

## Impact of Service Quality and Service Innovations on Competitive Advantage in Retailing

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**Abstract :** *Current competitive environment induced by 4.0 industrial revolution has forced companies to focus on managing service to customer by provide added value to customers, so that it will increase competitiveness. This study aims to find out and analyze impact of service quality and service innovations on competitive advantage. Analysis method is descriptive statistical and Structural Equation Modeling with AMOS software. The sampling Technique was purposive sampling with combination cluster proportional stratified random sampling, the instrument to collect the data was questionnaire with manager, supervisor or employee of retailing. The results indicate that the service quality and service innovations impact on competitive advantage.*

**Keywords :** *Service Quality; Service Innovations; Competitive Advantage.*

### I. Introduction

The 4.0 industrial revolution has an impact on business behavior in Indonesia. The phenomenon of the 4.0 industrial revolution is the changing lifestyles of society and the emergence of the phenomenon of online shopping has eroded the modern retail market, so that the influence is slowing growth in modern retailing. In the era 4.0 industrial revolution, the most popular technology in business is information technology (IT) with digital technology and internet will be the basis of revolutionary change in all industries [1],[2]. Information technology is essential in creating a tightly integrated value chain and delivering high quality service, so as to enable companies to always innovate. Technology and innovations is very important to the retailing industry as it plays a significant role in helping retailers to improve their business and to provide the best service for customers [3],[4]. Service quality and innovation are two elements that can build competitive advantage, because the quality of service as a infrastructure that is adequate in providing services, while innovation is applied because consumers want a renewal in the services perceived by consumers, so the end result of service quality and innovation is the creation of competitive advantage. Service quality in the retail becomes an important in forming image and increase sustainable competitive advantage, because competitive advantage success is driven by service quality that exceed customer expectations[5],[6]. The results of studies that quality of customer service an important drive to a sustainable competitive advantage [7],[8],[9]. Innovations in business retail are increasingly critical for building sustainable advantage in a marketplace defined by unrelenting change, escalating customer expectations, and intense competition[10], so that creating an innovative retail organization is of outright strategic importance[11]. The results of studies that innovations in retail is an important resource in building competitiveness[12], [13].

In Indonesia there are two major players in the group of local retailers with minimarket format, namely Indomaret and Alfamart. Indomaret is the market leader with the largest number of outlets in Indonesia has turnover market share Rp 8.72 trillion (45.035%), followed by Alfamart Rp 7.77 trillion (40.13%) from total market share of minimarket in Indonesia. This is the basis for the authors to conduct research on both the minimarket in Indonesia. Contribution of this study is to investigate the relationship service quality and innovations with competitive advantage directly, which up to this time, no study has directly examined the relationship between service quality and innovations on competitive advantage.

## II. Literatur Review

### 2.1 Retail Service Quality (RSQS)

Although Parasuraman et al. [14] suggest that the SERVQUAL instrument can be adapted to the organization, Dabholkar et al. [15] view SERVQUAL as more appropriate for “pure” service settings and not as applicable to the retail setting which they believe requires additional dimensions. The researchers site others with the same viewpoint. The result of research Lalwani, et.al [16] showed that RSQS was superior within the context of more good and less service environment, i.e. a supermarket, while SERVPERF was better for a retailing context where the service element becomes more important, i.e. an electronic goods retailer. From the results of research conducted by Ushanta [17], Nguyen and Hau [18] and Najib and Sosianika [19] service quality in retail is very different from the environment of other products or services, and the dimension RSQS i.e. physical aspect, reliability, personal interaction, problem solving and policy. This study recommended that SERVQUAL and RSQS could be applied in retail of minimarket that they are adjusted to the specific context of study. These five dimensions : physical aspect, reliability, personal interaction, problem solving and policy.

