The International Journal of Social Sciences World
TIJOSSW is Available Online at:
https://www.growingscholar.org/journal/index.php/TIJOSSW
Vol. 3 No. 2, December 2021, pages: 64~73
DOI: https://doi.org/10.5281/zenodo.5149721
ISSN **2690-5167**
Growingscholar Publisher

The Influence of Innovation Strategies and Services Quality on Customer's Satisfaction and Loyalty during Covid-19 Pandemic

Noor Meywati[1], Agung Wahyu Handaru[2], Harya Kuncara Wiralaga[3]

Article history: Received May, 10, 2021; Accepted: July, 15, 2021; Displayed Online: July, 31, 2021; Published: December, 30, 2021

Keywords

Service Innovation;

Service Quality;

Customer Satisfaction;

Customer Loyalty;

Abstract

This study aims to determine and analyze the effect of innovation strategies and service quality on customer (patient) satisfaction and loyalty during the covid-19 pandemic. This study applied a quantitative approach with a sampling technique. It applied non-probability sampling for distributing the questionnaire. The population in this study is patients at the National Hospital Dr Cipto Mangunkusumo Jakarta, Indonesia. This study uses a Structural Equation Model (SEM) approach using the Smart PLS version 3.2.9 program. Based on the results of the research, it was found that service innovation and service quality have a significant positive effect on customer satisfaction. Moreover, service innovation, service quality, and customer satisfaction have a significant positive effect on customer loyalty.

1. Introduction

The rapid development of the business world makes business competition very tight, so that companies engaged in business are required to be able to work more effectively and efficiently as a step to create competitive advantage and existence. Especially in the era of globalization and digitalization, the business environment must be able to keep up with technological changes that are very fast and increasingly sophisticated, so it is important to create innovations in products (goods or services) in profit-oriented and non-profit companies (Gunawan & Saragih, 2019; Tammubua & Pattiasina, 2019; Maulana et al., 2020; Samadara, 2020; Sirrullah et al., 2020; Realino & Moko, 2021; Rofingatun & Larasati, 2021).

[1] *Faculty of Economics, State University of Jakarta, Jakarta, Indonesia. Emai: meywati@gmail.com*
[2] *Faculty of Economics, State University of Jakarta, Jakarta, Indonesia*
[3] *Faculty of Economics, State University of Jakarta, Jakarta, Indonesia*

The hospital is an institution that is engaged in health services, but over time it began to experience many changes. The health industry is starting to grow rapidly, this is because people are starting to realize how valuable health is for their lives, especially since there are more and more new diseases that can threaten people's lives and health. As it is today, there is an outbreak of Corona Virus Disease (COVID-19) which infects almost some people around the world. Since the beginning of 2020, the World Health Organization (WHO) has said that the whole world has entered a state of emergency due to the Corona Virus, better known as the COVID-19 Pandemic. The Covid-19 pandemic is affecting the world economy, the environment and everyone's lives and how individuals behave. The Covid-19 pandemic has had a significant impact on the decline in Indonesia's economic growth. As reported by the Central Statistics Agency (BPS) that Indonesia's economic growth in 2020 is minus -2.17%. This is a very different condition compared to 2019, where economic growth reached 5.02% (www.bps.go.id).

In addition, the frequent development of technology including information technology and also the era of the Covid-19 pandemic has encouraged hospitals to be able to create innovations and become smart hosts. The following data regarding the quality of service from the National Hospital Dr. Cipto Mangunkusumo

During the period as of June 2018 for the weighted average point value of 3.10 then in the period as of December 2018 the weighted average value only rose slightly to 3.14 and with this value the quality of service only received a good predicate. Furthermore, what caused the decrease in value was because the service element of service speed points scored less well, namely 2.94 and 2.95 respectively during the June and December 2018 periods. Then, the service element of facilities and infrastructure quality points also received a poor predicate. both were 3.02 and 3.05 respectively during the same period, June and December 2018.

During this Covid-19 pandemic, many people and business actors prioritize a sense of security from the transmission of the Covid-19 Virus which has a significant level of spread and transmission. This is very important to be considered by companies, especially hospitals. Companies should consider taking decisions in action. The company's decision to take action such as systematic service improvement is a decisive umbrella in following up on consumer complaints from a failure so that in the end it is able to bind consumer loyalty (Elu, 2005).

According to research conducted by Gunawan & Saragih (2019), one of the factors that influence patient satisfaction is the quality of services provided by hospitals to patients. Optimal service quality is expected to be able to meet customer expectations so that it will create company satisfaction and loyalty. Another factor that affects customer satisfaction is innovation, which as revealed in research revealed by Gunawan & Saragih (2019) states that innovation is indeed able to affect patient or customer satisfaction.

