Does Organizational Culture Capability and Relationship Building Capability Expediate Supply Chain Operational Performance? Evidence from Indonesia

Obsatar Sinaga[1], Nova Indah Saragih[#2], Rima Rachmawati[#3], Omar Alaeddin[3]
[1]Padjajaran University
[1]obsatar.sinaga@padjajaran.ac.id
[#]Widyatama University
[2]nova.indah@widyatama.ac.id
[3]rima.rachmawati@widyatama.ac.id
[3]Universiti Kuala Lumpur
[3]omar.alaeddin@unikl.edu.my

***Abstract*--- The current study considered the effect of organization culture capability and relationship building capability on supply chain operational performance with the mediating role of supply chain technology adoption. This study focused on the Indonesian supply chain companies. Data were collected from the employees of supply chain companies. Questionnaires were distributed with the help of area cluster sampling techniques and 7-point Likert scale was preferred. Total 350 questionnaires were distributed with the help of email. Data were analysed with the help of Partial Least Square (PLS). Results of the study investigated that organization culture capability and relationship building capability both have an important contribution in supply chain operational performance through supply chain technology adoption. Moreover, supply chain technology adoption playing a mediating role. Thus, majorly this study contributed by highlighting the mediating role of supply chain technology adoption.**

Keywords: *Supply chain, operational performance, technology adoption, organization culture capability, relationship building capability.*

1. Introduction

The idea of supply chain management (SCM) begins to rise in the mid of 1960s and first showed up in the literature in 1982, with a dramatic expansion among researchers since 1990s [1, 2].
It has gained a great consideration since 2000s from the academia and specialist's [3]. In the course of the most recent 30 years, the importance of SCM on the firm performance has been demonstrated in literature [4]. In a competitive business condition, firms need to underscore on supply chain performance (SCP) rather than organizational performance [5]. A few investigations demonstrated that firm should concentrate on SCP since it has a massive direct impact on performance [6, 7].

These days, the SCM turning into a lot of enthusiasm among the organizations. This is on the grounds that the present business patterns are forming worldwide business and giving the chances to firms to getting to be multi-nationals [8] and in this way, increment the unpredictability of the supply chain. SCM depends on the total chain which is important to include all accomplices in the chain to hold the key of competitiveness [9]. In the present decade, the business rivalry will also be on supply chain [10]. Consequently, these days, SCM turns into a well-known management instrument in helping firms to enhance their competitiveness. The idea of SCM has been perceived to be imperative significance for materials and clothing industry [11]. The management can use the elements of SCM to plan, facilitate, and control coordination's learning stream, capital stream, and information stream of the business. It empowers firms to enhanced reaction speed and decreased vulnerability of the supply chain [12]. However, the completion is increasing among firm's day by day. Indonesian companies are also facing the heat of competition. The Indonesian company's performance as compared to the other companies are shown in below graph. It is shown in the Figure 1 that Indonesian supply chain companies performance is low as compared to Vietnam, Thailand, Philippines and Malaysia.

IJSCM, ISSN: 2050-7399 (Online), 2051-3771 (Print)

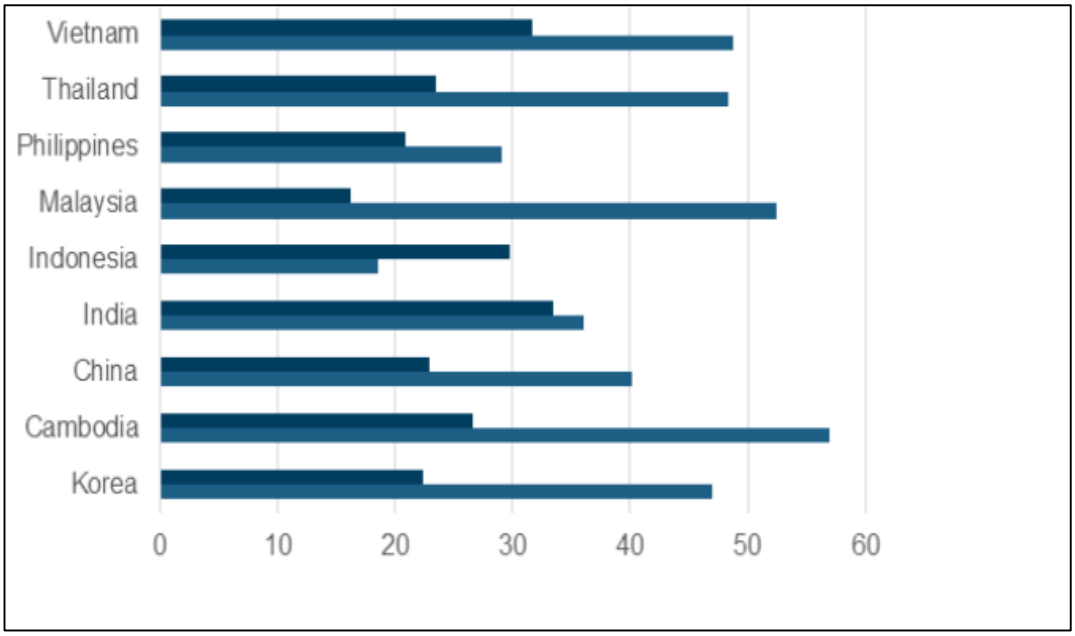

Figure 1. Comparison between Indonesian supply chain companies with other emerging countries

Rivalry has progressively turned out among firm in the worldwide business environment [3]. Along these lines, it is imperative that companies to participate to achieve shared objectives, for example, limiting conveyance cost, stock holding cost, increment dependability [13], upgrade quality and enhanced flexibility [8] to guarantee success [12, 14] and consumer loyalty [8, 12]. The organization will lose skill in extraordinary shifted environment and quick-change in market [8].

