

# **The Role of Supply Chain Agility in Mediating the Effect of Knowledge Sharing, Innovation, and Absorptive Capacity on Competitive Advantage**

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## **Abstract**

This study investigates the role of supply chain agility in mediating the relationship between knowledge sharing, innovation capability, and absorptive capacity for competitive advantage. This research used structural equation modeling (SEM) methods to analyze the data. This study employs SmartPLS for data processing. Data were collected by distributing the questionnaire to respondents who met the requirements that the researcher had determined. The samples in this study were 200 coffee shops with more than 500 Instagram followers, while the research respondents were owners, managers, and supervisors who managed the coffee shop. The findings revealed that absorptive ability significantly and favorably impacted supply chain agility and competitive advantage. Supply chain agility had a positive and significant impact on competitive advantage. Absorptive capacity and competitive advantage were mediated by supply chain agility in a positive and significant way. On the other hand, there is no effect of knowledge sharing on competitive advantage or supply chain agility. Supply chain agility cannot mediate the relationship between knowledge sharing and competitive advantage. Likewise, innovation capability does not affect competitive advantage, and supply chain agility and supply chain agility cannot mediate the relationship between innovation capability and competitive advantage.

## **Keywords**

Supply Chain Agility, Knowledge Sharing, Innovation Capability, Absorptive Capacity, and Competitive Advantage.

## **1. Introduction**

To survive, advance, and triumph over the competition, businesses require a competitive advantage. Businesses currently compete as part of a supply chain network rather than as individual entities in the highly competitive business market. The organization and its supply chain network must constantly increase its capacity to react swiftly to market changes and update information and technology that are continuously evolving as a result of internal R&D and outside knowledge. Knowledge sharing (K.S.), absorptive capacity (A.C.), innovation capability (I.C.), and supply chain agility (SCA) are four key sources that are important for a company's competitive advantage. (Eidizadeh, 2017; Arsawan et al., 2020; Than et al., 2019; Lo & Tian, 2020; Ambe, 2010, MacCarthy et al., 2016, Martinez-Sanchez & Lahoz-Leo, 2018).

Knowledge Sharing can help companies to produce knowledge resources obtained through collaboration and creation that make problem-solving skills so that the results expected by the company can be achieved. In achieving success for competitive advantage, problem-solving skills must be possessed so that each element is aware of the decision-making process (Azeem et al., 2021). For companies to be more agile, companies need to share knowledge and information in the market in the supply chain process. Knowledge sharing is required to implement supply chain agility to make coordination more effective (Tuan, 2016).

The ability to innovate is the internal force behind developing and exploring radically novel ideas and concepts, experimenting with answers to potential opportunity patterns found in the market "empty spaces," and turning them into marketable and useful innovations using both internal and external resources and competencies. The ability to innovate has been acknowledged as a crucial strategy for firms to be competitive (Iddris et al., 2014; Afraz et al., 2021; Assink, 2006). It is commonly acknowledged that innovation aptitude is essential for organizational performance and innovation. Swafford et al. (2008). According to Panayides (2006), for businesses to sustain a long-term competitive advantage in today's fast-evolving technological and market environment, they must enhance their capacity for innovation.

Absorptive capacity is the company's ability to take, assimilate, transform, and exploit new knowledge to produce dynamic organizational capabilities. Absorptive capacity is a strategic asset that enables companies to manage knowledge when there is an opportunity or need. Absorptive capacity makes the company able to develop the company's capabilities continuously. This capability can facilitate the company's relationship with customers and increase agility. Companies with good absorptive capacity will be better able to feel and respond to changes in the company's external environment.

In addition, to build supply chain agility, companies must have the absorptive capacity to expand the reach and wealth of company knowledge. Taking the information and knowledge needed from the market will enable companies to increase supply chain visibility and integrate processes with supply chain partners. A company's competitive advantage in today's business environment comes not only from the company's position in the market but also from the company's knowledge assets that are difficult to replicate and use by competitors. The ability of the company's knowledge assets is a strategic resource asset that is valuable, rare, difficult to imitate, and difficult to replace by other resources and is considered the most crucial asset in long-term competitive advantage (Liu et al., 2009, Dobrzykowski et al., 2015, Lis. & Sudolska, 2015, Martinez-Sanchez & Lahoz-Leo, 2018).

