

Sustainable Procurement & Sustainable Distribution Influence the Organizational Performance (Economic, Social and Environmental): Moderating Role of Governance and Collaboration at Thai Food Industry

Kittisak Jermstittiparsert^{#1, 2*}, Jutamat Sutduean^{#3}, Chutipan Sutduean^{#4}

¹Department for Management of Science and Technology Development, Ton Duc Thang University, Ho Chi Minh City, Vietnam

²Faculty of Social Sciences and Humanities, Ton Duc Thang University, Ho Chi Minh City, Vietnam
Corresponding author: E-mail: kittisak.jermstittiparsert@tdtu.edu.vn

³College of Innovative Business and Accountancy, Dhurakij Pundit University, Bangkok, Thailand
³607191030012@dpu.ac.th

⁴Division of Business Administration, ASA College, New York, USA.
⁴chutipan_law@outlook.com

Abstract---The prime goals of the current paper investigate the influence of SCM practices on organizational performance with moderating roles of 'governor' and 'collaboration'. The organizational performance was measured on the basis of three dimensions such as economic, social and environmental aspects. Data was collected from Thai food manufacturers and was tested via Measurement Model and Structural Equation modeling. The study highlights influence of sustainable procurement and sustainable distribution or logistics to determine the organizational performance in Thai food industry. Moderating role of 'governance' and 'collaboration' were also examined and presented interesting outcomes. The research paper also focuses the need of considering various factors including business process, sustainability, collaboration, sustainable procurement, logistics or distribution with moderating role of governance and collaboration. Firms must strive for improving effectiveness of supply chain and organizational performance in highly competitive market.

Key words: Sustainable Procurement, Sustainable Distribution, Organizational Performance, Governance, Collaboration.

1. Introduction:

Literature has indicated increasing interest in supply chain management and associated nodes including

upstream and downstream supply chain participants. Research has given attention to supply chain management and collaboration among SC participants and term coined as supply chain collaboration [1, 2]. Scholars have embarked on necessity to address relationship among supply chain members and need to identify performance related outcomes [3]. Effective and rapid supply chain assist firms to develop business process management for faster organizational response for continuous market changes and challenges. Firms strive to develop better business understanding for key business processes, rapidly changing business operations to meet and grasp new opportunities and improvement in business efficiency by utilization of technology within different business area for supporting relevant processes [4]. Previous researchers have suggested that business process management and supply chain collaboration stated as crucial and important for performance enhancement and being competitive [5-7].

However, there is lack of empirical evidence in examining the relationship between predictors and outcomes of effective supply chain. Empirical

evidence on various markets and industries may produce diverse and interesting results for better understanding organizational development associated with business management practices and collaborative activities to generate benefits strategically. Moreover, previous studies overlooked to develop business process management to include attributes and identification of various factors in literature as they did not consider business process management in progressive manner. Research scholars have contributed in the field of supply chain collaboration but overlooked the role of supply chain activities and performance related outcomes [8, 9]. Firms need to focus on their supply chain activities for development of intra and inter organizational capabilities and competitiveness [10]. Studies have been conducted to develop conceptual frameworks for identification of interrelationship between business process management and supply chain collaboration advantages and for organizational performance among manufacturing industry of Thailand.

Regulatory authorities and stakeholders of firms focus and expected from organizations to demonstrate their business operations and clearly transparent their environmental concerns and ethical issues and behavior [11, 12]. The pressures from government authorities and stakeholders manufacturing firms has to focus their supply chain activities and incorporate guidelines of regulatory authorities for providing acceptable and sustainable products or services or combination [13]. Large number of manufacturing firms has initiated environmental concerns while implementing their supply chain or business operations as the result of intense pressure from regulatory authorities and willingness of stakeholders [14]. There are various factors leads firms for adoption of sustainable supply chain management and practices as result of pressure from institutional pressures such as government and regulatory authority [15]. Various research scholars have conducted studies and stated that government pressure drive firms to adopt sustainable supply chain management [16, 17].

Previously, research scholars have investigated supply chain practices and their influence towards performance [18, 19]. Majority of the studies examined different variables as antecedents or performance related outcomes with respect to supply chain management, research scholars have included various factors including environmental concerns.

The aim of current study is to examine sustainable supply chain practices including sustainable procurement, sustainable distribution to determine organizational performance with moderating role of governance and collaboration among supply chain actors.

Research scholars have claimed already that governance impact on SSCM and influence the relationship between supply chain practices and organizational performance from different perspectives [19, 20].

Therefore, current study entails sustainable supply chain practices including sustainable procurement, distribution to determine organizational operational performance with moderating role of governance and supply chain collaboration among supply chain actors.

Research scholars have integrated environmental concerns in activities of their supply chain [21]. The studies have been conducted on supply chain and sustainability of supply chain, as practices of supply chain has been given weighted by practitioners and research scholars for realizing the organizing and incorporation of environmental concerns and operations, as it has been recognized worldwide that environmental concerns have wider concerned by regulatory authorities and stakeholders beyond the boundary of firms [14, 22]. Firms strive to sustain their business profits and long term benefits by implementing various programs, policies and strategies, firms undertake various supply chain activities and initiatives to reduce environmental impacts associated with whole product life cycle and business operations, as these activities included products or services, business processes, raw material handling and consumption of resources to distribution of goods [23].

