

## THE IMPACT OF DIGITAL TRUST ON CUSTOMER SATISFACTION AND LOYALTY (THE CASE OF DIGITALIZATION IN CONTAINER SHIPPING SERVICES IN INDONESIA)

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**Abstract:** The COVID-19 pandemic has driven digital transformation in many industries. Digitalization is also developing and affecting non-technology industries, including the cargo shipping industry with containers using ships in Indonesia which is experiencing digitalization changes in its services and operations. Indonesian container shipping companies have prepared strategies to maintain long-term relationships by increasing customer satisfaction and loyalty through digitalization. The purpose of this study was to determine how the effect of digital trust compared to service quality on customer satisfaction and loyalty. Qualitative data collection was conducted across 152 freight forwarding companies with respondents working in operations, customer service, sales, and marketing departments. The hypothesis is tested using a structural equation model (SEM). The research found that digital trust has no direct relationship with customer loyalty; But when mediated by customer satisfaction, digital trust affects customer loyalty. Service quality remains a determinant of customer satisfaction and loyalty. This research presents the influence of customer loyalty not only through traditional service quality but also digital trust in the modern era, which is still relatively new in the container shipping industry in Indonesia.

**Keywords:** Non-technology industry, shipping container, service quality, digital trust, customer satisfaction, customer loyalty

### INTRODUCTION

The container shipping industry uses a B2B business model with customers from EMKL or freight forwarding companies providing services to freight owners. According to Kalafatis and Cheston (1997), cited by Balci dan Cetin, (2017), B2B business models are more complex than B2C in the container shipping industry in Turkey. Customer loyalty depends not only on the value of the product or service, but also on the value of the profits that customers get. Russo and Confente, (2017) explained that in the B2B business model, the customer's focus is on the company's financial performance, and customer loyalty is the main target of service providers. Several factors influence customer loyalty in B2B business models, according to Russo and Confente, (2017), Includes large switching costs, customer satisfaction, service quality, trust, and commitment to continue using service providers.

The rapid growth in ocean cargo shipping is encouraging container shipping industry businesses to purchase larger capacity container carriers. This continuous purchase of container vessels leads to oversupply, creating an imbalance between supply and demand, resulting in fierce competition and decreased profitability Glave, T., Joerss, M., and Saxon, S., (2014). Pressure on the sales division to meet ship capacity triggered hasty decisions on shipping rates, causing price competition to the detriment of the industry (Glave et al., 2014).

To maintain profitability, container shipping companies need to maintain and win customer loyalty by providing superior service. Increasing customer satisfaction is also key in responding to intensive competition Balci et al., (2019); (Chao and Chen, 2015). Balci, G.,

Caliskan, A., and Yuen, K. F., (2019) and Chao and Chen, (2015) reinforcing that relational bonding strategies in container shipping services are key to maintaining customer loyalty to B2B business models. Container shipping companies continuously strive to provide the best service and develop competitive advantages to maintain customer satisfaction, which is considered crucial for the sustainability of the company (Midoro, R., Musso, E., and Parola, F., 2005). As a strategy, container shipping companies implement product differentiation in their services Kotler and Armstrong, (2010), and emphasizing the importance of high-quality service to stand out from competitors Collett Miles, (2013).

At the end of 2019, the COVID-19 pandemic hit the world, triggering efforts to limit social and community activities by the Indonesian government, such as PSBB and PPKM (kominfo.go.id, 2020). This encourages industries, including container shipping, to develop digitalization technologies to provide new business models and increase the value of their services Yudhistira, (2022). This digital transformation is accelerated by the phenomenon of unexpected change, namely the COVID-19 pandemic (accidental transformation). Digitalization has recently played a key role in the container shipping industry, establishing Digital Trust as a competitive advantage (Balci, 2021b). Despite the challenges, digitalization in the sector is supported, although EMKL and freight forwarding must transform the way they operate by switching to digital ordering and administration (Balci, 2021b).

Several container shipping companies have digitized (Zeng, F., Chan, H. K., and Pawar, K., 2020), to change operational processes that are usually carried out manually to go through *digital platforms*, including ordering, price requests, demurrage fee calculations to issuing *bills of lading* (B/L). *Digital trust* is still a very interesting variable to be studied in the container shipping industry in Indonesia, because container shipping companies in Indonesia have not developed many digital applications or digital services.

Indonesian container shipping companies have been making changes towards digitalization since 2016. The application was developed to provide ship schedules that can be directly accessed by customers and make *online orders (e-booking)*, also *integrate with services provided, such as* electronic Shipping Instruction (e-SI), *electronic Bill of Lading (e-BL)*, electronic Delivery Order (e-DO), *customer dashboard*, trace and tracking, *personalize booking, and more*.

Several previous studies have shown a relationship between Service Quality to Customer Satisfaction in the container shipping industry (Akil dan Ungan, 2021; Hirata, 2019; Kusumo, D. S., Rachbini, D. J., dan Rekart, E., 2021; Putra Setiawan dan Frianto, 2021; Selasdini, V., Nurdin, M., dan Budi Nugroho, A., 2021; Subaebasni, S., Risnawaty, H., dan Arie Wicaksono, A., 2019; Susanti, S., Wiwaha, E., dan Tyas, A. W., 2020; Thai, V. V., Grewal, D., dan Chen, S., 2021; Yorulmaz dan Taş, 2022). Likewise, research examining the effect of Service Quality on Customer Loyalty (Akil dan Ungan, 2021; Kusumo et al., 2021; Subaebasni et al., 2019; Thai et al., 2021). Meanwhile, research on the effect of *digital trust* on customer satisfaction and loyalty in the container shipping industry (Balci, 2021a) and in the tech industry (Hermawan, 2020; Zhghenti and Gedenidze, 2022).