However, in this situation, supply chain companies can sustain the performance by increasing the organizational capability and relationship building capability. The integration between organizational culture and relationship capabilities can enhance the performance and find the way to survive in competitive environment. As the supply chain capabilities has relationship with performance [15-17]. Moreover, organizational culture also has important relationship with performance [18-20]. Additionally, supply chain technology adoption always increases the firm performance [21, 22].

Therefore, current study considered organization culture capability and relationship capability as independent variables. Organization culture capability includes; involvement, consistency, adaptability and innovativeness. Relational building capability include; supplier partnership, information sharing, information quality and customer relationship. Moreover, supply chain technology adoption is taken as meditating variable. As it is shown in Figure 2. Therefore, the objective of the this study is to examine the role of organization culture capability and relational building capability in supply chain operational performance. Sub-objectives of the study are given below.

1. To examine the role of organization culture capability in supply chain operational performance.
2. To examine the role of relational building capability in supply chain operational performance.
3. To examine the mediating effect of supply chain technology adoption.

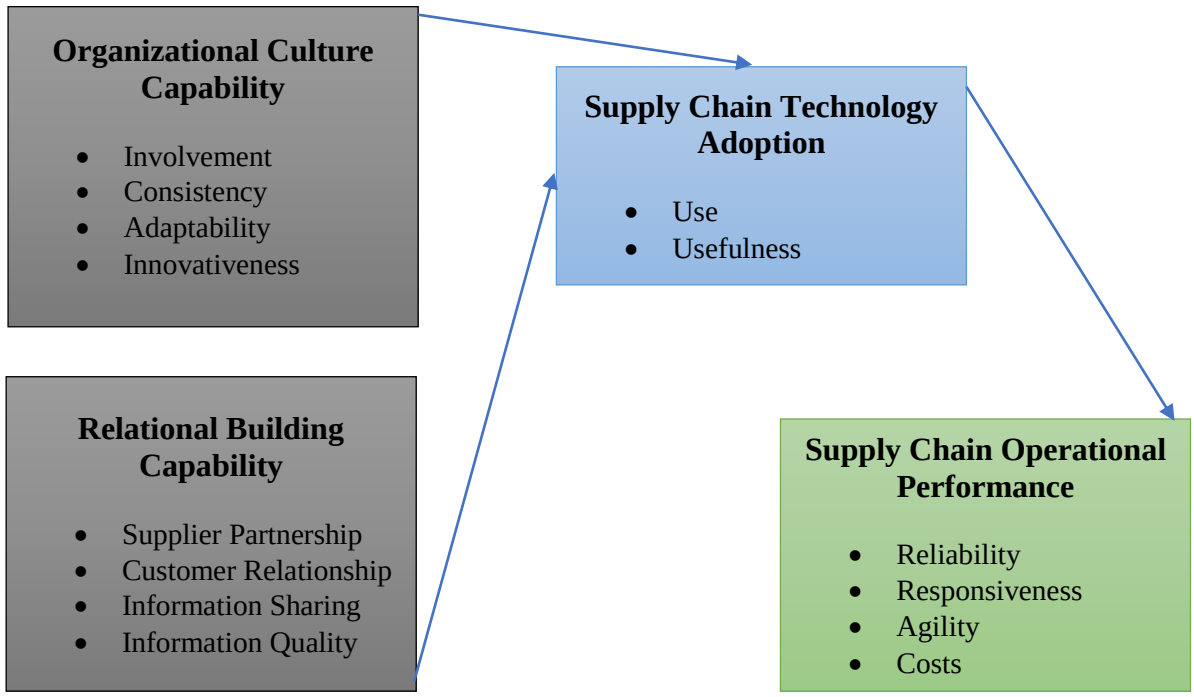

Figure 2. Theoritical framework of the study showing the effect of organization culture capability and relational building capability on supply chain operational performance

2. Literature Review

2.1 Supply Chain Operational Performance

In resource-based view (RBV), performance can be subdivided into three classes, which are environmental, operational, and financial performance [23] This examination concentrated on supply chain operational performance, since its portrayed as having the tremendous effect for the performance [24]. Along these lines, supply chain environmental and financial performance would not be stressed on this examination, since supply chain operational performance would give positive effect to environmental and financial performance [25]. Supply chain tasks regularly include exercises and procedures related with changing completed products and their supply [26].

Supply chain performance is typically decided through reliability, cost, responsiveness, and agility [14]. Since this examination is centred around supply chain operational performance, by measuring through various dimensions including reliability, cost, responsiveness, and agility. Supply chain services should be reliable which will satisfy the customers. The services should also be cost effective. Increase in cost will decreases the customer satisfaction level and automatically decreases the profitability and performance. Additionally, a quick response to the customer also influence on performance.