Government of Thailand took initiatives for promoting Thailand as the kitchen of world and has become one of largest producers while increased exports of process food items [24]. Consequently, food manufacturing of Thailand has increased their capabilities for competitive advantage. The supply chain members of food processing included growers, manufacturer, distribution units, and retailers; every node has different responsibility and deliver food products from grower or agriculture sector to the consumers as shown in figure 1 below [25].

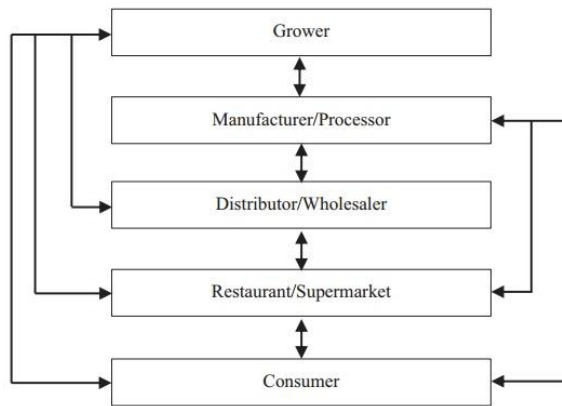


Fig 1: Source: Maloni and Brown (2006)

The firms has consider and face challenges from global good security and sustainable quality issues which is not more limited to domestic market, as global and international market has strict regulatory issues has to face. These challenges included fair trade initiatives, environmental and organic food, labor and human challenges [26]. Therefore, intense intentions has been given to food manufacturing and focuses on sustainability issues and implement sustainability in their supply chain activities for being sustain and maintain their competitive advantage and better sustainability performance among Thailand manufacturers of food industry. Manufacturers of food industry has addressed sustainability of supply chain activities through collaboration and incentive [27, 28]. Most of the challenges have been faced at upstream supply chain of food and supply chain industry located in emerging economies [29]. The limited capabilities of firms for implementation of supply chain practices among Thai manufacturing industry stated as challenged and hurdle for effective supply chain at sustainable level [30]; upstream and large scale downstream supply chain in Brazil and India or any other country are different in their sustainable supply chain capabilities [31].

Research scholars have given important and attention to sustainable supply chain collaboration as an important practice in supply chain management of any firm or industry for success and long term benefits achievements. Importance of collaboration between firms for improving in sustainable performance [32]. Moreover, higher collaboration among firms and its supply chain nodes, firms strives to gain and sustain competitive advantage as stakeholders may be internal or external has to comply with sustainable requirements and success [33, 34]. Internal resources and sustainable practices

must be part of strategic planning and policies while effective coordination among supply chain partners for improved sustainability [35].

2. Review of Literature:

Sustainable competitive advantages have been gained by Thai food manufacturing firms in global market place as emerging economies based on various resources such as Thai industrial development. Thailand is known as agricultural state, on the other hand, food manufacturing meets the need of domestic consumption but also export food products to global market and compete [30]. Various products have been exported including rice, fruit, vegetables, frozen items, sea food and poultry. The intensive transactions and movement of items are possible with effective coordination and information sharing with suppliers and clients, specifically producers such as rice mills [36]. The practices at food industry of Thailand demonstrated that there is various indicators shows successful implementation of supply chain management while coordinating with suppliers, clients via distribution and management practices.

Thai food manufacturing industry often faces sustainability issues as they have to compete in highly competitors markets. The usage of clean water as natural resources for cleansing processes, utilization of electricity for machinery, air conditions and fuel including natural gases and diesel and oil for production process and transportations which may cause damages to environmental degradation [30]. Utilization of water resources as huge quantity for production processes and may cause wastage of water, solid waste and air pollution [37]. Addition to the previous, agriculture sector of Thailand as upstream SC actor of food industry usually faces sustainability related issues and dilemmas which further leads towards shortage of water [38].

2.1. Sustainable Procurement and Organizational Performance:

The focus of firm on effective cooperation with suppliers and other participants of SCM for the purpose of development of eco friendly products considered as sustainable procurement as an important node of SCM [39]. Research scholars have evolved the concepts of sustainable supply chain management activities mostly associated with sustainable performance [40], eco design [41] and sustainable distribution [42] and investment recovery [39]. Research scholars have given expanded

literature on sustainable supply chain management as various scholars have given attention to different practices including sustainable production, sustainable design and distribution of products. There are various areas have been presented implementation of sustainable supply chain management that encompass internal and external activities and functions related to sustainable supply chain management [43]. The various initiatives included environmental influence and impact without negatively affecting any dimension of performance such as cost, functional and ethical concerns [20, 44].

