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THE INFLUENCE OF TRANSFORMATIONAL LEADERSHIP ON ORGANIZATION PERFORMANCE

Chatchai Sanguanwongs[A], Taweesak Kritjaroen[B]

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ABSTRACT

Purpose: The objectives of this study were 1) to determine the direct effect of Transformational Leadership Competency (TLC) and Environment, Social, and Governance (ESG) affecting Balanced Scorecard (BSC), 2) to determine the indirect effect of TLC affecting BSC, and 3) to confirm the developed model of transformational of food industrial organization with public concern by confirming with P-value, RMSEA, GFI, AGFI, and Critical Number.

Theoretical framework: This study focuses on the relationship between TLC and ESG to BSC that affects the efficiency and success of an organization.

Design/methodology/approach: The quantitative approach with survey research was conducted to collect data from 150 Executive Officers (CEOs) of food business organizations in Thailand.

Findings: The finding showed that TCL has a direct effect on ESG (p-value=0.001). TLC has a direct effect on BSC (p-value=0.001). ESG has a direct effect on BSC (p-value=0.001). TLC has an indirect effect on BSC (p-value=0.001).

Research, Practical & Social implications: The recommendation, TLC affected BSC with direct and indirect effects with 64.0 percent. It implied that public concern is the essential intermediate variable that should be paid attention to introduce in the organization management in the current situation when TLC was integrated into modern management. However, to accomplish effective company management, ESG should be integrated into the transformation of organization management to meet the sustainable food industry.

Originality/value: The value of the study shows that TLC and ESG directly and indirectly influence BSC management and contribute to the organization performance

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A INFLUÊNCIA DA LIDERANÇA TRANSFORMACIONAL NO DESEMPENHO DA ORGANIZAÇÃO

RESUMO

Objetivo: Os objetivos deste estudo foram: 1) determinar o efeito direto da Competência de Liderança Transformacional (TLC) e do Meio Ambiente, Social e Governança (ESG) sobre o Balanced Scorecard (BSC); 2) determinar o efeito indireto da TLC sobre o BSC; e 3) confirmar o modelo desenvolvido de liderança transformacional de uma organização industrial de alimentos com interesse público por meio de confirmação com o valor P, RMSEA, GFI, AGFI e número crítico.

Estrutura teórica: Este estudo enfoca a relação entre TLC e ESG com o BSC, que afeta a eficiência e o sucesso de uma organização.

[A] *Phd Student in College of Multidisciplinary Sciences. Master of Science in Technology and Innovation Management. Graduate School of Management and Innovation, King Mongkut's University of Technology Thonburi. Thailand. E-mail: chatchai.article@gmail.com Orcid: https://orcid.org/0000-0002-1389-0087*

[B] *Doctor of Public Administration and Public Policy. Associate Professor. Graduate School of Management and Innovation, King Mongkut's University of Technology Thonburi. Thailand. E-mail: Taweesak.article@gmail.com Orcid: https://orcid.org/0000-0003-0032-8754*

Projeto/metodologia/abordagem: A abordagem quantitativa com pesquisa de levantamento foi realizada para coletar dados de 150 diretores executivos (CEOs) de organizações do setor de alimentos na Tailândia.
Resultados: Os resultados mostraram que o TCL tem um efeito direto sobre o ESG (p-valor=0,001). A TLC tem um efeito direto sobre o BSC (p-valor=0,001). O ESG tem um efeito direto sobre o BSC (p-valor=0,001). A TLC tem um efeito indireto no BSC (p-valor=0,001).
Implicações sociais, práticas e de pesquisa: A recomendação, TLC, afetou o BSC com efeitos diretos e indiretos com 64,0%. Isso implica que a preocupação com o público é a variável intermediária essencial que deve ser introduzida na gestão da organização na situação atual, quando a TLC foi integrada à gestão moderna. Entretanto, para realizar uma gestão eficaz da empresa, o ESG deve ser integrado à transformação da gestão da organização para atender ao setor de alimentos sustentável.
Originalidade/valor: O valor do estudo mostra que a TLC e a ESG influenciam direta e indiretamente a gestão do BSC e contribuem para o desempenho da organização

Palavras-chave: Modelo, Transformação, Organização Industrial de Alimentos, Preocupação Pública com ESG.

LA INFLUENCIA DEL LIDERAZGO TRANSFORMACIONAL EN EL RENDIMIENTO ORGANIZATIVO

RESUMEN
Propósito: Los objetivos de este estudio fueron 1) determinar el efecto directo de la Competencia de Liderazgo Transformacional (TLC) y Medio Ambiente, Social y Gobernanza (ESG) en el Cuadro de Mando Integral (BSC); 2) determinar el efecto indirecto de TLC en BSC; y 3) confirmar el modelo desarrollado de liderazgo transformacional de una organización industrial de alimentos con interés público a través de la confirmación con P-valor, RMSEA, GFI, AGFI y número crítico.
Marco teórico: Este estudio se centra en la relación entre el TLC y el ESG con el BSC, que afecta a la eficiencia y el éxito de una organización.
Diseño/metodología/enfoque: Se aplicó un enfoque cuantitativo con investigación mediante encuesta para recopilar datos de 150 directores ejecutivos (CEO) de organizaciones del sector alimentario en Tailandia.
Resultados: Los resultados mostraron que TCL tiene un efecto directo sobre ESG (valor p=0,001). La TCL tiene un efecto directo sobre el BSC (valor p=0,001). El ESG tiene un efecto directo sobre el BSC (valor de p = 0,001). El TLC tiene un efecto indirecto sobre el BSC (p-valor=0,001).
Implicaciones sociales, prácticas y de investigación: La recomendación TLC afectó al BSC con efectos directos e indirectos con un 64,0%. Esto implica que la preocupación por el público es la variable intermedia esencial que debe introducirse en la gestión de la organización en la situación actual, cuando el TLC se ha integrado en la gestión moderna. Sin embargo, para realizar una gestión eficaz de la empresa, ESG debe integrarse en la transformación de la gestión de la organización para cumplir con el sector de la alimentación sostenible.
Originalidad/valor: El valor del estudio demuestra que TLC y ESG influyen directa e indirectamente en la gestión del BSC y contribuyen al rendimiento de la organización.

Palabras clave: Modelo, Transformación, Organización Industrial Alimentaria, Preocupación Pública por ESG.

INTRODUCTION

At present, Thailand has faced with the trap of being a middle-income country. Therefore, to escape from this trap, the government turned its attention to rapidly supporting the food industrial sector. The Thai government has issued an action plan for the food industry development by supporting the food company to step into the global competition. Numerous future food products are especially relevant to Thailand including 1) cell-based food, 2) organic food, 3), plant-based food 4) hemp-based food, 5) functional food, and 6) medical food. Nevertheless, speedy scientific modification is not only changing the food on the plates, but it is also restructuring the food industry supply chains. This is the most important with great

transformations to move the industrial environment to a platform-based structure instead of focusing on a pipeline-type pattern. Positive perspective, this will aid to add value to the food industrial supply chain, but simultaneously, some businesses will see their existence in the market reduction. However, participants in the industry will require to reevaluate their actions by revamping their business models and utilizing new opportunities. As mentioned above, to achieve a deep understanding of the technology that is disrupting the sector, it needs to reconsider the business model for the food industry. To keep up with world competition, the Thai government has been assigned to increase agricultural production from a food perspective for the world market (Thiengkamol, 2009, & ADB, 2015). Thai governments have continuously supported the food industry to take part by motivating them to create a "kitchen of the world" through government-supported collaboration all together of governmental sectors, private companies, and local farmers. Thailand has transformed itself from a nation with few food-connected industries to one with innumerable food firms. Thailand has larger than 100 companies that produce more than 300 items under government supervision as well as edible goods like different spices, flavoring, coconut oil, curry paste, and several fruits and vegetables (Tumpracha, et al., 2012b, & Charoen Pokphand Foods Public Company Limited, 2021). Additionally, these companies are legally run by their associates, who also obtain profits from their work, especially, the immediate growth of the food industry in SMEs companies can distribute food and drink products for exporting lucratively (European Union, 2020, Su et al., 2020, & Charoen Pokphand Foods Public Company Limited, 2021