The supply chain is a concept that is used to achieve time, labor, and cost efficiencies that will increase productivity. In the supply chain, a variety of stakeholders are involved in carrying out varying processes to produce the product that will be delivered to the customer (Pedroso & Nakano, 2009). Supply chain management is a very important area for any business to master to build competitive business models quickly and sustainably. There are a few strategies in SCM that may be adapted by an organization to be used in competition and continually grow. The single most important strategy is agility (Felea & Albastroiu, 2013, Yadav, 2013).

Agility is the ability to respond to market changes and customer demands quickly and is a requirement for companies to achieve organizational flexibility and rapid response (Pandey & Garg, 2009). Companies require agility to be competitive and have traditionally been associated with supply chains that provide and manufacture innovative products, products with short cycles, high market fluctuations, uncertainty in demand, and unreliable supply.

Supply chain agility is utilized to give businesses a competitive edge. The capacity to adapt to quick changes in the market, shifting client preferences, and prioritize initiatives that benefit customers is known as supply chain agility (SCA) (Bottani, 2009, Wu et al., 2017). Enterprise supply chain agility results from a company's capacity to swiftly recognize opportunities and changes (awareness), gain access to pertinent data (accessibility), make a quick decision (decision), carry out that decision (speed), and adjust various operations and tactics as necessary (flexibility). The characteristics that must be possessed by supply chain agility are, first, market sensitivity, namely, paying attention to the conditions in the market environment, understanding priorities, and finding solutions. The second is a virtual network, where parts of the supply chain elements in the supply chain process can share accurate and real-time information through information technology. The third is process integration, where supply chain partners can work together and act in product development with a sense of cooperation and mutual trust. Fourth is network integration, where members of the supply chain process can work in one network (Guner et al., 2018).

An agile supply chain is considered the most critical success factor in today's competitive market because an elegant supply chain will enable companies to be more sensitive to the market and better synchronize supply with demand (Balaji et al., 2015, Chan et al., 2017). ). An agile supply chain must possess four key characteristics and elements: market sensitivity, virtual integration, process integration, and network integration (Iskanius, 2007).

Supply chain agility increases competitive advantage in terms of operational process integration, accelerating customer needs, maintaining customer-based steps, increasing access to information, and increasing flexibility between manufacturers and suppliers. SCA helps companies to be able to see rapid market changes and prevent disruptions in the supply chain network. Internal integration, external integration, information integration, network integration, and collaboration will improve performance quality, minimize costs and reduce production time. Businesses must be adaptable, sensitive, and flexible in order to survive. To achieve customer satisfaction goals, collaborative connections, process integration, information integration, and market or customer sensitivity are all possible. It covers supply chain networks' cost effectiveness, time, competency, and speed, all of which help a company maintain a competitive advantage (Ambe, 2010, Wu et al., 2017).

Companies that can recognize and understand the changing business environment will have the possibility to survive and thrive in the business environment. The company's ability to quickly respond to changing customer demands and deliver high-quality products to the market in the shortest possible time will reflect the company's success doing information integration and strategic alliances (Guner et al., 2018, Iskanius, 2007). Process integration then has the greatest impact on creating a competitive advantage. According to Storer and Hyland (2009), firms still need to incorporate dynamic capabilities into their operations, get rid of outdated configurations, and create new ones to maximize their capacity for innovation. Based on the above, this study investigates the effect of implementing supply chain agility in mediating the relationship between innovation capability and absorptive capacity on competitive advantage.

## **2. Literature Review**

### **2.1. Knowledge Sharing and Competitive Advantage**

The ability of a business to outperform rivals in the same industry is known as having a competitive edge (Godfrey et al., 2020). Anwar (2018) defines competitive advantage as a company's ability to outperform rival businesses in a certain industry.

Knowledge sharing has been found to impact competitive advantage in earlier research (Eidizadeh, 2017; Arsawan et al., 2020; Than et al., 2019; Lo & Tian, 2020). Sharing knowledge can dramatically and favorably affect a company's competitive advantage (Eidizadeh, 2017). Knowledge sharing has an impact on innovation culture and long-term economic advantage, according to another empirical study. The findings of this study show that to strengthen their competitive advantage, businesses must be able to expand and improve information exchange at the level of both individual employees and organizations (Arsawan et al. 2020).