In this study, presenting novelty elements with a research focus on 2 traditional and modern service variables, namely Service Quality (SQ), *Digital Trust* (DT) which as far as the author knows there has been no research that examines these two variables simultaneously both in national and international journals. The relationship between Customer Satisfaction and Customer Loyalty is unique to the container shipping industry in Indonesia. Therefore, this study

also examines the relationship between Customer Satisfaction (CS) and Customer Loyalty (CL) directly, or indirectly, namely as mediation to analyze Service Quality (SQ) variables and *Digital Trust* (DT) variables on Customer Loyalty (CL).

## MATERIALS AND METHODS

This type of research uses quantitative research because quantitative research emphasizes the breadth of information (Sugiyono, 2019). The unit of analysis in this study is customers of Indonesian container shipping companies, which are Marine Freight Forwarding Companies (EMKL), *or freight forwarders, and respondents will be employees who run operations, sales, or branch heads of EMKL companies or freight forwarders* (Thai et al., 2021). The data sources in this study are primary data sources and secondary data sources. For primary data sources, it is obtained through collecting data from respondents using online questionnaires to respondents. Meanwhile, secondary data sources are obtained from Indonesian container shipping companies and literature reviews. The variables in this study are Service Quality, *Digital Trust*, Customer Satisfaction, and Customer Loyalty.

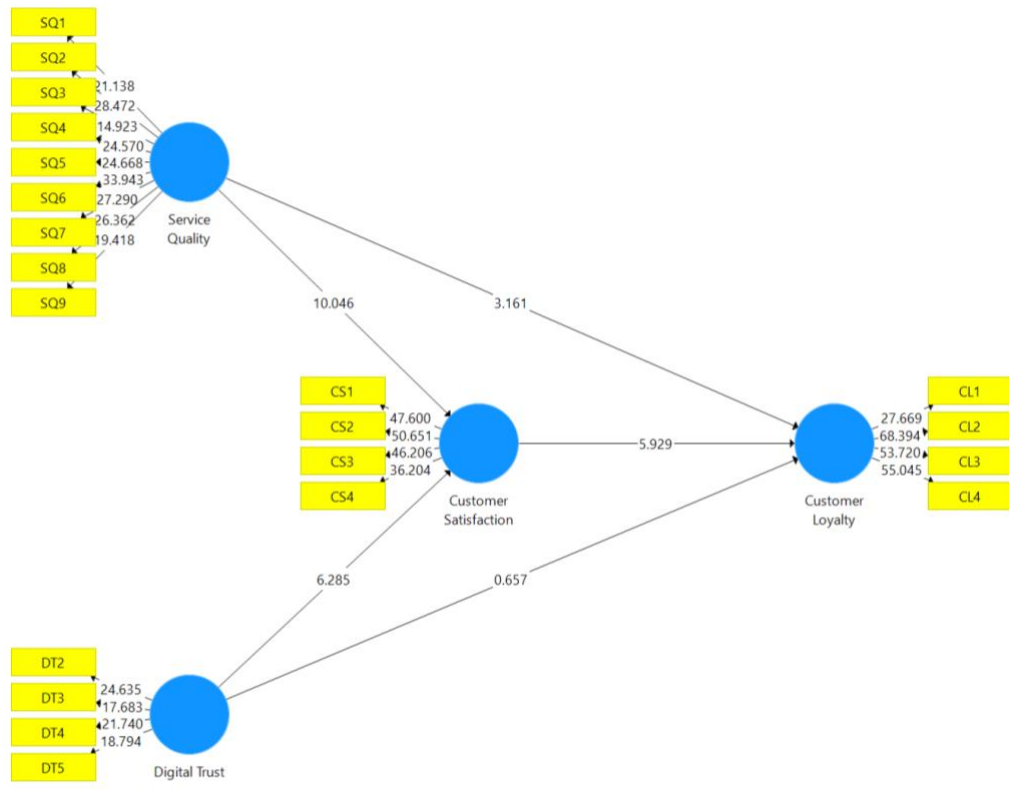
The population in this study was conducted only to employees who work for EMKL companies *or freight forwarders* who ship cargo from the *port of loading* Jakarta, making shipments of at least 50 TEUs in the last 1 year, namely June 2022 to May 2023, with a minimum delivery frequency of 2 times in the last 3 months, namely March 2023 to May 2023. In accordance with the population criteria determined in this study, a total of 152 EMKL companies *or freight forwarders* were obtained with total cargo shipments of 218,563 TEUs or 97.13% of the total shipments from customers of Indonesian container shipping companies that ship cargo from the *port of loading* Jakarta.

Respondents in this study are representatives of EMKL *or freight forwarders*. Respondents are EMKL employees *or freight forwarders* who run operations, *customer service, sales and marketing* with more than 1 year of experience in the shipping industry with containers using ships that use or know the digital applications of container shipping companies. This study used *non-probability sampling technique with purposive sampling technique*. The structural equation model (SEM) analysis method was used in this study using the Smart-PLS (*Partial Least Squares Structural Equation Modeling*) version 3 program as a statistical tool to be able to process questionnaire data that has been collected into statistical data.