To achieve effective transformational food industrial management in Thailand, from the last research of Sanguanwongs, & Kritjaroen, 2023a, it is obviously seen that Transformational Leadership Competency (TLC) that leads to successful management. Moreover, Thailand's government offers an occasion for industry leaders to consider beyond their local markets when starting up food businesses as exporter organizations to provide all customer needs at all levels of local, regional, and global (Thiengkamol, 2011, & White, et al., 2019). However, the operations are executed through networking practices at local and international levels. These are assisted by Thai embassies around the world. These circumstances make all prominent industrialists from different countries share ideas to create new markets (Thai Embassy-Washington, D.C., 2017, Xu et al., 2021, & Zaunseder, 2022). This international partnership model encourages Thailand to be able to a prosperous food industrial business (European Union, 2020, & Charoen Pokphand Foods Public Company Limited, 2021). Thus, Thai leaders in the food industry should articulate their own TLC to integrate the valuable strategies, visions,

and administration to keep money and to produce decent products to meet the consumers' requirements. SMEs in the food industry in Thailand can offer plentiful natural food accessibility at a cheap cost. Thailand is recognized as "the kitchen of the world" because it can offer ingredients for any dish cooked around Asia (Thiengkamol, 2011, Shafi, et al., 2020, Mbindyo, et al., 2021, Charoen Pokphand Foods Public Company Limited, 2021, & Sanguanwongs, & Kritjaroen, 2023a).

SMEs in the food industry play a vital role in the national, regional, and international economies around the world, generating work and revenue added and delivering various innovations. SMEs are critical to the efforts to achieve Environmental, Social, and Governance (ESG) and sustainability strategies to accomplish further complete development. Especially, the SMEs of food industry companies in Thailand (OECD, 2017, & Bayraktar, & Nese, 2019, & Sanguanwongs, & Kritjaroen, 2023a). Integrating ESG in the process of management shows the public concern for all creators of the world to sustain the environment, and society and to create good governance. These give good impacts on the environment and quality of life including among firms, numerous countries, and sectors with excellent attempts to reach fair global markets (Bayraktar, & Nese, 2019, Jafari-Sadeghi, et al., 2022, Sanguanwongs, & Kritjaroen, 2023b, & MSCI, 2022). Attain the efficiency of SMEs in the Thai food industry, it requires the actual TLC and ESG together to impact the organizational transformation management for truly successful ESG and sustainability transformation, it needs to define the organization's purpose and develop the skills, talent, and leaders with Balance Scorecard Management (BSM). Subsequently, this study will verify the model of transformational food industrial organization with the public concern of SMEs food companies in Thailand by using SEM analysis (Thiengkamol, 2016, Chen, 2017, FAO, 2017, World Bank, 2017, Mbindyo, et al., 2021, Sanguanwongs, & Kritjaroen, 2023b, & MSCI, 2022).

LITERATURE REVIEW

Essence of World and Thailand Food Industry

In the year 2020, it was a hard year for restaurants and bars, but it wasn't all awful for the food and beverage industry, even though revenue declined. According to Research and Markets latest report Food and Beverage Global Market Report 2020-30: COVID-19 Impact and Recovery, the sector is expected to shrink by 2.9%, from $3,606.1 billion in 2019 to $3,503.3 billion in 2020, resulting in a negative compound annual growth rate of -2.9%. The global economic recession caused by the outbreak is mainly to criticize the fall in sales (TAN

DO, 2022). The report also revealed that the market is on the path to a comeback, with experts expecting the sector to grow to $4,290 billion in 2021, an increase of 8% over this year's compound annual growth rate (CAGR) (CAGR is the annualized average rate of revenue growth between two given years, assuming growth takes place at an exponentially compounded rate) (Gartner, 2022). Currency variations and swings in consumer demand and new mergers and purchases were strong influences in 2020, promoting the accomplishment of the largest food and beverage companies and the declines of others. The magazine also cited product innovation and enhanced home cooking during the epidemic as factors affecting the total market (TAN DO, 2022). The food industry of Thailand is accepted as the top ten industries and has aim to escape from the middle-income trap of economic structure via innovation-based economy adaptation by industrial strategy progress as a new growth machine to create the venture aim by means of the existing top ten industries in Thailand (World Bank, 2016, Thai Embassy-Washington, D.C., 2017, & Warr, 2020). To achieve the future industry of the active production food industry requires expert people and new information desirably with modern knowledge to match industrial innovation, technology, and TLC (World Economic Forum, 2018a, World Economic Forum, 2018b, Warr, 2020, Benyaapikul, 2021, & Sanguanwongs, & Kritjaroen, 2023a).

Thailand's food industry has radically developed over the past few periods. The many food companies in Thailand produce food of every form, varying from instant noodles to refined international meals (European Union, 2020, & Charoen Pokphand Foods Public Company Limited, 2021). Many Thai companies use custom forms to interest in both local and international flavors. Thailand has several food producers that provide to the country's economy (European Union, 2020, &Charoen Pokphand Foods Public Company Limited, 2021). With more than 100 recorded instant noodle industrial companies in Thailand; most of them are privately owned and are equally popular with both Thais and foreigners. Thailand's food industries export their products, creating millions of dollars yearly for the Thai economy. The food industry in Thailand also produces agricultural products, such as canned fruit and marine food, and fish sauces and pastes under the world safety food regulations. Exports of these goods also obviously get in considerable income for Thailand (European Union, 2020, Charoen Pokphand Foods Public Company Limited, 2021, FAO, IFAD, UNICEF, WFP, & WHO, 2022, & FAO, & WHO, 2022). Thailand's food business has flourished as wealthy industries in Asia, enticing both Thais and foreigners at low prices. Thailand's food industry is a widespread tourist fascination with global tourists in quest of the best food at the cheapest costs depending on

where one travels in Thailand from street sellers to fine-dining restaurants serving international cuisine and local specialties. Many foreigners have discovered chances in Thai food industries to make their fortunes by exporting goods overseas (Boonpienpon, 2017, OECD, 2017, OECD, 2019, OECD, 2020, & Hotels.com, 2022).

The food industry in Thailand plays a significant role in the financial value of the country under the plan of Thai Food 4.0. The food industry is the greatest venture capital and additional value. The value of the Thai food industry is yearly 2.5 million baht as reported by Government Savings Bank Research Center (GSB, 2020(. The estimated output value of related industries will be a total economic value of more than 5 trillion baht annually. It is the added value of more than 20 percent of the gross domestic product (GDP). It is the peak in the industrial sector, and it is likely to constantly grow unlimitedly (Kumpirarusk, & Rohitratana, 2018). Furthermore, Thailand has launched a project of smart future food product development to increase added value for better economic growth of the country. The foods are manufactured to accomplish the guarantee related to the expenditure of the global market. This great task for industry leaders is that Artificial Intelligence (AI) is established in the production process with various advantages to using it. AI modification and application in the food industry has happened for decades, hence it is even now expanding ceaselessly (Corney, 2002, Doganis, et al., 2006, Jones, & Pimdee, 2017, Kumar, & Kalse, 2021, & Mavani, et al., 2021).