The impact of knowledge sharing on innovation pace, quality, and competitive advantage is examined in another empirical study. Competitive advantage has been positively impacted by innovation speed and quality (Than et al. 2019). Empirical evidence from some of this research suggests that knowledge sharing can boost a company's competitive advantage. Knowledge sharing, innovation potential, absorptive capability, and competitive advantage are some other empirical studies that use more complicated factors. Innovation potential and competitive advantage are highly impacted by knowledge exchange and absorption capability. The research also revealed that the ability to absorb information could mediate the ability to innovate and share knowledge for competitive advantage (Lo & Tian, 2020). Knowledge sharing is essential in maximizing the organization's ability to manage knowledge resources and help individuals achieve goals more efficiently (Azeem et al., 2021). Empirical evidence found that knowledge sharing has a positive influence on competitive advantage. Knowledge sharing is the company's ability to generate knowledge from internal or obtain information from the experience that has been experienced and the expertise of the people who process it. Increasing knowledge from experience will allow the company to have an improvement in making decisions. Companies can get a competitive advantage if they prioritize knowledge, experience, and expertise, improving decision-making (Hu et al., 2022).

**H1:** Knowledge sharing has a positive and significant effect on competitive advantage

### **2.2. Knowledge Sharing and Supply Chain Agility**

Supply chain agility is a supply chain unit coordinating effectively with knowledge sharing. Applying knowledge sharing will be an innovation that leads to flexibility and agility. Organizations can build the supply chain they want to process the information they get from their partners, creating new knowledge. This study shows that companies

with good relationships with the supply chain and high levels of information shared are the two keys to achieving SCA, which is the effect of knowledge sharing (Pedroso & Nakano, 2009; sir, 2016).

Knowledge sharing positively influences supply chain agility, where suppliers and buyers provide helpful information for supply chain relationships (Kim & Chai, 2017). Other empirical evidence was also found that knowledge sharing affects supply chain agility (Rajabion et al., 2019; Mehdikhani & Valmohammadi, 2019).

**H2:** Knowledge sharing has a positive and significant effect on supply chain agility

### **2.3. Innovation Capability and Competitive Advantage**

The significance of the company's innovative capacity has also been stressed in several earlier studies. The success of a company in putting innovative ideas into practice is innovation (Sniukas, 2020). Innovation is the ideation, creation, application, and success of new concepts in a firm that can enhance business performance. The ability to innovate refers to a company's capacity to develop and apply fresh business concepts to success. Increasing competitive advantage can be positively impacted by innovation capability (Puspita et al., 2020; Ferreira et al., 2020; Aziz & Samad, 2016; Anjaningrum & Rudamaga, 2019; Nafiu et al., 2020; Lo & Tian, 2020). The capacity for innovation has a substantial impact on the competitive advantage of the business (Puspita et al., 2020). Creativity and innovation capacity are positively impacted by the company's dynamic ability, which comprises exploration and exploitation.

However, the ability to innovate favorably impacts competitive advantage and business performance (Ferreira et al. 2020). Knowledge sharing, innovative potential, absorptive capacity, and competitive advantage in employees of the education business are some further empirical research employing more complicated factors.

Innovation potential and competitive advantage are highly impacted by knowledge exchange and absorption capability. The research also revealed that the ability to absorb information could mediate the ability to innovate and share knowledge for competitive advantage (Lo & Tian, 2020). Competitive advantage is significantly impacted by innovation. Firm size moderates the relationship (Aziz & Samad, 2020). The conclusion that innovation significantly influences competitive advantage is supported by several investigations (Anjaningrum & Rudamaga, 2019; Nafiu et al., 2020). The importance of innovation in boosting competitive advantage has been emphasized in several earlier research and works of literature. As a result, the following theory is put forth:

**H3:** Innovation capability has a positive and significant effect on competitive advantage

### **2.4. Innovation Capability and Supply Chain Agility**

Understanding innovation skills can help you better understand how businesses adapt to changing market conditions and prosper. Organizational capacities typically serve as a barometer for the company's strengths and limitations. Organizational capability is the business's capacity to use the resources at its disposal as its primary asset. According to Eisenhardt and Martin (2000), dynamic capabilities are procedures that allow businesses to integrate, reconfigure, acquire, and release resources as well as respond to and even drive market change. This perspective expands the traditional Resource Based View of the Firm (RBV) theory. An important high-level construct for achieving corporate competitiveness is innovation capabilities. Companies today place a high value on the capacity for innovation, which has led to an upsurge in study interest in this phenomenon over the past few years (Bessant & Tidd, 2015). There is, however, a dearth of research that focuses especially on the capacity for innovation (Schreyögg and Kliesch-Eberl, 2007, Börjesson and Elmquist, 2011). research looking specifically at the relationship between supply chain agility and the innovation capabilities afforded by cloud computing, trust, and open innovation Although empirical studies use the corporation as the unit of study, various research in the context of SMEs have demonstrated that enhancing innovation capabilities leads to gaining a competitive advantage (Saunila et al., 2012; Albaladejo & Romijn, 2000). Additionally, general innovative skills are the main focus. Power distance, institutional support, and worker skills are a few enabling variables mentioned in the context of SMEs. The sole study in supply chain management that has been found looks at the relationship between company dynamic capabilities and supply chain innovation capacity development Storer & Hyland (2009). The study, however, focuses on how the nature and kinds of relationships between firms affect supply chains' dynamic capabilities and the kinds of dynamic capabilities needed to increase supply systems' potential for innovation.

**H4:** Innovation capability has a positive and significant effect on supply chain agility

### **2.5. Supply Chain Agility and Competitive Advantage**

Companies must deal with issues in their supply chains as a result of the business world's dynamic changes, rising competition, and unpredictable customer demand. Companies must improve their agility to deal with ups and downs, which is defined as the capacity to adjust swiftly to changes in the market and client preferences as a source of competitive advantage (Wu et al. 2017). Supply chain agility (SCA) is a tool that helps businesses gain the upper hand in the market. The development of competitive advantage through SCA in ambiguous or shifting conditions was studied by Koç et al. in 2022. Supply chain agility is examined by Ambe (2010), who also examines the connection between SCA and competitive advantage.

**H5:** Supply chain agility has a positive and significant impact on competitive advantage

## **2.6. Absorptive Capacity and Competitive Advantage**

Through the development of skills to identify important knowledge in the corporate environment, take knowledge, assimilate knowledge, alter knowledge, and improve knowledge, absorptive ability plays a role in firm growth and competitive advantage. Businesses can utilize it to increase and solidify their competitive advantage (Lis & Sudolska, 2015). Companies that can accomplish this effectively have the absorptive ability because external connections offer fresh knowledge that must be turned into new competencies. In a competitive context, the company's competitive advantage is built through the relationships of individuals, groups, and organizations. Therefore, the company's capacity to translate learning and put it into engagement with the commercial environment contributes to that competitive advantage.

**H6:** Absorptive capacity has a positive and significant effect on competitive advantage

## **2.7. Absorptive Capacity and Supply Chain Agility**

Dobrzykowski et al. (2015) did research on AC in South Carolina. According to the report, information is a crucial component of the supply chain and is becoming more significant as businesses work to meet the escalating demand from customers for cutting-edge products. The study investigates how A.C. links strategy and firm-responsive performance and is based on the information processing theory. According to claims, A.C. fully mediates the relationship between responsive strategy and business performance. A.C. is a crucial skill for businesses looking to provide customers with cutting-edge items. The mediating function of absorptive ability in the relationship between supply chain agility and company performance is examined by Chatchawanchanchanakij & Arphonpisan in 2021. The study showed SCA as a promising method for improving corporate air conditioning performance levels. Superior A.C. is thought to put businesses in a better position to offer SCA benefits.

**H7:** Absorptive capacity has a positive and significant effect on supply chain agility

## **2.8. Supply chain agility mediates the relationship between knowledge sharing and competitive advantage**

Hu et al. (2022) explained that to create a sustainable supply chain agility. Organizations need to pay attention to their supply chain agility. After all, this plays an essential role in anticipating market changes and consumer demand because this is dynamic. Companies must effectively manage existing knowledge. Companies will be more competitive if they can apply these knowledge resources to the entire organization. This study also suggests that knowledge sharing plays a role in aligning supply chain processes resulting in increased supply chain agility and competitive advantage. So knowledge sharing needs to be involved in providing organizations with several strategies to make them more competitive.

