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The Analysis of Supply Chain Management, Competitive Advantage, and Company Performance: A Study on SMEs in Sleman Regency, Indonesia

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Abstract

This research concerns contemporary beverage SMEs in the Sleman Regency, Special Region of Yogyakarta. The data used in this study is primary data. From the existing population, the researchers took a sample of 50 SMEs. This study uses a purposive sampling technique with the following criteria: SMEs enter into strategic partnerships with suppliers; SMEs establish relationships with customers; MSEs share information with supply chain management elements; SMEs pay attention to the quality of information. This study analyzes supply chain management, competitive advantage, and company performance in contemporary beverage SMEs in Sleman. Purposive sampling data collection method. The data analysis method uses SEM based on Partial Least Square (PLS). The results of this study are: supply chain management significantly has a positive effect on company performance; supply chain management significantly has a positive effect on competitive advantage; competitive advantage significantly has a positive effect on company performance; competitive advantage mediates the relationships between supply chain management and company performance in beverage SMEs. in Sleman, Yogyakarta Special Region. The following research will need to consider supply chain management variables through competitive advantage that affects company performance. The researchers hope further researchers to consider the variables that have not been included in this study.

Keywords : *Supply Chain Management, Competitive Advantage, Company Performance, Contemporary Beverage SMEs, PLS, Sleman*

Introduction

In the era of technology that is growing rapidly, companies adopt several things to support the company's operations. Modern tools resulting from the innovation of a technological product are starting to be applied in large companies, even to the point that some SMEs have production tools with high technology to support work productivity. Productivity is what determines how well the company performs in managing its business. In addition, marketing media in the industrial era 4.0 is very changing. Products advertised through newspapers, television, radio, and billboards have turned into social media such as Instagram, Tiktok, and YouTube. This application can be accessed easily in all circles.

Business opportunities from time to time are always there for business people who can see gaps in the market. Innovation will always be needed to produce products that have an element of novelty. One of them is a contemporary drink such as Thai

[1, 2, 3] UPN "Veteran" Yogyakarta

tea and green tea, an innovation created using traditional raw materials such as tea added with processed flavoring. Contemporary drink is a term that is usually used for drinks that are unique and varied in taste and use several mixtures of raw materials. Some contemporary drink shops, especially in Sleman Regency, need help to adjust to the market's desires, which are always moving. However, most SMEs just run as is. They are satisfied that their merchandise sells only in local areas (Widiyanto, 2019).

According to the Center for Statistics, in 2018, the trend of people eating food that is not their food tends to increase yearly. Almost a quarter (24.56%) of calorie consumption comes from prepared food and beverages. The province with the highest calorie consumption from prepared food and beverages is Yogyakarta, which is 805.63 kcal, while the lowest is Papua, which is 168.66 kcal (Hakiki, 2018).

Based on Krisna's research (2020) conducted by Kompas R&D in 2018 through a telephone poll methodology that was held from 25 to 26 January 2020 with 525 respondents at least 17 years old and domiciled in Greater Jakarta, explained the percentage of the frequency of ready-to-drink drinks such as Thai tea, iced coffee milk, brown sugar milk and milkshakes as follows: consumption of contemporary drinks with a frequency of once a week has the largest percentage of 32.1%, more than once a week at 28.3%, once a month at 17.9%, more than a month once was 9.8%, and the rest of the respondents who did not know about contemporary drinks had the smallest percentage of 1.9%. Current trends make the high competition in today's beverage business world increasingly visible. Companies always innovate on an ongoing basis, resulting in adding flavor variants, especially current beverage organizations/companies.

Based on the pre-research, most contemporary beverage SMEs in Sleman Regency, The Special Region of Yogyakarta, have implemented a simple supply chain management. They have implemented the concept of supply chain management, such as production-related strategies, shipping, and product distribution. Competitive advantage can be obtained when companies or SMEs have differences or differentiation, especially in terms of quality, price, product variety, and taste. In addition, competitive advantage can attract more consumers and dominate market share. It is very important to measure the company's performance to find out how far employees, staff, managers, and other divisions have developed from time to time. Besides that, the company's performance measured every period can help the company in continuous improvement efforts. The level of performance within the company can be used as a benchmark for selecting competent employees in a company division which can be realized in the form of job specifications. In large companies, this performance can also be used as a reference for selecting employees at a higher career level. In the context of this research, non-financial performance or operating performance is the main focus of the researcher.