Table 1. Dimensions of supply Chain Operational Performance

Supply Chain Performance Dimension	Definition	Literature
Supply Chain Reliability	The quality of the supply chain in performs and maintains perfect order fulfillments which deliver needs as per stated requirements.	[50], [51]
Supply Chain Responsiveness	The speed of a supply chain provides products, services, or information to members in the supply chain.	[51]
Supply Chain Agility	The ability to quickly adjust tactics and operations of the supply chain in responses to market changes.	[50]
Supply Chain Costs	The costs associated with operating the supply chain.	[50], [51]

2.2 Relational Building Capbilities

The attention in SCM is on the efficient, effective and timly delivery of merchandise from company and supplies through assembling to a definitive customer or client. It is required the stream of knowledge in forward as well as backward directions in the supply chain. Without effective information, the objectives of supply chains can't be accomplished. Moreover, the fruitful usage of an effective SCM requires the participation of an extensive number of outer assistants [27]. To put it plainly, social ability can be characterized as the property of at least two information records that can be shared or trade for view, alter, or change to end up valuable information between at least two supply chain individuals [28].

The current study examing the effect of relational building capabity of supply chain companies on supply chain operational performance. Relational building capabity is measured based on supplier partnership, customer relationship, information sharing and information quality[29-31]. A few researchers found that information sharing, information quality, customer relationship, and supplier partnership are vital components of SCM practices [32]. The centrality of the relationship between customer relationship as well as supplier partnership on SCM has been perceived hundreds of years. The management of customer relationship and supplier partnerships includes every one of the exercises related to the stream of merchandise and ventures from suppliers to definite customers [33]. Basically, partnership is the center of the association among suppliers and customers. In this way, so as to prevail in partnership, willingness to share information is crucial [34], share quality's information [35], reasonableness, and trust are required [36]. In this perspective, supplier partnership, customer relationship, information sharing, and information quality is fundamental measurements in deciding social ability. Moreover, external and internal

communication by the company generates new ideas [37].

Table 2. Dimensions of retional building capabity

Relational Capability Dimension	Definition	Literature
Supplier Partnership	The long term relationship between the organization and suppliers that providing goods or services to the business to achieve significant ongoing benefits.	[52], [53]
Customer Relationship	The long term relationship between the organization and customers that acquire goods or services from the business to achieve significant ongoing benefits.	[52], [53]
Information Sharing	The extent to which critical and proprietary information of an organization is communicated to a number of people or organizations.	[54]
Information Quality	The degree of excellence of information fits the people or organization's needs.	[55]

2.3 Organizational Culture Capability

Culture can be characterized as the mixture of the language, practices, convictions, customs, principles, foundations, and practices that portray a general public [38]. Organizational culture has been comprehensively considered by researchers since the mid 1980s [39]. In this manner, brought about ample definitions [40]. Deshpande and Webster Jr [41] characterized authoritative culture as a lot of shared suspicions and understandings about organization working[29-31, 42, 43].

It likewise can be commonly characterized as a lot of conduct and activities of representatives who work in an organization which influences the manner in which individuals and gatherings connect with one another [44]. While, the attributes of culture can be depicted as staffing, preparing, pay, assessment [45], regular qualities, frames of mind, presumptions and beliefs of workers in the organization [46]. To put it plainly, authoritative culture ability can be comprehended as the method for representatives figure they ought to do. In the current study, organizational culture measures through various dimensions include; involvement, consistency, adaptability and innovativeness. Various dimensions are shown in Table 3.

Table 3. Dimensions of organizational culture capability

Organizational Culture Capability Dimension	Definition	Literature
Involvement	The act of employees takes part or participates in something.	[56]
Consistency	The ability of employees to remains the same in behavior, attitude, or quality of work.	[57]
Adaptability	The ability of employees to copes with unexpected disturbances in the environment.	[50], [57]
Innovativeness	The ability of employees to apply new approach or new idea to meet new requirements, inarticulate needs, or problem solving.	[58]

2.4 Supply Chain Technology Adoption

The expansive utilized of supply chain technology empower organizations to enhance or redesign their SCM and business performance [47]. The effects of supply chain innovation on SCM can be partitioned into three elements, which are (1) transection handling, (2) supply chain arranging and joint effort, and (3) order tracking and delivery coordination [48]. Besides, the utilized of supply chain innovation empower firms in manual work and costs, accelerate information exchange, and enhance information quality, and make full utilization on the supply chain [49]. However, in this process, enterprise risk management and employee statisfaction is crucial [50, 51]. Moreover, evolution of supply chain technology stated from 1970. It is shown in Table 4.

Table 4. Evolution of Supply Chain Technologies Adoption

1970s	1980s	1990s	2000s	2010s
Information Processing	Scanner Systems Bar Codes Electronic Cash Register Just-In-Time (JIT)	Electronic Data Interchange (EDI) E-commerce Vendor Managed Inventory (VMI) Continuous Replenishment Systems Direct Store Delivery Computer Assisted Ordering Cross Docking	Supply Chain Reinvention Warehouse Management Systems (WMS) Transportation Management Systems (TMS) Customer Relationship Management (CRM) Vendor Relationship Management (VRM) Supply Chain Communication Systems Radio Frequency Identification (RFID) Global Positioning Systems (GPS)	Cloud Computing Mobile Supply Chain Management System

In addition, adoption of supply chain framework provides unique and impalpable advantages. The substantial advantages include, (1) improve delivery on time, (2) limit expenses and stock, (3) better stock management and item quality, and (4) shorter process duration. The immaterial advantages include, (1) better service quality, (2) shorter reaction time, (3) continuous information, (4) exact information, and (5) predictable information. For the most part, the adoption of supply chain technology has positive and critical effects on sufficiency, precision, and accessibility of information [52].

Table 5. Dimensions of Supply Chain Technology Adoption

Supply Chain Technology Dimension	Definition	Literature
SCT Use	The applications of hardware and software components that used specifically in SCM to generate effective and efficient supply chain operations.	[59]
SCT Usefulness	The quality or fact of being useful associated with the applications of hardware and software components that used specifically in SCM.	[60]

From the above discussion, following hypotheses are proposed;

H1: OCC has positive effect on SCTA.