**H8:** Supply chain agility mediates the relationship between knowledge sharing and competitive advantage

## **2.9. Supply chain agility mediates the relationship between innovation capability and competitive advantage**

Agility is a risk management tactic that enables companies and their partners to respond quickly to market changes and disruptions in the supply chain (Braunscheidel & Suresh, 2009). It can apply through dimensions of the supply chain agility concept. Companies that have high external flexibility have high supply chain agility. The company can develop the business project to see how agility elements appear in business networks. They are virtual integration, process integration, network integration, and market sensitivity. The firm supply chain agility consists of joint planning, demand response, visibility, and customer responsiveness (Iskanius, 2007).

Companies need to have a competitive advantage, and technology unpredictability might hinder supply chain agility. Supply chain agility is positively impacted by technological uncertainty, while supply chain agility is positively impacted by firm performance (Güner et al., 2018). Vigilance, accessibility, decision-making, speed, and flexibility are the five elements of a firm agility supply chain that Gligor et al. (2013) and Gligor (2014) explore.

The development of an organization's innovation capabilities is influenced by a variety of deciding factors. In addition, a few other enabling characteristics also have a big impact on the ability to innovate. According to empirical research by Börjesson & Elmquist (2011), involvement, experimentation, collaboration with outside parties, and communication are the primary antecedents of innovative ability. The primary determinants of the innovative capability development process in a reorganization, according to Samson and Gloet (2013), are innovation strategies, processes, culture, rewards, and outcomes.

Lawson and Samson (2001) identified seven essential enabling innovation capabilities, including vision and strategy, competency-based leveraging, organizational intelligence, creativity and idea management, organizational structures & systems, culture & climate, and technology management, demonstrating that no studies have used computing cloud, trust, and open innovation as precursors to innovation capability and supply chain agility. The scant study on the supply chain's capacity for innovation is also crucial (Storer and Hyland, 2009). Therefore, it is crucial to create innovation capabilities and a framework that focuses on key elements of the process of creating enterprise-level innovation capabilities.

**H9:** Supply chain agility mediates the relationship between innovation capability and competitive advantage

### **2.10. Supply chain agility mediates the relationship between absorptive capacity and competitive advantage**

Supply chain agility comprises market sensitivity, virtual, process, and network integration. These four characteristics represent a company's supply chain agility strategy in business processes. A good company's absorptive capacity will make the supply chain better integrate process networks with partners in response to market changes. The company's absorptive capacity is seen from the ability to acquire, assimilate, transform and exploit new knowledge. Better supply chain agility also positively affects a company's competitive advantage. Where the company's absorptive capacity also supports a company's competitive advantage.

According to the research papers previously mentioned, absorptive capacity (A.C.) enables businesses to utilize the most recent knowledge to strengthen their competitive advantage (C.A.). Excellence is attained through dynamic capability development, in which businesses must pick up the newest information to enhance organizational performance. The necessity for a corporation to understand consumer wants, the market, and the process is constantly growing. Companies can obtain up-to-date knowledge of their whole supply chain when their A.C. levels are high. High A.C. levels will help businesses adapt to changing market conditions and client needs more swiftly. The organization will increase its supply chain agility and acquire a competitive advantage by being more aware of market developments and responding quickly.

**H10:** Supply chain agility mediates the relationship between absorptive capacity and competitive advantage

## **3. Research Method**

This study uses a quantitative research model. The sampling technique used purposive sampling, with the criteria being at the intermediate level in digital adoption. The sample in this study was 200 coffee shops with more than 500 followers on Instagram, while the research respondents were owners, managers, and supervisors who managed the coffee shop. Research data were collected through questionnaires distributed via a google form. Question/statement items in the questionnaire were measured using a 5-point Likert scale (1=strongly disagree; 5=strongly agree). The statistical analysis tool used in this research is Structural Equation Modeling (SEM). The software used in data processing is SmartPLS.

The operational definition of each variable is as follows:

1. *Knowledge Sharing* (Janus, 2016; Lo & Tian, 2020):
  - *When I get new information, I share it with my coworkers*