### 2.2 Service Innovations

The key to remaining competitive and surviving in the market is the firm’s ability to provide products and service tailored to meet the needs of its customers. In a chain relationship, scholars have suggested that the key to remaining competitive through meeting customer needs is innovation [20], as trends, customer needs and perceptions keep evolving with the passage of time [21]. Service innovation is the key to change conducted by companies to improve competitive advantage by accelerating the service process through innovation in new service systems that combine with technological i.e integrate retail processes and digital services elements, because digital innovation a framework for diagnosing service innovation [22], [23]. From the results of research conducted by Pinto, et.al [24], Helkkula, Kowalkowski and Tronvoll [25], Prabhu, et.all [26] that service innovations service innovations i.e use a technology, new service, interactions new customer’s/client interface and service delivery system is key a create and gain to competitive advantage.

### 2.3 Competitive Advantage

When understanding the concept of competitive advantage, Michel porter has laid a clear foundation as the evolution of the competitive advantage is a function of the way the firm organizes and manages the activities. One of the competitive advantages is differentiation product or service offering of the firm, creating something that is perceived as being unique, so that give a position of defense against competition [27], [28]. Differentiation is a differentiator factor that has characteristics in products and services. Service quality is considered an important tool for a firm’s struggle to differentiate itself from its competitors. The essence of quality service provides added value for customers and added value is one factor in competitive advantage. The result of research Warraich et.al [29], Anthony [30], Yeboah and Ewur [31] found that service quality to be considered as a source of competitive advantage. A study Tphoon, et.al [32] dimension of competitive advantage are, price/cost, quality, delivery dependability, Product innovation and Time to market. A study Dirisu, Iyiola and Ibidunni [33], Weiss and Ciliers [34], Lasalewo [35] added that the dimensions of competitive advantage such as best brend and value. Based on the above, the dimensions of the competitive advantage

retail constructs used in this study are price/cost, quality, value to customer and product variety. With these theoretical and empirical evidenced the following hypothesis can be proposed.

### III. Research Framework

Service quality and service innovations has a positive and significant impact on competitive advantage. Retail Quality of service is divided into five main indicators, namely physical aspect, reliability, personal interaction, problem solving and policy. Service innovation is technology, new service, interactions with customer's and service delivery system. Competitive advantage is divided into price/cost, quality, value to customer and product variety. Thus, the conceptual framework proposed in the study is shown in Figure 1.

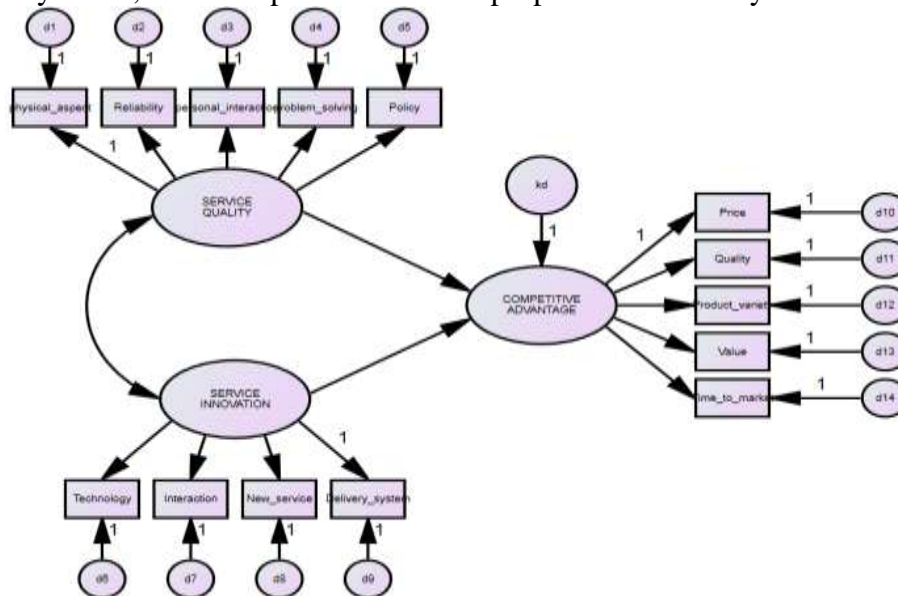


Figure 1 Research Framework

Based on the Figure 1 above the research hypothesis is as follows:

1. Service Quality have a significant effect on competitive advantage in retailing.
2. Service Innovations have a significant effect on competitive advantage in retailing.