No	Characteristic	Presented	Frequency	
1	Age	21 - 30 years	15.56%	21
		31 - 40 years	34.81%	47
		41 - 50 years	36.30%	49
		50 years and above	13.33%	18
2	Number of Employees	1 - 25 employees	23.70%	32
		26 - 50 employees	20.00%	27
		51 - 100 employees	<b>17.04%</b>	23
		more than 100 employees	<b>39.26%</b>	53
3	Shipment Volume	1 - 50 TEU(s)	18.52%	25
		51 - 100 TEUs	19.26%	26
		101 - 500 TEUs	<b>25.93%</b>	35
		more than 500 TEUs	<b>36.30%</b>	49

4	Department	<i>Sales and Marketing</i>	45.93%	62
		<i>Customer Service</i>	7.41%	10
		<i>Operational</i>	20.74%	28
		<i>Top managerial level</i>	25.93%	35
5	Work Experience	less than 1 year old	0.00%	0
		1 - 3 years	15.56%	21
		4 - 6 years	22.22%	30
		more than 6 years	62.22%	84

**RESULTS AND DISCUSSION**



	Hipotesis	T Statistics	P Values	Hypothesis test results
<b>H1:</b>	Service Quality has a positive and significant effect on Customer Satisfaction	10.046	0.000	Accepted
<b>H2:</b>	Service Quality has a positive and significant effect on Customer Loyalty	3.161	0.002	Accepted
<b>H3:</b>	Digital Trust has a positive and significant effect on Customer Satisfaction	6.285	0.000	Accepted
<b>H4:</b>	Digital Trust has a positive and significant effect on Customer Loyalty	0.657	0.511	Rejected
<b>H5:</b>	Customer Satisfaction has a positive and significant effect on Customer Loyalty	5.929	0.000	Accepted

<b>H6:</b>	Quality of Service mediated by Customer Satisfaction has a positive and significant effect on Customer Loyalty	5.040	0.000	Accepted
<b>H7:</b>	Digital Trust mediated by Customer Satisfaction has a positive and significant effect on Customer Loyalty	4.462	0.000	Accepted

### A. The Effect of Service Quality on Customer Satisfaction

The first hypothesis in this study implies that service quality has a significant impact on customer satisfaction in the context of corporate container service. The assessment of customer satisfaction by respondents is based on the service experience that is considered quality from the container shipping company. The results of the hypothesis test showed a critical t-values of 10,046 and p-values of 0,000. This finding is consistent with the results of previous studies that confirmed that service quality affects customer satisfaction, especially in the service industry, B2B services, logistics industry, shipping, and specifically, the container shipping industry in various countries. The implication is that container shipping companies need to prioritize and improve their service quality to achieve optimal customer satisfaction levels. (Akil and Ungan, 2021; Chen et al., 2009; Fachmi et al., 2020; Kang and Kim, 2009; Lie et al., 2019; Roh et al., 2021; Yadav and Rai, 2019; Yorulmaz and Taş, 2022; Yuen and Thai, 2015).

Service quality plays a crucial role in the service industry, especially in the context of container shipping services. The study notes the importance of service quality in influencing customer satisfaction, not just in one particular generation, but covering the entire spectrum of generations, including baby boomers, Gen X, and Gen Y. The majority of respondents in the age range of 31-50 years gave the impression that service quality indicators, such as sales, customer service, and digitalization, contribute positively to customer satisfaction. These findings support previous research, as expressed by Hirata, (2019), that the three strongest characteristics of Service Quality are *sales*, customer service, digitalization. Inseparable from the container shipping industry in Indonesia, Service Quality is also one of the most important factors for Customer Satisfaction, because the Quality of Service obtained from container shipping companies, determines the speed of customers in providing shipping services, which will also provide efficiency for the delivery services provided by customers to the owner of the goods.

### B. The Effect of Service Quality on Customer Loyalty

The second hypothesis in the results of the hypothesis test confirms that service quality also has an effect on customer loyalty in the context of container shipping companies. Respondents who experience quality service tend to show loyalty to the company. Analysis of the hypothesis test resulted in a critical t-values of 3.161 and p-values of 0.002. Although some research, such as in the banking industry (Fattah Al-Slehat, 2021; Yadav dan Rai, 2019), and in the container shipping industry also shows that there is an influence of Service Quality on Customer Loyalty (Balci, 2021a; Balci et al., 2019; Gil-Saura et al., 2018; Subaebasni et al., 2019). However, with a *p-value* result of 0.002, the significance of Service Quality to Customer Loyalty is not as strong as Service Quality to Customer Satisfaction. These results slightly corroborate research conducted in other industries, according to Lie et al., (2019) on his research on *user-based transport applications*, and research by Fachmi et al., (2020) In the insurance industry, which states that the quality of service does not always have a significant influence on customer loyalty. The implication is that container shipping companies need to understand that while service quality can affect customer satisfaction, it does not always directly create customer loyalty. Additional efforts may be needed to reinforce other factors that influence customer loyalty within the context of this industry.

### C. The Effect of Digital Trust on Customer Satisfaction

The third hypothesis asserts that digital trust affects customer satisfaction in the context of container shipping companies. Respondents who experience the benefits of digital information or applications are likely to be satisfied with the company's services. Analysis of the hypothesis test yielded a critical t-value of 6.285 and a p-value of 0.000. Trust in digital information and the benefits of this application provide efficiency in customer operations. This finding is also supported by direct interviews with customers, where they state that trust in digital applications has saved them operational costs. Previous research has also shown that Digital Trust has a positive impact on customer satisfaction (insert name of previous research). The implication is that container shipping companies need to continue to increase customer digital trust by strengthening and optimizing the use of digital information and applications in order to provide more significant benefits for customers, so as to increase the overall level of customer satisfaction Balci, (2021a) in the container shipping industry, also significantly affects Customer Satisfaction.