H2: RBC has positive effect on SCTA.

H3: SCTA has positive effect on SCOP.

H4: SCTA mediates the relationship between OCC and SCOP.

H5: SCTA mediates the relationship between RBC and SCOP.

3. Research Methodology

What is the appropriate method to conduct a research study is most important question. It should be accordance with the study objectives as well as questions [53]. Inappropriate method of research lead towards different results. Therefore, it is most important element of each research study and researchers need to be careful while selecting.

This study is based on quantitative research method. While examining the objectives of the study, it adopted a cross-sectional research design. Therefore, data were collected at one point in time. A survey was carried out and all the questionnaires were distributed among the employees of supply chain companies in Indonesia. Only those employees were selected having a direct relationship with supply chain activities. It was considered that the employees having no direct relationship with the supply chain are not appropriate for this study and may lead to inappropriate results.

However, all the questions were close-ended from 7-point Likert scale. The questionnaire was based on three major parts. The first part was based on the profile of respondents. The second part was based on items related to independent and mediating variables. The third part was based on the items related to the dependent variables, namely; supply chain operational performance. Additionally, 300 sample size was selected.

4. Findings

Before further processing for hypotheses testing, a preliminary analysis was performed. It was found that data is free from missing values and outlier. Therefore, it further proceeded for data analysis. First of all, reliability and validity were examined. For this purpose, a measurement model was analyzed. It was found that two items have factor loadings less than 0.5, thus, deleted from the analysis. Composite reliability achieved a satisfactory level of 0.7 and average variance extracted (AVE) 0.5 [54]. AVE achieved the convergent validity. Discriminant validity is given through cross-loadings. It is shown in Table 8.

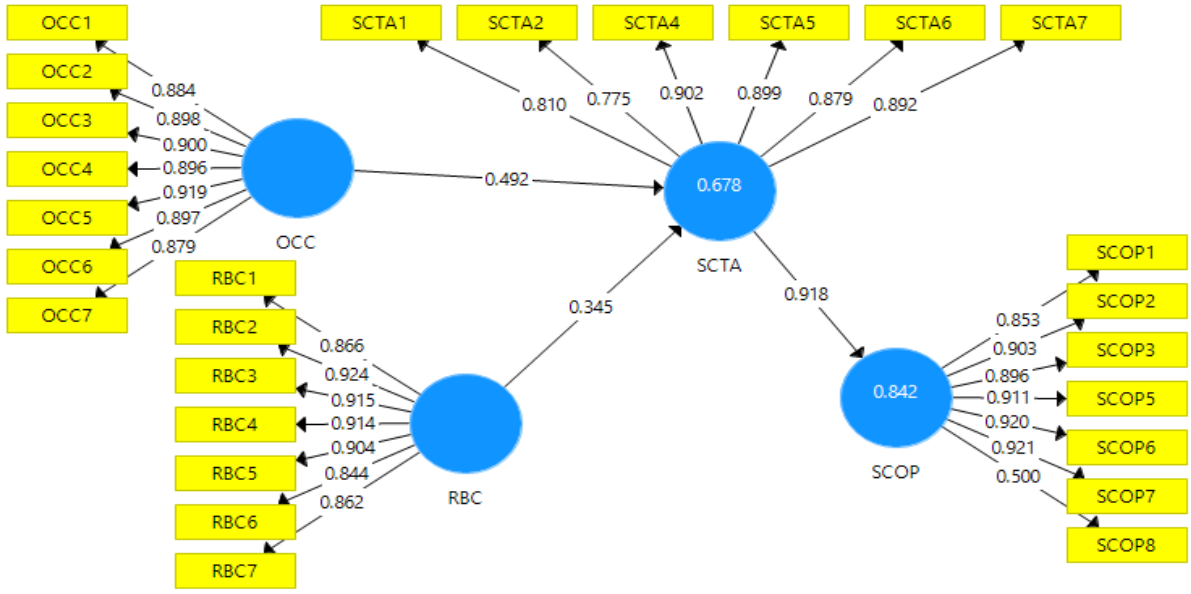

Figure 3. Confirmatory Factor Analysis

Table 6. Factor Loadings

	OCC	RBC	SCOP	SCTA
OCC1	0.884			
OCC2	0.898			
OCC3	0.9			
OCC4	0.896			
OCC5	0.919			
OCC6	0.897			
OCC7	0.879			
RBC1		0.866		
RBC2		0.924		
RBC3		0.915		
RBC4		0.914		
RBC5		0.904		
RBC6		0.844		
RBC7		0.862		
SCOP1			0.853	
SCOP2			0.903	
SCOP3			0.896	
SCOP5			0.911	
SCOP6			0.92	
SCOP7			0.921	
SCOP8			0.5	
SCTA1				0.81
SCTA2				0.775
SCTA4				0.902
SCTA5				0.899
SCTA6				0.879
SCTA7				0.892

Table 7. Measurement model results

	α	**rho_A**	**CR**	**(AVE)**
OCC	0.959	0.96	0.966	0.803
RBC	0.956	0.957	0.964	0.792
SCOP	0.934	0.953	0.949	0.732
SCTA	0.929	0.93	0.945	0.741

Table 8. Cross-Loadings (Discriminant Validity)