Russell & Taylor (2019) defines supply chain management manages the flow of information, products, and services throughout the network, from customers to companies to suppliers. The implementation of SCM includes organizational activities that aim to improve supply chain management efficiency. In a competitive market, a company’s performance depends on its competitive advantage. In the struggle for greater growth and diversification, however, many organizations have lost sight of their competitive advantage as a result of decades of success and wealth. Competitive advantage, according to Quynh and Huy (2018), is the extent to which a firm can establish a durable position over its competitors.

In the last few years, contemporary beverage outlets have continued to appear in Indonesian society, along with the large popularity of these drinks, especially among teenagers and young adults (Veronica & Ilmi, 2020). The high consumption of contemporary drinks, one of the drinks, is comparable to the proliferation of modern beverage SME shops, especially in The Special Region of Yogyakarta, with the highest consumption of ready-to-drink drinks in Indonesia. There is high competition among contemporary beverage SMEs, especially in Sleman Regency. Each store strives to gain its competitive advantage. For entrepreneurs, this is a challenge and an opportunity to maintain a business life cycle. Of course, from time to time, it requires them to continue to innovate to create drinks with new and different flavors. Every contemporary beverage SMEs usually has a signature menu, or it can be called a mainstay menu that cannot be obtained at other shops. The use of tools in business operations must be considered and taken into account to achieve high business performance.

Literature Review

Supply Chain Management

Managing the flow of incoming information through all enterprises to achieve synchronization and be more responsive to consumer wants while lowering costs is supply chain management (Russell & Taylor, 2019). According to Heizer & Render (2003,) SCM is a management activity of activities to obtain raw materials, transforming these raw materials to consumers through the distribution system. Li et al. (2006) found that numerous types of literature present SCM techniques from multiple viewpoints with the ultimate objective of enhancing organizational performance.

The research of Quynh & Huy (2018) measures the SCM variable using the following factors:

a. Strategic Partnership Supplier
b. Customer Relationships
c. Information Sharing
d. Information Quality

Leadership Style

A company's capacity to outperform rival businesses in the same industry or market as a result of its attributes and resources is known as a competitive advantage (Porter, 2008). By offering greater consumer value at a lower cost or by offering larger profits and services at a higher cost, a company might gain a competitive advantage over its rivals. A company will have a competitive advantage if it gains advantages in its operational, tactical, and strategic areas (Fink & Disterer, 2006).

Work Discipline

Company performance is a measurement of its success over a specific time period. This item can be useful for evaluating the appropriateness of the strategy and implementation for each activity that has been planned and implemented (Kushwaha, 2011). According to Fink & Disterer (2006), competitive advantage is a strategy that aids in the survival of the company. Excellence in competition is a means through

which the organization can attain its ultimate objective of enhancing corporate performance.

This study uses operational performance because the object of research is SMEs that have difficulty measuring financial performance. For the measurement of company performance variables based on operational performance utilizing the theory in Carton (2004,) which claims that operational performance may be measured by market share, new product launch, product performance, marketing effectiveness, and customer satisfaction.

Performance

Mangkunegara (2011) suggests that performance is the result of work in quality and quantity achieved by an employee in carrying out his duties in accordance with the responsibilities given to him. Because organizations are basically run by humans, actual performance is human behavior within the organization that meets predetermined standards of behavior to achieve the desired results. Maximum employee performance can be obtained if employees are satisfied both financially and non-financially and are comfortable with their work environment.

Hypothesis

The hypotheses in this study are:

H1. Supply chain management positively affects company performance in contemporary beverage SMEs in Sleman Regency.

H2. Supply chain management positively affects the company's competitive advantage in contemporary beverage SMEs in Sleman Regency.

H3. Competitive advantage positively affects company performance in contemporary beverage SMEs in Sleman Regency.

H4. Competitive advantage mediates the relationships between supply chain management and company performance in contemporary beverage SMEs in Sleman Regency.