#### **D. The Impact of Digital Trust on Customer Loyalty**

From the results of the hypothesis test on the fourth hypothesis, it shows that *Digital Trust* does not affect Customer Loyalty. Having trust in digital applications, according to respondents, does not affect Customer Loyalty. The results of the hypothesis test on this fourth hypothesis produce a *critical t-values* of 0.657 and have a *p-value of* 0.511. The results of this fourth hypothesis test contradict the results of research conducted on the container shipping industry in Turkey by Balci, (2021a) which states that *Digital Trust* has an influence on Customer Loyalty. However on research by Balci, (2021a) it shows that the *Digital Trust* variable has a moderate level of significance to Customer Loyalty. In addition, it is known that 50% of respondents include *baby boomers* and Gen X, this certainly affects *Digital Trust* related to Customer Loyalty. According to Chee, (2023) that there is a digital divide that occurs in *the baby boomers* generation which causes difficulties adapting to technology. There are components that must be owned to get sustainable intentions for *baby boomers* and Gen X so that it can become a habit or become dependent (Santosa et al., 2021).

#### **E. The Effect of Customer Satisfaction on Customer Loyalty**

The fifth hypothesis in the results of the hypothesis test shows that Customer Satisfaction has an influence on Customer Loyalty. Respondents who feel satisfaction will encourage customers to continue making transactions with container shipping companies. This is shown from the results of the hypothesis test which produces a *critical t-values* of 5.929 and has a *p-value of* 0.000. The results of this fifth hypothesis test further strengthen research on the effect of Customer Satisfaction on Customer Loyalty in the service industry (Fachmi et al., 2020; Gecit dan Taskin, 2020; Lie et al., 2019; Uyar, 2019), and the effect of Customer Satisfaction on Customer Loyalty in the container shipping industry (Akil and Ungan, 2021; Balci, 2021a; Gil-Saura et al., 2018; Subaebasni et al., 2019; Wen, 2020). In the container shipping industry in Indonesia by getting Customer Satisfaction, it turns out that it can also maintain Customer Loyalty.

#### **F. The Effect of Service Quality on Customer Loyalty mediated by Customer Satisfaction**

The sixth hypothesis in the results of the hypothesis test shows that there is a mediating effect of Customer Satisfaction on Service Quality on Customer Loyalty. Respondents who get Quality Service from service providers will provide satisfaction to customers then for this satisfaction, container shipping companies will get Customer Loyalty. In the results of the hypothesis test that produces a *critical t-values of* 5.040 and has a p-value of 0.000. The results of this hypothesis test further corroborate previous research conducted on the service industry, which has proven that Service Quality mediated by Customer Satisfaction, affects Customer Loyalty (Fachmi et al., 2020; Giao et al., 2020; Lie et al., 2019; Yadav dan Rai, 2019).

#### **G. The Effect of Digital Trust on Customer Loyalty mediated by Customer Satisfaction**

*The Impact Of Digital Trust On Customer Satisfaction And Loyalty (The Case Of Digitalization In Container Shipping Services In Indonesia)*

The seventh hypothesis in the results of the hypothesis test shows that there is a mediating effect of Customer Satisfaction *on Digital Trust* on Customer Loyalty. Respondents who have *Digital Trust* will become loyal to container shipping companies if they get service satisfaction. In the results of the hypothesis test that produces a *critical t-values* of 4.462 and has a *p-value* of 0.000. The results of this hypothesis test further enrich the existing literature, especially in the container shipping industry. The results of the hypothesis test of the effect of mediation *of Customer Satisfaction on Digital Trust* on Customer Loyalty also corroborate the results of the study Balci, (2021a).

## CONCLUSION

This research analyzes how the effect of Service Quality and Digital Trust on Customer Satisfaction and Customer Loyalty as a case study on container shipping companies in Indonesia. Customer Satisfaction is also analyzed as a mediating factor between Service Quality and Digital Trust on Customer Loyalty. The survey conducted was limited to the segmentation of freight forwarding customers, namely Marine Cargo Expeditions (EMKL) or freight forwarders located in DKI Jakarta, Indonesia.

The analysis technique used is SEM-PLS to test conceptual models. Validity tests and reliability tests were carried out to determine how valid and reliable the indicators used in this study were. There is one indicator that is not valid, namely the indicator on the Digital Trust variable (*DT1*), which, according to alleged, the statement on this indicator does not specifically show a correlation between the statement and the Digital Trust variable, causing ambiguity and causing respondents to give a neutral response. This indicator was decided not to be used further in the analysis process, in order to obtain a more accurate analysis of this study. The *R square* test showed good values, while the results of hypothesis testing on the seven hypotheses proposed in this study, there was one hypothesis that was rejected.

The influence of Service Quality on Customer Satisfaction in the container shipping industry. Service Quality from three foundations, namely representative sales, representative customer service, and digitalization affects Customer Satisfaction. Based on the correlation relationship between indicators, here are 4 indicators that are most crucial to Customer Satisfaction, namely the ease of contacting customer service representatives, having a good relationship with sales representatives, quickly getting responses from sales representatives and customer service who can provide solutions.

Based on the conclusions of research results and discussion on the effect of Service Quality and Digital Trust on Customer Loyalty mediated by Customer Satisfaction. Sales representatives and customer service become very vital to Customer Satisfaction. Indonesian container shipping companies are advised to provide continuous training to sales representatives to develop relationship relationships with customers, fast and responsive to communication with customers, and customer service representatives to be able to provide excellent service, quickly respond to customers, and always be able to provide solutions.

To get Customer Loyalty, sales representatives play the most important role. It is recommended that Indonesian container shipping companies need to have a regular schedule for approach by sales representatives specifically to customers and carried out on an ongoing basis so as to make customers continue to be loyal to container shipping companies. Indonesian container shipping companies are also advised to improve their organizational and structural approach to continue to gain Customer Loyalty.

