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The effect of supply chain agility in mediation of absorptive capacity and competitive advantage: A case study of modern cafes and restaurants

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ABSTRACT

This study aims to investigate the implementation of supply chain agility in mediating the relationship between absorptive capacity and competitive advantage. The object of this study was some cafes and modern restaurants that have over 500 Instagram followers, while the subjects of this study were individuals that manage the cafes and restaurants. The data of three variables of this study were collected using a valid and reliable questionnaire. The data were analyzed using Structural Equation Modeling (SEM) which is a statistical analysis technique that incorporates factor analysis and simultaneous equations. The analysis was performed using AMOS 22.0. The results indicated that absorptive capacity has a positive and significant effect on supply chain agility, while supply chain agility has a positive and significant effect on competitive advantage, absorptive capacity has a positive and significant effect on competitive advantage, and supply chain agility has a positive and significant effect in mediating the relationship between absorptive capacity and competitive advantage.

Introduction

Competitive advantage is very urgent for companies to survive, grow, and win the competition in the increasingly competitive business environment at the end of the day. In today's competitive business ecosystem, firms do not compete as individuals but as a supply chain network. Firms and their supply chain networks need to continuously enhance their ability to immediately respond to market changes and upgrade their knowledge and technology both through internal R&D and using external knowledge appropriately to gain maximum advantage in a constantly changing market competition. Two main sources are very important for a company's competitive advantage, namely Absorptive Capacity (AC) and Supply Chain Agility (SCA) (Ambe, 2010, MacCarthy et al., 2016, Sanchez & Leo, 2018). Absorptive Capacity assesses the firms' ability to absorb, assimilate, transform, and exploit new insights to produce dynamic organizational capabilities to gain a competitive advantage. As a result, this capacity enables companies to continuously update technology and adapt to changing markets from a knowledge and innovation perspective. Absorptive capacity is seen as a strategic asset that enables companies to utilize knowledge in responding to opportunities or needs.

Meanwhile, agility in the supply chain is the ability used to facilitate companies in gaining a competitive advantage in respond to rapid market changes, changes customer demand, and focus on customer-oriented measures. (Bottani, 2009, Wu et al., 2017). Under an uncertain and constantly changing business environment, agility is a critical concept for a firm to be continuously developed in

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supply chain management. To establish an agile supply chain, firms should have absorptive capacity to expand the extent and richness of knowledge.

The relationship between these two sources of capabilities and their impact on competitive advantage has been less studied. Other studies have showed the need of knowledge for managing supply chains (Dobrzykowski et al., 2015), and other studies showed the need to analyze the effect of absorptive capacity on companies' competitive advantage (Gligor et al., 2014, Lis & Sudolska, 2015). The relationship is important because the need for dynamic capabilities to compete in the global economy. Companies must create synergies among dynamic capabilities to improve competitive advantage.

Within this framework, supply chain agility can contribute to responding quickly to the market changes and also contribute to improve competitive advantage by making knowledge absorption more productive throughout the supply chain. There is some empirical evidence in the literature on a positive relationship between absorptive capacity and competitive advantages (Lis & Sudolska, 2015) but it is less studied in a supply chain framework. There is also little research on the causal mechanisms that could explain the relationship.

This study focus on the effect of supply chain agility as a variable that mediates absorptive capacity on competitive advantage and to see how big the influence of supply chain agility is as a variable that supports competitive advantage with absorptive capacity.

The object of this study was some cafes and modern restaurants that have over 500 Instagram followers, while the subjects of this study were individuals that manage the cafes and restaurants. The data of three variables of this study were collected using a valid and reliable questionnaire. This paper is structured as follows. First, we reviewed the literature and developed a research hypothesis then describe the methodology of the empirical studies followed by the results and discussion. Finally, this paper ends with conclusions and limitations.

Literature Review

Theoretical and Conceptual Background

Absorptive Capacity

Absorptive capacity was originally proposed by Cohen and Levinthal in 1990. They showed that firms cannot take advantage of external knowledge if they do not respond to the knowledge. On the contrary, firms should develop their ability to recognize the value of external knowledge to assimilate and utilize it for profit. Absorptive capacity becomes such a valuable dynamic ability of firms that competitors will find difficult to imitate as it largely relies on the knowledge of each firm. This ability then becomes something distinctive, inimitable, and irreplaceable, which affects on sustention of competitive advantage among the firms.