Lastly, Thailand's food industry is the great significance to response food demands of the world's population as the "kitchen of the world" and to increase the national economic benefit with government policy support. Additionally, it supports food safety in the region. It assists to stimulate the economy and to contribute for the quality of life and people's health in the region. Consequently, it is the responsibility of organizational leaders to express TLC in management alteration to effortlessly pass tasks (Rahman, et al., 2012, GSB, 2020, & Mavani, et al., 2021). However, on the challenges of the food industry, in international competitive perception, it was revealed whether it is a medium-sized, large, or small-scale operation. AI and automation technology are needed to fight competition (OECD, 2017, Hershanty, & Jafrizal, 2021, Mavani, et al., 2021, & Kumar, & Kalse, 2021).

Importance of Transformational Leadership Competency (TLC) for Balanced Scorecard Management (BSM)

Transformational Leadership Competency (TLC) is the backbone of knowledge, skill, and ability of food industry leadership roles. They need to perform as good followers and good

team leaders in the meantime. Furthermore, they have a talent for problem-solving and inspirational concepts to make potential collaboration as well as conquer difficulties and being team consultants (Alzghoul, Algraibeh, Khawaldeh, Khaddam, & Al-Kasasbeh, 2023). These include leadership abilities, vision perception, creation, team leader, quick approach, accurate assessment, rapid conflict resolutions (win-win), project supervision, making employee involvement, coaching and effectively training peers and subordinates (Hollenbeck et al., 2006; John, 2010, Laguna, et al, 2012, Kremer, et al., 2019, & Lim, & Ok, 2021). TLC is recognized as an endeavor to concentrate on the people and way of a team, rather than physical assets with the intention to develop manpower, parties, and corporations through ethical values, communication skills, and democratic practices to build great leaders, Transformational leaders share their advantage of powers for their members to expand their abilities while creating a confident situation in which everyone in the set can achieve their own goals (Davidson, et al.,2012, Mittal, & Dhar, 2015, Ouakouak, & Ouedraogo, 2017, Falahat et al., 2020, & Mbindyo, et al., 2021). The power of transformational leadership to motivate member innovation and creativity can make the structural development and assess the management role of intrinsic encouragement (Flavia, et al., 2012, Mittal, & Dhar, 2015, Inbavanan, 2017, Shafi, et al, 2020, & Mbindyo, et al., 2021).

The TLC with “4I’s” (Four I’s) comprises of 1) Idealized Influence (II) refers to leaders who act as a role source or prototype for followers (Bass, 1998, & Bass, Bass, 2008). Valuable transformational leaders will be praised as faithful, honest, and respected, similarly, they will be recognized and appreciated to work together. The followers will make an effort to act like the leaders to achieve these characteristics. Nevertheless, leaders should have precise visions and regularly convey competencies, therefore they can administer their emotions in critical conditions. Additionally, they have great ethics, good integrity, and steady discipline to eliminate conflict of interest but they can make benefit others and parties. They also express their intelligence)Flavia, et al., 2012, Inbavanan, 2017, Mbindyo, et al., 2021, & Chandasuwan, et al, 2022). The qualified leaders will show their efforts, capabilities, and self-possession, with tangible purposes, mindsets, and trusts. These will inspire the followers by enhancing their self-esteem, loyalty, and confidence.

Eventually, the followers will articulate loyalties and self-confidence, greatly assisting the leaders with reciprocal objectives and the followers have a similar feeling to reach the expected objectives. The followers will imitate the leaders' behavior to create self-assurance, self-esteem, and success)Mohsen and Mohammad, 2011, Mbindyo, et al., 2021, &

Chandasuwan, et al, 2022). Subsequently, transformational leaders will maintain their control to reach the structural goals and work requirements. 2) Inspiration Motivation (IM) recommended that the leaders operate on the path of fundamental encouragement and challenge the followers (Bass,1990 & Bass, & Bass, 2008). Leaders should nurture the vital team spirit of followers to communicate their enthusiasm with a constructive mind and positive attitude. Moreover, leaders convince them to understand the future vision and leaders should obviously convey self-dedication and commitment to shared goals and visions for the follower (Abbas & Asghar, 2010; Addai, Avor, Ofori, & Tweneboah, 2019)

However, leaders should express their beliefs and convey a clear determination to reach objectives. Leaders aid followers to pursue ahead of their interests with forethought and company intent. Leaders aid followers to enhance their devotion to long-term objectives. It is often found that inspiration occurred through beliefs and attitudes. 3) Intellectual Stimulation (IS), this is a facility for followers to be able to cope with their problems and encourage followers' creativity (Bass,1990 & Bass, & Bass, 2008). IS means leaders require to promote their followers to be concerned about problems happening in the work unit. Leaders let them discover new solutions that are better than before and generate somewhat new ones. Leaders have organized ideas and trouble explaining them (Flavia, et al., 2012, Birasnav, 2014, & Kremer, et al., 2019(. Leaders should establish a framing hypothesis by considering the crisis. Leaders should be able to face old conditions in new practices and offer incentives and boost the new ideas concerned in problem-solving. Leaders should inspire followers to struggle to get new resolutions to solve problems. Leaders induce followers to feel that problems are challenging, and it is a great occasion to solve problems together. Leaders will reassure their followers that every problem has an answer (Daft, 2015, & Dartey-Baah, & Agbozo, 2021). Although some problems have several hurdles. Leaders will give proof that all hurdles can be overcome through the partner's collaboration for problem-solving. Followers are aided to ask questions about their own beliefs, attitudes, and values and are fostered in their intelligence. It is an important part of developing a follower's competence to know, understand and get solutions by himself. 4) Individualized Consideration (IC), leaders have relationships relating to a person as a leader to offer individualized care and consideration to followers and to make followers feel notice self-respect and self-value through the action of leaders as a trainer and mentor to grow followers (Bass,1990& Bass, & Bass, 2008). The leader will pay specific interest to the desires of each person for the achievement and development of the individual. The leader will construct the follower competency to reach a higher level. Also, the leaders will

offer the followers by giving them the opportunity to collect the new thing, producing a beneficial, supporting environment by considering the distinctions between individuals in terms of demands and necessities)Xiao-Hua & Jane, 2012, Stevenson, 2014, Auareesuksakun & Chuntuk, 2016, Mohammad, & Mohammed, 2018, & Falahat et al., 2020).

Balanced Scorecard (BSC) is known as an effective implementation measurement. However, the success of food industry management requires the TLC of the leader to operate based on the BSC management concept. Nevertheless, Balanced Scorecard (BSC) is used for performance measurement, strategic objectives, strategy maps, the strategy management system, and future opportunities (Hammood & Dammak, 2023). Most organizations include various business and support units, each occupied by trained, and skilled executives. But the efforts of individual units are not organized, resulting in tensions, lost chances, and reduced execution. Robert S. Kaplan and David P. Norton argue that the responsibility for this crucial arrangement lies with the company headquarters. The authors utilize their innovative BSC management system to corporate-level strategy, discovering how extremely successful businesses are (Kaplan, & Norton, 2006). Each perspective of BSC comprises related strategic goals, indicators, and measures to attain them. One should emphasize the fact that the concept persists open for integrating further related stakeholders or perspectives, for instance, an environmental perspective (Kaplan and Norton, 1997, & Išoraitė, 2008).

The BSC was originally established principally as a measurement system and as an answer to a critique concerning the independent measurement of the performance ability of a company. It was organized through four different perspectives (Išoraitė, 2008) including 1) The financial perspective includes financial ratios and various cash flow measures, the customer perspective includes the amount of time spent on customer calls and customer survey data, the internal perspective includes the length of time spent prospecting and the amount of rework required, and 4) the learning perspective include the amount of revenue that comes from new ideas and measures of the types and length of time spent training staff.