	OCC	RBC	SCOP	SCTA
OCC1	0.884	0.828	0.585	0.709
OCC2	0.898	0.805	0.594	0.739
OCC3	0.9	0.831	0.565	0.713
OCC4	0.896	0.801	0.592	0.711
OCC5	0.919	0.855	0.668	0.779
OCC6	0.897	0.864	0.613	0.72
OCC7	0.879	0.872	0.61	0.732
RBC1	0.812	0.866	0.536	0.654
RBC2	0.843	0.924	0.633	0.728
RBC3	0.847	0.915	0.608	0.724
RBC4	0.841	0.914	0.643	0.74
RBC5	0.845	0.904	0.661	0.75
RBC6	0.817	0.844	0.61	0.679
RBC7	0.811	0.862	0.65	0.728
SCOP1	0.591	0.563	0.853	0.794
SCOP2	0.602	0.625	0.903	0.834
SCOP3	0.572	0.579	0.896	0.817
SCOP5	0.649	0.681	0.911	0.831
SCOP6	0.634	0.679	0.92	0.851
SCOP7	0.653	0.688	0.921	0.859
SCOP8	0.222	0.25	0.5	0.405
SCTA1	0.803	0.84	0.677	0.81
SCTA2	0.749	0.758	0.606	0.775
SCTA4	0.64	0.601	0.867	0.902
SCTA5	0.633	0.629	0.87	0.899
SCTA6	0.6	0.591	0.842	0.879
SCTA7	0.636	0.632	0.867	0.892

In the structural model, the direct and indirect effect was examined. Figure 4 shows the structural model. Table 9 shows the direct effect between independent variable, dependent variable and mediating variable. It is found that OCC has a significant positive relationship with SCOP. In line with these results, it is found that RBC also has a significant relationship with SCOP. As the t-value for both relationships is above 1.96. Moreover, the effect of SCTA is also significant positive on SCOP. Therefore, increases in OCC, RBC, and SCTA increase the operational performance of the supply chain process in supply chain firms. Thus, these results supported H1, H2, and H3.

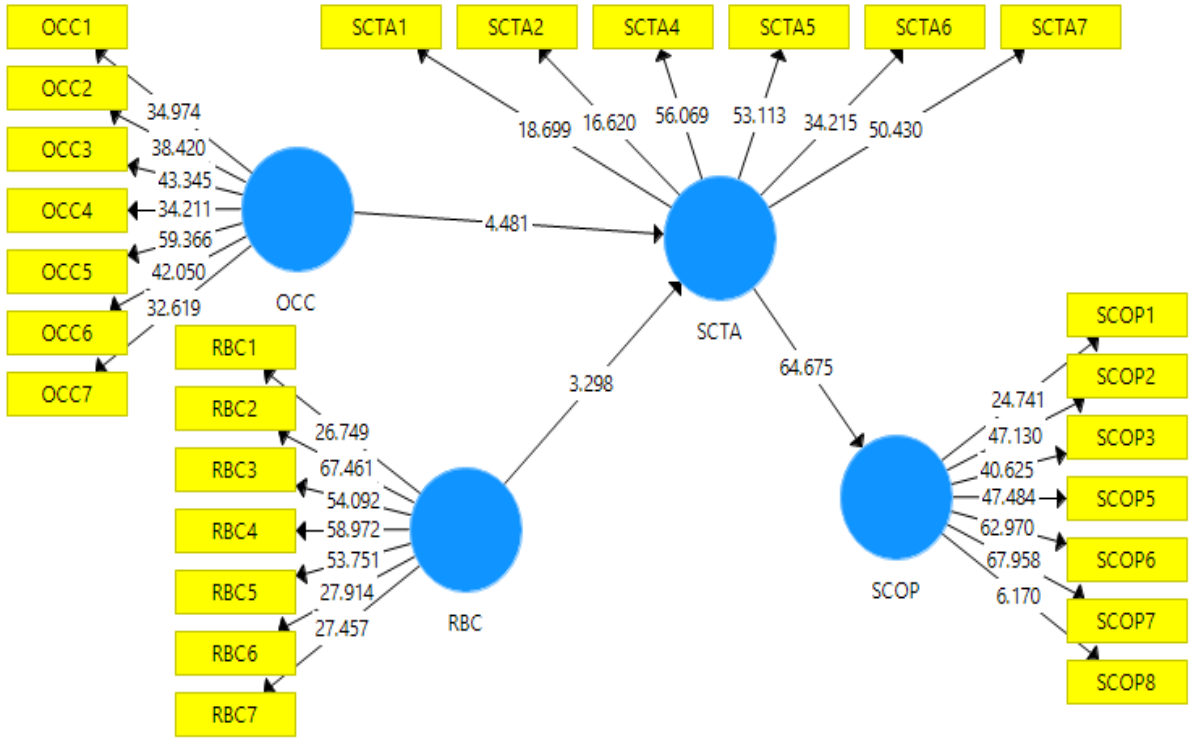

Figure 4. Structural Model Assessment

Table 9. Direct effect

	(O)	(M)	(STDEV)	T Statistics	P Values
OCC -> SCTA	0.492	0.486	0.11	4.481	0
RBC -> SCTA	0.345	0.354	0.105	3.298	0.001
SCTA -> SCOP	0.918	0.918	0.014	64.675	0

Table 10. Indirect effect

	(O)	(M)	(STDEV)	T Statistics	P Values
OCC -> SCTA -> SCOP	0.452	0.446	0.101	4.479	0
RBC -> SCTA -> SCOP	0.317	0.326	0.097	3.253	0.001

Mediation effect of supply chain technology adoption is shown in Table 10. It is also shown through histograms in Figure 5 and Figure 6. It is investigated that the mediation effect between OCC and SCOP is significant with t-value 4.479. Moreover, the mediation effect between RBC and SCOP is also significant with t-value 3.253. Supply chain technology adoption reflects the positive effect of OCC and RBC on SCOP. These results supported H4 and H5. Additionally, the r-square (R^2) value is 0.482.

