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The Role of Service Digitalization in Moderating the Influence of Social Capital on Supply Chain Resilience and the Competitiveness of Sea Transportation Service Companies in Indonesia

Peran Digitalisasi Jasa dalam Memoderasi Pengaruh Modal Sosial terhadap Ketahanan Rantai Pasok dan Daya Saing Perusahaan Jasa Angkutan Laut di Indonesia

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ABSTRACT

Social capital in the form of strong internal and external networks is useful in maintaining the company's supply chain resilience and company competitiveness. During the COVID-19 pandemic, social capital in the form of relationship strength that is the mainstay of transportation service companies is not utilized optimally due to restrictions on direct interaction between companies and stakeholders. Effort to digitize company services is one option in empowering social capital through relationship strength to maintain supply chain resilience and company competitiveness. This research explores the role of service digitalization in the empowerment of social capital to generate supply chain resilience and company competitiveness. Data and information are collected from 446 Indonesia's marine transportation services companies through online surveys and analyzed statistically using SEM WarpPLS. The results showed that social capital has a significant effect on the company's supply chain resilience and also on the company competitiveness. Furthermore, service digitalization strengthens the influence of social capital on the supply chain resilience. Likewise, service digitalization strengthens the influence of social capital on company competitiveness. On the contrary, service digitalization actually weakens the influence of supply chain resilience on the company competitiveness.

Keywords*: Competitiveness, service digitalization, social capital, supply chain resilience.*

ABSTRAK

Modal sosial berupa jaringan internal dan eksternal perusahaan yang kuat bermanfaat dalam menjaga ketahanan rantai pasok dan daya saing perusahaan. Selama pandemi COVID-19, modal sosial berupa kekuatan relasi yang menjadi andalan perusahaan jasa transportasi tidak termanfaatkan secara optimal akibat pembatasan interaksi langsung antara perusahaan dengan pemangku kepentingan. Upaya digitalisasi layanan perusahaan merupakan salah satu opsi dalam memberdayakan modal sosial untuk menjaga ketahanan rantai pasok dan daya saing perusahaan. Penelitian ini bertujuan mengeksplorasi peran digitalisasi layanan dalam memoderasi pemberdayaan modal sosial untuk menghasilkan ketahanan rantai pasok dan daya saing perusahaan. Data dan informasi dikumpulkan dari 446 perusahaan jasa transportasi laut Indonesia melalui survei online dan dianalisis secara statistik menggunakan analisis *Structural Equation Modeling* dengan *software* WarpPLS. Hasil penelitian menunjukkan bahwa modal sosial berpengaruh signifikan terhadap ketahanan rantai pasok perusahaan dan juga terhadap daya saing perusahaan. Selain itu, digitalisasi layanan memperkuat pengaruh modal sosial terhadap ketahanan rantai pasok perusahaan. Demikian juga dengan digitalisasi layanan memperkuat pengaruh modal sosial terhadap daya saing perusahaan. Sebaliknya, digitalisasi layanan justru melemahkan pengaruh ketahanan rantai pasok perusahaan terhadap daya saing perusahaan.

Kata kunci: Daya saing, digitalisasi layanan, ketahanan rantai pasok, modal sosial.