Therefore, firms with high absorptive capacity can respond much more effectively to customer needs on new products or customized products and at the same time, can improve organizational capabilities and management practices that have a positive effect on improving company performance. Firms should pay more attention to their ability in knowledge management, develop an understanding of the knowledge they have, and transform knowledge into the capacity to meet the demands of the business environment. Absorptive capacity is so critical that firms can work distinctively from their competitors and exploit opportunities in a volatile business environment to sustain competitive advantage (Foss et al., 2011, Dobrzykowski et al., 2015, Sanchez & Leo, 2018). There are four elements of absorptive capacity, namely:

i. Acquisition: Ability to recognize and acquire external knowledge.

ii. Assimilation: Ability to analyze, process, understand and interpret external knowledge.

iii. Transformation: Ability to develop and complete information.

iv. Exploitation: The ability to consistently use this new knowledge for business interests in the long run.

Supply Chain Agility

Supply chain agility is defined as the supply chain's ability to respond quickly adapt to market changes and also the ability to respond to environmental changes that occur in the market in a timely manner. This concept focuses on the external side and is seen as an ability. Therefore, the agility of a firm's supply chain is associated with the firm's ability to respond or react quickly to changes regardless of how effective the results are (Chan et al, 2017).

Agile supply chains can make a quick adjustment to volatility and unexpected events, see market opportunities, and customer interests. An agile supply chain can be achieved through business processes and structures that pay attention to speed, adjustment, and resilience, and are able to meet competitive performance in a highly dynamic and unpredictable business environment.

Agility in the supply chain stems from the firms' ability to quickly identify changes, opportunities, and threats, access appropriate data, rapidly make a decision on what to do, implement decisions and modify various strategies and operations as necessary (Gligor et al., 2013, Gligor, 2014).

The characteristics of supply chain agility are:

i. Market sensitivity. It is an ability to read and observe market demands and find solutions or respond to real demands.

ii. Virtual network. The virtual network is defined as the use of information technology in a network in the supply chain process. Information technology is used to share data between buyers and suppliers, to create a virtual supply chain. The virtual supply chain is based on information.

iii. Integration process. The integration process is a collaborative process between buyers and suppliers in product development, systems, and information sharing. Information shared between supply chain partners can only be fully utilized through an integrative process.

iv. Network integration. It is an organization within an SC network so that supply chain members can work in the same network. Partners are linked together as a network. Individual businesses are growing, no longer competing as stand-alone entities, but as part of the supply chain (Guner et al, 2018).

Competitive Advantage

Competitive advantage is a condition in which firms have more successful and inimitable strategies compared to their competitors. A firm has a competitive advantage once they apply adding and creating value strategies that are unable to be implemented by their competitors. There are several theoretical cornerstones of competitive advantage, namely resource heterogeneity, *ex post* limit to competition, imperfect mobility, and *ex ante* limit to competition.

Resource heterogeneity enables a firm to access and control resources that are not accessible to other firms. Firms with access to these resources take advantage of them. Superior resources will allow the firms to produce more economically to meet customer interests. *Ex post* limits to competition means that there must be a power to restrict competition. This pillar can be established with two conditions, namely imperfect imitability, and imperfect substitution. *Ex Ante* Limits to Competition means that to sustain a competitive advantage, heterogeneity of resources should be preserved. There should be competition for resources.

Competitive advantage can be measured using resource-based indicators and market/industry (non-resource) based indicators. Resource-based indicators build on the concept of barriers to entry that include economies of scale, product differentiation, innovation, and capital requirements. Meanwhile, non-resource-based indicators of market/industry include power over suppliers and customers, and credibility against competitor threats (Ambe, 2010, Dickinson & Sommers, 2012).

Competitive advantage will encourage firms to achieve superior performance, where competitive advantage determines the company's profitability. Innovative firms will have a competitive advantage that affects financial performance. The superior performance of a firm with a competitive advantage is a result of fulfillment of several criteria such as being valuable, scare, inimitable, and irreplaceable, so that competitive advantage will improve the company's overall performance (Agha et al., 2011, Gaya et al., 2013, Chahal & Bakshi, 2015, Rochdi, et al. 2017).

Empirical Review and Hypothesis Development

The relationship between absorptive capacity and competitive advantage.