### IV. Research Methodology

This study uses descriptive verification research methods with explanatory surveys. The data sources used are primary data and secondary data. Primary data is obtained from the distribution of research questionnaires to respondents, while secondary data is obtained from data owned by companies, articles and other sources. Total samples used in this study is adjusted with the analytical method used is the Structural Equation Model (SEM), was set at 100 Minimarket (Alfamart and Indomart) in Region III of West Java Province. The research sample was taken from participants minimarket manager and / or supervisor in Region III of West Java Province. The technique used to take samples at the minimarkets in Region III of West Java Province is purposive sampling technique. The selection of purposive sampling because of this study intensive research subjects are needed, so that the research subjects are selected based on the consideration of the researcher about the location of the subject and

subject of agreement to be involved in this research. Taking samples in the field is cluster stratified random sampling. Data was collected by collected by use of questionnaires and interview schedules. Prior to use the questionnaires were piloted, and then subjected validity checks and reliability tests. The researcher used the drop and pick technique when issuing the questionnaires to the respondents so as to give them humble time to respond to questions. The data analysis tool used is the Structural Equation Model (SEM) from the AMOS statistical package.

## V. Results And Discussion

The results of the analysis on the characteristics respondents of minimarket (Alfamart and Indomart) in the Region III of West Java Province, Respondents in this study is the management or employee which is considered to have feasibility. Characteristics of respondents described based on gender, age range, income and length of work. Table 1 extend to the characteristics of respondents visitors traditional market research.

**Table 1.** General Characteristics of Respondents

Classified	Sample	Percentage (%)
Gender		
Male	69	69.00
Female	31	31.00
Total	100	100.00
Age Range		
20 – 29	56	56.00
30 – 39	29	29.00
> 40	15	15.00
Total	100	100.00
Monthly Income (IDR)		
< 2 Milion	47	47.00
2 Milion – 3 Milion	38	38.00
>3 Milion	15	15.00
Total	100	100.00
Length of work		
1 – 5 years	51	51.00
6 – 10 years	34	34.00
>10 years	15	15.00
Total	100	100.00

Sources: Data Processing Results

Table 1 provides information that, in general, length of work at minimarket (Alfamart and Indomart) between 1-5 years which dominates, income < £ 2 million, is in the range of age between 20-29 years, as well as male. Descriptive statistical analysis on each of the indicators the study are summarized in Table 2 below:

**Table 2.** Descriptive Analysis Service Quality

No	Dimension	Perception Score					Total Score	Max. Score	%
		1	2	3	4	5			
1	Physical aspect	0	42	150	204	390	786	1000	78.60
2	Reliabilty	0	98	195	204	175	672	1000	67.20
3	Personal interaction	0	54	150	260	290	754	1000	75.40
4	Problem solving	0	24	123	220	460	827	1000	82.70
5	Policy	0	28	192	200	360	780	1000	78.00
	Service Quality	0	246	810	1088	1675	3819	5000	76.38
7	Technology	0	0	153	368	285	806	1000	80.60
8	Interactions new customer	0	2	156	344	305	807	1000	80.70
9	New service	0	6	246	372	119	734	1000	73.40
10	Delivery system	0	2	192	468	90	752	1000	75.20
	Service Innovations	0	10	747	1552	799	3099	5000	77.48
11	Price	0	2	81	356	415	854	1000	85.40
12	Quality	0	38	135	208	420	801	1000	80.10
13	Produt variety	0	30	165	232	360	787	1000	78.70
14	Value	0	46	138	284	300	768	1000	76.80
	Competitive Advantage	0	116	519	1080	1495	3210	4000	80.25

