

Role of Enterprise Resource Planning and Total Quality Management in Supply Chain Organizational Performance

Antonius Setyadi*

Post Graduate Program of Management, Mercu Buana University, Jakarta, Indonesia
setyadi@mercubuana.ac.id, setyadi60@gmail.com

Abstract- The objective of this study is to examine the effect of enterprise resource planning (ERP) and total quality management (TQM) on supply chain organizational performance in Indonesia. Therefore, the current study focused on supply chain companies in Indonesia. Additionally, the current study introduced mediating variable, namely; supply chain organizational excellence. The employees of Indonesian supply chain companies having direct involvement in supply chain activities were considered to collect the data. Thus, total two hundred questionnaires were sent to Indonesian supply chain companies by using mail survey. This study used SPSS for preliminary analysis and PLS to examine the relationship between variables. Results of the study highlighted that ERP and TQM has key role to promote supply chain organizational performance with the help of supply chain organizational excellence. It is found that supply chain organizational excellence helps to transfer the positive effect of ERP and TQM on supply chain organizational performance. Therefore, Indonesian companies should focus on supply chain organization excellence.

Keywords: Supply chain, enterprise resource planning, TQM, organizational excellence, organizational performance.

1. Introduction

Organizational performance is one of the most critical area of every organization [1–3]. To sustain in a competitive environment, organization performance is vital. It is based on various important elements. In the present era of competitiveness, supply chain organizational performance is most important for survival. Most

of the companies are now focusing to promote supply chain organizational performance [4]. As the supply chain is most important element of organizations [5–7].

However, Indonesian supply chain companies are facing different challenges related to the performance [8]. Due to these issues, the performance of Indonesian supply chain companies is decreasing. Low performance has adverse effect on gross-domestic product (GDP) of Indonesia. To address this issue, the present study is one of the attempts to introduce various factors to overcome the issue of low performance in Indonesian supply chain companies.

Generally, organizational performance is based on internal and external factors [9–11]. Various external factors include; legal, political, social, economic, technological and ecological factors. The internal factors include; organizational capacity and organizational motivation [12, 13]. Various internal and external organizational factors are shown in Figure 1. However, the current study is only focused on internal organizational factors. These factors include; enterprise resource planning (ERP) and total quality management (TQM).

ERP and TQM has positive relationship with organizational performance [14]. Better ERP and TQM practices has the ability to overcome various performance related issues in supply chain companies. Along with ERP and TQM, supply chain organizational excellence has key role to boost the positive effect of ERP and TQM. Improvement in organizational excellence increases the overall organizational performance [14]. Therefore, the combination of ERP, TQM and supply chain organizational excellence can increase the supply chain organizational performance.



Figure 1. Elements of Organizational Performance

Hence, the objective of this study is to examine the effect of ERP and TQM on supply chain organizational performance in Indonesia. Moreover, the present study is based on various other sub-objectives which are shown below;

1. To examine the effect of ERP on supply chain organizational performance.
2. To examine the effect of TQM on supply chain organizational performance.
3. To examine the indirect effect of supply chain organizational excellence.

2. Literature Review

2.1 Organizational Performance

The organizational performance is one of the complex relationships among six diverse performance criteria's such as efficiency, innovation, effectiveness, quality, productivity and profitability [15,16]. [17] defined organizational performance as a measure of how an organization can handle well and how organizations can bring the value for the concerned customers and stakeholders. Notwithstanding, [18,19,61-64] characterized organizational performance as the device and estimation that is utilized to survey and assess the organization's achievement to make and convey value to its inward and outside clients.

In the present competitive and changing business condition, it is broadly focused on

organizational performance estimation is essential to assess the dimension of success of organizational directions [20]. In this way, without estimating the present circumstance of any organization, it is difficult to enhance its business. In spite of the broad research work that has been led by researchers with respect to the organizational performance, there is no assertion among those literature on the meaning of organizational related performance and in what manner can be characterized [21], [22,61].

2.2 Measuring Supply Chain Organizational Performance

Performance measurement is essential for increasingly practical management in any organization [23]. [24] explained that performance measurement is viewed as a critical part of management. [25] contended that performance measurement is a critical job that develop individuals mindful of what measurements expected to enhance the performance. They included that the principle objective of measurement can be integrated to examine the advancement towards the ideal objective through recognizing enhancement, accomplishing organizational arrangement and objective consistency, improving responsibility, driving future asset assignment choices, conveying to every

person to add to the whole methodology and empowering certain frames of mind and practices. In connection to that, literature centre around four zones for estimating performance, they are

achieved procedure excellence, increase value of stakeholder, satisfy customer, and advance organizational learning. Few performance measures are shown in Figure 2.