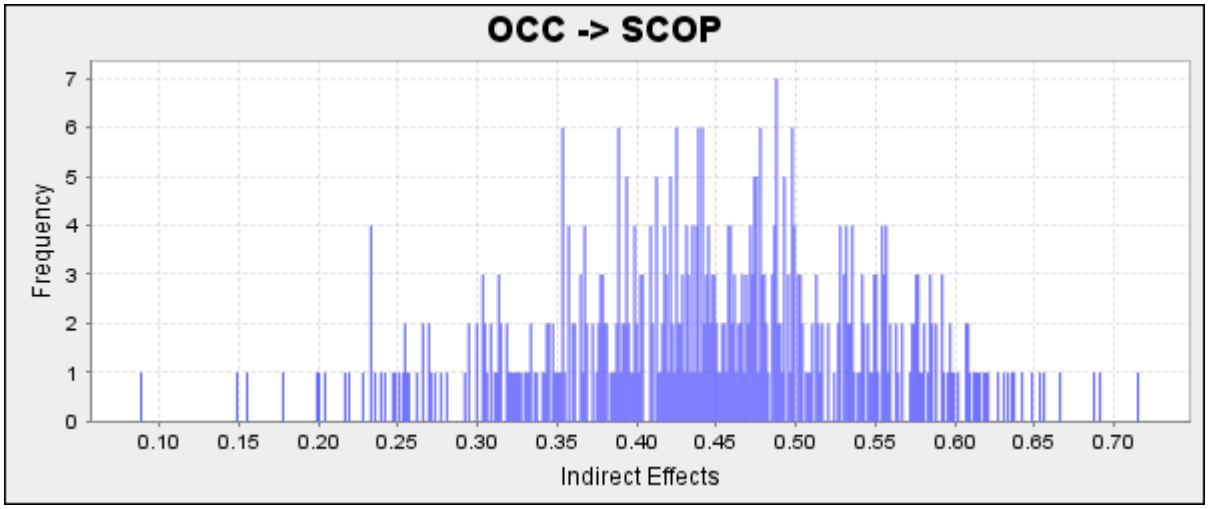

Figure 5. Mediation effect of SCTA between OCC and SCOP

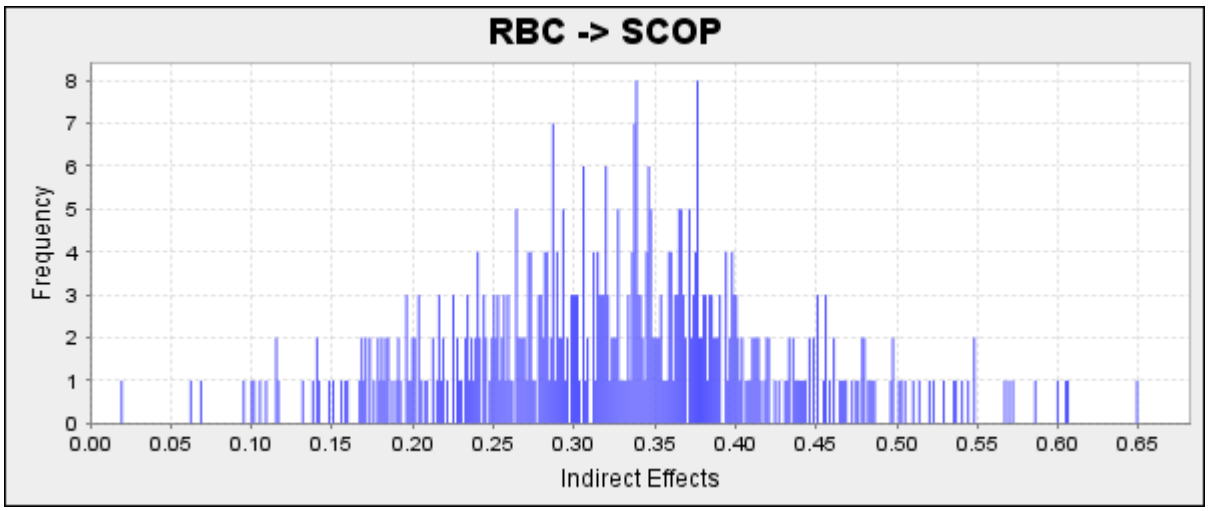

Figure 6. Mediation effect of SCTA between RBC and SCOP

5. Conclusion

The aim of the current study is to observe the effect of organization culture capability and relationship building capability on supply chain operational performance with the mediating role of supply chain technology adoption. To achieve this aim, data were gathered from the employees of companies purely related to supply chain.

Results of the study investigated that organization culture capability and relationship building capability both have an important contribution in supply chain operational performance through supply chain technology adoption [61,62]. Better organization culture capability through effective involvement, consistency, adaptability, and innovativeness has a significant impact on supply chain operational performance through supply chain technology adoption. Moreover, a good relationship with customers, partners, and other stakeholders increase technology adoption and operational performance. Therefore, to increases supply chain operational performance in Indonesian supply chain companies, organization culture capability, relationship building capability, and supply chain technology adoption are important. Thus, the Indonesian supply chain companies should enhance better organization culture capability, relationship building capability and supply chain technology adoption to enhance operational performance.