Moreover, the vision and the strategy of a company are the starting point of the Balanced Scorecard. The BSC takes the vision, strategy, and missions are intangible assets and translates them into tangible objectives and measurements. The measurements of the BSC are used to achieve the succeeding management processes: 1) clarifying and translating vision and strategy, 2) communicating and connecting strategic objectives and confirming, 3) planning, setting targets, and positioning strategic initiatives, and 4) expanding strategic response and learning. The measures function as a linkage between the strategy and operational action. The

core question is the collection of goals and measures to examine the performance of the vision and the strategy. BSC covers 1) operating an overall organizational assessment. 2) classify strategic themes, 3) identify perspectives and strategic objectives, 4) create a strategy map, 5) run performance metrics, 6) adjust and prioritize strategic initiatives, &) automate and communicate, 8) execute the balanced scorecard throughout the organization, and 9) gather data, assess, and revise (Kaplan and Norton, 2006, Kaplan and Norton, 2008, & Išoraitė, 2008). The various advantage and challenges of BSC, the primary advantage are that it facilitates organizations to translate strategy into action. To define and communicate performance metrics associated with the whole strategy of the company, the DSC gives the strategy to life. It also allows employees at all levels of the organization to focus on critical business drivers. The main challenge of this system is that it can be complicated and time-consuming to execute. Kaplan and Norton originally expected that it would take an organization more than two years to entirely execute the system all over the organization. Some organizations execute it quicker, for some, it takes longer. The bottom line is that the BSC needs sustained, long-term dedication at all levels in the organization effectively (Ghosh, & Mukherjee, 2006, (Kaplan and Norton, 2008, Išoraitė, 2008, Yang et al., 2010, &Sanguanwongs, & Kritjaroen, 2023a).

The recent study of Sanguanwongs, & Kritjaroen, 2023a, on the "Transformational Leadership Competency Influencing Balanced Scorecard Management of Food Industry in Thailand" aims to determine the transformational leadership competency associated with balanced scorecard management of the food industry in Thailand. The finding revealed that Canonical Analysis was used to determine the correlation between 2 set variables of TLC and BSC. The finding illustrated that there is a 58.70 percent between TLC and BSC. The Idealized Influence (II) component of TLC showed the highest correlation with the Internal Business Process perspective (IB) of BSC with 54.70 percent. The Individual Consideration (IC) component of TLC correlated to the Learning and Growth perspective (LG) component of BSC with 43.00 percent, and the Intellectual Stimulation (IS) component of TLC correlated to the Customer Perspective (Cu) component of BSC with 33.20 percent. Finally, the Inspirational Motivation (IM) component of TLC correlated to the Customer Perspective (Cu) with 31.00 percent. TLC and BSC are used as essential techniques to alter the organizational vision and goals to actual practices by developing intangible assets to be tangible assets of organizational management. Consequently, TLC leaders can integrate the measurement of intangible assets into their management systems by adopting the BSC management together. But in this study, the ESG concept is introduced in the research to develop an effective model of

Transformational Food Industrial Organization with Public Concern for data analysis. These provide the food industrial leader to get deeper and broader perceptions and understanding to reach the food business success through their powers and potential. During the next 15 years, it was adopted by thousands of private, public, and nonprofit enterprises across the globe. BSC was extended and broadened the idea into a management device for describing, communicating, and employing strategy. BSC was described as the roots and motivation for the unique BSC in addition to the successive innovations that attached it to a greater management narrative. In this research, the ESG concept is introduced as an intermediate variable to clarify the Effective of TLC affecting BSC management.

Transformational Organization Management (TOM) with Public Concern

Public concern is introduced to TOM because the organization leader must pay attention to the Environment, Social, and Governance (ESG) to meet sustainable development (Potter,) Most people realized ESG importance during this decade (Potter, Doppelt, 2017, Mostafiz, et al., 2019, Eccles, et al., 2017, & MSCI, 2022). External pressures play an essential factor to run the organization and cause it to modify to keep up with the globalization trend. These are competitive situations or the expectations of stakeholders to alter and another internal thrust is also faced. The active vision or new goals of the organization is required to take awareness of TOM (Bridges, 1991, Stevenson, 2014, Khalili, 2016, & Inbavanan, 2017, & Shafi, et al., 2020). TOM is an organization that has adapted and needed to choose a technique, and a design to go along with their background or situation. However, numerous models or patterns to be selected for modification, so this selection requires an extremely skillful person because the organization expects a balance concerning the detrimental effects of alteration. Diverse researches are relevant to TOM, such as Concepts of Human Behavioral Science by Thaler (Nudge Theory(,)Thaler, & Sunstein, 2008), Prosci's Organizational Change Management Model (ADKAR model),)Prosci, 2003), Lewin’s Change Management Model, (Lewin, 1951), Kotter’s change management theory, (Kotter, 1995), Bridges’ Transition Model, (Bridges, & Bridges, 2017).), McKinsey's Conceptual Framework for Change Management (McKinsey 7S Model), (Cox, et al., 2019(, and the 5-order pattern of feelings of those pretentious by Kübler 's transformation (Kübler-Ross Five Stage Model(,)Kübler, 1969). These cover the gaps in tools for managers to use for supporting organizations to select the right model for themselves or integrate multiple forms together.

However, the public concern of food companies should consider the ESG concept. ESG is a sustainable corporate development concept that stands for Environment, Social, and Governance. ESG is presently fashionable with investors around the world. Because it is a concept that investors use when considering investments. It will focus on doing business, which takes into account the 3 main responsibilities: the environment, society, and governance (Potter, Doppelt, 2017, Mostafiz, et al., 2019, Eccles, et al., 2017, & MSCI, 2022). Environment is a criterion that considers a company's environmental responsibility. Social is a criterion that measures how a company manages its relationships and communications with its employees, suppliers, customers, or other stakeholders, and Governance is a principle that measures how a company manages its governance relationships. for efficient, transparent, verifiable management and considering stakeholders. The ESG concept helps build credibility for businesses. by reflecting the roles and responsibilities of the business towards the stakeholders and presenting results of business development for sustainable growth (Kaewhao, 2022, & MSCI, 2022). Currently, both investors individual investors and institutional investors are increasingly concentrating on sustainable investments. Or investing in securities that operate according to the framework of the ESG sustainability concept. A total of 475 institutional investors were studied in the United States, Europe, and Asia Pacific. The results of the survey found that the majority of institutional investors' portfolios, 80 percent, are allocated to ESG-compliant organizations There is also a study from the Financial Planning Association, a 2020 study, it was conducted with 242 financial advisors in the United States. The study found that in 2020, Financial advisors recommended their investors to invest in ESG funds over the past year significantly increased. In addition, research from the Stock Exchange of Thailand reveals that sustainable investments can bring greater returns. The result of the experiment of organizing a portfolio of Thai listed companies according to the Dow Jones Sustainability Indices (DJSI) (DJSI are a family of best-in-class benchmarks for investors who have recognized sustainable business practices) over the past 5 years.

According to the survey results of many countries around the world including Thailand, sustainable investments are becoming more and more influential in the investment market. The Stock Exchange of Thailand has established the Sustainable Stocks Criteria, or THSI, whereby limited companies that have been assessed in all 3 dimensions will be classified as sustainable stocks that can attract investment among investors. In 2020, the past There are 124 companies categorized as Sustainable Stocks. which increased from the previous year as many as 51 companies, an increase in the number of companies in the group. The increment in the number

of companies in the sustainability sector can show that businesses and investors are becoming more active in conducting business in accordance with ESG sustainability frameworks. Moreover, the small capitalist and institutional investors pay more attention to ESG, this will have a long-term positive impact on the stock market and for the nation to grow steadily and sustainably. This is because listed companies operate with an emphasis on business growth along with improving well-being in both social and environmental dimensions. (Eccles, et al., 2017, Kaewhao, 2022, & MSCI, 2022). It is obviously seen that Most investors are aware of and recognized the importance of ESC integration in their business. The food industry in Thailand should pay attention to integrating into their business with the public concern because public concern means any matter on which it is in the interest of the public to be published, including but not limited to matters concerning all branches of government, politics, public health and safety, law enforcement, administration of justice, consumer and social interest, the environment, economic matters, the exercise of power, science, art, and culture. Hereby, this research will emphasize the concern of environment, social, and governance with regard to all creatures and other living things to live in a better environment, social, and governance.