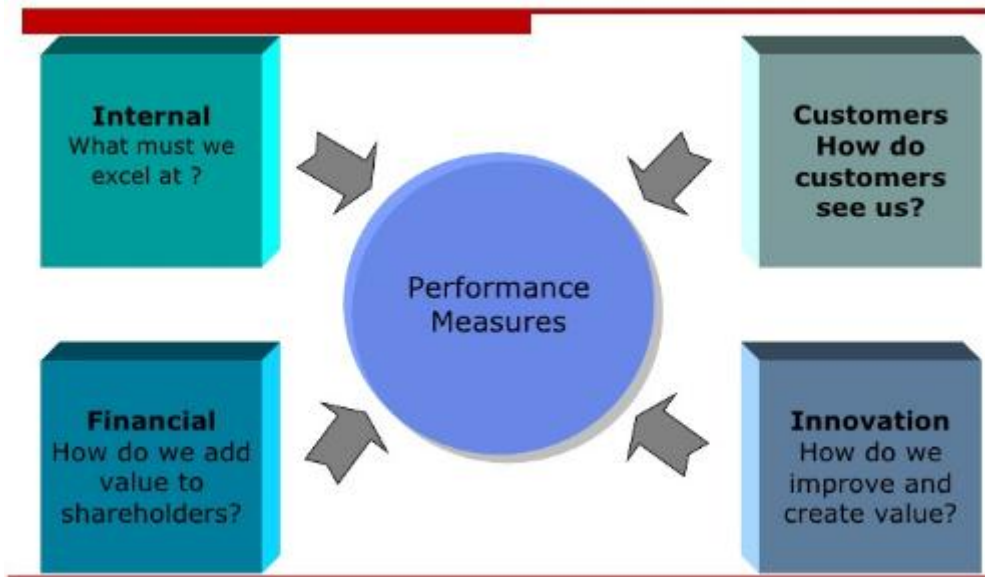


Figure 2. Performance Measures

As indicated by [26], enhancement of something is impossible without estimating it. In this way, enhancing of organizational performance needs a few measurements to decide the degree of adequacy of various organizational recourses on the performance of business [26,27]. Organization related performance is normally measured by budgetary measurement that have a few deficiencies but, to handle these inadequacies few researchers included non-financial indicators to the traditional measuring systems [23]. The current study also adopted non-financial measures of supply chain organizational performance.

With regards to performance measurement and benchmarking, [28, 29] described that benchmarking is measured as a tool to the procedure of organizational performance enhancement. Consequently, [31] presumed that organizations those neglect to work on benchmarking as a necessary piece of their procedure of performance measurement will give results of low performance enhancement and high disappointment and increase turnover among employees. Therefore, performance measurement in supply chain companies is most important [31, 32].

2.3 Enterprise Resource Planning (ERP) and Supply Chain Organizational Performance

Organizations use an extensive variety of technological arrangements and techniques to advance their services as well as products and to improve business procedure [14]. The worldwide market rivalry and the advancement of information technology (IT) support numerous organizations to actualize a progressed technological framework to remain in the line of rivalry [34]. One of these technological frameworks is Enterprise Resource Planning (ERP). An ERP has increased noteworthy development in the market over the most recent two decades [34,35]. As per [37] the worldwide market's income of ERP were assessed in 2008 to be \$65 billion, in 2009 to be \$61 billion, and \$65 billion out of 2010. [38] called attention to that the first major structure of ERP was during the 1960s when computers turned to business. The principal application mechanized manual undertaking, for example, invoicing, recording, and accounting. In addition, he expressed that ERP is an institutionalized programming that comprises of a few modules for explicit capacities. The advancement of ERP started with MRP that is utilized as all-inclusive assembling incorporated framework [39]. Subsequently, ERP and MRP share a similar basic procedure with the distinction that ERP is a lot more extensive than MRP and furthermore increasingly viable in managing various units inside the organization.

[40] expressed that an ERP framework is a complicated framework that dependent on the coordination of business procedures to computerize the stream of information, material, and financial resources inside the organization by utilizing a typical database. Notwithstanding, [41] called attention that ERP usage includes proper change in business procedure and IT changes so as to essentially improve quality, adaptability, responsiveness, cost, as well as performance.

When contrasting ERP frameworks with the different frameworks, the most important elements of ERP are identified with databases, information coordination, interfaces, application, and engineering process. These all highlights result yield which can be measured in various sides, for example, compelling variables, technical factors, and experiences of user's factors [34]. In addition, clients' fulfilment and utilization are basic and noteworthy issues where framework performance is assessed by utilizing knowledge of various clients, for example, top directors, administrators, workers, and framework engineers.

Various studies found that ERP has significant relationship with organizational performance [41–44]. Most of the studies shows that it has positive impact on organizational performance. Therefore, it

is evident that ERP and supply chain companies' performances has relationship.

H₁: ERP has a relationship with supply chain organizational performance.

2.4 Total Quality Management (TQM) and Supply Chain Organizational Performance

Total quality management (TQM) entails organization-wide efforts to "install as well as make permanent climate where employees continuously advance their capability to provide on demand products as well as services that customers will find particular value." TQM in the present changing conditions of business has turned into a primary change that needs for progress in the organization's procedures, culture, beliefs, and key needs among others [46]. There are various studies about TQM as well as its job in creating and improving performance of the organization. The past research about TQM, for example, [47] and [26] changed the business reasoning around the world [48]. TQM is a complete method in organizations' management and emphasis on organizational purposes through quality enhancement, addressing client needs, profitability, and competitiveness [49]. TQM practices are shown in Figure 3.