References

[1] Huan, S.H., S.K. Sheoran, and G. Wang, *A review and analysis of supply chain operations reference (SCOR) model.* Supply Chain Management: An International Journal, 2004. **9**(1): p. 23-29.

[2] Cooper, W.D., *Textile and Apparel Supply Chain Management Technology Adoption The Burlington Industries Case and Beyond.* Journal of Textile and Apparel, Technology and Management, 2006. **5**(2): p. 1-22.

[3] Chan, F.T. and H.J. Qi, *An innovative performance measurement method for supply chain management.* Supply chain management: An international Journal, 2003. **8**(3): p. 209-223.
[4] Houlihan, J.B., *International supply chain management.* International journal of physical distribution & materials management, 1985. **15**(1): p. 22-38.
[5] Leng, F.L. and S. Zailani, *Effects of information, material and financial flows on supply chain performance: A study of manufacturing companies in Malaysia*. International journal of management, 2012. **29**(1): p. 293.
[6] Green Jr, K.W., R. McGaughey, and K.M. Casey, *Does supply chain management strategy mediate the association between market orientation and organizational performance?* Supply Chain Management: An International Journal, 2006. **11**(5): p. 407-414.
[7] Green Jr, K.W., D. Whitten, and R.A. Inman, *The impact of logistics performance on organizational performance in a supply chain context.* Supply Chain Management: An International Journal, 2008. **13**(4): p. 317-327.
[8] Thomas, D.J. and P.M. Griffin, *Coordinated supply chain management.* European journal of operational research, 1996. **94**(1): p. 1-15.
[9] Beske, P., *Dynamic capabilities and sustainable supply chain management.* International Journal of Physical Distribution & Logistics Management, 2012. **42**(4): p. 372-387.
[10] Deshpande, A.R., *Supply chain management dimensions, supply chain performance and organizational performance: An integrated framework.* International Journal of Business and Management, 2012. **7**(8): p. 2.
[11] Lam, J.K. and R. Postle, *Textile and apparel supply chain management in Hong Kong.* International Journal of clothing science and technology, 2006. **18**(4): p. 265-277.
[12] Jacques, A., *The role of electronic commerce in improving supply chain performance.* Advances In Management, 2012.
[13] Jin, K., T. Wang, and A. Palaniappan. *Improving the agility of automobile industry supply chain*. in *Proceedings of the 7th international conference on Electronic commerce*. 2005. ACM.
[14] Agami, N., M. Saleh, and M. Rasmy, *Supply chain performance measurement approaches: Review and classification.* Journal of Organizational Management Studies, 2012. **2012**: p. 1.
[15] Rai, A., R. Patnayakuni, and N. Seth, *Firm performance impacts of digitally enabled supply chain integration capabilities.* MIS quarterly, 2006: p. 225-246.
[16] Wu, F., et al., *The impact of information technology on supply chain capabilities and firm performance: A resource-based view.* Industrial Marketing Management, 2006. **35**(4): p. 493-504.
[17] Liu, H., et al., *The impact of IT capabilities on firm performance: The mediating roles of absorptive capacity and supply chain agility.* Decision Support Systems, 2013. **54**(3): p. 1452-1462.
[18] Ogbonna, E. and L.C. Harris, *Leadership style, organizational culture and performance: empirical evidence from UK companies.* International Journal of Human Resource Management, 2000. **11**(4): p. 766-788.
[19] Marcoulides, G.A. and R.H. Heck, *Organizational culture and performance: Proposing and testing a model.* Organization science, 1993. **4**(2): p. 209-225.
[20] Ramli, A., & Desa, N. M. The relationship between servant leadership and organizational commitment: The Malaysian perspectives. International Journal of Management and Sustainability, (2014). 3(2), 111-123.
[21] Golparvar, M., & Azarmonabadi, A. R. Explaining psychological capital components through organization's ethical climate components. International Journal of Business, Economics and Management, (2014), 1(8), 216-228.
[22] Yeh, W. C., Tseng, M. H., & Lee, C. C.. Effects of Organizational Control, Trust, Relationship Commitment, and Partnerships on Relationship Performance in the Business Waste Industry. International Journal of Asian Social Science, (2018), 8(10), 881-897.
[23] Al Shamsi, I. R. H., & Alsinani, S. A Study of Organizational Factors and Employee Retention: The Case of Ministry of Civil Service in Oman. Journal of Accounting, Business and Finance Research, (2018), 3(2), 72-82.
[24] 24. Anowor, O. F., & Nwanji, M. O. Are There Nexus Between Public Expenditures and Economic Growth in Nigeria?-A Re-Examination. International Journal of Applied Economics, Finance and Accounting, (2018), 2(2), 40-46.
[25] Vlasov, P., & Kiseleva, A. Ideology and Distortions of the Entrepreneurial Concept. The Results of Conflict in Organizational Culture. International Journal of Emerging Trends in Social Sciences, (2017), 1(2), 90-96.
[26] Haque, S., & Pathrannarakul, P. The role of technology in enhancing transparency and accountability in public sector organizations of Pakistan. International Journal of Economics Business and Management Studies, (2013), 2(1), 20-24.
[27] Akhir, R. M., Ahmad, S. N. B., Ahmad, H., & Hashim, N. A. Staying or Leaving? The Influence of Employees' Engagement towards Turnover Decision Among Employees of A Semi-Government Organization in Malaysia. American Journal of Social Sciences and Humanities , (2018), 3(1), 55-62.
[28] Power, D. and A. Simon, *Adoption and diffusion in technology implementation: a supply chain study.* International Journal of Operations & Production Management, 2004. **24**(6): p. 566-587.
[29] Abdul Hadi, A., et al., *Bank's performance and its determinants: evidence from Middle East, Indian sub-continent and African banks.* Polish Journal of Management Studies, 2018. **17**.
[30] Abdul Hadi, A., et al., *Analyzing sectorial level determinants of inward foreign direct investment (FDI) in ASEAN.* Polish Journal of Management Studies, 2018. **17**.
[31] Ali, A. and M. Haseeb, *Radio frequency identification (RFID) technology as a strategic tool towards higher performance of supply chain operations in textile and apparel industry of*