The role of absorption in the growth and competitive advantage of companies is carried out through the development of skills to recognize valuable knowledge in the business environment, take knowledge, assimilate, transform and develop it. Companies can take advantage to grow and strengthen competitive advantage (Lis & Sudolska, 2015). The company's competitive advantage is built from the relationships of individuals, groups and organizations, in a competitive environment. Where companies that can do this positively are companies that have absorption capacity. Because external interactions bring new knowledge that must be developed into new competencies. So that competitive advantage is built by the company's ability to transform this knowledge and bring it into interaction in the business environment

H1: absorption has a positive effect on competitive advantage

Relationship between absorptive capacity and supply chain agility

In the research of Dobrzykowski et al., 2015, examines Absorptive Capacity in the Supply Chain. In this study it is said that information is a core activity of the supply chain which is increasingly important as companies try to be more responsive to the increasing customer demand for innovative products. This study is based on information processing theory, and examines the role of Absorptive Capacity in linking corporate responsive strategy and performance. In this study Absorptive Capacity fully mediates the relationship between responsive strategy and company performance, Absorptive Capacity is a necessary competency for companies aiming to deliver innovative products to customers. This study shows supply chain agility as a potential mechanism to obtain high levels of performance by reforming the company's Absorptive Capacity. Companies with superior absorptive capacity are considered to be in an advantageous position to provide superior supply chain agility.

H2: absorptive capacity has a positive effect on supply chain agility

The relationship between supply chain agility and competitive advantage.

Research conducted by Ambe in 2010 was to explore the concept of supply chain agility and see the relationship between supply chain agility and competitive advantage. In this study, to face the changing business world which is increasingly dynamic, competition is getting higher and customer demand is fluctuating, companies must face challenges in their supply chains. Companies must respond to the ups and downs by increasing their agility. Where agility is seen as the ability to respond to market changes and customer desires quickly as a carrier of competitive advantage. In Wu et al's 2017 research, this study examines the achievement of competitive advantage through supply chain agility in uncertain or changing circumstances. Supply chain agility (SCA) is a tool that enables companies to achieve competitive advantage. The results show that flexibility is significantly affected by process integration, information integration and strategic alliances. Then, process integration has the highest influence in developing competitive advantage.

H3: supply chain agility has a positive effect on competitive advantage

The relationship between supply chain agility in mediating the relationship between absorption and competitive advantage

As noted in the previously discussed research study, absorptive capacity makes it easier for companies to apply the latest knowledge to increase the company's competitive advantage (CA). Excellence is achieved through dynamic capability development, where companies must acquire the latest knowledge to improve company performance. The company's need for knowledge of customer needs, the level of market knowledge and process knowledge continues to increase. A high level of Absorptive Capacity allows companies to gain up-to-date knowledge related to their entire supply chain. Companies with a high level of Absorptive Capacity will be better able to adapt to customer demands in a timely manner and recognize market situations more quickly. By recognizing market changes more quickly and responding in a timely manner, the company will gain a competitive advantage by increasing the agility of its supply chain.

H4: supply chain agility mediates the relationship between absorptive capacity and competitive advantage

Research and Methodology

In the present study, a quantitative research model was used. This study investigated supply chain agility as a mediating variable in the relationship between absorptive capacity and competitive advantage. The relationship of supply chain agility as a mediating variable was seen to absorptive capacity and competitive advantage. absorptive capacity was tested for its positive correlation with supply chain agility, while supply chain agility was tested for its positive correlation with competitive advantage, and absorptive capacity was tested for its positive correlation with competitive advantage. Subsequently, supply chain agility was tested for its mediating role in the relationship between absorptive capacity and competitive advantage.

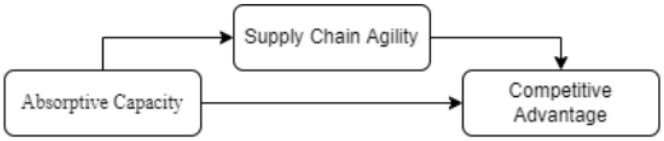

Figure 1: Research framework

The population used in this study were employees of cafes and modern restaurants in Yogyakarta. Meanwhile, the sampling technique used in this study was purposive sampling, which is selecting the sample based on certain criteria.

Employees of cafes or restaurants that used digital marketing. The measurement of digital adoption level was based on criteria at 3 levels of digital adoption, namely (*Deloitte Access Economics*, 2015):

i. Basic level, which is indicated by the presence of digital devices such as a computer or smartphone and access to the internet.

ii. Intermediate level, which entails direct engagement in a social network site and provision of live chat or thread features to attract customers.

iii. Advanced level, which is indicated by sophisticated connection, integrated social networks, and e-commerce business ability.