Figure 3. Total Quality Management (TQM)

Various studies found that TQM has positive impact on organizational performance [49–51]. Therefore, TQM has a relationship with supply

chain organizational performance. Thus, it hypothesized that;

H₂: TQM has a relationship with supply chain organizational performance.

2.5 Supply Chain Organizational Excellence and Supply Chain Organizational Performance

The word —excellence denotes always to the maximum rank of assessment. [53] stated that it is not much tough to know when you can achieve excellence if you do not know what excellence is. It is increasingly connected with "business" or "organizational" excellence. [54] described that whether business excellence can affirm, and prompt competitive favourable position is as yet not settled and there is a discussion among researchers, and the supporting hypothesis of this view is not sufficient. These days, numerous organizations are searching for excellence, however, it is disappointed that a large number of them missed to achieve this objective since they do not have a profound understanding what excellence implies [55].

Different researchers carried out research on organizational excellence. Most of the studies found that organizational excellence and

organizational performance has significant relationship [18],[55–68]. Thus, from the above discussion, below hypotheses are proposed;

H₃: Supply chain organizational excellence has significant relationship with supply chain organizational performance.

H₄: Supply chain organizational excellence mediates the relationship between ERP and supply chain organizational performance.

H₅: Supply chain organizational excellence mediates the relationship between TQM and supply chain organizational performance.

Additionally, from above discussion, it is concluded that;

H₆: There is a significant relationship between ERP and supply chain organizational excellence.

H₇: There is a significant relationship between TQM and supply chain organizational excellence.

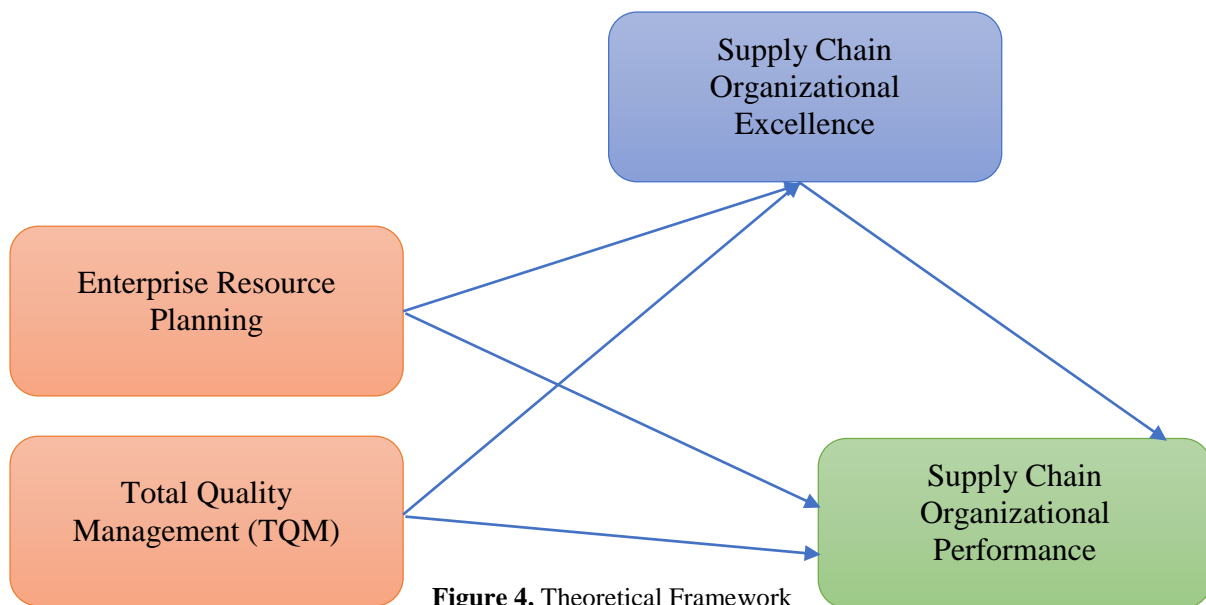


Figure 4. Theoretical Framework

3. Data Collection Procedure

The objective of this study is to examine the effect of ERP and TQM on supply chain organizational performance in Indonesia. Therefore, the current study focused on supply chain companies in Indonesia. The employees of these supply chain companies having direct involvement in supply chain activities was considered to collect the data. Thus, total two hundred questionnaires were sent to Indonesian supply chain companies by using mail survey. From these two hundred questionnaires,

only sixty-five valid responses were received and used for data collection. The response rate is 32.5% which is quite low. However, according to [59] this response rate is sufficient in case of mail survey. Thus, total 65 responses were utilized to get final results. Therefore, this study is based on quantitative research approach. Moreover, this study used cross-sectional research design.