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INTRODUCTION

Supply chain resilience and competitiveness are very important for companies. Supply chain resilience and competitiveness can be obtained from the empowerment of corporate social capital. Corporate social capital can be in the form of internal network strength and or external network strength that has been built continuously for a long time. The pandemic COVID-19 condition has hit the business world including sea transportation service companies. The performance of sea transportation in 5 major Indonesian ports (Belawan, Jakarta, Surabaya, Makassar, and Bitung) both passengers and goods has decreased during the pandemic. The number of passengers was 10.140 people/month compared to before the pandemic of 98.181 people/month, while cargo was 2.420.143 tons/month compared to the previous 2.526.978 tons/month (Kendek, 2022). When viewed from the service aspect, it also shows a decrease in both ship services and goods services, where the ship service aspect with an average value range above 80 percent, and the goods service aspect with an average value range above 65 percent to 80 percent (Arianto & Sutrisno, 2020). This pandemic COVID-19 condition requires companies to respond and adjust their business operations. Sea transportation service companies such as shipping agency companies, stevedoring companies, forwarding companies, and trucking companies also experience the same challenges. These service companies as with other service companies rely on the strength of external relations in producing services. They offer intangible services that rely on social capital in the form of strong relationships and networks with external parties. However, the restriction of physical interaction has resulted in the company adjusting its operational patterns and strategy. One of the operational strategy options is to digitize service products through innovation and service adaptation steps. The digitization option is intended so that the service delivery process can still be realized even though there are obstacles to not being able to interact directly with customers. Corporate supply chain resilience and competitiveness are maintained so that the company's survival can be maintained.

This study intends to explore the moderation role of service digitalization in empowering social capital to maintain corporate supply chain resilience and create company competitiveness. The moderation role of service digitalization on the influence of corporate social capital on supply chain resilience and company competitiveness is a research model development. This research model development is new because the previous empirical is unavailable. Thus, this study contributes to theory enrichment and complements some previous empirical evidence in the examination of the relationship between social capital with supply chain resilience and competitiveness. The theoretical basis used in this research is the theory of resource-based competitive advantage (Barney,1995), social capital theory (Nahapiet & Ghoshal, 1998), and organizational resilience theory (Christopher & Perk, 2004).

Literature Reviews

Social capital is the actual or potential resources owned by individuals or groups or organizations originating from the relationships of these individuals or groups (Nahapiet & Ghoshal, 1998). Social capital consists of three dimensions, namely the structural dimension, the relational dimension, and the cognitive dimension. The structural dimension is defined as the pattern of relationships in the social system that is formed from the property, depth of relationships, connectivity, hierarchy, and network configurations owned (Nahapiet & Ghoshal, 1998). While the relational dimension is related to assets generated through relationships such as respect, friendship, trust, and norms. The cognitive dimension is seen in terms of the system of meaning, shared representation, and interpretation, from the parties involved. Social capital in this study is defined as the strength of the relationship pattern and the depth of the relationship of the sea transportation service company. In addition, it is also in the form of quality relationships in the form of trust, and friendship owned by sea transportation service companies.

Service companies in carrying out company operations must pay attention to the continuity of the operating process in producing the services that will be produced. Thus the continuity of the supply chain must be ensured to run well, which is also known as supply chain resilience. Supply chain resilience is defined as the ability of the system to return to its original state or move

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to a new system through more desirable modifications (Christopher & Perk, 2004). A similar definition is defined as the supply chain's ability to prepare for unexpected risk events, respond and recover quickly to potential disruptions to return to its original situation or grow by moving to a new, more desirable state to improve customer service, market share and financial performance (Hohonstein *et al*., 2015). Supply chain resilience in this study emphasized more on the adaptability of sea transportation service companies in responding to pandemic events so that the services provided to customers can still be realized which will have an impact on the sustainability of targeted revenues and profits.

Competitive advantage or competitiveness is defined as the company's ability to manage its resources to produce products or services provided to customers that have unique and special characteristics so that they have significant differences or advantages compared to competitors. Competitive advantage is defined as the ability of a company to create and maintain its competitiveness in the industry. Another definition from Barney (1995) introduces resource-based competitive advantage is defined as the company's ability with resources that have special and unique characteristics that are managed by creating added value that cannot be done or imitated by competitors. Competitiveness in this study is defined as the achievement of sea transportation service companies having a competitive advantage through resource empowerment strategies to produce unique and distinctive products or services that cannot be imitated by competitors.