Employees of cafes or restaurants that have more than 500 Instagram followers.

Respondents were the owner, manager, and supervisor

The data were collected using a questionnaire with 1 to 5 point-Likert scale based the following criteria:

i. 1 = Strongly disagree

ii. 2 = Disagree
iii. 3 = Rather agree
iv. 4 = Agree
v. 5 = Strongly agree

The minimum sample required was determined based on the number of indicators x 5 to 10 (Hair et al., 2010). According to the guideline, Based on the guidelines, the minimum sample size for this study 12 x 5 = 60. Based on this formula, the minimum total samples in this study were 60 respondents.

Indicators of absorptive capacity are as follows (Lo & Tian, 2020):

i. Employees and management in my unit often share ideas and exchange opinions
ii. Employees and management in my unit often share ideas and exchange opinions in informal activities such as in lunch and so on.
iii. I like to share my experience with my colleagues
iv. My unit has a clear job description and responsibilities for employees

Indicators of supply chain agility are as follows (Martinez-Sanchez & Lahoz-Leo, 2018).

i. My unit maintains business relationships with customers based on core competency development
ii. Information about my SC unit is accessible to all SC agents
iii. My unit has no barriers in coordination and knowledge exchange among departments
iv. My unit uses performance measures based on customer satisfaction

Indicators of competitive advantage are as follows (Lo & Tian, 2020):

i. Overall, my unit has a better reputation than the same competing firms
ii. My unit can develop a new and unique program
iii. My unit always has better research performance than the same competing firms
iv. My unit can always have a better relationship with the industry than the same competing firms

The final sample of this study was 200 companies and this number was above the minimum number of respondents required.

The statistical analysis technique is a method of statics used to confirm the proposed hypotheses. The statistical analysis tool used in this study was Structural Equation Modeling (SEM), which combines two statistical methods, namely factor analysis and the simultaneous equation method (Ghozali, 2014). In this study, the analysis was performed using AMOS 22.0.

There are several stages in SEM modeling:

i. Model development based on theory
ii. Compile path diagrams and equations
iii. Selecting the type of input matrix and estimation of the proposed structural model
iv. Assess structural model identification
v. Test the validity and reliability of AMOS; The approach used to assess the measurement model is to measure composite reliability and variance extracted for each construct. The generally accepted level of reliability is > 0.70 while the reliability < 0.70 is acceptable for exploratory research. While the recommended number for the variance extracted value is > 0.50
vi. Assess the criteria for Goodness-of-fit

Table 1: Goodness of Fit

No.	*Goodness of fit*	*Cut off value*
1	CMIN / DF	< 2
2	RMSEA	0,05 ≤ RMSEA ≥ 0,08
3	GFI	> 90 %
4	AGFI	≥ 0,90
5	TLI	≥ 0,90
6	NFI	≥ 0,90

Analysis and Findings

Path Diagram and Structural Equation

After developing a theoretical model, the subsequent step is to transform the model into a path diagram. To facilitate testing causal relationships, the relationships between constructs are represented by arrows in the path diagram. The arrows show the direct relationship between a construct and another. Measurement of the relationship between variables in SEM is called a structural model. Based on the theoretical framework, the path diagram for Structural Equation Modeling was made as shown in Figure 1.

After the theoretical model was developed and drawn into the path diagram, the next step was to convert the path diagram into a structural model. In this stage, the structural model was compiled by connecting endogenous and exogenous constructs, and afterward connecting these constructs with existing indicators. The research model is shown in Figure 2.