Sources: Data Processing Results

Table 2 shows that based on the descriptive service quality analysis. The result of research conducted provides information that at this time, the perception of respondents on the variables service quality are generally quite good. Problem that should be raised is the problem of the dimension of service quality parts reliability. This aspect discusses the operational hours, that not all minimarkets operate 24 hours in the Region III of West Java Province. The research results on variables service innovations are generally quite good. Problem that should be raised is the problem of the dimension of service innovations parts new service. From the results of respondents' answers to new services that are currently being launched such as e-commerce (online) and courier services in Region III of West Java Province that have not been fully used by customers. The research results on variables competitive advantage are generally quite good. Problem that should be raised is the problem of the dimension of competitive advantage parts added value. The results of this analysis prove that retail in region III of West Java Province is still not maximized in the aspect of added value. The added value in this study is about online facilities and services and the benefits of minimarket customer membership cards. Results of testing the goodness of fit index at the end of the model are as follows:

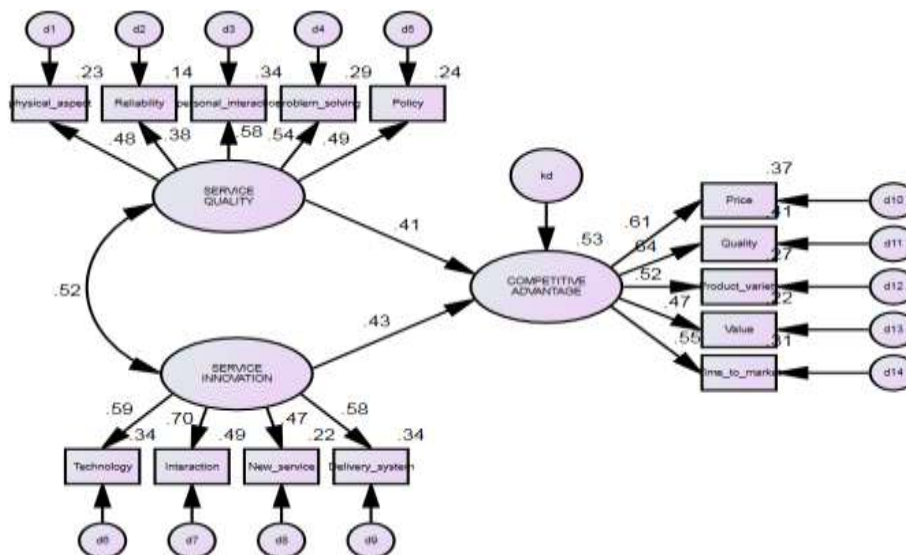
**Table 3.** Goodness of Fit Index Model

Goodness of fit index	Cut of Value	Result	Decision
$\chi^2$ – Chi square	< 95.081	82.232	Good
Significance probability	$\geq 0.05$	0.240	Good
RMSEA	$\leq 0.08$	0.034	Good
GFI	$\geq 0.90$	0.898	Marginal
AGFI	$\geq 0.90$	0.855	Marginal

CMIN/DF	≤ 02.0	1.111	Good
TLI	≥ 0.95	0.951	Good
CFI	≥ 0.95	0.960	Good

Sources: Data Processing Results

Based on Table 3, tests for the full feasibility of SEM models were tested using Chi square, CFI, TLI, CMIN / DF, RMSEA, GFI and AGFI in the range of expected values. These results indicate that the model used is acceptable. The significance level of 0.240 shows as a good structural equation model. The TLI measurement index, CFI, CMIN / DF, GFI, AGFI, and RMSEA are within the range of expected values. Thus the feasibility test of the SEM model has met the acceptance requirements.