Similarly, other research scholars have argued that balance between desire of society towards environmental protection and economic burden for industry [45]. The implementation of individual sustainable supply chain management found to be directly influence the results as measured by reduction of air pollution, wastage material, solid waste material and toxic material produced during process of material towards finished goods [19, 41]. Moreover, research studies have considered governance and regulatory authorities to implement environmental protection initiatives and instigate for sustainable supply chain practice including all basic functions of supply chain including sustainable procurement, manufacturing, logistics, design and investment [15]. The most likely changes in sustainable supply chain management resulted of pressures from government, regulatory authorities and other stakeholder practices which found to be significant impact from environmental and economic performance.

The current study entails the sustainable procurement as independent variable to determine and its influence on organizational performance which includes, economic, social and environmental performance.

On the basis of above following hypothesis is derived:

***H1:** Sustainable Procurement influence organizational performance at manufacturing industry of Thailand*

2.2. Sustainable Distribution and Organizational Performance:

Sustainable distribution is referred as mean to transportation of goods, finished products or services from supplying node to manufacturing processes and then finished goods towards customers with less

environmental negative impact and protection of surroundings of environment [19, 20].

Literature has spoken about expansion and implementation of supply chain and logistics or distribution of finished goods stated and identified as one of most important and crucial factor that needs to be focus for distribution and investment derived from production design and manufacturing, which covers all activities of supply chain. Research scholars has determined performance of organization on the based on supply chain activities, as they implement sustainable supply chain management practices specifically address internal and external functions for sustainability of supply chain [19]. Scholars have various major sustainable supply chain management practices including purchasing of raw material, design, logistics and investment recovery to determine the performance of firms among diverse industries and regions, including UK, USA and South East Asian such as Vietnam, Thailand, and Malaysia [19].

Firms focus on the supply chain activities to become eco-friendly and must consider environmental protection in devising strategies and policies. The supply chain must be developed and activities must be eco-friendly to minimize the negative outcomes related to performance and environment including cost reduction and functional excellence [19, 20]. Research scholars have examined the successful implementation of supply chain activities including purchasing, design of products, logistics and investment on information technology for influencing and contribute for performance of firms. The results of successful implementation of supply chain activities on the base of their capabilities of reduction in raw material consumption, wastage reduction of raw material, energy utilization and emission of toxic gases as they damage environment and raw material or inventory handling [19, 41, 46].

Research scholars have considered various constructs related to supply chain and sustainability including purchasing, distribution, design at manufacturing and logistics and their influence towards different types of performance dimensions including environmental, economic and social performance. Scholars have depicted interesting results while investigation of these relations and found that various supply chain activities influence the performance of firms. As a result mixed findings have been depicted as few studies have found positive relations between

effective supply chain and performance. Further, sustainable SCM practices found to be related and association with governance, environmental, economic performance and found to be produce various performance related outcomes. Government authorities and pressure drive firms to adopt sustainable SCM practices and impact or influence their performance, these practices include purchasing, developing and distribution of finished goods [15]. Studies have shown that pressure of government and stakeholders influence firms to adopt sustainable SCM practices which impact performance of organizations [19].

Based on above following hypothesis is proposed:

H2: Sustainable distribution influence organizational performance at Thai manufacturing industry

2.3. Moderating Role of Governance and Collaboration:

Governance and structure of firms remained under discussion of research scholars that offer participant of partners to develop flexible, problem solving, voluntary exchange of information, usage of power and play role in enhancing the performance of chain. Various studies have depicted that governance and collaboration increase positive behaviors and performance of firm inclines while satisfaction of clients increases. The research scholars have suggested that successful supply chain instigate and help firms to gain and develop various performance related outcomes including trust issues, commitment of employees and firms and cooperative norms among supply chain actors [47, 48]. Research scholars have found in industry that management of operational activities that various collaborative issues takes place due to technology and improve relationship among firms and supply chain actors for effective flow of information [49, 50].

Role of governance and collaboration based on technology usage and smart application usage among various actors of supply chain from supplier to distributor and then consumers effective information flow is necessary to remain at appropriate place and control mechanism must be there for trust among business partners for developing long term relationship such as sharing of contributive knowledge among partners. Governance and collaboration enable firms to sustain their timely availability of raw material from suppliers, as effective and timely collaboration with suppliers will

enable firms to coordinate with suppliers and distributors to determine the organizational performance [51]. Governance and collaboration are stated as one of important for organizational stability, hence the issues from the perspective of supply chain management there is lack of empirical research to determine the relationship between various constructs. Research scholars and previous studies have suggested that supply chain management of firms must enable appropriate system and mechanism must involve collaboration with different nodes of supply chain including suppliers, internal manufacturing team and distributors logistics for being more effective and successful [52].

Research scholars have stated that currently firms are considering the implementation of supply chain activities with effective collaboration system among various nodes of business partners to address environmental issues and concerns which is helping for firms to develop comprehensive environmental plans [53]. The efforts for collaboration between firms and their supply chain actors such as suppliers and distributors to develop eco-friendly and social responsible activities are required in order to perform better and competitive [54, 55].