Model of Transformational of Food Industrial Organization with Public Concern

Currently, small, and medium enterprises (SMEs) are noticed as engines of economic growth and technological advancement in vibrant and competitive markets (Bala Subrahmanya and Loganathan, 2021; Xu, et al., 2021). They play an unavoidable role through their intrinsic ability to constantly invent new products and processes (Su, et al., 2020). SMEs engage an essential strategic position in the global economy, not least because of their important contribution to employment, exports, and national income, especially through exports, where the development of new products can help the firms to overcome barriers that can prevent internationalization (Paul, Parthasarathy, & Gupta, 2017, & Su et al., 2020). In recent years, the role of internationalization and innovation in the context of SMEs are paid attention to the international food industry to overcome malnutrition and hungry decrement (Sadeghi & Biancone, 2018, & FAO, IFAD, UNICEF, WFP & WHO, 2022).

Victory in Thailand's Food Industry needs to develop the model of transformational food industrial organization with public concern. This hypothesized model will comprise exogenous latent TLC, intermediate latent variable of ESG, and endogenous latent variable of BSC. The exogenous latent TLC will be confirmed by Confirmatory Factor Analysis (CFA) by using 4 observed variables of Inspirational Motivation (IM), 2) Intellectual Stimulation (IS), 3)

Idealized Influence (II), and 4) Individual Consideration (IC). the intermediate latent variable of ESG will be confirmed by Confirmatory Factor Analysis (CFA) by using 3 observed variables Environment (En), Social (So), and Governance (Go). The endogenous latent variable (result from latent variable) of BSC will be confirmed by Confirmatory Factor Analysis (CFA) by using 4 observed variables of Financial Perspective, Customer Perspective, Internal Process of Business, and Learning and Growth Perspective. The statistical values that are used to verify χ^2/df are Critical Number (CN), Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Root Square Error of Approximation (RMSEA), and Root Mean Squared Residual (RMR) (Thach, & Thompson, 2007; Bootrach, et al., 2015a; Thiengkamol, 2016; & Sanguanwongs, & Kritjaroen, 2023a).

Finally, to encourage food safety in Thailand and to reach the international objectives to encourage the national, regional, and local community food guarantee, the public concern is integrated into the organization, promotion, and manufacturing process, these lead to the success of SMEs of food industrial business by using the Model of Transformational of Food Industrial Organization with Public Concern (Thiengkamol, 2011, Tumpracha et al, 2012b, European Union, 2020, Falahat et al., 2020, Charoen Pokphand Foods Public Company Limited, 2021, Hershanty, & Jafrizal, 202; Kumar, & Kalse, 2021; Chandasuwan, et al., 2022; FAO, IFAD, UNICEF, WFP, & WHO, 2022; & Sanguanwongs, & Kritjaroen, 2023a).

During the 21st century era, the food industry of Thailand requires leaders who have TLC characteristics and ESG concepts to integrate the management process with BSC measurement to incorporate in the whole administration approach of SMEs company Moreover, they should have the expertise to comprehend the organizational visions, goals, target, and achievement in leading the food industry organization by leading the team work to understand and to having confidence in the leaders and endorse to their organizations (Kaplan, & Norton,2008; Išoraitė, 2008; & Yang, et al., 2010). Many food industry organizations in Thailand have had success in managing organizational change, such as Thai Union Group Public Company Limited. Many food industry organizations in Thailand, which has been chosen as a member of the Sustainability Index of the Dow for seven consecutive years and is ranked 2nd in the world's food products industry with sustainability by continuous growth (The S&P Global Corporate Sustainability Assessment (CSA), 2020). The leaders use the production and product management information, devotion to the quality system of production, technology, and management with environmental conservation, social welfare, and good governance in the organization with and labor focus as well as TLC introduction based on

management result of BSC practice (Išoraitė, 2008; Kaplan, & Norton, 2008; Auareesuksakun & Chuntuk, 2016; Mohammad, & Mohammed, 2018; Falahat et al., 2020; Kaewhao, 2022; Global Compact Network Thailand, 2022; & Sanguanwongs, & Kritjaroen, 2023a). It stated that the primary success factor was the vision and leadership performance. But these management principles are not transmitted to be academic work for organizations to follow easily. It would be helpful if this research could explain this success model as a whole picture to accomplish the actual effective food industry organization. The study of change management in the food industry is required systematically but there has not been a directly studied of a systematic leadership change that TLC, ESG, and BSC in the food industry based on public concern (Kaplan, & Norton, 2008; Doppelt, 2017; Falahat et al., 2020; Kaewhao, 2022; Sanguanwongs, & Kritjaroen, 2023a). A leadership style that fits the challenge, and the competence of a leader in the specific food industry. In conclusion, there is a lack of systematic research on the content of specific leadership transformation for the food industry, therefore, it is important for this research to identify the model development of transformational food industrial organizations with public concern by confirmation with statistical values.

RESEARCH OBJECTIVE

The research objectives are as followings:

- To determine the direct effects of TLC on ESG.
- To determine the direct effects of TLC on BSC.
- To determine the direct effects of ESG on BSC.
- To determine the indirect effects of TLC on BSC.

HYPOTHESIS AND CONCEPTUAL FRAMEWORK

H1: TLC has a direct effect on ESG.

H2: TLC has a direct effect on BSC.

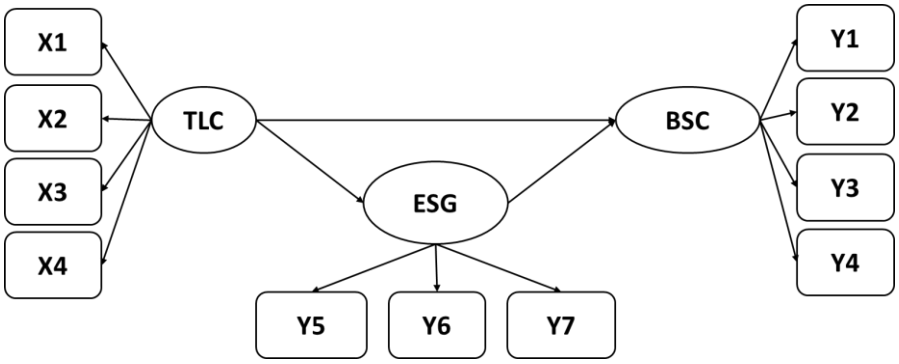
H3: ESG has a direct effect on BSC.

H4: TLC has an indirect effect on BSC.

The conceptual framework shows that the TLC exogenous latent variable composes of 4 observed variables of 1) Inspirational Motivation (IM), 2) Intellectual Stimulation (IS), 3) Idealized Influence (II), and 4) Individual Consideration (IC). The ESG intermediate latent variables comprise 3 observed variables of Environment (En), Social (So), and Governance

(Go). BSC's endogenous latent variable comprises 4 observed variables 1) Financial perspective (Fi), 2) Customer Perspective (Cu), 3) Internal Business Process perspective (IB), and 4) Learning and Growth perspective (LG). The Hypothesized model is shown in Figure 1.

Figure 1. Hypothesized Model of Transformational Food Industrial Organization Management with Public Concern



Source: Prepared by the authors (2023).