The limitations of the research used as a research variable only use four theoretical studies, namely Service Quality, Digital Trust, Customer Satisfaction, and Customer Loyalty. This research is limited to 135 respondents domiciled in Jakarta with a focus on forwarder segmentation, namely EMKL

or freight forwarders. Limited time for research conducted by survey in a limited period from May to August 2023.

## REFERENCES

- Abdullah, M. Al, Muhammad, M., Syed, F. A., & Ghazali, B. A. (2018). Effect of entrepreneurial and market orientation on consumer engagement and performance of manufacturing SMEs. *Management Research Review*, 34(1), 1–5.
- Akil, S., & Urgan, M. C. (2021). E-Commerce Logistics Service Quality. *Journal of Electronic Commerce in Organizations*, 20(1), 1–19. <https://doi.org/10.4018/jeco.292473>
- Balci, G. (2021a). Digitalization in container shipping: Do perception and satisfaction regarding digital products in a non-technology industry affect overall customer loyalty? *Technological Forecasting and Social Change*, 172, 121016. <https://doi.org/https://doi.org/10.1016/j.techfore.2021.121016>
- Balci, G. (2021b). Digitalization in Container Shipping Services: Critical Resources for Competitive Advantage. *Journal of Eta Maritime Science*, 9(1), 3–12. <https://doi.org/10.4274/jems.2021.47364>
- Balci, G., Caliskan, A., & Yuen, K. F. (2019). Relational bonding strategies, customer satisfaction, and loyalty in the container shipping market. *International Journal of Physical Distribution and Logistics Management*, 49(8), 816–838. <https://doi.org/10.1108/IJPDLM-02-2019-0051>
- Balci, G., & Cetin, I. B. (2017). Market segmentation in container shipping services: a qualitative study. *Management Research Review*, 40(10), 1100–1116. <https://doi.org/10.1108/MRR-01-2017-0012>
- Bhakar, S. S., Bhakar, S., & Bhakar, S. (2015). Customer satisfaction or service quality—identifying mediating variable and evaluating behavioral intention model in hotel industry: an SEM approach. *Research Journal of Social Science and Management*, 5(2), 111–124.
- Chao, S. L., & Chen, B. C. (2015). Effects of switching costs on customer loyalty in the liner shipping industry. *Maritime Economics and Logistics*, 17(3), 341–358. <https://doi.org/10.1057/mel.2014.22>
- Chee, S. Y. (2023). Age-related digital disparities, functional limitations, and social isolation: unraveling the grey digital divide between baby boomers and the silent generation in senior living facilities. *Aging & Mental Health*, 1–12. <https://doi.org/10.1080/13607863.2023.2233454>
- Chen, K.-K., Chang, C.-T., & Lai, C.-S. (2009). Service quality gaps of business customers in the shipping industry. *Transportation Research Part E: Logistics and Transportation Review*, 45(1), 222–237.
- Collett Miles, P. (2013). Competitive strategy: the link between service characteristics and customer satisfaction. *International Journal of Quality and Service Sciences*, 5(4), 395–414. <https://doi.org/10.1108/IJQSS-03-2013-0007>
- Fachmi, M., Modding, B., Kamase, J., & Damis, H. (2020). The Mediating Role of Satisfaction: Life Insurance Customers' Perspective (Service Quality, Trust and Image Toward Loyalty). *International Journal of Multicultural and Multireligious Understanding*, 7(6), 156. <https://doi.org/10.18415/ijmmu.v7i6.1745>
- Fattah Al-Slehat, Z. A. (2021). Determining the Effect of Banking Service Quality on Customer Loyalty Using Customer Satisfaction as a Mediating Variable: An Applied Study on the Jordanian Commercial Banking Sector. *International Business Research*, 14(4), 58. <https://doi.org/10.5539/ibr.v14n4p58>
- Gecit, B. B., & Taskin, E. (2020). The Effect of Value and Service Perceptions on Customer Loyalty for Electronic Commerce Sites; Mediator Role of Satisfaction and Trust. *Business Management Dynamics*, 10(5), 1.
- Giao, H. N. K., Vuong, B. N., & Quan, T. N. (2020). The influence of website quality on consumer's e-loyalty through the mediating role of e-trust and e-satisfaction: An evidence from online shopping in Vietnam. *Uncertain Supply Chain Management*, 8(2), 351–370. <https://doi.org/10.5267/j.uscm.2019.11.004>
- Gil-Saura, I., Berenguer-Contró, G., & Ruiz-Molina, E. (2018). Satisfaction and loyalty in B2B relationships in the freight forwarding industry: Adding perceived value and service quality into equation. *Transport*, 33(5), 1184–1195.