Service companies in producing products or services that will be delivered to customers are carried out through improvements and refinements aimed at achieving customer satisfaction. Service companies take advantage of technological advances in modifying the company's products and services to meet customer needs and satisfaction. Service digitization is defined as the use of digital technology to transform business models and provide revenue and value-generating opportunities (Brennen & Kreiss, 2016). Another definition is defined as the process of moving into a digital business, realizing a digital workplace, creating a digital supply chain, changing business processes, and creating an environment for digital business, where digital information is the core (Blix, 2015).

Corporate social capital is related to supply chain resilience where social capital is useful in generating supply chain resilience to ensure the survival of the company. The previous empirical examination showed that there is a positive relationship which means that the greater the social capital of the company, the greater or increase the supply chain resilience (Gölgecia & Kuivalainen, 2020). Social capital in the relational dimension, namely in the form of trust and respect and strong norms owned by the company, is very useful for managing relationships in partnerships so that if there are differences in views or the possibility of conflicts, they can be overcome thanks to trust and respect. (Nahapiet & Ghoshal, 1998). If a company is facing an unforeseen event or the experience in processing its services is experiencing disruptions in the supply chain, then relational social capital will help stronger to recover faster because trusted partners will act kindly and try to recover the situation. Sea transportation service companies that rely on the strength of relationships or networks have supply chain resilience. Therefore, the hypothesis can be built as follows:

H1: Social capital has a significant effect on supply chain resilience.

Corporate social capital is related to the company's competitiveness whereas social capital is useful in creating a company’s competitiveness. Corporate social capital is initial capital or resources with special and distinctive characteristics and then managed by companies that become the company's competitiveness in the competition. Corporate social capital in the form of strong relationships with stakeholders, especially with business partners, is capital for companies to win the competition. Several previous empirical have shown that corporate social capital has a significant effect on the competitiveness of companies both on the scale of the small, medium and large companies (Chukhunonso *et al*., 2021; Fathy *et al*., 2021). However, several other empirical showed that corporate social capital does not affect competitiveness (Widiyati & Hasanah, 2022; Prasetyo *et al.,* 2020; Qamariah & Muchtar, 2019). Sea transportation service companies in the

ownership of social capital obtained from good relations with port managers and other partners are used as capital in creating company competitiveness. Companies that have a strong network that has good access and are proven in the operational field have more added value for customers which are the advantages of the company. Thus the hypotheses that can be built are:
H2: Corporate social capital has a significant effect on the company's competitiveness.

Companies that can demonstrate supply chain resilience as reflected in the output of customer service improvements and also market share have an impact on the competitiveness of the company. Several previous empirical showed that supply chain resilience has a significant effect on company competitiveness (Tarigan *et al.*, 2021). Significant results occur because companies producing supply chain resilience are supported by the company's internal strengthening process, as well as chain agility supply and cooperation in the supply chain within the company. Other empirical showed that agility, collaboration, and engineering or rearrangement have a significant effect on company competitiveness (Abeysekara *et al.*, 2019). Meanwhile, other empirical results showed that supply chain resilience does not affect competitiveness (Rezaei *et al.*, 2022). This result emphasizes that supply chain resilience can be competitive if the supply chain resilience meets three components, namely, it must be agile, adaptable and aligned. Sea transportation service companies can survive in a competitive situation and a situation of environmental change by managing the supply chain well, the company can generate competitiveness. So the hypothesis can be built as follows:
H3: Supply chain resilience has a significant effect on competitiveness.

Service company made a breakthrough in digitizing services to adjust its service process provided to customers during pandemic conditions. Previous empirical showed that the digitization process results in supply chain resilience for companies (Trabucco & De Giovanni, 2021). Other empirical showed that exploration of the use of information technology in collaboration with customers and suppliers will result in supply chain resilience (Gu *et al.*, 2020). The strength of relationships that contain trust, networks that have been formed when disturbed by the covid pandemic where they cannot interact directly, then the service digitization solution will maintain the quality of existing relationships. Thus, the following hypothesis can be built:
H4: The role of service digitalization will strengthen the influence of social capital on the supply chain resilience.