**Figure 2.** The Result Structural Equation Model Analysis

Sources: Data Processing Results

**Table 4.** Direct, Indirect Effect and Hypotheses Confirmatory

Variables	Direct Effect	Indirect Effect		Total Effect	C.R	Description
		Service quality	Service Innovations			
Service quality	0.160	-	0.093	0.253	2.005	Significant
Service Innovations	0.185	0.093	-	0.278	2.126	Significant
Total	0.354	0.093	0.093	0.531		
			Epsilon	0.469		

Sources: Data Processing Results

Table 4 provides information that, direct effect of service quality on competitive advantage are 0.160 and indirect effect of service quality on competitive advantage are 0.092, so that total effect of service quality on competitive advantage are 0.253. Direct effect of service innovations on competitive advantage are 0.185 and indirect effect of service innovations on competitive advantage are 0.093, so that total effect of service innovations on competitive advantage are 0.278. Simultaneous effect of service quality and service

innovations on competitive advantage are 0.531 and total epsilon are 0.469. The results of hypotheses the influence of service quality on competitive advantage with C.R value  $2.005 > 1.960$  (critical value), the meaning hypotheses about the influence of the quality of service received. C.R value of service innovations  $2.126 > 1.960$  (critical value), hypotheses on the effect of service innovations positive and significant impact on competitive advantage.

The indicator result of reliability on service quality are the lowest indicator with value 0.38, the indicator result of new service on service innovations are the lowest indicator with value 0.47 and the indicator result of value on competitive advantage are the lowest indicator with value 0.47. The results of the study shows that service quality and service innovations influence on competitive advantage. The results of this study support the research conducted by Lakhali [36], Njoroge [37], with the findings in their research each researcher has empirically that service quality has a positive and significant effect on competitive advantage. The results of research about service innovation shows that service innovation has a significant effect on competitive advantage.

The meaning, competitive advantage can be achieved by innovation, this is in accordance with Hana [38], Sorescu, et.al [39] competitive advantage achievement through innovations are a key source and essence if competitive advantage is to be realized. The results of this study support the research conducted by Liu [40], Noorani [41] that service innovations has a significant effect on competitive advantage. In the business of minimarket, service quality and service innovations very important given to consumers, the service provided must be able to provide and increase added value, because of these factors are very weak from because its added value is very weak in contribution the competitiveness of minimarkets. The results of this study support the results of previous studies that have proven the hypothesis about service quality and service innovations is very impact on competitive advantage.

## VI. Conclusion

The aim of this study was to empirically investigate the impact of service quality and service innovations on competitive advantage retailing in region III of West Java Province. Service quality has a positive and significant effect on competitive advantage. Service innovations has a positive and significant effect on competitive advantage. Service innovations is more influenced by competitive advantage than service quality. These findings indicate that service innovations can source first of competitive advantage, and service quality in the second place to improve competitive advantage. The level highest of service quality indicator are personal interaction and problem solving, the lowest of service quality indicator are reliability. The level highest of service innovations are interaction, technology and delivery system, the level lowest of service innovations are new service. The level highest of competitive advantage indicator are price and quality, the lowest of competitive advantage are value.

## References

- [1] K. Jung *et al.*, "How to Respond to the Fourth Industrial Revolution, or the Second Information Technology Revolution? Dynamic New Combinations between Technology, Market, and Society through Open Innovation," *J. Open Innov. Technol. Mark. Complex.*, vol. 4, no. 3, p. 21, 2018.
- [2] Borges MHoppen NLuce F, "Information technology impact on market orientation in e-