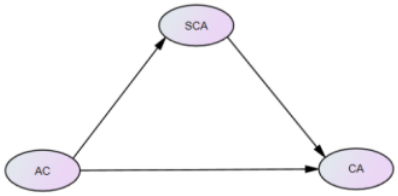

Figure 2: Research Model

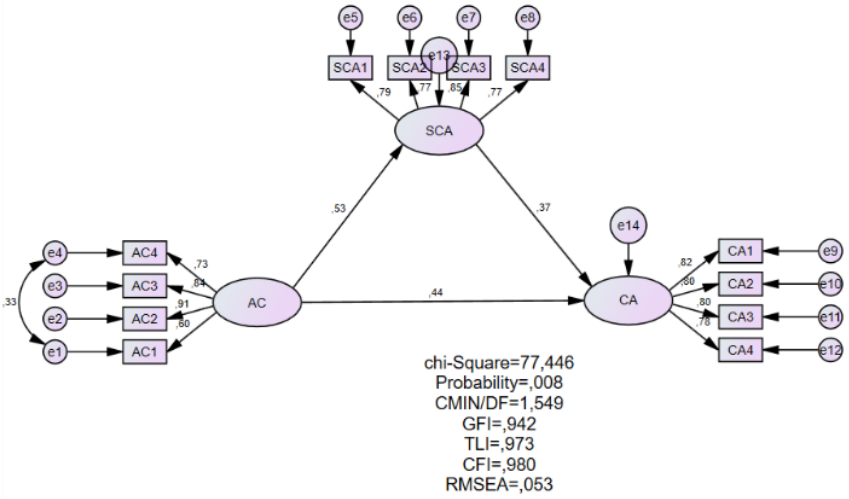

Figure 3: Model result

Normality Test

The normality test was performed through inspection on the skewness value of the data in the AMOS 22.0 output. The data is normally distributed if the critical ratio value of the skewness value is in the range ± 2.58.

Table 2: Normality Test

Variable	Min	Max	Skew	C.R.	Kurtosis	C.R.
Variable	min	max	skew	c.r.	kurtosis	c.r.
CA4	2.000	5.000	.013	.074	-.590	-1.704
CA3	1.000	5.000	-.059	-.342	-.598	-1.725
CA2	1.000	5.000	-.032	-.187	-.586	-1.691
CA1	1.000	5.000	-.269	-1.552	-.395	-1.141
SCA4	2.000	5.000	-.082	-.475	-.824	-2.379
SCA3	1.000	5.000	-.465	-2.683	-.429	-1.239
SCA2	1.000	5.000	-.267	-1.543	-.393	-1.135
SCA1	2.000	5.000	-.297	-1.714	-.665	-1.920
AC4	1.000	5.000	.021	.123	-.638	-1.842
AC3	1.000	5.000	.019	.108	-.587	-1.694
AC2	1.000	5.000	-.319	-1.843	-.055	-.160
AC1	2.000	5.000	.279	1.613	-.618	-1.785
Multivariate					-.554	-.214

From Table 2, the majority univariately the majority of the data were normally distributed as no coefficient of the critical ratio of skewness value that is less than the range of ± 2.58. Meanwhile, the data has also met the assumption of multivariate normality as -0.214 remains within the range of ± 2.58. Hence, it can be concluded that the data in the study have met the assumption of normality.

Identification of Structural Model

SEM can be performed if the results of model identification show that the model is over-identified or identifiable. Such identification is determined from the value of degrees of freedom.

Table 3: Computation of degrees of freedom

The number of distinct sample moments:	**78**
The number of distinct parameters to be estimated:	**28**
Degrees of freedom (78 - 28):	**50**

The AMOS output results show that the degrees of freedom value are 50. This indicates that the model was over-identified or identifiable, because it has positive degrees of freedom value.

Validity testing

Confirmatory factor analysis (CFA) was used in the construct validity test to confirm unidimensionality of exogenous and endogenous constructs. The loading factor value of each indicator was inspected to see correlation of each exogenous and endogenous variable. The indicator is valid if the loading factor value of each indicator of the variable exceeds 0.5.

Table 4: Validity testing

			Estimate
AC1	←	AC	**.60**
AC2	←	AC	**.91**
AC3	←	AC	**.84**
AC4	←	AC	**.73**
SCA1	←	SCA	**.79**
SCA2	←	SCA	**.77**
SCA3	←	SCA	**.85**
SCA4	←	SCA	**.77**
CA1	←	CA	**.82**
CA2	←	CA	**.80**
CA3	←	CA	**.80**
CA4	←	**CA**	**.78**

The results of the CFA validity test showed the loading factor value of all indicator items of the variables was > 0.5. Therefore, all indicators of exogenous and endogenous variables were valid.

Reliability testing

Confirmatory factor analysis (CFA) was used to show the extent to which a measurement can produce relatively consistent results when two or more measurements are taken on the same subject. To find out the results of the construct reliability test, the Construct Reliability and variance extracted formulas were used.