4. Data Analysis and Results

The response rate in the current study is very small. Thus, the statistical software is selected based on the low response rate. According to various studies, partial least square (PLS) is appropriate for data analysis through small sample size [60]. Thus, in this study PLS is used to obtain the results.

4.1 Confirmatory Factor Analysis

Figure 5 shows the factor loadings and Table 1 shows the reliability and convergent validity with the help of average variance extracted (AVE). All the items have factor loadings more than 0.5, composite reliability (CR) above 0.7 and AVE above 0.5. Additionally, discriminant validity is shown in Table 2.

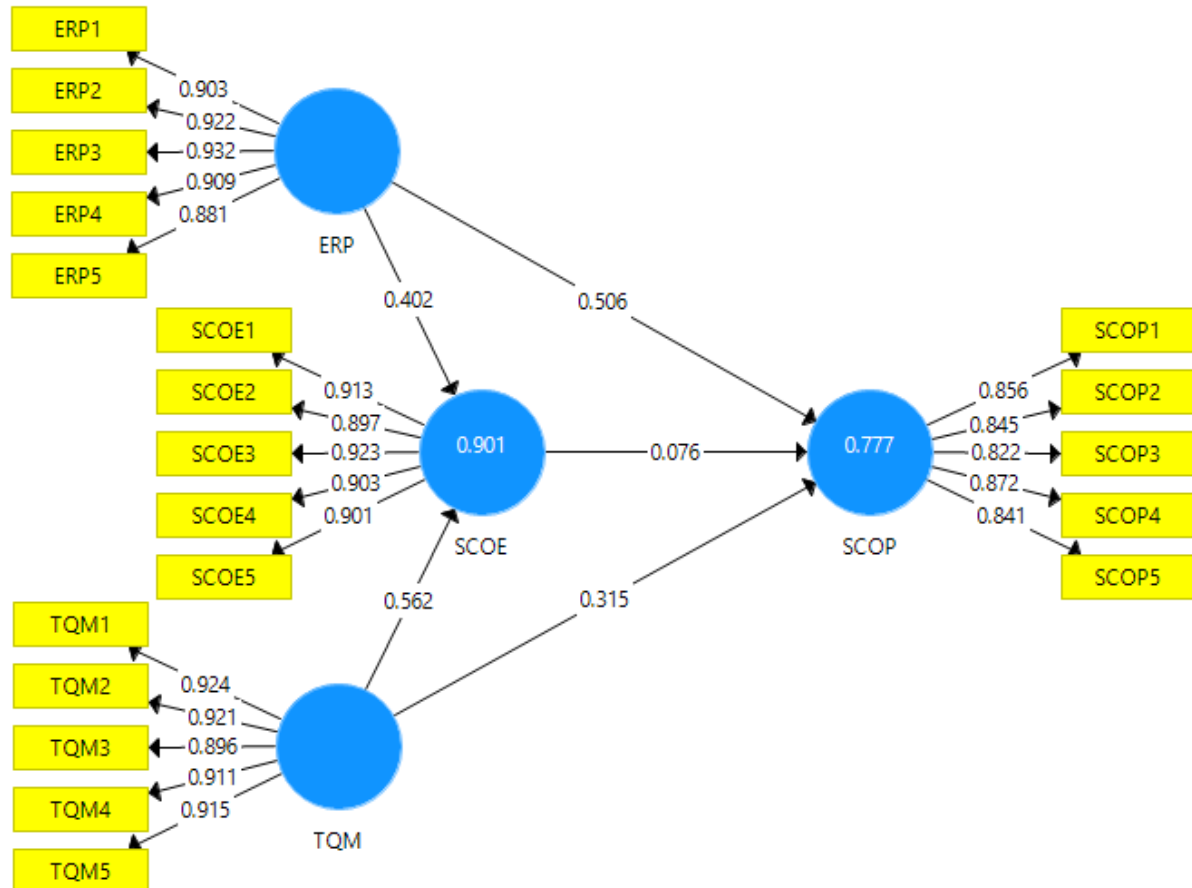


Figure 5. Confirmatory Factor Analysis

Table 1. Confirmatory Factor Analysis Results

	α	rho_A	CR	(AVE)
ERP	0.948	0.948	0.96	0.827
SCOE	0.946	0.947	0.959	0.824
SCOP	0.903	0.913	0.927	0.719
TQM	0.95	0.951	0.962	0.834

Table 2. Discriminant Validity

	ERP	SCOE	SCOP	TQM
ERP	0.909			
SCOE	0.93	0.908		
SCOP	0.873	0.843	0.848	
TQM	0.941	0.94	0.862	0.913

4.2 Structural Model Assessment

Structural model is examined to test the hypotheses which was developed in literature review. In this process, t-value, p-value and beta value was considered to accept or reject the hypotheses. 1.96 t-value is considered to accept the hypotheses. Beta value was considered to check the direct of relationship. It is evident from Figure 6 and Table 3 that all the relationships have t-value above 1.96

and p-value below 0.05 with positive beta values. Thus, all the relationships are direct and positive. ERP and TQM have positive effect on supply chain organizational performance. ERP and TQM also have positive effect on supply chain organizational excellence. Moreover, all the variables are expected to bring 77.7% change in supply chain organizational performance as shown in Figure 5. Additionally, mediation effect given in Table 4 which is significant in both cases.