Research scholars have shown that various benefits can be gained from effective governance and collaboration in developing and sustaining effective supply chain to enhance performance of firms [35, 56]. Contrary, studies have been conducted for utilizing the collaboration as moderator to examine the links among various variables and constructs related to supply chain management. The effective governance and collaboration assist firms to establish effective and useful relationship with suppliers and other supply chain actors for implementation of green supply chain management practices.

According to the best of knowledge of researcher there is lack of empirical studies to determine the moderating role of governance and collaboration in examining the relationship between independent variable and performance.

Thus, the researcher intends to examine the relationship between supply chain practices and performance of firms. The prime objective of the study is to investigate the relationship between sustainable procurement, sustainable distribution and organizational performance with economic, environmental and social performance aspect of firm

among manufacturing industries of Thailand. The other objective of the study entails to examine the moderating role of collaboration and governance between SCM practices and organizational performance with three dimensions including economical, social and environmental concerns.

Thus, on the base of above discussion following hypothesis is proposed:

H3: Governance moderate the relationship between sustainable suppliers and organizational performance

H4: Governance moderate the relationship between sustainable distributor and organizational performance

H5: Collaboration moderate the relationship between sustainable procurement and organizational performance

H6: Collaboration moderate the relationship between sustainable procurement and organizational performance

H7: Governance influence the organizational performance at manufacturing industry of Thailand

H8: Collaboration influence the organizational performance at manufacturing industry of Thailand

2.4. Research Framework:

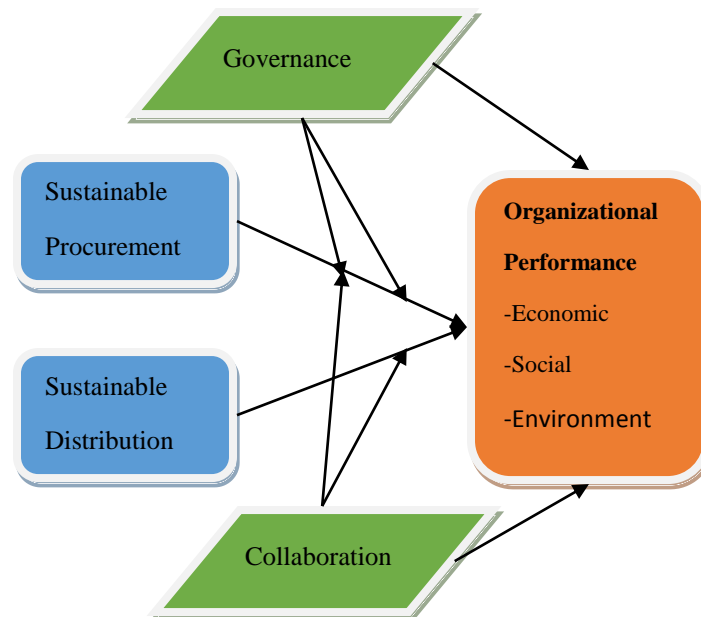


Fig 2: Proposed Research Framework

2.5. Abbreviation of studies:

SP (sustainable procurement); SD (sustainable distribution); Gov (governance); Col (collaboration); OP (organizational performance, economic, social, environmental)

3. Research Methodology:

3.1. Population and Sample:

The data was collected through questionnaire from Thai food manufacturing firms, as sample of the study was 1,161 food companies according to record of government [57]. The sample was based on large food firms as they faced various challenges in global market in competition. The data was collected from top and middle management core engaged with supply chain issues, challenges and activities. The developed questionnaires along with cover letter to send to targeted sample via email and postal services as total 500 questionnaires were floated, but researcher received only 220 valid usable within time responses from various different firms. The data was analyzed by using SMART-PLS and Measurement Model and Structural Equation modeling for investigating relationship of proposed framework.

3.2. Measurement Scale for the study:

For data collection measurement scale was adopted from previous research papers; and data was collected from food manufacturing industry of Thailand. All items of each scale were measured on 5-point Likert scale; where 5 represents strongly agree and 1 represent strongly disagree; as the scale was adopted from previous literature.

4.2. Sustainable procurement:

The six item scale was adopted from the study of (Zhu and Sarkis, 2006) [58]. The construct was measure on five point scale where 1 shows (no implementation); 2 shows (consider only); 3 shows (currently considered); 4 shows (initiate implementation); and 5 presents (fully implemented). The cronbach alpha of the construct was observed as 0.912; which is acceptable for investigate relationships of proposed framework[62][63].

4.3. Sustainable distribution:

The measurement scale of sustainable distribution (SD) six item scale was adopted from previous study of (Zhu and Sarkis, 2006; Green et al., 2012b) [58]. The measurement of item was identical with sustainable procurement's scale. The cronbach alpha for the construct was observed as 0.812; and acceptable.

Organizational Performance (Economic, Environmental, and Social):

The four items scale of organizational performance was adopted from the study of Wiengarten *et al.* (2010) [59]. The cronbach alpha for the construct was 0.873 and acceptable.