Table 5: Reliability testing

Indicator	Loading Factor	Loading Factor ²	1-Loading Factor ²	Construct Reliability	Variance Extracted
AC1	0.601	0.361201	0.638799		
AC2	0.906	0.820836	0.179164		
AC3	0.842	0.708964	0.291036	0.857641028	0.6063405
AC4	0.731	0.534361	0.465639		
SUM	3.08	2.425362	1.574638		
SQUARE	9.4864				
SCA1	0.794	0.630436	0.369564		
SCA2	0.769	0.591361	0.408639		
SCA3	0.846	0.715716	0.284284		
SCA4	0.774	0.599076	0.400924	0.87378839	0.63414725
SUM	3.183	2.536589	1.463411		
SQUARE	10.131489				
CA1	0.816	0.665856	0.334144		
CA2	0.803	0.644809	0.355191		
CA3	0.801	0.641601	0.358399	0.877316324	0.64133875
CA4	0.783	0.613089	0.386911		
SUM	3.203	2.565355	1.434645		
SQUARE	10.259209				

The coefficient of construct reliability and variance extracted indicator variables were above 0.7 and 0.5. The indicator is reliable if the value of the construct reliability indicator variable exceeds 0.7 and the value of the variance extracted indicator variables is more than 0.5 (Hair et al., 2010). Thus, it can be concluded that the research instruments in this study are usable.

Criteria of Goodnes of Fit

The following table presents the results of the goodness of fit the data analysis.

Table 6: Goodness-of-fit

Goodness of fit index	Cut-off value	Research model	Model
CMIN / DF	≤ 2.0	1.549	**Good Fit**
RMSEA	≤ 0.08	0.053	**Good Fit**
GFI	≥ 0.90	0.942	**Good Fit**
AGFI	≥ 0.90	0.909	**Good Fit**
TLI	≥ 0.90	0.973	**Good Fit**
NFI	**≥ 0.90**	**0.946**	**Good Fit**

Based on the overall goodness of fit measurement, the model proposed in this study is acceptable because the values of CMIN/DF, RMSEA, GFI, AGFI, TLI, and NFI have met the fit criteria.

Hypothesis Testing

The coefficient of regression weights shows the relationship of influence between variables. Hypothesis testing was carried out using the critical ratio (c.r) 1.967 with a *p*-value < 0.05:

Table 7: Hypothesis testing

	ESTIMATE	S.E.	C.R.	*P*	Note
SCA ← AC	0.888	0.155	5.749	****	Sig.
CA ← SCA	0.380	0.084	4.517	****	Sig
CA ← AC	0.772	0.157	4.935	****	Sig

The effect of absorptive capacity on competitive advantage

The first hypothesis is absorptive capacity affects competitive advantage. Absorptive capacity has a significant effect on competitive advantage with a CR value of 4.935 (c.r ≥ 1.967) and a significant value of $p = 0.000$ ($p < 0.05$). Absorptive capacity has a positive effect on competitive advantage by 77.2%. Thus, it can be concluded that absorptive capacity has a positive and significant effect on competitive advantage.

The effect of absorptive capacity on supply chain agility

The second hypothesis is absorptive capacity affects supply chain agility. Absorptive capacity has a significant effect on supply chain agility with a CR coefficient of 5.749 (c.r ≥ 1.967) with a significant value of $p = 0.000$ ($p < 0.05$). Absorptive capacity has a positive effect on supply chain agility by 88.8%. Thus, it can be concluded that absorptive capacity has a positive and significant effect on supply chain agility.

The effect of supply chain agility on competitive advantage

The third hypothesis is supply chain agility affects competitive advantage. Supply chain agility has a significant effect on competitive advantage with a CR value of 4.517 (c.r ≥ 1.967) with a significant value of $p = 0.000$ ($p < 0.05$). Supply chain agility has a positive effect on competitive advantage by 38%. Thus, it can be concluded that supply chain agility has a positive and significant effect on competitive advantage

Testing Mediation

	Input:		Test statistic:	Std. Error:	*p*-value:
a	0.89	Sobel test:	3.55345672	0.09517493	0.0003802
b	0.38	Aroian test:	3.52066578	0.09606138	0.00043046
s_a	0.155	Goodman test:	3.58718129	0.09428015	0.00033427
s_b	0.084	Reset all		Calculate	

Figure 4: table of Sobel test

Based on the results of the Sobel test to examine the mediating effect of supply chain agility in the relationship between absorptive capacity and competitive advantage, *p*-value was 0.00038 where $p < 0.05$. Therefore, it can be concluded that supply chain agility significantly mediates the relationship between absorptive capacity and competitive advantage

Conclusions

The results of testing the first hypothesis using SEM AMOS show that absorption has a positive and significant effect on competitive advantage. Based on the first hypothesis testing, the CR value was 4.935 with a significant P value of 0.000 (p <0.05). The results of the first hypothesis indicate that the company's absorption has a positive and significant effect on the company's competitive advantage. The higher the company's ability to have absorption, the more positive it will be on company**'s** advantage.