METHODOLOGY

Population

The population was CEOs who were representatives of SMEs food industry business organization that was only juristic persons registered with the Department of Business Development, Ministry of Commerce, Thailand. There are 6,411 CEOs. The population is distributed into 3 groups according to the definition of the Office of Small and Medium Enterprise Promotion (OSMEP) as follows:

(1)Large organizations have employees of more than 200 people with an income of more than 500 million Baht.

(2)Medium organizations have employees of less than 200 people with an income of less than 500 million Baht.

(3)Small organizations have employees of less than 50 people with an income of less than 100 million Baht.

Sample Group

The sample groups are Chief Executive Officers (CEOs) of business organizations in the food industry of Thailand. The sampling method was quota selection according to the employee numbers and income of the organization from each category. The size of the sample was calculated by 10 times of observed variables. In this study, there are 11 observed variables, the minimal sample size is 110 CEOs but in this study, 150 CEOs were used for data collection. The micro-organization is excluded with the reason that this scale organization does not have

enough money to support the ESG management. Moreover, this is proved by the statistic verification that the model cannot be verified.

Research Instrument

The questionnaires with 5 Likert's scale were used for each item evaluation by starting from 1 as strongly disagree to 5 as strongly agree. The content validity was evaluated by 3 experts and the accepted value was more than 0.5 and reliability was determined by Cronbach's correlation and the accepted level was higher than 0.8 (Hair, et al., 2010; & Thiengkamol, 2016).

The TLC consists of 1) Inspirational Motivation (IM), 2) Intellectual Stimulation (IS), 3) Idealized Influence (II), and 4) Individual Consideration (IC). The reliability and validity met the criteria of higher than 0.80. Moreover, The BSC comprises 1) a Financial perspective (Fi), 2) a Customer Perspective (Cu), 3) Internal Business Process perspective (IB), and 4) a Learning and Growth perspective (LG). The reliability and validity of BSC met the criteria of higher than 0.80. The ESG comprises 1) Environment, 2) Social, and 3) Governance. The reliability and validity met the criteria of higher than 0.80. The details were presented in Table1.

Table 1. Reliability and Validity of ESG

ESG	Reliability	Validity	code
1) Environment			
En1 Organization pays attention to efficiently using energy	0.907	1.00	En1
En2 Organization is cautious about pollution emissions	0.907	1.00	En2
En3 Organization is cautious about making impacts on climate change	0.907	1.00	En3
En4 Organization pays attention to waste control	0.907	1.00	En4
En5 Organization pays attention to preserving natural resources	0.907	1.00	En5
En6 Organization pays attention to animal welfare	0.907	0.67	En6
2) Social			
So1 Organization pays attention to human rights	0.913	1.00	So1
So2 Organization pays attention to the child and forced labor	0.913	1.00	So2
So3 Organization pays attention to community engagement	0.913	1.00	So3
So4 Organization pays attention to employee health, the safety of customers and people in society	0.913	1.00	So4
So5 Organization pays attention to relationship values with stakeholders.	0.913	1.00	So5
So6 Organization pays attention to employee relations	0.913	1.00	So6
3) Governance			
Go1 Organization pays attention to the quality of corporate governance	0.738	1.00	Go1
Go2 Organization pays attention to the independence of executive committees	0.738	1.00	Go2
Go3 Organization pays attention to conflicts of interest	0.738	1.00	Go3
Go4 Organization pays attention to executive compensation	0.738	1.00	Go4
Go5 Organization pays attention to transparency and disclosure	0.738	1.00	Go5
Go6 Organization pays attention to shareholder rights	0.738	1.00	Go6

Source: Prepared by the authors (2023).

Sampling Method

CEOs or organizational representatives were selected with Simple random sampling by picking from the company name list of the Administration Sector of the Department of Industrial Promotion, Ministry of Industry. The number of companies was calculated by the percentage of size proportion. The real sample size for large size was 25 companies (6.1%), the real sample size for medium size was 32 companies (7.8%), the real sample size for small size was 2148 companies (36.0%), and the real sample size of micro size was 206 companies (50.1%). The questionnaire was used to collect data from 411 CEOs of the SME food industry in Thailand.

Data Analysis

Descriptive was used for demographic explanation and confirmatory factor analysis was conducted for leadership competency factor and transitional organization management.

The questionnaire was employed for data collection from 411 CEOs in the food industry that was classified into 4 categories as mentioned above.

The data were analyzed with the program IBM SPSS, Version 26. After the evaluation of the content validity of items of TLC and BSC met the standard criteria of more than 0.5, Then the reliability of 27 items of TLC was more than 0.75. The latter step was the calculation of the descriptive data (max, min, mode, median, and mean) on the 30 items, as well as kurtosis, skewness, and standard error. This was done to determine whether the data vary significantly in normality. Further, the TLC scale was confirmed by using factor confirmatory factor analysis CFA), model fit indices (to validate the factor analysis), reliability (composite reliability and Cronbach's alpha), and face validity analysis was conducted by 3 experts in the field of organization management and leadership competency by considering on)Index of Congruence: IOC) with the acceptant value of more than 0.50 for validity and 0.7 for reliability. The results of TLC with Confirmatory Factor Analysis (CFA) cover 4 components of Inspirational Motivation (IM) with 7 items, Intellectual Stimulation (IS) with 6 items, Idealized Influence (II) with 9 items, and Individual Consideration (IC) with 3 items. The BSC comprises 1) Financial perspective (Fi) with 3 items, 2) Customer Perspective (Cu) with 3 items, 3) Internal Business Process perspective (IB) with 3 items, and 4) Learning and Growth perspective (LG) with 3 items (Sanguanwongs, & Kritjaroen, 2023a). The ESG comprises Environment (En) with 6 items, Social (So) with 6 items, and Governance (Go) with 6 items.

Descriptive Statistics

Mean, standard deviation, skewness, and kurtosis were calculated to highlight the descriptive statistics. The normality of data was ensured by calculating kurtosis and skewness (coefficients of normality) with the standard error (S.E.), falling within the range of 1.96 to -1.96, thus indicating the normality of data (Malhotra & Dash, 2009). Moreover, the results of the widely followed tests of normality, Shapiroe-wilk, and Kolmogorove-Smirnov test was used to determine the normality test and it was satisfactory with a p-value of more than 0.05 for each item (Shapiro, & Wilk, 1965; & Razali & Wah, 2011). The results of normality tests are in the acceptable values. The results of normality tests are presented in Table 2.

Table 2. Mean, S.D., Skewness, S.E., Kurtosis, and S.E. of ESG

	Sample (n=411)					
Code	Mean	S.D.	Skewness	S.E.	Kurtosis	S.E.
En1	3.341	0.0297	1.039	0.12	0.791	0.24
En2	3.569	0.031	-0.079	0.12	-0.258	0.24
En3	2.993	0.036	0.202	0.12	0.918	0.24
En4	3.562	0.032	0.358	0.12	-0.362	0.24
En5	2.998	0.038	0.23	0.12	-0.715	0.24
En6	2.988	0.038	0.241	0.12	-0.75	0.24
So1	3.294	0.031	0.751	0.12	0.743	0.24
So2	3.180	0.035	0.381	0.12	0.493	0.24
So3	3.129	0.035	0.173	0.12	0.213	0.24
So4	3.185	0.034	0.358	0.12	0.282	0.24
So5	3.151	0.036	0.199	0.12	0.239	0.24
So6	3.173	0.036	0.106	0.12	0.471	0.24
Go1	3.051	0.030	1.307	0.12	10.388	0.24
Go2	3.046	0.030	1.343	0.12	10.285	0.24
Go3	3.024	0.028	0.007	0.12	0.178	0.24
Go4	3.063	0.031	-0.036	0.12	-0.348	0.24
Go5	3.071	0.030	1.345	0.12	10.683	0.24
Go6	3.156	0.033	0.91	0.12	5.801	0.24

Source: Prepared by the authors (2023).