- business,” *J. Bus. Res.*, vol. 62, no. 9, pp. 883–890, 2009.
- [3] Y. Mun and R. Yazdanifard, “The Influence of the Most Recent Technological Advancement on Retailing Industry The Influence of the Most Recent Technological Advancement on,” no. November 2013, 2014.
- [4] E. Pantano and G. Laria, “Innovation in Retail Process : From Consumers ’ Experience to Immersive Store Design,” vol. 7, no. 3, pp. 194–206, 2012.
- [5] S. Jelčić, “Managing Service Quality to Gain Competitive Advantage in Retail Environment,” *TEM J.*, vol. 3, no. 2, pp. 181–186, 2014.
- [6] P. F. Venter and M. Dhurup, “Scale Development and Validation,” vol. 8, no. 4, pp. 424–436, 2005.
- [7] P. Maclaran, “Managing service quality for competitive advantage in small engineering firms,” *J. Entrep. Behav. Res.*, vol. 5, no. 2, pp. 35–47, 1999.
- [8] Y. Y. C. P. D. D. Dominic, Diana Wong, Kim Nee Goh, “The importance of service quality for competitive advantage,” *J. Bus. Inf. Syst.*, vol. 6, no. 3, pp. 378–397, 2014.
- [9] Y. F. Ho, “Service Quality Improvement is a Tool for Competitive Advantage in Supermarkets: a Preliminary Study,” The University of Queensland, 1993.
- [10] C. B. Alina Sorescu, Ruud T. Frambach, Jagdip Singh, Arvind Rangaswamy, “Innovations in Retail Business Models,” *J. Retail. Consum. Serv.*, vol. 87, no. 1, pp. S3–S16, 2011.
- [11] G. C. Tănase, “The Significance of Strategic Service Innovation Management in Retailing,” 2012.
- [12] A. Brem, M. Maier, and C. Wimschneider, “Competitive advantage through innovation: the case of Nespresso,” *Eur. J. Innov. Manag.*, vol. 19, no. 1, pp. 133–148, 2016.
- [13] E. Leonardo Pinto, Giuseppe & Dell’Era, Claudio & Verganti, Roberto & Bellini, “Innovation strategies in retail services: solutions, experiences, meanings,” *Eur. J. Innov. Manag.*, vol. 20, no. 2, 2017.
- [14] L. Parasuraman, A., Zeithaml, V., Berry, “SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality,” *Jornal Retail.*, vol. 64, no. September 2014, pp. 12–40, 1988.
- [15] P. A. Dabholkar, D. I. Thorpe, and J. O. Rentz, “A Measure of Service Quality for Retail Stores,” *J. Acad. Mark. Sci.*, vol. 24, no. Winter, pp. 3–16, 1996.
- [16] A. K. Lalwani, “Service quality in retailing: Relative efficiency of alternative measurement scales for different product-service environments,” no. March 2000, 2015.
- [17] R. A. C. Ushantha and A. W. W. S. Achchuthan, “An Assessment of Retail Service Quality : An Empirical Study of the RSQS in Sri Lankan Supermarkets,” vol. 4, no. 3, pp. 78–91, 2014.
- [18] L. N. H. Nguyen Dang Duy Nhat, “Determinants of Retail Service Quality - a Study of Supermarkets in Vietnam,” *Sci. Technol. Dev.*, vol. 10, no. 08, pp. 15–23, 2007.
- [19] M. Farid Najib and A. Sosianika, “Retail Service Quality in Indonesia: Traditional Market Vs. Modern Market,” *Acad. Mark. Stud. J.*, vol. 21, no. 2, 2017.
- [20] J. Darroch and R. Mcnaughton, “Examining the link between knowledge management practices and types of innovation,” *J. Intellect. Cap.*, vol. 3, no. 3, pp. 210–222, 2002.
- [21] M. A. Mahmoud, R. E. Hinson, and P. A. Anim, “Service innovation and customer satisfaction : The role of customer value creation European Journal of Innovation Management Article information :,” no. December, 2017.
- [22] D. Nylén and J. Holmström, “Digital innovation strategy: A framework for diagnosing