The COVID-19 pandemic event, which reduces the interaction between service providers and service recipients, has forced sea transportation service companies to digitize the services offered to customers. The impact of digitizing services on social capital contributes to the management of resources with a special and distinctive character that becomes a competitive advantage for the company. Thus, social capital in the form of strong relationships and networks that have been well maintained and with the process of digitizing services will generate added value in the form of speed, and accuracy and reduce service costs. Thus, the hypotheses that can be built are as follows:
H5: The role of service digitalization will strengthen the influence of social capital on the company competitiveness.

Companies that have supply chain resilience are useful in creating competitiveness. Efforts to digitize services carried out for supply chain improvement or refinement are also intended as part of efforts to increase competitiveness. Thus it can be said that the role of service digitization in supply chain resilience will create company competitiveness so that the hypothesis can be built as follows:
H6: The role of service digitization will strengthen the influence of supply chain resilience on the competitiveness of enterprises.

Based on the set of hypotheses built above, the following research model is in the form of a relationship between the independent variable and the dependent variable as shown in Figure 1.

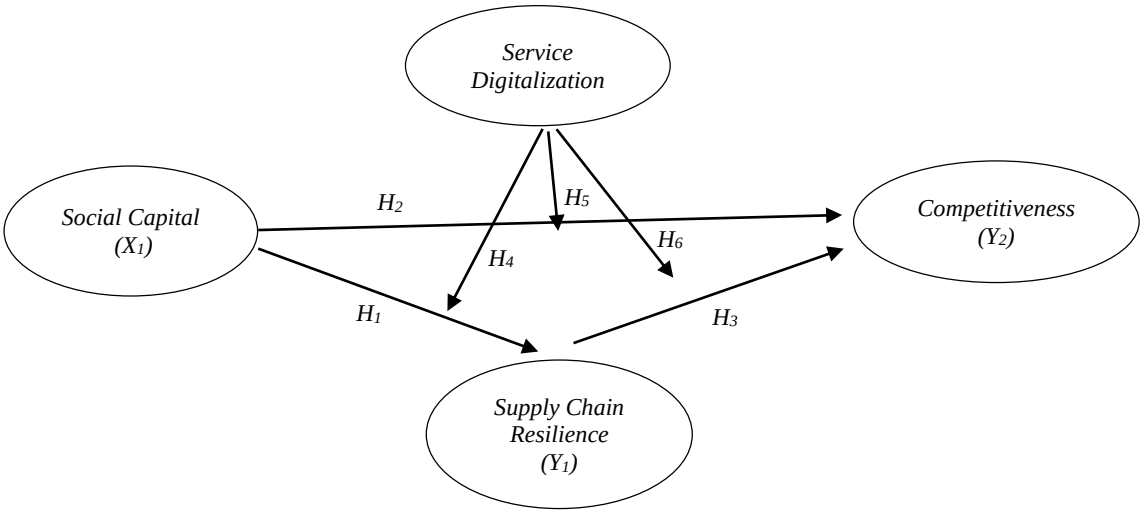

Figure 1. Path diagram of the model construct

RESEARCH METHODE

This research is explanatory research with a quantitative approach. This research was conducted on several sea transportation service companies such as agency companies, stevedoring companies, forwarding, trucking, depots and, warehousing companies spread across almost all major Indonesian ports which are members of each association. The population is sea transportation service companies that are members of the association as many as 8.501 companies. The sample is the company or organization represented by the head of the company. Determination of the number of samples using the Slovin formula with the formula $n = N / (1 + (N \times e^2))$, where N is the total population, n is the number of samples and e is the error tolerance limit (in this study using 5 percent). Thus the minimum number of samples is 382 companies. The sampling technique was done by drawing randomly. The data collection technique was carried out by online survey using Google form. The questionnaire is related to respondents' perceptions of questions with a measurement scale using a 5-point Likert scale interval category: 1. strongly disagree, 2 disagree, 3 neutrals, 4 agree and 5 strongly agree.