Malaysia. Uncertain Supply Chain Management, 2019. **7**(2): p. 215-226.
[32] Li, S., et al., *The impact of supply chain management practices on competitive advantage and organizational performance.* Omega, 2006. **34**(2): p. 107-124.
[33] Brereton, P., *The software customer/supplier relationship.* Communications of the ACM, 2004. **47**(2): p. 77-81.
[34] Narayanan, S., A.S. Marucheck, and R.B. Handfield, *Electronic data interchange: research review and future directions.* Decision Sciences, 2009. **40**(1): p. 121-163.
[35] Charkaoui, A., A.A. Ouahman, and B. Bouayad, *Modeling the logistics performance in developing countries: an exploratory study of moroccan context.* International Journal of Academic Research, 2012. **4**(2): p. 129-135.
[36] Sukwadi, R., H.M. Wee, and C.C. Yang, *Supply Chain Performance Based on the Lean–Agile Operations and Supplier–Firm Partnership: An Empirical Study on the Garment Industry in I ndonesia.* Journal of Small Business Management, 2013. **51**(2): p. 297-311.
[37] Hameed, W.U., et al., *Determinants of Firm's open innovation performance and the role of R & D department: an empirical evidence from Malaysian SME's.* Journal of Global Entrepreneurship Research, 2018. **8**(1): p. 29.
[38] Schniederjans, M.J., J.L. Hamaker, and A.M. Schniederjans, *Information Technology Investment: Decision-Making Methodology Second Edition*. 2010: World Scientific Publishing Company.
[39] Hofstede, G. and M. Minkov, *Long-versus short-term orientation: new perspectives.* Asia Pacific business review, 2010. **16**(4): p. 493-504.
[40] Chatman, J.A. and K.A. Jehn, *Assessing the relationship between industry characteristics and organizational culture: how different can you be?* Academy of management journal, 1994. **37**(3): p. 522-553.
[41] Deshpande, R. and F.E. Webster Jr, *Organizational culture and marketing: defining the research agenda*. The journal of marketing, 1989: p. 3-15.
[42] Haseeb, M., et al., *The Impact of Renewable Energy on Economic Well-Being of Malaysia: Fresh Evidence from Auto Regressive Distributed Lag Bound Testing Approach.* International Journal of Energy Economics and Policy, 2018. **9**(1): p. 269-275.
[43] Hussain, H., et al., *Adjustment to target debt maturity and equity mispricing: Evidence from Asia Pacific.* Polish Journal of Management Studies, 2018. **17**(2): p. 87-100.
[44] Moore, J.E. and L.A. Burke, *How to turn aroundturnover culture'in IT*. Communications of the ACM, 2002. **45**(2): p. 73-78.
[45] McAfee, R.B., M. Glassman, and E.D. Honeycutt Jr, *The effects of culture and human resource management policies on supply chain management strategy*. Journal of Business logistics, 2002. **23**(1): p. 1-18.
[46] Colovic, G., *Strategic management in garment industry*. 2012: Woodhead Publishing.
[47] Motwani, J., M. Madan, and A. Gunasekaran, *Information technology in managing global supply chains.* Logistics Information Management, 2000. **13**(5): p. 320-327.
[48] He, M. and J. Chen. *The drivers for information technology application in supply chain management: How developing countries' companies facing globalization*. in *Industrial Electronics and Applications, 2008. ICIEA 2008. 3rd IEEE Conference on*. 2008. IEEE.
[49] Kordha, E. and L. Elmazi, *Information and communication technologies as an incentive for improving relationships in business to business markets.* China-USA business review, 2009. **8**(2): p. 9-23.
[50] Hameed, W.-U., et al., *Enterprise Risk Management (ERM) System: Implementation problem and role of audit effectiveness in Malaysian firms.* Asian Journal of Multidisciplinary Studies, 2017. **5**: p. 11.
[51] Shah, S.M.M., et al., *Determinants of Job Satisfaction among Nurses: Evidence from South Asian Perspective.* Journal of Academic Research in Business and Social Sciences, 2018. **8**(5): p. 19-26.
[52] Javanmardi, M., A. Khabushani, and A. Abdi, *Analysis information technology infrastructures toward supply chain agility in home appliance industry.* Interdisciplinary Journal of Contemporary Research in Business, 2012. **4**(3): p. 416-429.
[53] Ul-Hameed, W., et al., *The effect of integration between audit and leadership on supply chain performance: Evidence from UK based supply chain companies.* Uncertain Supply Chain Management, 2019. **7**(2): p. 311-328.
[54] Hair, J., et al., *An updated and expanded assessment of PLS-SEM in information systems research.* Industrial Management & Data Systems, 2017. **117**(3): p. 442-458.