- and improving digital product and service innovation,” *Bus. Horiz.*, vol. 58, no. 1, pp. 57–67, 2015.
- [23] J. Häikiö and T. Koivumäki, “Exploring Digital Service Innovation Process Through Value Creation,” *J. Innov. Manag. Häikiö, Koivumäki JIM*, vol. 4, no. 2, pp. 96–124, 2016.
- [24] E. Leonardo Pinto, Giuseppe & Dell’Era, Claudio & Verganti, Roberto & Bellini, “Innovation strategies in retail services: solutions, experiences and meanings,” *Eur. J. Innov. Manag.*, vol. 20, no. 2, pp. 190–209, 2017.
- [25] A. Helkkula, C. Kowalkowski, and B. Tronvoll, “Archetypes of Service Innovation,” *J. Serv. Res.*, vol. 21, no. 3, pp. 284–301, 2018.
- [26] J. Prabhu, S. L. Vargo, M. Barrett, and E. Davidson, “Service Innovation in the Digital Age: Key Contributions and Future Directions,” *MIS Q.*, vol. 39, no. 1, pp. 135–154, 2017.
- [27] S. Li, B. Ragu-Nathan, T. S. Ragu-Nathan, and S. Subba Rao, “The impact of supply chain management practices on competitive advantage and organizational performance,” *Omega*, vol. 34, no. 2, pp. 107–124, 2006.
- [28] Michael E. Porter, *Competitive Strategy: Techniques for Analyzing Competitors*. New York: Library of Congress Cataloging in Publication Data, 1980.
- [29] I. A. Warraich, “Achieving Sustainable Competitive Advantage through Service Quality: an Analysis of Pakistan’s Telecom Sector Children Socialization View project Female criminality View project,” vol. 13, no. 2, 2014.
- [30] K. Anthony and N. Susan, “Effect of Product Differentiation of Substitutes on Competitive Strategy in Deposit Taking Saccos in Kericho County, Kenya,” *Interdiscip. Res.*, vol. 3, no. 7, pp. 380–391, 2017.
- [31] J. Yeboah and G. Dominic, “Quality Customer Service as a Competitive Advantage in the Telecommunication Industry in the Western Region of Ghana,” vol. 5, no. 5, pp. 20–30, 2014.
- [32] Мурашко М.А., “Инновационные подходы к обеспечению качества в здравоохраненииNo Title,” *Вестник Росздравнадзора*, vol. 6, no. 12, pp. 5–9, 2017.
- [33] J. I. Dirisu, O. O. Iyiola, and I. O. S., “Product differentiation: A tool of competitive advantage and optimal prganizational Performance (A study of Unilever Nigeria PLC),” *Eur. Sci. J.*, vol. 9, no. 34, pp. 258–281, 2014.
- [34] J. A. Badenhorst-Weiss and J. O. Cilliers, “Competitive advantage of independent small businesses in Soweto,” *South. African Bus. Rev.*, vol. 18, no. 3, p. 1, 2019.
- [35] T. Lasalewo, B. Hartono, H. A. Yuniarto, N. A. Masruroh, and . S., “The Effect of Competitive Advantage and Human Advantage on Industrial Competitive Strategy (Case Study: SMIs in Gorontalo Province),” *J. Indones. Econ. Bus.*, vol. 31, no. 1, p. 307, 2017.
- [36] L. Lakhali, “Impact of quality on competitive advantage and organizational performance,” *J. Oper. Res. Soc.*, vol. 60, no. 5, pp. 637–645, 2009.
- [37] Kenneth Ngugi Njoroge, “Effect of Service Quality on Sustainable,” United states International University Africa, 2016.
- [38] H. Urbancova, “Competitive Advantage Achievement through Innovation and Knowledge,” *J. Compet.*, vol. 5, no. 1, pp. 82–96, 2013.
- [39] A. Sorescu, R. T. Frambach, J. Singh, A. Rangaswamy, and C. Bridges, “Innovations in retail business models,” *J. Retail.*, vol. 87, no. SUPPL. 1, pp. S3–S16, 2011.
- [40] F. H. Liu, “Service Innovation Practices and Competitive Advantage: The Case of Manufacturing Firms,” pp. 1–27, 2015.
- [41] I. Noorani, “Service Innovation and Competitive Advantage,” *Eur. J. Bus. Innov. Res.*, vol. 2, no. 1, pp. 12–38, 2014.