Inferential Statistics

SEM analysis is used to identify and measure the associations among three sets of variables including TLC, ESG, and BSC. AMOS is statistical software and an added SPSS module and is specially used for Structural Equation Modeling, path analysis, and confirmatory factor analysis (Thiengkamol, 2016).

RESULTS AND DISCUSSION

General Information of CEO of SMEs

General Information of CEO of SMEs revealed that working years at the supervisor level had a mean of 15.35 years, the number of projects that you have brought changes to the project with mean of 11.85 projects, size of business and income (million baht per year) with the mean of 1,502 million baht, and a number of events used for change management in the past 10 years with a mean of 6.5 events respectively.

Latent Variable Construction

Each latent variable was constructed and verified the confirmation by using confirmatory factors to characterize the congruent issues of each item. Furthermore, the number of items utilized to determine an observed variable. It involves at least 3 items for each observed variable. Another criterion is each latent variable necessitates at least 3 observed variables for confirmation. Therefore, the number of items used to confirm the observed variables and latent variables constructs are shown in Table 3.

Table 3. Number of Items, Observed Variables, and Latent Variable Constructs

Latent Variable	Observed Variables	Number of Items
TLC	X1 Inspirational Motivation (IM) X2 Intellectual Stimulation (IS) X3 Idealized Influence (II) X4 Individual Consideration (IC)	27
ESG	Y5 Environment (En) Y6 Social (So) Y7 Government (Go)	18
BSC	Y1 Financial Perspective (Fi) Y2 Customer Perspective (Cu) Y3 Internal Business Process Perspective (IB) Y4 Learning and Growth Perspective (LG)	12

Source: Prepared by the authors (2023).

Model of Transformational Food Industrial Organization Management with Public Concern

The result of the structural equation model

The confirmation of the structural equation model is implemented by the SME entrepreneur with consideration of the size of the business. Firstly, if all 411 executives are used to verify the model. It is found that the SEM model cannot run to meet the fitness. After SME organization is carefully considered. It revealed that the appropriate Micro size could be not included in the SEM verification. Thus, the SME with 150 samples used to verify the model

is small, medium, and large size are compatible with the reason of the readiness to use ESG for sustainable management. Moreover, 150 samples are enough to employ for SEM verification according to the criteria that the sample size needs to be 10 times the number of observable (Hair, et al., 2010). This study, contains 11 observables since TLC comprises 4 observables, ESG contains 3 observables, and BSC composes of 4 observables.

A measurement model is created to investigate the effects of Transformational Leadership Competency (TLC) and Environment, Social, and Governance (ESG) or Public Concern toward a Balanced Scorecard (BSC). Using the structural equation model follow the research conceptual framework and test the consistency between the structural equation model and the empirical data based on the hypothesis provided.

H1: TLC has a direct effect on ESG.

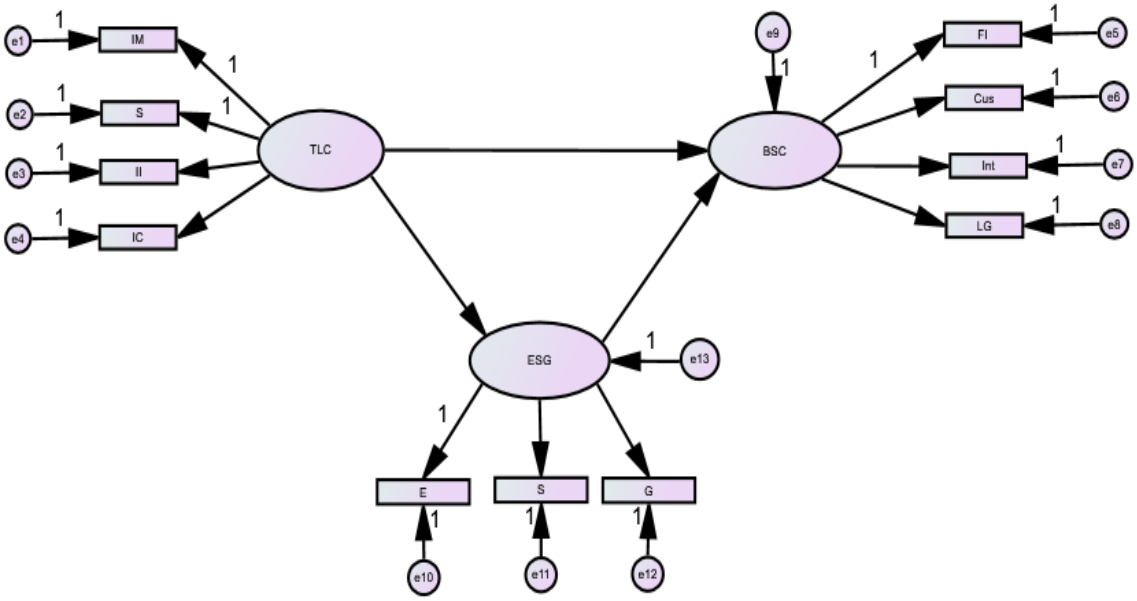
H2: TLC has a direct effect on BSC.

H3: ESG has a direct effect on BSC.

H4: TLC has an indirect effect on BSC.

This research obtained the criterion of goodness-fit of Structural Equation Modeling of which the result can be seen in Figure 2. which presents that the goodness of fit is below degree acceptance. Therefore, the structural equation modeling is inconsistent with empirical data.

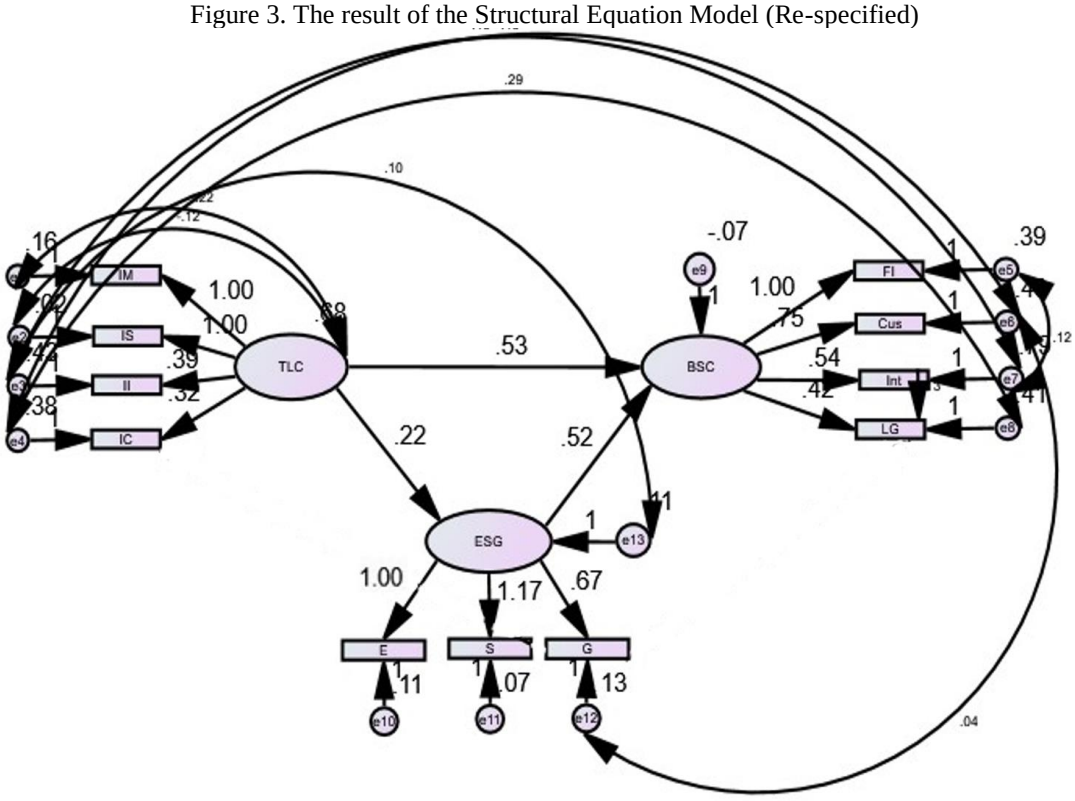
Figure 2. The result of the Structural Equation Model



Source: Prepared by the authors (2023).