- *When I get new knowledge or skills, I share and teach it to my coworkers*
  - *When I gain experience*
  - *When my colleagues get new knowledge or skills, they share and teach me*
  - *When my colleagues get further information, they share it with me*
  - *When my colleagues get new work-related experiences, they share them with me*
  - *I like to learn and seek input from coworkers*
2. *Innovation Capability* (Sniukas, 2020; Lo & Tian, 2020):
- *My unit is continuously updating the company's products, services, and programs*
  - *My unit is always able to keep up with competitor's performance*
  - *My unit can take advantage of opportunities well to increase market share*
  - *I can solve problems using the information or new knowledge I have gained*
3. *Absorptive Capacity* (Sripada, 2020; Lo & Tian, 2020):
- *Employees and management in my unit often discuss and exchange opinions*
  - *Employees and management in my unit often discuss and exchange views in informal activities such as lunch and others*
  - *I like to share experiences with my colleagues*
  - *My unit has clear job descriptions and responsibilities for employees*
4. *Supply Chain Agility* (Martinez-Sanchez & Lahoz-Leo, 2018):
- *My unit establishes business relationships with customers based on core competency development*
  - *Information about my S.C. unit is accessible to all S.C. agents*
  - *My unit has no barriers to coordinating and exchanging knowledge between departments*
  - *My unit uses performance measures based on customer satisfaction*
5. *Competitive Advantage* (Godfrey et al., 2020; Lo & Tian, 2020):
- *Overall, my unit has a better reputation than the same competing company*
  - *My unit can continually develop new and unique programs*
  - *My unit can always have a better research performance than the same competing company*
  - *My unit can always have a better relationship with the industry than the same competitor company*

## 4. Discussion and Result

### 4.1. Profile Respondent

Table 1. Respondent Profile based on Position in The Company

<b>Position</b>	<b>Frequency</b>	<b>Percentage</b>
<i>Owner</i>	42	21%
<i>Manager</i>	49	24.5%
<i>Supervisor</i>	109	54.5%
Total	200	100%

Source: Processed data

Table 1 shows that supervisors dominated the respondents in this study by 54.5% or 109 respondents, managers by 24.5% or 49 respondents, and owners by 21% or 42 respondents.

### 4.2. Validity and Reliability

Table 2. Result of Validity and Reliability Test

<b>Variable</b>	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
Knowledge Sharing	0.929	0.945	0.813
Innovation Capability	0.924	0.907	0.714

Absorptive Capability	0.864	0.908	0.712
Supply Chain Agility	0.874	0.913	0.725
Competitive Advantage	0.877	0.916	0.731

Source: Processed data

Table 2 explains that the value of all variables based on Cronbach's alpha and composite reliability is > 0.70, and validity testing uses AVE > 0.50, so the variables tested are valid and reliable so that it can be continued to test the structural model.

### 4.3. Hypothesis Test

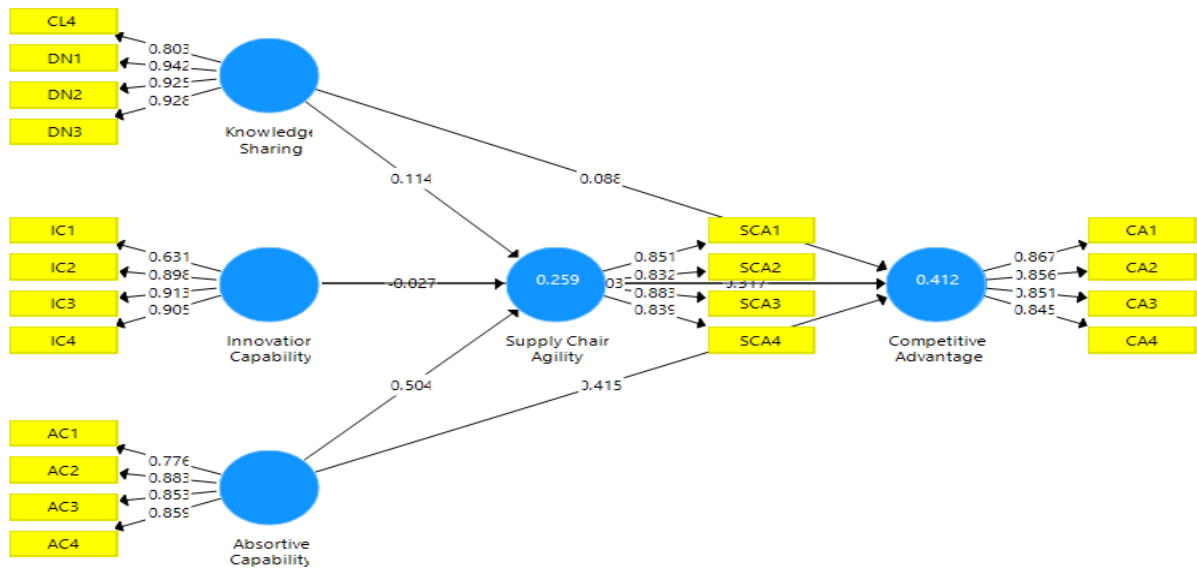


Figure 1. Path model

The bootstrapping method was used to determine the effect between variables (Figure 1). The PLS method's decision to accept or reject a hypothesis is based on the significance value (p-value) and the t-table value. The criteria for accepting or rejecting the idea (Bootstrapping) is if the t-value > 1.96 and the p-value < 0.05 at the 5% significance level ( $\alpha = 5\%$ ), then  $H_0$  will be rejected.