Competitive advantage of the company is built from the relationship of individuals, groups and organizations in a competitive environment. Where companies that can do this positively are companies that have absorption capacity. Because external interactions bring new knowledge that must be developed into new competencies. So that competitive advantage is built by the company's ability to transform this acquired knowledge and bring it into interaction in the business environment. The development of skills to recognize valuable knowledge in the business environment, take this knowledge, assimilate, transform and develop it enables companies to utilize it to grow and strengthen competitive advantage. This is supported by previous research by Lis & Sudolska (2015) where the higher the absorption capacity of the company, the higher the competitive advantage.So it can be concluded that absorptive capacity has a positive and significant effect on competitive advantage.

Based on the second hypothesis testing, the CR value was 5.749 with a significant P value of 0.000 (p <0.05). The results of the second hypothesis indicate that the company's absorption has a positive and significant effect on the company's supply chain agility. The higher the company's ability to have absorption, the more positive it will be on the company's supply chain agility. Information is a core activity of the supply chain which is increasingly important as companies seek to become more responsive to increasing customer demand for innovative products. Absorbency is a competency needed by companies that aim to provide innovative products to customers. Companies with superior absorptive capacity are considered to be in an advantageous position to provide superior supply chain agility. This is supported by previous research by Dobrzykowski et al., (2015) where the higher the company's absorptive capacity, the higher the supply chain agility. So it can be concluded that absorptive capacity has a positive and significant effect on supply chain agility.

Based on the third hypothesis testing, the CR value was 4.517 with a significant P value of 0.000 (p <0.05). The results of the third hypothesis indicate that the company's supply chain agility has a positive and significant effect on the company's competitive advantage. The higher the supply chain agility of the company, the more positive the company's competitive advantage will be. To

face the changing business world which is increasingly dynamic, competition is getting higher and customer demand is fluctuating, companies will face challenges in their supply chains. Companies must respond to fluctuating changes by increasing their agility, where agility is seen as the ability to respond to market changes and customer desires quickly as a carrier of competitive advantage. Supply chain agility (SCA) is a tool that enables companies to achieve competitive advantage. The results show that flexibility is significantly affected by process integration, information integration and strategic alliances.

Then, process integration has the highest influence in developing competitive advantage. This is supported by previous research by Ambe (2010) and Wu et al. (2017) where the higher the agility of the company's supply chain, the more it will increase its competitive advantage. So it can be concluded that supply chain agility has a positive and significant effect on competitive advantage

In testing the effect of the mediating variable, the Sobel test was carried out. The Sobel test was conducted to see the significance value of the influence of supply chain agility in mediating the relationship between absorption and competitive advantage. The results of this mediation test showed a P value of 0.00038 where $P < 0.05$. So it can be concluded that supply chain agility is significant in mediating the relationship between absorption and competitive advantage. As is known in the research studies that have been discussed previously, absorptive capacity makes it easier for companies to apply the latest knowledge to increase the company's competitive advantage. Excellence is achieved through dynamic capability development, where companies must acquire the latest knowledge to improve company performance. The company's need for knowledge of customer needs, the level of market knowledge and process knowledge continues to increase. A high level of absorptive capacity allows companies to get up-to-date knowledge regarding their entire supply chain. Companies with high absorptive capacity levels will be better able to adjust to customer demands in a timely manner and recognize market situations more quickly. By recognizing market changes more quickly and responding in a timely manner, the company will gain a competitive advantage by increasing the agility of its supply chain. it can be concluded that supply chain agility is significant in mediating the relationship between absorptive capacity and competitive advantage.

This research was conducted by setting the criteria for the level of digital adoption, which is divided into 3 criteria; basic, intermediate and advanced levels. From the results of the data, most of the cafes or restaurants that became the data sample were business units or companies that had an advanced level of digital adoption, as many as 199 out of 200 data. So this research cannot fully represent each level of digital adoption from cafes and restaurants.

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