This research model consists of four variables, including social capital, supply chain resilience, competitiveness, and service digitization. The Social capital variable that includes structural, relational, and cognitive dimensions are reflected in 5 items adapted from Liu *et al*. (2016). The supply chain resilience variable includes the ability to respond and overcome the smooth supply chain process reflected in four items adapted from Liu *et al.* (2018). The competitiveness variable includes the ability to manage unique and special resources that distinguish it from competitors as reflected in six items adapted from Sigalas and Papadakis (2018). While the service digitization variable includes digitizing interactions with customers, digitizing internal systems, and digitizing networks with partners that provide added value to customers, adapted from Saldanha *et al*. (2017). Furthermore, the results of data processing were analyzed descriptively and statistically inferential to see the validity, reliability, overall capital feasibility, and the relationship between variables using WarPLS 7.0 software.

RESULTS AND DISCUSSION

Based on the size company with indicators of the number of employees, there are 40,6 percent of small companies (employees under 25 people) while large companies with employees above 100 people are 26,9 percent and other companies that have employees between 25-100 people are 23,5 percent. Based on company age, there are 43,0 percent of companies are newly established and 28,5 percent of companies aged over 15 years, and the other 31,5 percent of companies aged between 3-15 years. Based on business type there are 43,0 percent as shipping

agency companies, 24,9 percent as stevedoring companies and 18,6 percent are forwarding companies and the rest are trucking and warehousing companies.

The results of the descriptive variable analysis examination as described in Table 1 showed that all variables of social capital, supply chain resilience, competitiveness, and service digitization have a high mean where the social capital variable has the highest mean of 4,4 and the lowest variable of competitiveness is 3,8. Based on these results, respondents have the perception that social capital in the form of strong relationships and networks is included in the high category. The same result also shows that respondents have a perception that sea transportation service companies have high supply chain durability and high competitiveness. Related to service digitization efforts are also perceived as high.

Table 1. Descriptive variable

Variable	Item	Mean	Standard Deviation
Social Capital (SC)	Good reputation in its industry (SC_1)	4,5	0,64
	External good relationship (SC_2)	4,3	0,60
	Internal strong relationship (SC_3)	4,4	0,65
	Access to valuable resources (SC_4)	4,4	0,58
	Cultivated relationship benefit (SC_5)	4,2	0,64
Supply chain Resilience (SCR)	Quickly return to its original state after being disrupted (SCR_1).	4,3	0,56
	Can move more desirable after being disrupted (SCR_2)	4,1	0,71
	Well-prepared to deal with financial outcomes of potential disruption (SCR_3)	4,1	0,65
	Ability to maintain the level of control of function at the time of disruption (SCR_4)	4,3	0,58
Competitiveness (CA)	More reliable soft resource than competitor (CA_1)	3,9	0,76
	Meet a head customer need than competitor (CA_2)	3,8	0,73
	Initiate and launch the newest product (CA_3)	3,6	0,81
	Imitable product or service (CA_4)	3,6	0,87
	Provide a more flexible product or service than the competitor (CA_5)	3,9	0,72
	Provide product or service more competitive than competitor (CA_6)	3,7	0,76
Service Digitalization (SD)	Enhance our valuable service to the customer (SD_1)	4,2	0,66
	Contribute competitive and efficient operation cost (SD_2)	3,9	0,76
	Provide easier customer access (SD_3)	4,0	0,70
	Enhance company reputation and image (SD_4)	4,2	0,66