4.5. Governance:

The three items scale was adopted from the study of (singh et al, (2016) [51]; the scale was examined on five point scale from strongly disagree to strongly agree. The cronbach alpha was observed for the said construct was 0.762 as acceptable value for investigation of relationships[53][54][55].

5.2. Collaboration:

The five items scale of collaboration was adopted from the study of Zacharia *et al.* (2009, 2011) [60]; the scale was measured on five point scale from 1 to 5 and strongly disagree to strongly agree respectively. The cronbach alpha for the construct was observed as 0.756 and acceptable for investigating relationships of proposed framework.

4. Analysis and Discussion:

4.1. Measurement Model:

The first phase of analysis consist of measurement model of SMART-PLS used to examine the convergent validity as suggested by Gefe, Straub and Boudreasu (2000); the resulted values of both measure convergent and composite reliability must be higher than 0.7 and AVE must be higher than 0.5. The analysis is shown in the table 1 below.

Table 1:

S#	Constructs	CR	Remarks
1	Sustainable procurement	0.913	Accept
2	Sustainable distribution	0.873	Accept
3	Collaboration	0.782	Accept
4	Governance	0.765	Accept
5	Organizational Performance	0.918	Accept

4.4. Discriminate Validity:

Fornell and cha, (1994); Fornell and Lacker, (1981) suggested the characteristics of discriminate validity and shared AVE is demonstrated in table 2 below.

Table 2:

S#	Constructs	SP	SD	Coll	Gov	OP
1	SP	0.813				
2	SD	0.773	0.891			
3	Coll	0.682	0.752	0.876		
4	Gov	0.565	0.659	0.564	0.765	
5	OP	0.718	0.432	0.673	0.654	0.919

5. Structural Equation Modeling:

5.1. Hypothesis testing: Direct test

Present phase of analysis investigates direct relationships between constructs of proposed framework. Table 3 presents the results of H1, H2, H7 and H8; the relationship was investigated on statistical grounds, the first hypothesis H1 was examined by examining the influence of 'sustainable procurement' on 'organizational performance' of Thai food manufacturing industry. The results of PLS shows that $\beta = 3.235$, $p < 0.01$; and t-value 2.761 and positive; hence, H1 was supported statistically. The second hypothesis H2 investigate relationship between 'sustainable distribution' and 'organizational performance'; the results depicted that $\beta = 2.987$, $p < 0.01$ and t-value was 2.487; hence H2 supported on the basis of statistical grounds. The direct hypothesis H7 investigates relationship between

'governance' and 'organizational performance'. The results shows that $\beta = 1.345$ and $p < 0.01$ whereas t-value noted as 1.991; therefore, H7 was supported. The Table below demonstrated the direct relationships of the study. Next direct hypothesis examine the relationship between 'collaboration' among firms for supply chain effectiveness and 'organizational performance' as H8; the statistical results shows that $\beta = 1.459$, $p < 0.01$; and t-value 2.209; therefore H8 was accepted on statistical basis.

Table 3: Hypothesis Testing: Direct Relations

H#	Relationships	β	t-value	Result
H1	SP→OP	3.235	2.761	Accept
H2	SD→OP	2.987	2.487	Accept
H7	Gov→OP	1.345	1.991	Accept
H8	Col→OP	1.459	2.209	Accept

6.1. Hypothesis Testing: Moderating test

Moderating role of 'Governance' and 'Collaboration' were investigated in present part of study between 'sustainable procurement' and dependent variable 'organizational performance' at Thai food industry. The statistical data shows that $\beta = -4.321$, $p < 0.43$; whereas t-value was observed as 1.939; therefore H3 was negatively moderated the relationship between constructs, the decline in β value and reversed the relation shows that governance played negative moderation between constructs of hypothesis.

Hypothesis H4 was examined moderate relationship between 'sustainable distribution' and 'organizational performance' by governance. The results shows as $\beta = 3.011$, $p < 0.02$; whereas t-value was found as 1.98; hence H4 was found to be significantly and lower moderated; as it shows that β value increased than direct relation and t-value less than cutoff point and observed as 1.09; therefore, H4 was accepted significantly. Hypothesis H5 was examined moderating role of 'collaboration' between 'sustainable procurement' and 'organizational performance'. The statistical results show that $\beta = 4.236$; $p < 0.02$; t-value of 'organizational performance' and t-value found to be significant and higher and observed as 2.432. The results show that there is less moderation by collaborative between 'sustainable procurement' and organizational performance'. The hypothesis H6 is rejected and insignificant influence of sustainable distribution towards 'organizational performance'; Hypothesis H6 was examined as moderating role between 'collaborative' and organizational performance. The results shows that $\beta = 3.92$, $p < 0.01$; t-value was

observed as 1.348 $p < 0.05$; t-value was observed 1/234; which is lower than 1.96; therefore, H6 was found to be insignificant on statistical grounds.