- Glave, T., Joerss, M., & Saxon, S. (2014). The hidden opportunity in container shipping | McKinsey. *Travel, Transport & Logistics McKinsey&Company, November, 8.*
- Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2020). *Multivariate Data Analysis (MVDA), 8th Edition* (P. E. Limited (ed.); 8th ed.). Harlow.
- Hermawan, D. (2020). The Importance of Digital Trust in E-Commerce: Between Brand Image and Customer Loyalty. *International Journal of Applied Research in Management and Economics.*
- Hirata, E. (2019). Service characteristics and customer satisfaction in the container liner shipping industry. *Asian Journal of Shipping and Logistics, 35(1), 24–29.* <https://doi.org/10.1016/j.ajsl.2019.03.004>
- Kang, G., & Kim, Y. (2009). An Analysis of the Measurement of the Shipping Service Quality. *The Asian Journal of Shipping and Logistics, 25(1), 41–55.* [https://doi.org/https://doi.org/10.1016/S2092-5212\(09\)80011-4](https://doi.org/https://doi.org/10.1016/S2092-5212(09)80011-4)
- kominfo.go.id. (2020). *Inilah PP Pembatasan Sosial Berskala Besar untuk Percepatan Penanganan Covid-19.*
- Kotler, P., & Armstrong, G. (2010). *Principles of Marketing.* Pearson Education, Inc.
- Kusumo, D. S., Rachbini, D. J., & Rekarti, E. (2021). Quality of services and prices in promoting customer satisfaction and customer loyalty services of container transportation facilities. Case Study at PT. Yang Ming Shipping Indonesia. *Technium Social Sciences Journal, 21(1), 645–660.*
- Lie, D., Sudirman, A., Efendi, E., & Butarbutar, M. (2019). Analysis of mediation effect of consumer satisfaction on the effect of service quality, price and consumer trust on consumer loyalty. *International Journal of Scientific and Technology Research, 8(8), 421–428.*
- Midoro, R., Musso, E., & Parola, F. (2005). Maritime liner shipping and the stevedoring industry: Market structure and competition strategies. *Maritime Policy and Management, 32(2), 89–106.* <https://doi.org/10.1080/03088830500083521>
- Putra Setiawan, B., & Frianto, A. (2021). Pengaruh Harga dan Kualitas Pelayanan Terhadap Kepuasan Pelanggan (Studi Kasus Perusahaan Jasa Ekspedisi Krian). *BIMA : Journal of Business and Innovation Management, 3(3), 352–366.* <https://doi.org/10.33752/bima.v3i3.293>
- Roh, T., Park, K. S., Oh, Y., & Noh, J. (2021). How Shipping Company Satisfies Shippers Through Service Quality in South Korea: The Mediation Role of Trust\*. *Journal of Korea Trade, 25(5), 19–38.* <https://doi.org/10.35611/jkt.2021.25.5.19>
- Russo, I., & Confente, I. (2017). *Customer loyalty and supply chain management: Business-to-business customer loyalty analysis.* Routledge.
- Santosa, A. D., Taufik, N., Prabowo, F. H. E., & Rahmawati, M. (2021). Continuance intention of baby boomer and X generation as new users of digital payment during COVID-19 pandemic using UTAUT2. *Journal of Financial Services Marketing, 26(4), 259–273.* <https://doi.org/10.1057/s41264-021-00104-1>
- Sekaran, U., & Bougie, R. (2020). *Research Methods for Business : A Skill Building Approach (8th ed. Asia Edition).*
- Selasdini, V., Nurdin, M., & Budi Nugroho, A. (2021). the Effect of Service Quality in Online Delivery Order (Do) Completion on Customer Satisfaction At Pt. Container Maritime Activities. *Dinasti International Journal of Digital Business Management, 2(4), 643–650.* <https://doi.org/10.31933/dijdbm.v2i4.913>
- Subaebasni, S., Risnawaty, H., & Arie Wicaksono, A. (2019). Marketing Effect of Brand Image, the Quality and Price on Customer Satisfaction and Implications for Customer Loyalty PT Strait Liner Express in Jakarta. *International Review of Management and Marketing, 9(1), 90–97.*
- Sugiyono. (2019). *Metode Penelitian Kuantitatif Kualitatif dan R&D.* Alfabeta.
- Susanti, S., Wiwaha, E., & Tyas, A. W. (2020). Pengaruh Kualitas Pelayanan Dan Harga Terhadap Kepuasan Pelanggan Perusahaan Forwarding Di Jakarta. *International Journal of Digital Entrepreneurship and Business (IDEB), 1(1), 1–10.*
- Thai, V. V., Grewal, D., & Chen, S. (2021). *The Impact of Container Shipping Consolidation on Service Quality, Brand Awareness, Customer Satisfaction, and Customer Loyalty : An Exploratory Study.*
- Uyar, A. (2019). EXAMINING THE RELATIONSHIP BETWEEN CUSTOMER SATISFACTION AND CUSTOMER LOYALTY WITH THE STRUCTURAL EQUALITY MODEL AN APPLICATION ON CAR USERS. *Electronic Journal of Social Sciences, 18(69).*