The outer model examination is intended to test the validity of both convergent validity and discriminant validity, and reliability. Furthermore, the outer model examination is also intended to test the overall model fit. The results of the outer model test as described in Table 1 show that the suitability of the instrument for all variables meets the requirements of convergent validity because the loading factor value is above 0,60 (Solimun *et al*., 2019). Thus, it is concluded that all indicators reflecting each variable and scores obtained by different variables measuring the same concept show a high correlation. The item that has the highest loading value is an item that reflects the variable. The item that reflects the social capital variable is the ownership of a good external relationship. While the item that reflects the supply chain resilience is well prepared in anticipating financial aspects. The competitiveness variable is reflected by the highest item, namely initiating and introducing the newest product compared to competitors. Meanwhile, the service digitization variable is reflected by the highest item, which is the one that contributes to more efficient operational costs and becomes competitive. The results of the discriminant validity test meet the requirements because the value of each AVE variable is above 0,5 and when viewed

from the loading factor value of each also higher than cross-loading (Solimun *et al*., 2019). Thus, it is concluded that each variable predicts its indicators better than the other variables. The next outer model examination is the reliability test shown in the Cronbach alpha and composite reliability values as described in Table 2. All variables have a Cronbach alpha value above 0,7 and a composite reliability value above 0,6, so it can be concluded that the research model meets the reliability requirements.

Table 2. Validity and Reliability Test

Variable/ Item	Loading Factor	p-value	AVE	Cronbach alpha	Composite reliability	Result
Social Capital (SC)			0,514	0,763	0,841	Valid & Reliable
SC_1	0,692	<0,001				Valid & Reliable
SC_2	0,789	<0,001				Valid & Reliable
SC_3	0,730	<0,001				Valid & Reliable
SC_4	0,708	<0,001				Valid & Reliable
SC_4	0,661	<0,001				Valid & Reliable
Supply-chain Resilience (SCR)			0,684	0,845	0,896	Valid & Reliable
SCR_1	0,792	<0,001				Valid & Reliable
SCR_2	0,805	<0,001				Valid & Reliable
SCR_3	0,868	<0,001				Valid & Reliable
SCR_4	0,840	<0,001				Valid & Reliable
Competitiveness (CA)			0,644	0,888	0,915	Valid & Reliable
CA_1	0,733	<0,001				Valid & Reliable
CA_2	0,849	<0,001				Valid & Reliable
CA_3	0,853	<0,001				Valid & Reliable
CA_4	0,847	<0,001				Valid & Reliable
CA_5	0,798	<0,001				Valid & Reliable
CA_6	0,722	<0,001				Valid & Reliable
Service Digitalization (SD)			0,705	0,860	0,905	Valid & Reliable
SD_1	0,796	<0,001				Valid & Reliable
SD_2	0,872	<0,001				Valid & Reliable
SD_3	0,859	<0,001				Valid & Reliable
SD_4	0,828	<0,001				Valid & Reliable

The last outer model test is a structural feasibility test of the model which is shown in the values of R squared and Q squared as described in Table 3. The R-squared value shows what proportion of endogenous variables can be explained by exogenous variables, while the Q-square value is used to assess predictive validity. or the relevance of a set of exogenous latent variables to their endogenous variables (Solimun *et al.*, 2019). The results of the model feasibility test as described in Table 3 show that the variable supply chain resilience can be explained by the social capital variable by 36,7 percent while the competitiveness variable can be explained by the social capital variable and supply chain resilience by 29,9 percent. This value is a moderate-level category. In other words, the variables of supply chain resilience and competitiveness are explained by factors outside this research model by 70,1 percent and 63,3 percent. With the range of R-square values that belong to the moderate category, it is necessary to consider adding other variables to increase the R-square value of the resulting equation model. The addition of these variables can act as mediating variables or the addition of exogenous variables. Meanwhile, the Q-square value for supply chain resilience and competitiveness variables is 0,367 and 0,303, respectively. Both of these Q-square values are large-level categories. Furthermore, the overall goodness of the model test showed that the research.