Table 3. Direct Hypotheses Results

	(O)	(M)	(STDEV)	T Statistics	P Values
ERP -> SCOE	0.402	0.4	0.083	4.819	0
ERP -> SCOP	0.506	0.524	0.143	3.536	0
SCOE -> SCOP	0.076	0.068	0.03	2.542	0.01
TQM -> SCOE	0.562	0.564	0.083	6.804	0
TQM -> SCOP	0.315	0.306	0.138	2.29	0.022

Table 4. Mediation Effect

	(O)	(M)	(STDEV)	T Statistics	P Values
ERP -> SCOE -> SCOP	0.03	0.027	0.015	2	0.044
TQM -> SCOE -> SCOP	0.042	0.038	0.019	2.201	0.035

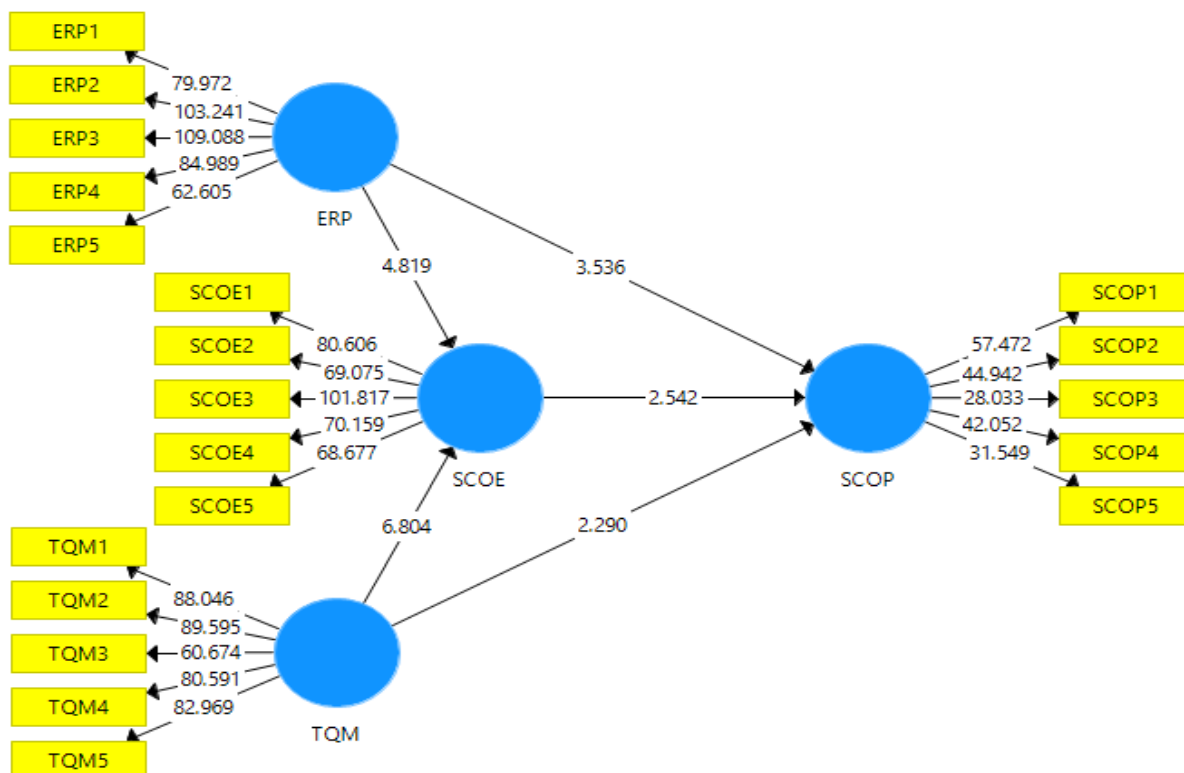


Figure 6. Structural Model Assessment

5. Conclusion

Organizational performance is one of the most significant part to sustain in a competitive environment. It is hard to survive with low

performance in competitive environment. Therefore, the current study attempted to develop a framework with the help of previous studies to boost organizational performance in Indonesian supply chain companies.

Results of the study revealed that issue of organizational performance can be well handled with the help of ERP and TQM. ERP and TQM both have significant effect on supply chain organizational performance. Better ERP practices increases the supply chain organizational performance. Along with ERP, TQM also has significant relationship with supply chain organizational performance. Better management of quality has positive influence on supply chain organizational performance. Apart from ERP and TQM, supply chain organizational excellence has major role to shift the positive effect of ERP and TQM on supply chain organizational performance. It is found that supply chain organizational excellence helps to transfer the positive effect of ERP and TQM on supply chain organizational performance. Therefore, Indonesian companies should focus on supply chain organizational excellence.