Table 3. Path Coefficient

Variable	Original Sample (O)	T-STATISTICS	P-VALUES
KS > CA	0.088	0.959	0.338
KS > SCA	0.114	0.803	0.423
IC > CA	0.003	0.040	0.968
IC > SCA	-0.027	0.225	0.822
AC > CA	0.415	5.048	0.000
AC > SCA	0.504	8.680	0.000
SCA > CA	0.317	3.687	0.000

Source: Processed data



Table 3 shows that the competitive advantage variable ( $O = 0.088$ ) is not significantly impacted by the knowledge-sharing variable ( $O = 0.088$ ). This is based on the fact that the t-statistic for the association between the variables is  $0.959 < 1.96$ , and the p-value is  $0.338 > 0.05$ .  $H_0$  did not succeed in being disproved, hence it cannot be said that knowledge sharing has a positive and large impact on competitive advantage. Previous research (Azeem et al., 2021; Hu et al., 2022) that indicated a positive and substantial association between information sharing and a competitive advantage does not corroborate the findings of this study.

The supply chain agility variable is unaffected by the knowledge-sharing variable ( $O = 0.114$ ). (Table 3). This is based on the fact that the p-value is  $0.423 > 0.05$  and the t-statistic for this variable connection is  $0.803 < 1.96$ . The second hypothesis, that information sharing has a favorable and considerable impact on supply chain agility, has not been disproven because  $H_0$  was not accepted. Previous studies (Kim & Chai, 2017; Rajabion et al., 2019; Tuan, 2016), which discovered that information sharing has a positive and significant relationship influence on supply chain agility, do not support the findings of this study.

The competitive advantage variable is not significantly impacted by the innovation capability variable ( $O = 0.003$ ). (Table 3). The p-value for this variable connection is  $0.968 > 0.05$ , and the t-statistic is  $0.040 < 1.96$ . The third hypothesis, which claims that innovation capability positively affects competitive advantage, was not refuted, hence it is not supported. Previous studies by Puspita et al. 2020, Ferreira et al. 2020, Aziz & Samad 2016, Anjaningrum & Rudamaga 2019, Nafiu et al. 2020, and Lo & Tian 2020, discovered that innovation capability has a positive and significant relationship effect on competitive advantage, do not support the findings of this study.

The supply chain agility variable is unaffected by the innovation capability variable ( $O = -0.027$ ). (Table 3). This variable relationship's t-statistic is  $0.225 < 1.96$ , and the p-value is  $0.822 > 0.05$ . The fourth hypothesis, which claims that innovation capability positively influences supply chain agility, is not supported because  $H_0$  was not rejected. Previous investigations have not supported the findings of this study. Researchers Schreyögg & Kliesch-Eberl (2007) and Börjesson & Elmquist (2011) discovered that supply chain agility and innovation capability have a favorable and significant link.

The competitive advantage variable is positively impacted by the absorptive capacity variable ( $O = 0.415$ ). This is based on the fact that the t-statistic for the association between these two variables is  $5.048 > 1.96$ , and the p-value is  $0.0000.05$ . (Note 3 in table)  $H_0$  is disproved, demonstrating the fifth hypothesis—that absorptive capacity has a favorable and considerable impact on competitive advantage. Lis and Sudolska (2015) findings, which claim that absorptive capacity has a favorable and considerable impact on competitive advantage, are also supported by this. Supply chain agility is positively impacted by the absorptive capacity variable ( $O = 0.504$ ). This is based on the fact that the t-statistic for the relationship between these two variables is  $8.680 > 1.96$  and the p-value is  $0.000 < 0.05$ . (Table 3).  $H_0$  is disproved, proving the sixth hypothesis—that absorptive ability positively and significantly influences supply chain agility—instead. Additionally, it supports the findings of a study by Dobrzykowski et al. (2015); Chatchawanchanchanakij & Arphonpisan 2021 reported that absorptive ability has a favorable and significant impact on supply chain agility.