- Wen, L. C. (2020). *The effects of marketing competence on customer satisfaction and loyalty in container shipping services.*
- Yadav, M. K., & Rai, A. K. (2019). *An Assessment of the Mediating Effect of Customer Satisfaction on the Relationship Between Service Quality and Customer Loyalty.* <https://doi.org/10.26446/kjlrp.2017.12.41.4.44>
- Yorulmaz, M., & Taş, A. (2022). Mediating effect of customer satisfaction on the relationship between core service quality and behavioral intentions in liner shipping. *Pomorstvo*, 36(1), 3–13. <https://doi.org/10.31217/p.36.1.1>
- Yudhistira, B. (2022). *Menciptakan Bisnis Kreatif dan Inovatif Digital Bagi Mahasiswa.*
- Yuen, K. F., & Thai, V. Van. (2015). Service quality and customer satisfaction in liner shipping. *International Journal of Quality and Service Sciences*, 7(2/3), 170–183. <https://doi.org/10.1108/IJQSS-02-2015-0024>
- Zeng, F., Chan, H. K., & Pawar, K. (2020). The adoption of open platform for container bookings in the maritime supply chain. *Transportation Research Part E: Logistics and Transportation Review*, 141(June), 102019. <https://doi.org/10.1016/j.tre.2020.102019>
- Zhghenti, T., & Gedenidze, G. (2022). Sharing Economy Platforms in Georgia: Digital Trust, Loyalty and Satisfaction. *Marketing and Management of Innovations*, 2(1), 209–219. <https://doi.org/10.21272/mmi.2022.2-19>
- Abdullah, M. Al, Muhammad, M., Syed, F. A., & Ghazali, B. A. (2018). Effect of entrepreneurial and market orientation on consumer engagement and performance of manufacturing SMEs. *Management Research Review*, 34(1), 1–5.
- Akil, S., & Ungan, M. C. (2021). E-Commerce Logistics Service Quality. *Journal of Electronic Commerce in Organizations*, 20(1), 1–19. <https://doi.org/10.4018/jeco.292473>
- Balci, G. (2021a). Digitalization in container shipping: Do perception and satisfaction regarding digital products in a non-technology industry affect overall customer loyalty? *Technological Forecasting and Social Change*, 172, 121016. <https://doi.org/https://doi.org/10.1016/j.techfore.2021.121016>
- Balci, G. (2021b). Digitalization in Container Shipping Services: Critical Resources for Competitive Advantage. *Journal of Eta Maritime Science*, 9(1), 3–12. <https://doi.org/10.4274/jems.2021.47364>
- Balci, G., Caliskan, A., & Yuen, K. F. (2019). Relational bonding strategies, customer satisfaction, and loyalty in the container shipping market. *International Journal of Physical Distribution and Logistics Management*, 49(8), 816–838. <https://doi.org/10.1108/IJPDLM-02-2019-0051>
- Balci, G., & Cetin, I. B. (2017). Market segmentation in container shipping services: a qualitative study. *Management Research Review*, 40(10), 1100–1116. <https://doi.org/10.1108/MRR-01-2017-0012>
- Bhakar, S. S., Bhakar, S., & Bhakar, S. (2015). Customer satisfaction or service quality—identifying mediating variable and evaluating behavioral intention model in hotel industry: an SEM approach. *Research Journal of Social Science and Management*, 5(2), 111–124.
- Chao, S. L., & Chen, B. C. (2015). Effects of switching costs on customer loyalty in the liner shipping industry. *Maritime Economics and Logistics*, 17(3), 341–358. <https://doi.org/10.1057/mel.2014.22>
- Chee, S. Y. (2023). Age-related digital disparities, functional limitations, and social isolation: unraveling the grey digital divide between baby boomers and the silent generation in senior living facilities. *Aging & Mental Health*, 1–12. <https://doi.org/10.1080/13607863.2023.2233454>
- Chen, K.-K., Chang, C.-T., & Lai, C.-S. (2009). Service quality gaps of business customers in the shipping industry. *Transportation Research Part E: Logistics and Transportation Review*, 45(1), 222–237.
- Collett Miles, P. (2013). Competitive strategy: the link between service characteristics and customer satisfaction. *International Journal of Quality and Service Sciences*, 5(4), 395–414. <https://doi.org/10.1108/IJQSS-03-2013-0007>
- Fachmi, M., Modding, B., Kamase, J., & Damis, H. (2020). The Mediating Role of Satisfaction: Life Insurance Customers' Perspective (Service Quality, Trust and Image Toward Loyalty). *International Journal of Multicultural and Multireligious Understanding*, 7(6), 156. <https://doi.org/10.18415/ijmmu.v7i6.1745>
- Fattah Al-Slehat, Z. A. (2021). Determining the Effect of Banking Service Quality on Customer Loyalty *The Impact Of Digital Trust On Customer Satisfaction And Loyalty (The Case Of Digitalization In Container Shipping Services In Indonesia)*