Reference

- [1] M. M. Parast and M. Shekarian, "The Impact of Supply Chain Disruptions on Organizational Performance: A Literature Review," in *Revisiting Supply Chain Risk*, Springer, 2019, pp. 367–389.
- [2] L. M. T. Pham, L. T.-T. Tran, P. Thipwong, and W. T. Huang, "Dynamic Capability and Organizational Performance: Is Social Networking Site a Missing Link?," *J. Organ. End User Comput.*, vol. 31, no. 2, pp. 1–21, 2019.
- [3] S. P.-J. Wu, D. W. Straub, and T.-P. Liang, "How information technology governance mechanisms and strategic alignment influence organizational performance: Insights from a matched survey of business and IT managers.," *Mis Q.*, vol. 39, no. 2, pp. 497–518, 2015.
- [4] S. Li, B. Ragu-Nathan, T. S. Ragu-Nathan, and S. S. Rao, "The impact of supply chain management practices on competitive advantage and organizational performance," *Omega*, vol. 34, no. 2, pp. 107–124, 2006.
- [5] V. Boonjing, P. Chanvarasuth, and C. Lertwongsatien, "An Impact of Supply Chain Management Components on Firm Performance," in *Proceedings of the 6th International Conference on Engineering, Project and Production Management*, 2015, pp. 555–565.
- [6] D. Prajogo and J. Olhager, "Supply chain integration and performance: The effects of long-term relationships, information technology and sharing, and logistics integration," *Int. J. Prod. Econ.*, vol. 135, no. 1, pp. 514–522, 2012.
- [7] D. Prajogo, A. Oke, and J. Olhager, "Supply chain processes: Linking supply logistics integration, supply performance, lean processes and competitive performance," *Int. J. Oper. Prod. Manag.*, vol. 36, no. 2, pp. 220–238, 2016.
- [8] S. Gold, A. Trautrim, and Z. Trodd, "Modern slavery challenges to supply chain management," *Supply Chain Manag. An Int. J.*, vol. 20, no. 5, pp. 485–494, 2015.
- [9] R. Dhalla, "The construction of organizational identity: Key contributing external and intra-organizational factors," *Corp. Reput. Rev.*, vol. 10, no. 4, pp. 245–260, 2007.
- [10] S. Stevenson, C. J. Chancellor, H. M. Lee, M. M. Olmstead, and A. L. Balch, "Internal and external factors in the structural organization in cocrystals of the mixed-metal endohedrals (GdSc₂N@ Ih-C80, Gd₂ScN@ Ih-C80, and TbSc₂N@ Ih-C80) and nickel (ii) octaethylporphyrin," *Inorg. Chem.*, vol. 47, no. 5, pp. 1420–1427, 2008.
- [11] A. Najimi, G. Sharifirad, M. M. Amini, and S. D. Meftagh, "Academic failure and students' viewpoint: The influence of individual, internal and external organizational factors," *J. Educ. Health Promot.*, vol. 2, 2013.
- [12] A. Moghadam, "Palestinian suicide terrorism in the second intifada: Motivations and organizational aspects," *Stud. Confl. Terror.*, vol. 26, no. 2, pp. 65–92, 2003.
- [13] Taguchi, H., & Wanasilp, M. (2018). Monetary Policy Rule and its Performance under Inflation Targeting in Thailand. *Asian Journal of Economics and Empirical Research*, 5(1), 19-28.
- [14] H. S. H. Al-Dhaafri, "Organizational performance and excellence of Dubai Police role of total quality management and enterprise resource planning," *Universiti Utara Malaysia*, 2014.
- [15] D. S. Sink and T. C. Tuttle, *Planning and measurement in your organization of the future*. Industrial Engineering And Management, 1989.
- [16] D. M. Saroso, "Decision Making Models for Quality Improvement," *Int. J. Technol.*, vol. 3, no. 2, p. 169, 2012.
- [17] M. Moullin, "Performance measurement definitions: Linking performance measurement and organisational excellence," *Int. J. Health Care Qual. Assur.*, vol. 20, no. 3, pp. 181–183, 2007.
- [18] J. P. Antony and S. Bhattacharyya, "Measuring organizational performance and organizational excellence of SMEs--Part 1: a conceptual framework," *Meas. Bus. Excell.*, vol. 14, no. 2, pp. 3–11, 2010.
- [19] J. P. Antony and S. Bhattacharyya, "Measuring organizational performance and organizational excellence of SMEs--Part 2: an empirical study on SMEs in India," *Meas. Bus. Excell.*, vol. 14, no. 3, pp. 42–52, 2010.
- [20] A. Neely and J. Hii, "The innovative capacity of firms. Report commissioned by the Government Office for the East of England," *Cent. Bus. Performance, Judge Inst. Manag. Stud. Univ.*