The supply chain agility variable positively impacts the competitive advantage variable ( $O = 0.317$ ). This is based on the fact that the t-statistic for the link between these two variables is  $3.687 > 1.96$  and the p-value is  $0.000 < 0.05$  (Table 3).  $H_0$  is disproved, proving the seventh hypothesis—that supply chain agility significantly and positively influences competitive advantage—to be true. The findings of this study are consistent with those of Ambe (2010) and Wu et al. (2017), who found that supply chain agility contributes to competitive advantage. The findings of earlier research by Koç et al. (2022) that found a positive and substantial relationship between supply chain agility and competitive advantage also corroborate this conclusion.

Table 4. Path Coefficient – Result of Indirect Effect

Variable	Original Sample (O)	T-STATISTICS	P-VALUES
KS > SCA > CA	0.036	0.768	0.443
IC > SCA > CA	-0.008	0.220	0.826
AC > SCA > CA	0.160	3.365	0.001

Source: Processed data

Table 4 shows that the supply chain agility variable does not mediate a significant effect ( $O = 0.036$ ) on the relationship between innovation capability and competitive advantage variables. The t-statistic value in this variable relationship is  $0.768 < 1.96$ , and the p-value is  $0.443 > 0.05$ .  $H_0$  failed to be rejected, so the eighth hypothesis states that supply chain agility mediates the relationship between knowledge sharing and competitive advantage. It is not proven. The results of this study are not supported by previous research (Hu et al., 2022), which found that supply chain agility mediates the relationship between knowledge sharing and competitive advantage.

The connection between the variables relating to innovation capability and competitive advantage was not significantly mediated ( $O = -0.008$ ) by the supply chain agility variable (Table 4). This variable relationship's t-statistic is  $0.220 < 1.96$ , and the p-value is  $0.826 > 0.05$ . The ninth hypothesis, according to which supply chain agility influences the relationship between innovation capability and competitive advantage, was not refuted, hence it cannot be said that it is true. Previous studies by Storer and Hyland (2009), Gligor et al. (2013), Gligor (2014), and Güner et al. (2018), which revealed that supply chain agility influences the association between innovation capability and competitive advantage, do not corroborate the findings of this study.

On the link between the variable absorptive capacity and competitive advantage, the supply chain agility variable mediates a substantial effect ( $O = 0.160$ ). (Table 4). The p-value for this variable connection is  $0.001 < 0.05$ , and the t-statistic is  $3.365 > 1.96$ . The tenth hypothesis claims that supply chain agility mediates the established link between absorptive ability and competitive advantage since  $H_0$  is rejected. Previous studies by Storer and Hyland (2009), Gligor et al. (2013), Gligor (2014), and Güner et al. (2018) who discovered that supply chain agility influences the association between absorptive capacity and competitive advantage complement the findings of this study.

## 5. Conclusion and Managerial Implication

### 5.1. Conclusion

Knowledge sharing and innovation capability do not significantly affect competitive advantage and supply chain agility if applied to 200 coffee shops in Sleman Regency, Yogyakarta. It was also found that supply chain agility did not mediate the relationship between knowledge sharing and innovation capability to competitive advantage. On the other hand, it is found that there is a positive and significant effect between absorptive capacity and supply chain agility on competitive advantage and absorptive capacity on supply chain agility. Supply chain agility plays a positive and significant role in mediating the relationship between absorptive capacity and competitive advantage.

### 5.2. Managerial Implication

This study proves that absorptive capacity significantly affects competitive advantage and supply chain agility. A coffee shop with good absorptive capacity will be able to compete and increase its competitive advantage built through relationships between individuals, groups, and organizations in the business environment. New knowledge will enter the company through the ability to absorb external knowledge. Knowledge can be developed into new competencies through assimilation, transformation, and exploitation. So competitive advantage can be built through the company's ability to transform the acquired knowledge and bring it into a strategy in the business environment. The ability to absorb information and sound knowledge will also positively affect the company's ability to react quickly to changes in its business environment. The company needs the ability to anticipate changes to be more competitive, read the

market, and integrate between networks/suppliers. Companies must also be more responsive to increasing customer demand for innovative products.

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