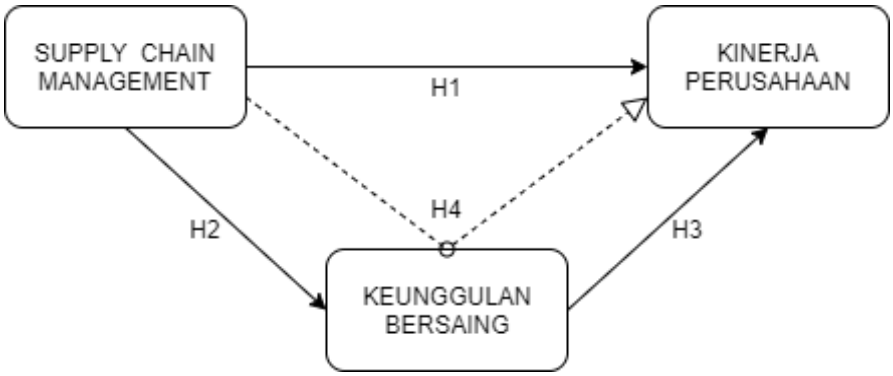

Figure 1. The Conceptual Framework

Methods

Sampling and Procedures

The contemporary beverage SMEs in Sleman Regency, The Special Region of Yogyakarta, is a members of this research population. To choose a part of the population member, this study uses a purposive sampling technique. Sampling is limited to certain types of people who can provide the desired information. They are people who meet several criteria determined by the researcher (Sekaran & Bougie, 2016). The criteria for taking the sample in this study are the contemporary beverage SMEs in Sleman Regency that applies SCM practices.

Data Analysis

Data processing in this study uses the SEM-PLS method. According to Ghozali & Latan (2015), reporting the results of the PLS analysis uses the two-step approach. The measurement model (the outer model) measures the relationship between indicators and their constructs to test the construct validity and reliability of the research instruments. The outer model (the measurement model) tests convergent validity, discriminant validity, AVE, and composite reliability. After testing the outer model, the next step is to test the inner model or measurement of the inner, called the structural model.

Result and Discussion

Result

Testing the Outer Model for the Fully Analyzed Model

The outer model tests the validity and reliability of each indicator of the latent variable. The outer model tests convergent validity, discriminant validity, AVE, and composite reliability.

The results of the SmartPLS analysis are in Figure 2 and Table 2. The value of the outer model did not meet convergent validity because there were indicators that had a loading factor value below 0.70, namely at SCM7 (0.691) and KB3 (0.691).

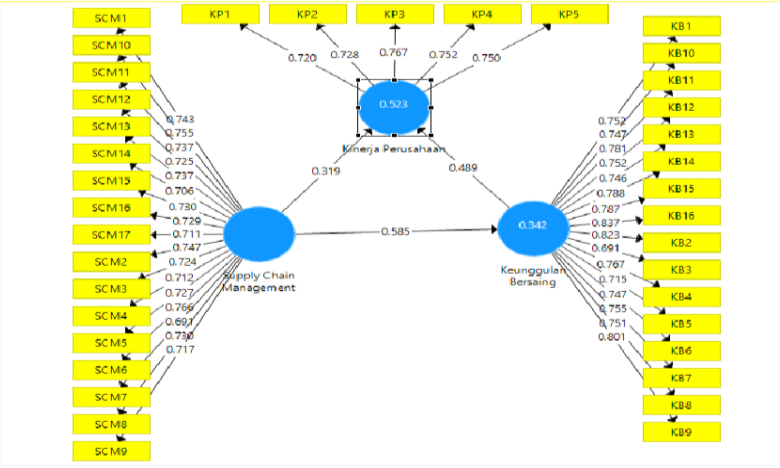

Figure 2. PLS-Algorithm 1

Therefore, for the model to meet convergent validity, researchers eliminate or issue indicators with a loading factor value below 0.70.

The recommended loading factor value is >0.7. The results of the outer loading test (Convergent Validity) are all valid in Table 1.

Table 1 shows that the research variables have met convergent validity or can be declared valid because all indicators have loading factor scores >0.7. The results show the cross-loading value obtained is >0.7, so that all indicators are valid.

Based on Table 2, all indicators in the study have met the requirements, which have a higher cross-loading value on the latent variable than other variables. In addition, each indicator has a cross-loading value > 0.7. Therefore, all indicators used can be declared to meet the criteria for discriminant validity testing and can be continued for use in the next measurement step. The expected AVE value is > 0.5, and good composite reliability if it has a value of 0.7. So that all latent variables are reliable.