From the results that the model does not fit with the empirical data, the researcher adjusted the model to the recommendations of the adjustment index (Modification Index), which makes the test results of the structural equation model result shown in Figure 3.

Figure 3. The result of the Structural Equation Model (Re-specified)



Source: Prepared by the authors (2023).

This research obtained the criterion of goodness-fit of the structural equation model as shown in Table 4. The result exceeds the goodness of fit than the acceptance value. Therefore, the structural equation model of TLC, ESG, and BSC consists of empirical data.

Table 4. The goodness of fit of structural equation model TLC, ESG, and BSC.

Statistics of measure consistency	**Result (Original)**	**Result (Re-specified Model)**	**Degree Acceptance**
P-value	0.000	0.071	>0.05
CMIN/DF	43.245/42=9.196	43.245/31=1.395	<2.0
RMSEA	0.235	0.51	<0.05-0.08
IFI	0.651	0.988	0.9-1.0
TLI	0.537	0.978	0.9-1.0
CFI	0.646	o.987	0.9-1.0
GFI	0.772	0.952	0.9-1.0

Source: Prepared by the authors (2023).

A hypothesis testing of the structural equation modeling related to the regression coefficient results of each path, Consideration by the probability value. p<0. 05, means there is a significant effect. The results of the direct effect among the variables are shown in Table 5.

Table 5. Direct Effects among Research Variables

Variable			Std. Regression Weight	Estimate	S.E.	C.R.	P
TLC	➡	ESG	0.479	0.219	0.064	3.413	***
TLC	➡	BSC	0.895	0.534	0.156	3.431	***
ESG	➡	BSC	0.410	0.522	0.147	3.550	***

Source: Prepared by the authors (2023).

The path analysis of all variables has a positive relationship, which is based on the hypothesis which statistically significant at the level of 0. 05. However, the hypothesis testing of direct effects shown in Table 5 specifies that hypothesis 1 (H1): TLC has a direct effect on ESG, (H2): TLC has a direct effect on BSC, and (H3): ESG has a direct effect on BSC, This is indicated by the value of the critical ratio (CR) that the CR is 3.413, 3.413 and 3.550 (higher than 2) and all p- values (0.001 greater than 0. 05) respectively. In a standardized form, the factor-loading coefficient is not less than 0. 4. Hereby, the covariance between TLC and ESG, TLC and BSC, and ESG and BSC are 0.479, 0.895, and 0.410. This, indicate that TLC has a significant direct effect on ESG and BSC. Moreover, ESG also has a significant direct effect on BSC.

Table 6. Indirect Effects of Research Variables

Variable	Direct Effect	Indirect Effect	Total Effect
TLC ➡ESG ➡BSC	0.53	0.22x0.52=0.11	0.53+0.11=0.64

Source: Prepared by the authors (2023).

Hypothesis 4 proposes that TLC indirectly affects BSC. The result of hypothesis testing presented in Table 6 shows that the indirect effect of TLC on BSC is 0.11. Based on the calculation result TLC directly affects BSC through ESG which is act as a mediator because the total effect is greater than the direct effect (0.64>0.53). Thus, the statistical test results obtain evidence that hypothesis 4 stating that TLC indirectly affects BSC is acceptable.

TLC directly and indirectly affects BSC and ESG directly affects BSC. The ESG is a mediator variable that enhances the effect of TLC influencing BSC with 11.00 percent with an indirect effect on BSC. Since the SME companies except Micro companies have competency in ESG which is the sustainable management for these companies' level when compared to

micro companies. This suggests that the government need to issue different policy to support SME and micro level but at present SME organization includes micro, small, medium, and large company together. It is obviously seen from the budget different micro and small levels of 1 1million and 100 million budget difference However, the food industry company is required in a current situation in the global food product competition unavoidably. The different studies have indicated that the accomplishment of food industry companies in Thailand, also required the highly effective TLC to lead the organization success However, BSC was introduced as a result of organization management by cooperating with TLC and ESG together to combine for understanding the effects of TLC and ESG variables. TLC and ESG increased to 64.00 percent that higher than the TLC to BSC with only 53.00 percent. The result showed the holistic view of TLC and ESG effect on BSC can be applied to accelerate the successful management of Thai industrial food companies in SME business. This study is consistent with the study of Ondoro, (2015), that the ESG and BSC support the organization's management success. This result can be employed for other businesses of other food sectors whether food products, frozen food, preserved food, dried fruit, canned fruit, and other forms of food and fruit goods including numerous agricultural products. The micro-organization is excluded with the reason that this scale organization does not have enough money to support the ESG management. Moreover, this is proved by the statistic verification that the model cannot be verified. The food industry plays a significant role in Thailand's GDP acceleration and supports Thai citizen income and quality of life as well. Moreover, this food industry also ensures food security and is in line with the studies of Thiengkamol, 2011; and Tumpracha et al., 2012b.

The finding showed that TLC directly affects ESG and BSG with 22.00 and 52.00 percent. It is obviously seen that TLC plays an essential factor that correlated to ESG and BSC since effectively competent leadership can lead to implementing successful ESG and BSC management (Laguna, et al., 2012; Ondoro, 2015; & Sanguanwongs, & Kritjaroen, 2023a). However, ESG as a mediator variable will enhance the TLC to increasingly affect BSC with 11.00 percent, therefore Total effect of TLC on BSC will be 64.00 percent. This points out that the success of the transformational food industry will achieve if the ESG integrates into food organization management. As a result, the food organization management will be upgrading the food company to reach to be sustainable organization management with ESG or public concern. It will be required for all creators of the world to sustain the environment, and social and to create good governance. These give good impacts on the environment and quality of life including among firms, numerous countries, and sectors with an excellent attempt to reach fair

global markets (Bayraktar, & Nese, 2019; Jafari-Sadeghi, et al., 2022; Sanguanwongs, & Kritjaroen, 2023a; & MSCI, 2022).

The finding of this study of ESG integration will contribute to the food industry of Thailand to be able to compete with other countries in terms of effective food production by responding to the rapid growth of the world population as well as Thai and region's economic growth. it also aids the nation's security (Thiengkamol, 2009; Thiengkamol, 2011; Tumpracha, et a., 2012; World Economic Forum, 2018b). and serves the national food security. Finally, the Thai citizen and regional people can meet their demands for better food quality to have good health and quality of life (FAO, 2017; World Bank, 2017; & World Economic Forum, 2018a).

CONCLUSION

Recommendation from this research focuses TLC and ESG direct and indirectly affect BSC. The TLC and ESG may be introduced to study the correlation between TLC and ESG to BSC management in the food industry for other country contexts. Moreover, other management dimensions such as visions, goals, missions, organizational systems, and work performance will be incorporated as well. Additionally, the research finding, demonstrated that ESG can extend the organization's performance by using BSC. Even though there are different contexts for each country, other countries can introduce TLC and ESG to be integrated into the study of successful food companies with BSC management as well. Accomplishment will occur in the success of the food industry, the TLC and ESG directly and indirectly affect BSC management in the food industry. Moreover, in Thailand, the world kitchen is not far from the actual dream when the food industry will employ the findings of this research to implement effectively manage. This confirmed that TLC and ESG effectively increase BSC management.

DECLARATION OF COMPETING INTEREST

None

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