Table 3. The goodness of fit model

Variable	R-squared	Adj. R-squared	Q-squared
Social Capital (SC)	-	-	-
Supply Chain Resilience (SCR)	0,367	0,364	0,367
Competitiveness (CA)	0,299	0,293	0,303
Service Digitalization SD)	-	-	-

The model has met the goodness of fit category. All items such as APC, ARS, AARS, AVIF, AFVIF, and others meet the requirements with good and ideal values as described in Table 4. Based on the results of the outer model test where all indicators show conformity with the criteria, namely valid, reliable, and feasible as well as overall suitability, then the research model can be concluded as good.

Table 4. Model fit and quality indices

Subject	Fit indicator	Result	Description
APC (average path coefficient)	p<0,05	APC= 0,238 p< 0,05	Good
ARS (Average R-squared)	p < 0,05	ARS = 0,333 p < 0,001	Good
AARS (Average Adjusted R-squared)	P < 0,05	AARS = 0,329 p< 0,001	Good
AVIF(Average block VIF)	Accepted if <=5 ideally <=3,3	AVIF = 1,310	Ideal
AFVIF(Average full collinearity VIF)	Accepted if <=5 ideally <=3,3	AFVIF = 1,767	Good
GoF (Tenenhaus GoF)	Small >= 0,1 medium >=0,25 large >=0,36	GOF = 0,502	Ideal
SPR (Sympson's paradox ratio)	Accepted if >=0,7 ideally =1	SPR = 0,833	Good
RSCR (R-squared contribution ratio)	Accepted if >=0,9 ideally =1	RSCR = 0,993	Good
SSR (Statistical suppression ratio)	Accepted if >=0,7	SSR = 1,000	Ideal
NLBCDR (Nonlinear bivariate causality direction ratio)	Accepted if >=0,7	NLBCDR =1,000	Ideal

The next model examination is the inner model test, which examines the relationship between social capital variables, supply chain durability, company competitiveness, and service digitalization as described in Table 5. The test results showed that social capital has a significant effect on supply chain resilience with a path coefficient value of 0,550 or 55 percent (**H1** is accepted). The same result also showed that social capital has a significant effect on the competitiveness of the company with a path coefficient of 0,110 or 11 percent (**H2** is accepted). Likewise, the effect of supply chain resilience also has a significant effect on competitiveness with a path coefficient of 0,453 or 45,3 percent (**H3** is accepted). Testing the role of service digitalization moderation, the test results showed that the role of service digitalization has a significant effect on the relationship between social capital and supply chain resilience by 0,173 or 17,3 percent (**H4** is accepted). This means that service digitalization strengthens the effect of social capital on supply chain resilience. Likewise, the role of service digitalization in moderating the influence between social capital and competitiveness also has a significant effect, which means that the role of service digitalization strengthens the relationship (**H5** is accepted). However, the role of service digitalization in moderating the effect of supply chain resilience on competitiveness is not significant with a path coefficient of -0,028 (**H6** is rejected). This value indicates that the role of service digitization is, on the contrary, namely weakening the influence of supply chain resilience on competitiveness.

Table 5. The Results of testing the Relationship Between Variables

Hypothesis	Variable Relationship	Path coefficient	p-value	Result
H1	SC and SCR	0,550	<0,001	Accepted*
H2	SC and CA	0,110	0,008	Accepted*
H3	SCR and CA	0,453	<0,001	Accepted*
H4	SD moderate SC and SCR	0,173	<0,001	Accepted*
H5	SD moderate SC and CA	0,113	0,008	Accepted*
H6	SD moderate SCR and CA	-0,028	0,274	Rejected

Note: * indicates significance on level < 0,05 (< 5%).