Table 1. Convergent Validity of Full Model

Kode Indikator	Supply Chain Management	Keunggulan Bersaing	Kinerja Perusahaan	Keterangan
SCM1	**0,756**			Valid
SCM2	**0,759**			Valid
SCM3	**0,721**			Valid
SCM5	**0,730**			Valid
SCM6	**0,762**			Valid
SCM8	**0,729**			Valid
SCM9	**0,718**			Valid
SCM10	**0,753**			Valid
SCM11	**0,738**			Valid
SCM12	**0,729**			Valid
SCM13	**0,750**			Valid
SCM15	**0,747**			Valid
SCM16	**0,734**			Valid
SCM17	**0,700**			Valid
KB1		**0,760**		Valid
KB2		**0,825**		Valid
KB4		**0,757**		Valid
KB5		**0,714**		Valid
KB6		**0,735**		Valid
KB7		**0,765**		Valid
KB8		**0,739**		Valid
KB9		**0,804**		Valid
KB10		**0,757**		Valid
KB11		**0,793**		Valid
KB12		**0,753**		Valid
KB13		**0,746**		Valid
KB14		**0,793**		Valid
KB15		**0,777**		Valid
KB16		**0,839**		Valid
KP1			**0,718**	Valid
KP2			**0,725**	Valid
KP3			**0,767**	Valid
KP4			**0,753**	Valid
KP5			**0,753**	Valid

Source: Primary data processing results

Table 2. Discriminant Validity (Cross Loading)

Kode Indikator	Supply Chain Management	Keunggulan Bersaing	Kinerja Perusahaan
SCM1	0,756	0,566	0,524
SCM2	0,759	0,484	0,523
SCM3	0,721	0,452	0,363
SCM5	0,730	0,472	0,430
SCM6	0,762	0,449	0,430
SCM8	0,729	0,364	0,289
SCM9	0,718	0,405	0,535
SCM10	0,753	0,394	0,374
SCM11	0,738	0,457	0,517
SCM12	0,729	0,350	0,483
SCM13	0,750	0,544	0,616
SCM15	0,747	0,384	0,427
SCM16	0,734	0,434	0,339
SCM17	0,700	0,394	0,425
KB1	0,536	0,760	0,505
KB2	0,527	0,825	0,442
KB4	0,545	0,757	0,556
KB5	0,434	0,714	0,471
KB6	0,337	0,735	0,456
KB7	0,533	0,765	0,569
KB8	0,299	0,739	0,483
KB9	0,440	0,804	0,582
KB10	0,393	0,757	0,556
KB11	0,551	0,793	0,642
KB12	0,370	0,753	0,494
KB13	0,408	0,746	0,460
KB14	0,504	0,793	0,483
KB15	0,422	0,777	0,547
KB16	0,583	0,839	0,516
KP1	0,393	0,507	0,718
KP2	0,333	0,449	0,725
KP3	0,580	0,597	0,767
KP4	0,438	0,379	0,753
KP5	0.516	0,533	0,753

Source: Primary data processing results

Table 3. Construct Reliability

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)	Reliability
Supply Chain Management	0,936	0,939	0,944	0,544	Reliable
Competitive Advantage	0,951	0,954	0,956	0,595	Reliable
Performance Company	0,800	0,808	0,861	0,533	Reliable

Source: Primary data processing results

Based on Table 3, all latent variables have AVE values> 0.5 and Composite Reliability of 0.7. With this value, all variables are said to be reliable. All latent variables that have been tested can be continued to be used in the next measurement step.

Testing the Inner Model (Structural Model)
The following table shows the results of the structural test output or the inner model.

Table 4. *Inner Model*

Testing	Results	Criteria
Determinant Coefficient (R^2)		
Competitive Advantage (R1)	0.366	Moderate (competitive advantage is influenced by 36.6% by SCM)
Company Performance (R2)	0.529	Moderate (company performance is affected by 52,9% by competitive advantage and SCM)
squared predictiveictive relevance Q^2 = 1-((1-R^1)(1-R^2)) =1-((1-0,366^2)(1-0,529^2) =1-((1-0,133956)(1-0,279841) =1-((0,866044)(0,720159) =0,3763	37,63%	Strong (the observed values after reconstruction well and has predictive relevance)
The goodness of Fit (GoF) (GoF) =$\sqrt{\overline{AVE}\ x\ \overline{R^2}}$ = $\sqrt{0{,}564\ x\ 0{,}529^2}$ = $\sqrt{0{,}564\ x\ 0{,}279841}$ = $\sqrt{0{,}1579}$ = 0,3972	39.72%	Large (the model has a good ability to explain empirical data)

Source: Primary data processing results

Figure 3 shows a picture of the PLS – Algorithm and Bootstrapping model.