- Cambridge, UK, 1999.
- [21] J. D. Ford and D. A. Schellenberg, "Conceptual issues of linkage in the assessment of organizational performance," *Acad. Manag. Rev.*, vol. 7, no. 1, pp. 49–58, 1982.
- [22] Syadullah, M. (2018). ASEAN banking efficiency review facing financial services liberalization: The Indonesian perspective. *Asian Development Policy Review*, 6(2), 88-99.
- [23] M. Demirbag, E. Tatoglu, M. Tekinkus, and S. Zaim, "An analysis of the relationship between TQM implementation and organizational performance: evidence from Turkish SMEs," *J. Manuf. Technol. Manag.*, vol. 17, no. 6, pp. 829–847, 2006.
- [24] P. Pongatichat and R. Johnston, "Exploring strategy-misaligned performance measurement," *Int. J. Product. Perform. Manag.*, vol. 57, no. 3, pp. 207–222, 2008.
- [25] T. P. Mani, P. M. e Sá, and G. Kanji, "Finding the path to organizational excellence in Portuguese local government: a performance measurement approach," *Total Qual. Manag. Bus. Excell.*, vol. 14, no. 4, pp. 491–505, 2003.
- [26] W. E. Deming, "Out of the crisis. Cambridge: Massachusetts Institute of Technology, Centre for Advanced Engineering Study." MIT Press, 1986.
- [27] B. Sharma and D. Gadenne, "An inter-industry comparison of quality management practices and performance," *Manag. Serv. Qual. An Int. J.*, vol. 12, no. 6, pp. 394–404, 2002.
- [28] C. N. MADU*, C.-H. Kuei, and R. A. Jacob, "An empirical assessment of the influence of quality dimensions on organizational performance," *Int. J. Prod. Res.*, vol. 34, no. 7, pp. 1943–1962, 1996.
- [29] P. Dawkins, S. Feeny, and M. N. Harris, "Benchmarking firm performance," *Benchmarking An Int. J.*, vol. 14, no. 6, pp. 693–710, 2007.
- [30] R. Mitra Debnath and R. Shankar, "Benchmarking telecommunication service in India: an application of data envelopment analysis," *Benchmarking An Int. J.*, vol. 15, no. 5, pp. 584–598, 2008.
- [31] C. O. Longenecker and L. S. Fink, "Improving management performance in rapidly changing organizations," *J. Manag. Dev.*, vol. 20, no. 1, pp. 7–18, 2001.
- [32] A. Gunasekaran, C. Patel, and R. E. McGaughey, "A framework for supply chain performance measurement," *Int. J. Prod. Econ.*, vol. 87, no. 3, pp. 333–347, 2004.
- [33] A. Gunasekaran, C. Patel, and E. Tirtiroglu, "Performance measures and metrics in a supply chain environment," *Int. J. Oper. Prod. Manag.*, vol. 21, no. 1/2, pp. 71–87, 2001.
- [34] C.-C. Wei, "Evaluating the performance of an ERP system based on the knowledge of ERP implementation objectives," *Int. J. Adv. Manuf. Technol.*, vol. 39, no. 1–2, pp. 168–181, 2008.
- [35] J. Carlino, S. Nelson, and N. Smith, "AMR research predicts enterprise applications market will reach \$78 billion by 2004," *AMR Res.*, 2000.
- [36] K. Reilly, "AMR research releases ERP market report showing overall market growth of 14% in 2004," *Growth (Lakeland)*, vol. 29, 2009.
- [37] M. D'Aquila, J. Shepherd, and T. Friscia, "The global enterprise applications software market forecast update 2009--2010," *AMR Res.*, 2009.
- [38] C. Møller, "ERP II: a conceptual framework for next-generation enterprise systems?," *J. Enterp. Inf. Manag.*, vol. 18, no. 4, pp. 483–497, 2005.
- [39] Sudirman, I., Hamid, N., & Sidin, I. (2017). The Manifestation of Physician's Nonverbal Communication towards Patient's Satisfaction. *Humanities and Social Sciences Letters*, 5(2), 29-35.
- [40] V. Kumar, B. Maheshwari, and U. Kumar, "Enterprise resource planning systems adoption process: a survey of Canadian organizations," *Int. J. Prod. Res.*, vol. 40, no. 3, pp. 509–523, 2002.
- [41] Suleiman, N., Yahaya, L., & Abba, M. (2018). The Perception On Public Sector Corruption (PSC) In Nigeria: An Insight From Experts In Anti-Corruption Agencies (ACA). *International Journal of Applied Economics, Finance and Accounting*, 2(2), 60-70.
- [42] R. Poston and S. Grabski, "The impact of enterprise resource planning systems on firm performance," *ICIS 2000 Proc.*, p. 48, 2000.
- [43] J.-H. Park, H.-J. Suh, and H.-D. Yang, "Perceived absorptive capacity of individual users in performance of Enterprise Resource Planning (ERP) usage: The case for Korean firms," *Inf. Manag.*, vol. 44, no. 3, pp. 300–312, 2007.
- [44] B. Wier, J. Hunton, and H. R. HassabElnaby, "RETRACTED: Enterprise resource planning systems and non-financial performance incentives: The joint impact on corporate performance." Elsevier, 2007.
- [45] M. Anderson, R. D. Banker, N. M. Menon, and J. A. Romero, "Implementing enterprise resource planning systems: organizational performance and the duration of the implementation," *Inf. Technol. Manag.*, vol. 12, no. 3, pp. 197–212, 2011.
- [46] J. Motwani, "Critical factors and performance measures of TQM," *TQM Mag.*, vol. 13, no. 4, pp. 292–300, 2001.
- [47] P. B. Crosby, *Quality is still free: making quality certain in uncertain times*. McGraw-Hill Companies, 1996.
- [48] M. E. James, *An empirical investigation into the extent of quality management practices in the Jamaican manufacturing industry*. University of Phoenix, 2009.
- [49] L. D. Pfau, "Total quality management gives companies a way to enhance position in global marketplace," *Ind. Eng.*, vol. 21, no. 4, p. 17, 1989.
- [50] D. Gharakhani, H. Rahmati, M. R. Farrokhi, and