The relationship between corporate social capital and supply chain resilience which is reflected in the form of the strength of relations with external sea transportation service companies which showed a significant effect implies that the greater or stronger the company's social capital in the form of strong relations with external companies will increase the company's ability to maintain the supply chain. This result is in line with previous research which showed that social capital has a significant effect on supply chain resilience (Gölgecia & Kuivalainen, 2020). This result support and confirm the theory of social capital where relationships in the form of strong trust and respect are useful for managing relationships in the event of a conflict (Nahapiet & Ghoshal, 1998). This result contributes to empirical evidence on the theory of social capital with the background of abnormal conditions, namely the COVID-19 pandemic. Furthermore, when the relationship between corporate social capital with supply chain resilience is moderated by service digitalization, the result showed that service digitalization strengthens the influence of social capital on supply chain resilience. The strength of external relations that have been well maintained and if there is a service development process will strengthen the company's supply chain resilience. This moderation test complements the previous empirical (Trabucco & De Giovanni, 2021; Gu *et al.*, 2020; Taghizadeh, 2021).

The relationship between corporate social capital and competitiveness which is reflected through the strength of external relations showed a significant effect in the low category of 11 percent. This result means that during the COVID-19 pandemic where almost all companies are under heavy pressure to survive, corporate social capital can still create company competitiveness even though the value of the influence is very small. Previous empirical tests have shown that social capital has a significant effect (Chukhunonso *et al*., 2021; Fathy *et al*., 2021) but the other empirical test showed that social capital does not affect competitiveness (Widiyati, & Hasanah, 2022; Prasetyo *et al.*, 2020; Qamariah & Muchtar, 2019). This result complements the proof of the theory of resource-based competitive advantage from Barney (1995). Furthermore, when the relationship between corporate social capital and competitiveness is moderated by service digitalization, the result showed that service digitalization strengthens the influence of social capital on company competitiveness. This finding is interesting because without moderating the role the value of the influence of social capital on competitiveness is small, but when it is moderated by service digitalization, this relationship is strengthened.

The relationship between supply chain resilience and company competitiveness showed a significant effect with a path coefficient value of 45,3 percent. This result implies that if supply chain resilience is managed agilely, and adapts easily and in harmony, it will create competitiveness for the company. This result is relevant to previous empirical examinations (Tarigan *et al.*, 2021; Abeysekara *et al.*, 2019), but some previous empirical are not relevant (Rezaei *et al.*, 2022). This result contributes to the testing of supply chain resilience theories. These results emphasize that supply chain resilience can be competitive if supply chain resilience meets three components, namely being agile, and flexible. Furthermore, if the relationship between supply chain resilience and competitiveness is moderated by service digitalization the result showed that service digitalization weakens the relationship between supply chain resilience and competitiveness with a negative path coefficient value. These results indicate that companies that already have supply chain resilience even though there is a service system development process, will not increase company competitiveness. Efforts to develop service systems that are not adapted easily and are not aligned and are not agile will weaken the resilience of the company's

supply chain in creating competitiveness. These results contribute to proof of competitive advantage theory, especially testing on abnormal business conditions such as the COVID-19 pandemic condition.

CONCLUSIONS

Corporate social capital which is reflected in the strength of external relations has a significant effect on supply chain resilience. The relationship between social capital and supply chain resilience is strengthened by moderating the role of service digitalization development. The relationship between social capital and competitiveness in transportation service companies has a significant effect even though the value of the influence is small. The relationship between social capital and competitiveness is strengthened by the moderating role of service digitalization The company which has strong supply chain resilience enhances the company's competitiveness. However, the role of digitizing services weakens the influence of supply chain resilience on company competitiveness. The relationship between variables examination results especially related to the role of moderation contributes to empirical evidence in confirming the theory of social capital, the theory of resource-based competitive advantage, and the theory of supply chain resilience. These results concluded that the digitization of services carried out by companies operating during a pandemic strengthens the influence of social capital on supply chain resilience and competitiveness. On the other hand, the digitization of services weakens the influence of supply chain resilience on the competitiveness of companies.

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