Table 4 Hypothesis Testing: Moderating Relations

H#	Relationships	β	t-value	Result
H3	SP*Gov→OP	-4.321	1.65	Insig
H4	SD*Gov→OP	3.011	1.98	Sig
H5	SP*coll→OP	4.236	2.432	Sig
H6	SD*coll→OP	1.348	1.234	Insig

6. Conclusion:

The current study highlighted the role of supply chain practices in terms of business operations and to determine identify the drivers of organizational performance and instigate activity as SCM of industry. The study provided the better understating in relationships between supply chain activities and multi-dimensional construct of organizational performance. The study assists various strategists and academician persons to conduct more empirical studies on determining relationship between SCM and organizational performance. The data was collected from food manufacturing industry of Thailand. Responses was collected and analyzed on SMART-PLS by using measurement model and Structural equation modeling. The results of the study produced surprisingly different; all direct hypothesis including H1, H2, H7 and H8 was significant and acceptable. The moderating role was examined in study by testing hypothesis H3, H4, H5 and H6; the results depicted that H3 and H6 found to be insignificant, on the other hand H4, H5 were accepted statistically.

Future research always open new horizons for new scholars to explore more as present study can be taken on broader state including many developed or developing countries. A comparative study will provide ideal gap between two systems and fulfill the bridge.

References:

- [1] Ramanathan, U. and A. Gunasekaran, Supply chain collaboration: Impact of success in long-term partnerships. International Journal of Production Economics, 2014. 147: p. 252-259.

- [2] Lavastre, O., A. Gunasekaran, and A. Spalanzani, Effect of firm characteristics, supplier relationships and techniques used on supply chain risk management (SCRM): an empirical investigation on French industrial firms. *International Journal of Production Research*, 2014. 52(11): p. 3381-3403.
- [3] Zhao, X., et al., The impact of internal integration and relationship commitment on external integration. *Journal of operations management*, 2011. 29(1-2): p. 17-32.
- [4] Lindsay, A., D. Downs, and K. Lunn, Business processes—attempts to find a definition. *Information and software technology*, 2003. 45(15): p. 1015-1019.
- [5] Zacharia, Z.G., N.W. Nix, and R.F. Lusch, An analysis of supply chain collaborations and their effect on performance outcomes. *Journal of business logistics*, 2009. 30(2): p. 101-123.
- [6] Olowa, O. W. (2018). Determinants of Rural Residential Solid Waste Collection Services in Lagos State. *International Journal of Sustainable Development & World Policy*, 7(1), 1-7.
- [7] Ozkurt, B., & Alpay, C. B. (2018). Investigation of Proactive Personality Characteristics of the Students of High School of Physical Education and Sports through Various Variables. *Asian Journal of Education and Training*, 4(2), 150-155.
- [8] Trkman, P., Increasing process orientation with business process management: Critical practices'. *International Journal of Information Management*, 2013. 33(1): p. 48-60.
- [9] Soosay, C.A. and P. Hyland, A decade of supply chain collaboration and directions for future research. *Supply Chain Management: An International Journal*, 2015. 20(6): p. 613-630.
- [10] Trkman, P., M. Budler, and A. Groznik, A business model approach to supply chain management. *Supply Chain Management: An International Journal*, 2015. 20(6): p. 587-602.
- [11] Tuzcek, F., P. Castka, and T. Wakolbinger, A review of management theories in the context of quality, environmental and social responsibility voluntary standards. *Journal of Cleaner Production*, 2018. 176: p. 399-416.
- [12] Olowa, O. A., & Olowa, O. W. (2017). Rice Farmer and Capital Formation: A Case Study of Rice Farmer's Credit Cooperative in Itoikin, Ikosi-Ejirin LCDA, Lagos State. *International Journal of Sustainable Development & World Policy*, 6(1), 1-8.
- [13] Vezzoli, C., et al., Why have 'Sustainable Product-Service Systems' not been widely implemented? Meeting new design challenges to achieve societal sustainability. *Journal of Cleaner Production*, 2012. 35(10): p. 288-290.
- [14] Su, C.-M., et al., Improving sustainable supply chain management using a novel hierarchical grey-DEMATEL approach. *Journal of Cleaner Production*, 2016. 134: p. 469-481.
- [15] Zhu, Q., J. Sarkis, and K.-h. Lai, Institutional-based antecedents and performance outcomes of internal and external green supply chain management practices. *Journal of Purchasing and Supply Management*, 2013. 19(2): p. 106-117.
- [16] Sarkis, J., P. Gonzalez-Torre, and B. Adenso-Diaz, Stakeholder pressure and the adoption of environmental practices: The mediating effect of training. *Journal of operations management*, 2010. 28(2): p. 163-176.
- [17] Omid, A. M., & Jamil, E. (2017). Linear and Nonlinear Relationship between Inflation, Operating Cycle and Cash Holdings: Evidence from Iran. *International Journal of Asian Social Science*, 7(4), 300-310.
- [18] Pazil, N. H. A. (2018). Face, Voice and Intimacy in Long-Distance Close Friendships. *International Journal of Asian Social Science*, 8(11), 938-947.
- [19] Esfahbodi, A., et al., Governance pressures and performance outcomes of sustainable supply chain management—An empirical analysis of UK manufacturing industry. *Journal of Cleaner Production*, 2017. 155: p. 66-78.
- [20] Green Jr, K.W., et al., Do environmental collaboration and monitoring enhance organizational performance? *Industrial Management & Data Systems*, 2012. 112(2): p. 186-205.
- [21] Linton, J.D., R. Klassen, and V. Jayaraman, Sustainable supply chains: An introduction. *Journal of operations management*, 2007. 25(6): p. 1075-1082.
- [22] Ping, G. (2017). Revisiting the Causal Nexus between Defense Expenditure and Economic

