability of a large organization.	OP→SUS	0.010	0.792	Reject
H7	The employee and team influence the sustainability of a large organization.	ET→SUS	0.220	0.000***	Accept
H8	Innovation and technology influence the sustainability of a large organization.	IT→SUS	0.033	0.415	Reject

Direct influence		β	P-Value	Hypothesis
H9	The growth of an organization relates to the sustainability of a large organization. GR→SUS	0.639	0.000***	Accept

Note: Sig < 0.05*; Sig < 0.01**; Sig < 0.001***

Conclusion and Discussion

This study examined the strategic drivers of organizational growth and sustainability in the post-COVID-19 era by applying Structural Equation Modeling (SEM) to data collected from 680 professionals across large listed corporations in Thailand. The findings provide both theoretical insights and practical applications by integrating key constructs, including leadership, organizational policy, employee and team engagement, innovation, and technology, within a unified analytical framework.

The SEM results reveal distinct but interconnected influences on growth and sustainability outcomes. Leadership had a stronger influence on sustainability ($\beta = 0.082$, $p = 0.037$) than on growth ($\beta = 0.052$, $p = 0.307$). This supports prior research asserting that ethical, transformative, and emotionally intelligent leadership is essential for embedding sustainability into organizational culture (Yukl, 2013; Avery & Bergsteiner, 2011). The role of leadership aligns with the Resource-Based View (RBV), which considers leadership a strategic intangible asset, and Dynamic Capabilities Theory, which emphasizes the leader's role in reconfiguring resources in response to environmental change (Teece et al., 1997).

Nevertheless, leadership did not have a statistically significant direct influence on organizational growth. This suggests that while leadership may not directly drive growth outcomes, it could play an indirect or enabling role, creating an environment in which other factors such as employee performance, innovation, and strategic policy can thrive, acting as a facilitator than a direct determinant in the post-crisis growth phase (Yukl, 2013; Hackman & Johnson, 2018; Pendleton et al., 2009; Sukphon, 2022).

Organizational policy demonstrated a stronger effect on growth ($\beta = 0.147$, $p = 0.004$) than on sustainability ($\beta = 0.010$, $p = 0.792$), according to scholars' studies (Vargas-Hernández, 2021; Cummings & Worley, 2014). This finding affirms the role of strategic clarity and governance in facilitating performance accountability, agility, and resource optimization (Hambrick, 2007; Mintzberg, 1993), as well as implementing the strategy, and consistently monitoring and evaluating performance (Pfeffer & Sutton, 2000). In line with Thai-based studies (Raksudjarit et al., 2024; Kamolsin et al., 2023), the findings suggest that policy coherence and alignment with environmental trends are critical for both reactive and proactive responses to uncertainty. However, the results showed that organizational policy did not significantly influence sustainability. This finding challenges common assumptions that sustainability initiatives embedded in policies are sufficient on their own (Dyllick & Hockerts, 2002). It implies that policy statements may have limited practical impact unless actively implemented (Vargas-Hernández, 2021), supported by leadership, and aligned with daily operations and employee behavior (Mitchell et al., 2022; Kamolsin et al., 2023).

Employees and teams significantly impacted both growth ($\beta = 0.457$, $p = 0.000$) and sustainability ($\beta = 0.220$, $p = 0.000$). These results validate theoretical perspectives on high-performance work systems, psychological empowerment, and collaborative learning (Turulja et al., 2023). The emphasis on cross-functional collaboration and innovation-capable teams confirms the findings of Sukphon (2022) and Sim-im et al. (2019), who observed that workforce adaptability and engagement are central to resilience.

Innovation and technology also had a significant influence on growth ($\beta = 0.184$, $p = 0.000$), reaffirming the proposition that dynamic innovation ecosystems strengthen organizational adaptability and stakeholder value (Chesbrough, 2020; Paeffgen et al., 2024;

Vinidwattanakomol & Sangmahachai, 2023). Organizations that leverage automation, omnichannel strategies, and artificial intelligence (AI) can enhance supply chain agility and operational control, increasing their ability to adapt to changing market demands (Paeffgen et al., 2024; Vargas-Hernández, 2021). In the Thai public sector, the integration of data analytics, e-government tools, and collaborative technologies has been linked to enhanced agility and transparency (Castro & Lopes, 2022; Kamolsin et al., 2023).

Surprisingly, innovation and technology did not show a statistically significant impact on sustainability ($\beta = 0.033$, $p = 0.415$), despite being a strong predictor of growth. This may indicate that technological adoption alone is not enough to ensure sustainability unless integrated into broader organizational strategies that encompass social and environmental dimensions (Castro & Lopes, 2022; Bossel, 1999). It highlights the need for balanced innovation, where technological advancement is purposefully aligned with people engagement (Vinidwattanakomol & Sangmahachai, 2023) and long-term sustainability capabilities (Vargas-Hernández, 2021; Tso & Li, 2012).

Notably, organizational growth positively influenced sustainability ($\beta = 0.639$, $p = 0.000$), reflecting the synergistic relationship between resource expansion and ethical strategic reorientation (Trongwattanawuth & Siriprasertsin, 2022; Naudé, 2012). However, this relationship is not automatic; scholars warn that growth must be aligned with stakeholder-centered sustainability frameworks to avoid short-termism (Sarni & Capozucca, 2012; Singh et al., 2019).

Recommendations

This study advances academic understanding by proposing an integrated framework linking leadership, organizational policy, employee collaboration, and innovation to organizational growth and sustainability in the post-COVID-19 context. It contributes empirically by applying structural equation modeling (SEM), which remains underutilized in research on crisis recovery.

A key theoretical insight is the central role of employees and teamwork, often acknowledged but rarely prioritized, as drivers of performance and resilience. The study demonstrates that knowledge sharing, collaboration, and adaptability enhance internal capabilities and sustainable growth. While strategic policy is commonly viewed as foundational, this research challenges the notion that policy alone secures sustainability, showing it is often symbolic unless reinforced by innovation and leadership (Vargas-Hernández, 2021). Leadership plays an indirect but catalytic role in shaping environments conducive to innovation and digital transformation (Kesting et al., 2015; Yi et al., 2017).

In the public sector, bureaucratic rigidity must give way to adaptive strategies that foster innovation and responsiveness to citizen needs. The transition to government 4.0 depends on cross-sector collaboration, data-driven problem-solving, and policy innovation (The Ministry of Industry, 2017). Innovation and technology consistently correlate with enhanced organizational capability and long-term sustainability (Trongwattanawuth & Siriprasertsin, 2022; Vinidwattanakomol & Sangmahachai, 2023).

Limitations and Future Research

This study provides insights into factors influencing organizational growth and sustainability in large organizations during post-COVID-19 recovery. However, several limitations should be noted. The cross-sectional design limits causal inference and temporal analysis. The use of self-reported questionnaires may introduce social desirability bias. The sample, restricted to large organizations in Thailand, limits generalizability to SMEs or other national and sectoral contexts. Subgroup differences based on demographics or managerial levels were not examined. Additionally, the SEM model focused solely on direct relationships, overlooking possible mediating or moderating variables such as organizational culture or leadership style.

Future research should adopt longitudinal designs to assess dynamic changes and apply mixed-method approaches to enrich data interpretation. Expanding studies to include different organizational types and international comparisons would enhance external validity. Researchers should also explore subgroup differences using multigroup SEM and investigate indirect effects to better understand contextual influences on sustainable organizational development.

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