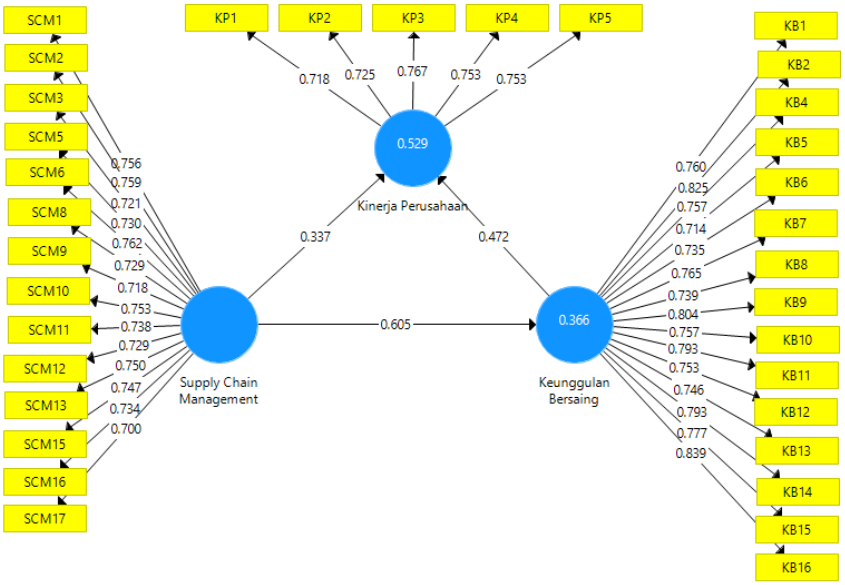

Figure 3. PLS- Final Algorithm

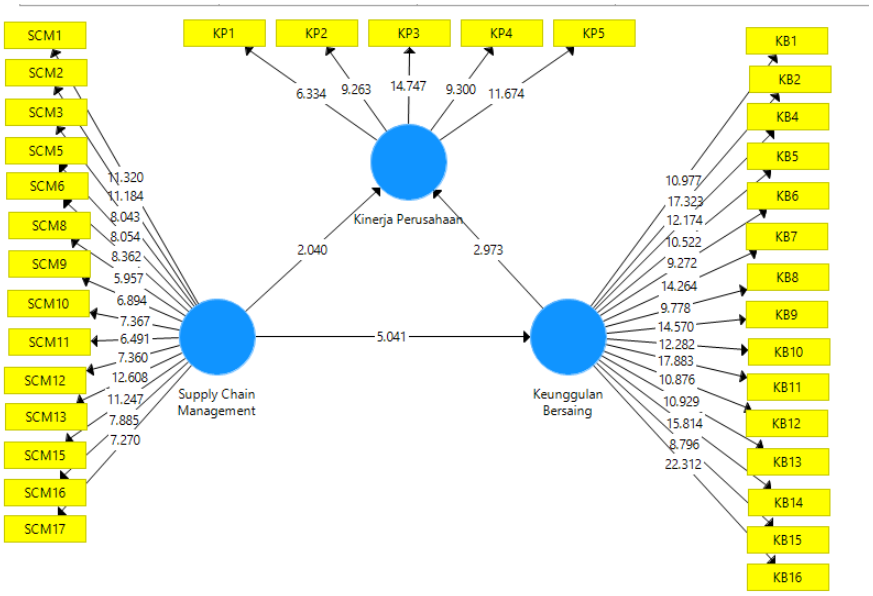

Figure 4. Bootstrapping Model

Table 5. The Direct Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Supply Chain Management→ Company Performance	0,337	0,321	0,167	2,017	**0,044**
Supply Chain Management→ Competitive Advantage	0,605	0,641	0,125	4,851	**0,000**
Competitive Advantage→ Company Performance	0,472	0,506	0,156	3,026	**0,003**

Source: Primary data processing results

R2 shows that competitive advantage is influenced by SCM by 0.366 or 36.6%. While the company's performance is influenced by SCM, and the competitive advantage is 0.529 or 52.9%. Company performance is influenced by SCM, and 37.63% competitive advantage means that the observed values have been well constructed and have predictive relevance. The goodness of fit (GoF) is used to validate the overall structural model. The criteria for assessing goodness of fit are 0.1 (small GoF), 0.25 (medium GoF), and 0.36 (large GoF) (Ghozali & Latan, 2015). The value of goodness of fit is 39.72% which means a large GoF.