- A. Farahmandian, "Total quality management and organizational performance," *Am. J. Ind. Eng.*, vol. 1, no. 3, pp. 46–50, 2013.
- [51] O. A. Arda, E. Bayraktar, and E. Tatoglu, "How do integrated quality and environmental management practices affect firm performance? Mediating roles of quality performance and environmental proactivity," *Bus. Strateg. Environ.*, 2018.
- [52] J. Hong, Y. Liao, Y. Zhang, and Z. Yu, "The effect of supply chain quality management practices and capabilities on operational and innovation performance: Evidence from Chinese manufacturers," *Int. J. Prod. Econ.*, 2019.
- [53] S. Mi Dahlgaard-Park, "Decoding the code of excellence—for achieving sustainable excellence," *Int. J. Qual. Serv. Sci.*, vol. 1, no. 1, pp. 5–28, 2009.
- [54] R. Reed, D. J. Lemak, and N. P. Mero, "Total quality management and sustainable competitive advantage," *J. Qual. Manag.*, vol. 5, no. 1, pp. 5–26, 2000.
- [55] S. M. P. Dahlgaard and J. J. Dahlgaard, "Towards a holistic understanding of human motivation: core values—the entrance to people's commitment?," *AI Soc.*, vol. 17, no. 2, pp. 150–180, 2003.
- [56] R. Edgeman, "Performance Management and Enterprise Excellence through Sustainable Business Models," in *Sustainable Business Models*, Springer, 2019, pp. 317–359.
- [57] H. Kerzner, *In search of excellence in project management: Successful practices in high performance organizations*. Van Nostrand Reinhold New York, NY, 1998.
- [58] J. J. Jamrog, M. Vickers, M. H. Overbolt, and C. L. Morrison, "High-performance organizations: Finding the elements of excellence," *People Strateg.*, vol. 31, no. 1, pp. 29–39, 2008.
- [59] U. Sekaran and R. Bougie, "Edisi 6," *Res. Methods Bus.*, 2013.
- [60] J. F. Hair Jr, G. T. M. Hult, C. Ringle, and M. Sarstedt, *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications, 2016.
- [61] Ahmed, U., Zin, M. L. M., & Majid, A. H. A. (2016). Impact of Intention and Technology Awareness on Transport Industry's E-service: Evidence from an Emerging Economy. *산경연구논집 (IJIDB)*, 7(3), 13-18.
- [62] Ali, A., & Haseeb, M. (2019). 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*, 7(2), 215-226.
- [63] Suryanto, T., Haseeb, M., & Hartani, N. H. (2018). The Correlates of Developing Green Supply Chain Management Practices: Firms Supply Chain Management Practices: Firms Level Analysis in Malaysia. *International Journal of Supply Chain Management*, 7(5), 316.
- [64] Haseeb, M., Abidin, I. S. Z., Hye, Q. M. A., & Hartani, N. H. (2018). 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*, 9(1), 269-275.
- [65] Haseeb., H. Z., G. Hartani., N.H., Pahi., M.H. Nadeem., H. . (2019). Environmental Analysis of the Effect of Population Growth Rate on Supply Chain Performance and Economic Growth of Indonesia. *Ekoloji*, 28(107).
- [66] Basheer, M., Siam, M., Awn, A., & Hassan, S. (2019). Exploring the role of TQM and supply chain practices for firm supply performance in the presence of information technology capabilities and supply chain technology adoption: A case of textile firms in Pakistan. *Uncertain Supply Chain Management*, 7(2), 275-288.
- [67] Hailu, H., Mengstu, S., & Hailu, T. (2018). An integrated continuous improvement model of TPM, TPS and TQM for boosting profitability of manufacturing industries: An innovative model & guideline. *Management Science Letters*, 8(1), 33-50.
- [68] Imran, M., Hamid, S., & Aziz, A. (2018). The influence of TQM on export performance of SMEs: Empirical evidence from manufacturing sector in Pakistan using PLS-SEM. *Management Science Letters*, 8(5), 483-496.