- Growth: Time Series Analysis for Saudi Arabia. *Asian Journal of Economic Modelling*, 5(1), 35-43.
- [23] De Bakker, F.G., O.A. Fisscher, and A.J. Brack, Organizing product-oriented environmental management from a firm's perspective. *Journal of Cleaner Production*, 2002. 10(5): p. 455-464.
- [24] Chunhavuthiyanon, M. and P. Intarakumnerd, The role of intermediaries in sectoral innovation system: The case of Thailand's food industry. *International Journal of Technology Management & Sustainable Development*, 2014. 13(1): p. 15-36.
- [25] Maloni, M.J. and M.E. Brown, Corporate social responsibility in the supply chain: an application in the food industry. *Journal of Business Ethics*, 2006. 68(1): p. 35-52.
- [26] Shokri, A., D. Oglethorpe, and F. Nabhani, Evaluating sustainability in the UK fast food supply chain: Review of dimensions, awareness and practice. *Journal of Manufacturing Technology Management*, 2014. 25(8): p. 1224-1244.
- [27] Osman, Z., & Sentosa, I. (2013). Mediating effect of customer satisfaction on service quality and customer loyalty relationship in Malaysian rural tourism. *International Journal of Economics Business and Management Studies*, 2(1), 25-37.
- [28] Wiese, A. and W. Toporowski, CSR failures in food supply chains—an agency perspective. *British Food Journal*, 2013. 115(1): p. 92-107.
- [29] Purwanto, M. R., Chotimah, C., & Mustofa, I. (2018). Sultan Agung's Thought of Javanis Islamic Calender and its Implementation for Javanis Moslem. *International Journal of Emerging Trends in Social Sciences*, 4(1), 9-14.
- [30] Setthasakko, W., The implementation of eco-budgeting in food processors: a case of Thailand. *British Food Journal*, 2012. 114(9): p. 1265-1278.
- [31] Vijayvargy, L., J. Thakkar, and G. Agarwal, Green supply chain management practices and performance: the role of firm-size for emerging economies. *Journal of Manufacturing Technology Management*, 2017. 28(3): p. 299-323.
- [32] Blome, C., A. Paulraj, and K. Schuetz, Supply chain collaboration and sustainability: a profile deviation analysis. *International journal of operations & production management*, 2014. 34(5): p. 639-663.
- [33] Razak, A., Sarpan, S., & Ramlan, R. (2018). Influence of Promotion and Job Satisfaction on Employee Performance. *Journal of Accounting, Business and Finance Research*, 3(1), 18-27.
- [34] Huang, X., B.L. Tan, and X. Ding, An exploratory survey of green supply chain management in Chinese manufacturing small and medium-sized enterprises: Pressures and drivers. *Journal of Manufacturing Technology Management*, 2015. 26(1): p. 80-103.
- [35] Paulraj, A., Understanding the relationships between internal resources and capabilities, sustainable supply management and organizational sustainability. *Journal of Supply Chain Management*, 2011. 47(1): p. 19-37.
- [36] Ritthaisong, Y., L. M. Johri, and M. Speece, Sources of sustainable competitive advantage: the case of rice-milling firms in Thailand. *British Food Journal*, 2014. 116(2): p. 272-291.
- [37] Chavalparit, O., et al., Options for environmental sustainability of the crude palm oil industry in Thailand through enhancement of industrial ecosystems. *Environment, Development and Sustainability*, 2006. 8(2): p. 271-287.
- [38] Praneetvatakul, S., et al., Assessing the sustainability of agriculture: a case of Mae Chaem Catchment, northern Thailand. *Environment International*, 2001. 27(2-3): p. 103-109.
- [39] Zhu, Q. and J. Sarkis, The moderating effects of institutional pressures on emergent green supply chain practices and performance. *International Journal of Production Research*, 2007. 45(18-19): p. 4333-4355.
- [40] Carter, C.R. and D.S. Rogers, A framework of sustainable supply chain management: moving toward new theory. *International Journal of Physical Distribution & Logistics Management*, 2008. 38(5): p. 360-387.
- [41] Seuring, S. and M. Müller, From a literature review to a conceptual framework for sustainable supply chain management. *Journal of Cleaner Production*, 2008. 16(15): p. 1699-1710.