Hypothesis Testing

The direct effect of this research can be seen in the Table 5.

Based on Table 5, the effect of SCM on firm performance has a T-statistic of 2.017 and a P-value of 0.044. Thus, SCM has a significant positive effect on company performance. Hypothesis 1 is accepted.

The effect of SCM on competitive advantage has a T-statistic of 4.851 and a p-value of 0.000. Thus, SCM has a significant positive effect on competitive advantage. Hypothesis 2 is accepted.

Table 6. Indirect Effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Supply Chain Management→ Competitive Advantage →Company Performance	0.286	0.331	0.140	2.041	**0.042**

Source: Primary data processing results

Table 6. Effect of Total

	Supply Chain Management	Competitive Advantage	Company
Supply Chain Management		0.605	0.623
Competitive Advantage			0.472
Company Performance			

Source: Primary data processing results

The effect of competitive advantage on company performance has a t-statistic of 3.026 and a p-value of 0.003. Thus, competitive advantage has a significant positive effect on company performance. Hypothesis 3 is accepted.

The indirect effect of this research can be seen in the Table 6.

The competitive advantage mediates the relationships between SCM and company performance with a T-statistic of 2.041 and a P-value of 0.042. Thus SCM has a positive and significant effect on company performance through competitive advantage as an intervening variable. The researcher concluded that the variable of competitive advantage mediates the relationship of SCM to company performance. Hypothesis 4 is accepted.

The total effect of SCM through competitive advantage on company performance is 0.623 or 62.3%.

Discussion

The Effect of Supply Chain Management on Company Performance

The results of the study show that SCM positively affects the company performance in the contemporary beverage SMEs in Sleman Regency. The better the role of SCM, the more the company's performance will be. The role of good SCM management must be maintained because it can improve company performance. The study is in line with the research of Jamaludin (2021), where the results of his research show the same results, namely, SCM affects company performance positively. It can be concluded that SCM can improve the company's operational performance.

The Effect of Supply Chain Management on Competitive Advantage

The results of the study indicate that SCM positively affects competitive advantage in the research object of contemporary beverage SMEs in the Sleman Regency. This means that the SCM variable has a relationship that has an impact on the competitive advantage variable. The better the role of SCM, the more competitive advantage that

every contemporary beverage SME has in Sleman Regency. The results of this study support the research of Jamaludin (2021), in which his research shows that SCM positively affects competitive advantage. Quality plays an important role in competitive advantage in winning the competition. The quality of the products produced is sourced from the quality of the raw materials obtained when these SMEs apply good SCM.

The Effect of Competitive Advantage on Company Performance

The results of the study indicate that competitive advantage positively affects company performance. The better the competitive advantage, the better the performance of the company owned by every contemporary beverage SME in Sleman Regency. The results of this study support the research of Quynh & Huy (2018), where the competitive advantage variable has a positive and significant effect on company performance. Jamaludin's research (2021) also had the same result. Researchers can conclude that company performance is a measure of the success of a company measured over a certain period of time. The competitive advantage can attract many consumers, and the level of sales and market share of the company and the company's performance will be increased.

The Effect of Supply Chain Management on Company cPerformance Through Competitive Advantage

The results of the study indicate that competitive advantage mediates the relationships between SCM and company performance in contemporary beverage SMEs in Sleman Regency. The study results in support Quynh & Huy (2018) and Jamaludin (2021) studies. The findings imply that in order to increase the company's competitive advantage, contemporary beverage SMEs in Sleman Regency must manage customer relations well, share information with their partners, increase information quality and build partnerships with their suppliers and customers. By increasing their competitive advantage, beverage SMEs can obtain good company performance.

Conclusion

The researchers conclude the results of the study:

1. Supply chain management positively affects company performance in the contemporary beverage SMEs in Sleman Regency.
2. Supply chain management positively affects competitive advantage in the contemporary beverage SMEs in Sleman Regency.
3. Competitive advantage positively affects the company performance in the contemporary beverage SMEs in Sleman Regency.
4. Competitive advantage mediates the relationships between SCM and company performance in contemporary beverage SMEs in Sleman Regency.

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