- Using Customer Satisfaction as a Mediating Variable: An Applied Study on the Jordanian Commercial Banking Sector. *International Business Research*, 14(4), 58. <https://doi.org/10.5539/ibr.v14n4p58>
- Gecit, B. B., & Taskin, E. (2020). The Effect of Value and Service Perceptions on Customer Loyalty for Electronic Commerce Sites; Mediator Role of Satisfaction and Trust. *Business Management Dynamics*, 10(5), 1.
- Giao, H. N. K., Vuong, B. N., & Quan, T. N. (2020). The influence of website quality on consumer's e-loyalty through the mediating role of e-trust and e-satisfaction: An evidence from online shopping in Vietnam. *Uncertain Supply Chain Management*, 8(2), 351–370. <https://doi.org/10.5267/j.uscm.2019.11.004>
- Gil-Saura, I., Berenguer-Contró, G., & Ruiz-Molina, E. (2018). Satisfaction and loyalty in B2B relationships in the freight forwarding industry: Adding perceived value and service quality into equation. *Transport*, 33(5), 1184–1195.
- Glave, T., Joerss, M., & Saxon, S. (2014). The hidden opportunity in container shipping | McKinsey. *Travel, Transport & Logistics McKinsey&Company*, November, 8.
- Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2020). *Multivariate Data Analysis (MVDA)*, 8th Edition (P. E. Limited (ed.); 8th ed.). Harlow.
- Hermawan, D. (2020). The Importance of Digital Trust in E-Commerce: Between Brand Image and Customer Loyalty. *International Journal of Applied Research in Management and Economics*.
- Hirata, E. (2019). Service characteristics and customer satisfaction in the container liner shipping industry. *Asian Journal of Shipping and Logistics*, 35(1), 24–29. <https://doi.org/10.1016/j.ajsl.2019.03.004>
- Kang, G., & Kim, Y. (2009). An Analysis of the Measurement of the Shipping Service Quality. *The Asian Journal of Shipping and Logistics*, 25(1), 41–55. [https://doi.org/https://doi.org/10.1016/S2092-5212\(09\)80011-4](https://doi.org/https://doi.org/10.1016/S2092-5212(09)80011-4)
- kominfo.go.id. (2020). *Inilah PP Pembatasan Sosial Berskala Besar untuk Percepatan Penanganan Covid-19*.
- Kotler, P., & Armstrong, G. (2010). *Principles of Marketing*. Pearson Education, Inc.
- Kusumo, D. S., Rachbini, D. J., & Rekart, E. (2021). Quality of services and prices in promoting customer satisfaction and customer loyalty services of container transportation facilities. Case Study at PT. Yang Ming Shipping Indonesia. *Technium Social Sciences Journal*, 21(1), 645–660.
- Lie, D., Sudirman, A., Efendi, E., & Butarbutar, M. (2019). Analysis of mediation effect of consumer satisfaction on the effect of service quality, price and consumer trust on consumer loyalty. *International Journal of Scientific and Technology Research*, 8(8), 421–428.
- Midoro, R., Musso, E., & Parola, F. (2005). Maritime liner shipping and the stevedoring industry: Market structure and competition strategies. *Maritime Policy and Management*, 32(2), 89–106. <https://doi.org/10.1080/03088830500083521>
- Putra Setiawan, B., & Frianto, A. (2021). Pengaruh Harga dan Kualitas Pelayanan Terhadap Kepuasan Pelanggan (Studi Kasus Perusahaan Jasa Ekspedisi Krian). *BIMA : Journal of Business and Innovation Management*, 3(3), 352–366. <https://doi.org/10.33752/bima.v3i3.293>
- Roh, T., Park, K. S., Oh, Y., & Noh, J. (2021). How Shipping Company Satisfies Shippers Through Service Quality in South Korea: The Mediation Role of Trust\*. *Journal of Korea Trade*, 25(5), 19–38. <https://doi.org/10.35611/jkt.2021.25.5.19>
- Russo, I., & Confente, I. (2017). *Customer loyalty and supply chain management: Business-to-business customer loyalty analysis*. Routledge.
- Santosa, A. D., Taufik, N., Prabowo, F. H. E., & Rahmawati, M. (2021). Continuance intention of baby boomer and X generation as new users of digital payment during COVID-19 pandemic using UTAUT2. *Journal of Financial Services Marketing*, 26(4), 259–273. <https://doi.org/10.1057/s41264-021-00104-1>
- Sekaran, U., & Bougie, R. (2020). *Research Methods for Business : A Skill Building Approach (8th ed. Asia Edition)*.
- Selasdini, V., Nurdin, M., & Budi Nugroho, A. (2021). the Effect of Service Quality in Online Delivery Order (Do) Completion on Customer Satisfaction At Pt. Container Maritime Activities. *Dinasti International Journal of Digital Business Management*, 2(4), 643–650.

- <https://doi.org/10.31933/dijdbm.v2i4.913>
- Subaebasni, S., Risnawaty, H., & Arie Wicaksono, A. (2019). Marketing Effect of Brand Image, the Quality and Price on Customer Satisfaction and Implications for Customer Loyalty PT Strait Liner Express in Jakarta. *International Review of Management and Marketing*, 9(1), 90–97.
- Sugiyono. (2019). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Alfabeta.
- Susanti, S., Wiwaha, E., & Tyas, A. W. (2020). Pengaruh Kualitas Pelayanan Dan Harga Terhadap Kepuasan Pelanggan Perusahaan Forwarding Di Jakarta. *International Journal of Digital Entrepreneurship and Business (IDEB)*, 1(1), 1–10.
- Thai, V. V., Grewal, D., & Chen, S. (2021). *The Impact of Container Shipping Consolidation on Service Quality, Brand Awareness, Customer Satisfaction, and Customer Loyalty : An Exploratory Study*.
- Uyar, A. (2019). EXAMINING THE RELATIONSHIP BETWEEN CUSTOMER SATISFACTION AND CUSTOMER LOYALTY WITH THE STRUCTURAL EQUALITY MODEL AN APPLICATION ON CAR USERS. *Electronic Journal of Social Sciences*, 18(69).
- Wen, L. C. (2020). *The effects of marketing competence on customer satisfaction and loyalty in container shipping services*.
- Yadav, M. K., & Rai, A. K. (2019). *An Assessment of the Mediating Effect of Customer Satisfaction on the Relationship Between Service Quality and Customer Loyalty*. <https://doi.org/10.26446/kjlrp.2017.12.41.4.44>
- Yorulmaz, M., & Taş, A. (2022). Mediating effect of customer satisfaction on the relationship between core service quality and behavioral intentions in liner shipping. *Pomorstvo*, 36(1), 3–13. <https://doi.org/10.31217/p.36.1.1>
- Yudhistira, B. (2022). *Menciptakan Bisnis Kreatif dan Inovatif Digital Bagi Mahasiswa*.
- Yuen, K. F., & Thai, V. Van. (2015). Service quality and customer satisfaction in liner shipping. *International Journal of Quality and Service Sciences*, 7(2/3), 170–183. <https://doi.org/10.1108/IJQSS-02-2015-0024>
- Zeng, F., Chan, H. K., & Pawar, K. (2020). The adoption of open platform for container bookings in the maritime supply chain. *Transportation Research Part E: Logistics and Transportation Review*, 141(June), 102019. <https://doi.org/10.1016/j.tre.2020.102019>
- Zhghenti, T., & Gedenidze, G. (2022). Sharing Economy Platforms in Georgia: Digital Trust, Loyalty and Satisfaction. *Marketing and Management of Innovations*, 2(1), 209–219. <https://doi.org/10.21272/mmi.2022.2-19>



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