- [42] Vachon, S. and R.D. Klassen, Environmental management and manufacturing performance: The role of collaboration in the supply chain. *International Journal of Production Economics*, 2008. 111(2): p. 299-315.
- [43] Riaz, N., & Riaz, S. (2018). Investment and Economic Growth: A Panel Data Analysis. *Asian Development Policy Review*, 6(1), 20-31.
- [44] Zhu, Q., J. Sarkis, and Y. Geng, Green supply chain management in China: pressures, practices and performance. *International journal of operations & production management*, 2005. 25(5): p. 449-468.
- [45] Porter, M.E. and C. Van der Linde, Toward a new conception of the environment-competitiveness relationship. *Journal of economic perspectives*, 1995. 9(4): p. 97-118.
- [46] Pride, M., & Tatenda, N. (2017). Human Resource Planning in an Unstable Economy: Challenges Faced. A Case of State Universities in Zimbabwe. *International Journal of Asian Social Science*, 7(3), 206-217.
- [47] Johnston, D.A., et al., Effects of supplier trust on performance of cooperative supplier relationships. *Journal of operations management*, 2004. 22(1): p. 23-38.
- [48] Fynes*, B., S. de Búrca, and C. Voss, Supply chain relationship quality, the competitive environment and performance. *International Journal of Production Research*, 2005. 43(16): p. 3303-3320.
- [49] Quinones, A., & Hunter Jr, R. J. (2017). China-One Nation, Two Systems: A Management and Entrepreneurial Perspective. *International Journal of Asian Social Science*, 7(4), 284-299.
- [50] Kim, M., C. Sheu, and J. Yoon, Environmental Sustainability as a Source of Product Innovation: The Role of Governance Mechanisms in Manufacturing Firms. *Sustainability*, 2018. 10(7): p. 2238.
- [51] Singh, A. and J.T. Teng, Enhancing supply chain outcomes through Information Technology and Trust. *Computers in human behavior*, 2016. 54: p. 290-300.
- [52] Haseeb, M., Iqbal-Hussain, H., Ślusarczyk, B., Jermisittiparsert, K. (2019). Industry 4.0: A solution towards technology challenges of sustainable business performance. *Social Sciences*, 8(5), 154; doi: <https://doi.org/10.3390/socsci8050154>
- [53] Rao, P., Greening of suppliers/in-bound logistics—in the south East Asian context, in *Greening the supply chain 2006*, Springer. p. 189-204.
- [54] Rismayadi, B., & Maemunah, M. (2018). Creative Economy to Increase Community Revenue Based on Tourism Object, Medalsari Village, Pangkalan District Karawang Regency. *Journal of Accounting, Business and Finance Research*, 3(1), 28-35.
- [55] Klassen, R.D. and S. Vachon, Collaboration and evaluation in the supply chain: The impact on plant-level environmental investment. *Production and Operations Management*, 2003. 12(3): p. 336-352.
- [56] Ahmed, U., Isa, N. M., Majid, A. H. A., Zin, M. L. M., & Amin, B. M. (2017). Towards understanding work engagement: can HR really buffer HR? Test of a moderated model. *International Journal of Economic Research*, 14(20), 1-18.
- [57] Jermisittiparsert, K., M. Siam, M. Issa, U. Ahmed, & M. Pahi. 2019. Do Consumers Expect Companies to Be Socially Responsible? The Impact of Corporate Social Responsibility on Buying Behavior. *Uncertain Supply Chain Management* 7 (4) (In press), doi: 10.5267/j.uscm.2019.1.005.
- [58] Croom, S., et al., Impact of social sustainability orientation and supply chain practices on operational performance. *International journal of operations & production management*, 2018. 38(12): p. 2344-2366.
- [59] Chin, T.A., H.H. Tat, and Z. Sulaiman, Green supply chain management, environmental collaboration and sustainability performance. *Procedia Cirp*, 2015. 26: p. 695-699.
- [60] Pakdeechoho, N. and V. Sukhotu, Sustainable supply chain collaboration: incentives in emerging economies. *Journal of Manufacturing Technology Management*, 2018. 29(2): p. 273-294.
- [61] Rosli, A., & Siong, T. I. (2018). Determinants of Customers Satisfaction Towards Services Provided by Agencies in Urban Transformation Centre (UTC). *International Journal of*

Economics, Business and Management Studies, 5(1), 9-15.

- [62] Ahmed, U., Isa, N. M., Majid, A. H. A., Zin, M. L. M., & Amin, B. M. (2017). Towards understanding work engagement: can HR really buffer HR? Test of a moderated model. *International Journal of Economic Research*, 14(20), 1-18.
- [63] Wiengarten, F., et al., Risk, risk management practices, and the success of supply chain integration. *International Journal of Production Economics*, 2016. 171: p. 361-370.
- [64] Zacharia, Z.G., N.W. Nix, and R.F. Lusch, Capabilities that enhance outcomes of an episodic supply chain collaboration. *Journal of operations management*, 2011. 29(6): p. 591-603.