Based on the previous description, the researcher can draw the conclusion that there is a research gap between the research to be conducted and the research that has been done previously, namely: 1) there are differences in the context of the object being studied, so that the gap attracts researchers to conduct research on innovation strategies and service quality as well as other factors that can affect satisfaction and loyalty.

2. Materials and Methods

The location where the research will be investigated for this research is Dr. National General Hospital Cipto Mangunkusumo. The research uses quantitative methods. The population in the study were patients at the Dr. Cipto Mangunkusumo National Hospital, Jakarta. Sampling used non-probability sampling, with the determination of the number of representative samples as many as 310. To anticipate the existence of a defective questionnaire due to an error in filling out by the respondent, the researchers took a sample of 400 RSCM outpatients. This study uses test instruments and questionnaires as research instruments. The data analysis method in this study uses a Structural Equation Model (SEM) approach with a measurement model using the Smart PLS version 3.2.9 program.

Table 1.
Operational Variables

Variable	Indicator	Statement Items	Source
Service Quality	*1.* Realibity *2.* Resposveness *3.* Assurace. *4.* Emphaty *5.* Tangibles	Doctors, nurses and staff at the hospital have served 66 eon time (KP1). The length of service provided by the doctor is in line with my expectations (KP2). Doctors and nurses were quick to respond and friendly in handling my complaints (KP3). Doctors and nurses receive suggestions and complaints from patients (KP4). Doctors and nurses have good skills, experience and knowledge during treatment (KP5). Security at the hospital is guaranteed 24 hours (KP6). I have no difficulty in making online appointments, processing payments, and managing administration at this hospital (KP7). Doctors and nurses understand and understand the purpose and circumstances that I am experiencing (KP8). The hospital has complete and modern medical equipment (KP9). Services at the hospital are in accordance with patient expectations (KP10).	(Parasuraman et al., 1988)
Service Innovation	1. Use of technology 2. Interaction with consumers 3. Development of new services	Registration of patient services is done using the online web (IL1). Come according to the appointment hours received on the web online or sms (IL2). Use of online queuing system (IL3). Use of Self-Registration Platform to print SEP Online (IL4). This hospital service uses the	Delafrooz et.al (2013)

Variable	Indicator	Statement Items	Source
		Electronic Medical Record (IL5). Use of Helpdesk on the web 24 hours (IL6). Doctor consultation on the online web (IL7).	
	4.		
Customer Satisfaction	1. Satisfaction with service quality 2. Satisfaction on price 3. Satisfaction with the services provided by employees	RSCM officers always provide good service as expected (KP1). The facilities and infrastructure at the RSCM are complete and adequate (KP2). Payment of treatment rates at the RSCM according to ability (KP3). RSCM has many experts from various types of services (KP4). Service flow at RSCM is easy and clear (KP5).	(Samuel & Foedjiawati, 2005)
Customer Loyalty	1. Repeat purchase 2. Purchase between lines 3. Recommendation 4. Immune to the pull of competitors	When I was sick, I went to the RSCM (LP1) regularly for treatment. Affordable inspection rates (LP2). I feel satisfied and proud to use the services of RSCM (LP3). I believe in the service quality of RSCM (LP4). Suggest treatment to RSCM to other people (LP5). Discussing RSCM services to other people (LP6). RSCM has many doctors and many types of services (LP7). Choose RSCM over other RS (LP8). Access to RSCM which is easy to reach, clean, orderly and friendly (LP9). Do not intend to use other hospital services (LP10).	(Griffin, 2009)

Analysis Results

Coefficient of Determination Test/R Square (R^2)

Table 2.
R Square Value (R^2)

	R Square
Customer satisfaction	0,753
Customer Loyalty	0,850

Source: Results of Data Processing with SmartPLS version 3.2.9 (2021)

As seen in table 3, the relationship between constructs based on the value of R Square can be explained as follows.

1. The value of R Square on the Customer Satisfaction variable is 0.753. This shows that 0.753 or 75.3% of the Customer Satisfaction variable can be strongly influenced by the Service Innovation and Service Quality variable, while the remaining 24.7% is influenced by other variables outside of the research.
2. The value of R Square on the Customer Loyalty variable is 0.850. This shows that 0.850 or 85% of Customer Loyalty variables can be strongly influenced by the variables of Service Innovation, Service Quality and Customer Satisfaction, while the remaining 15% is influenced by other variables outside the research.

Hypothesis Testing

Calculation of hypothesis testing using SmartPLS version 3.2.9 can be seen from the Path Coefficient value, namely the t-statistic value of the relationship between variables in the study. The output coefficients between variables can be seen in the following path, which can be seen in Figure 1 below.

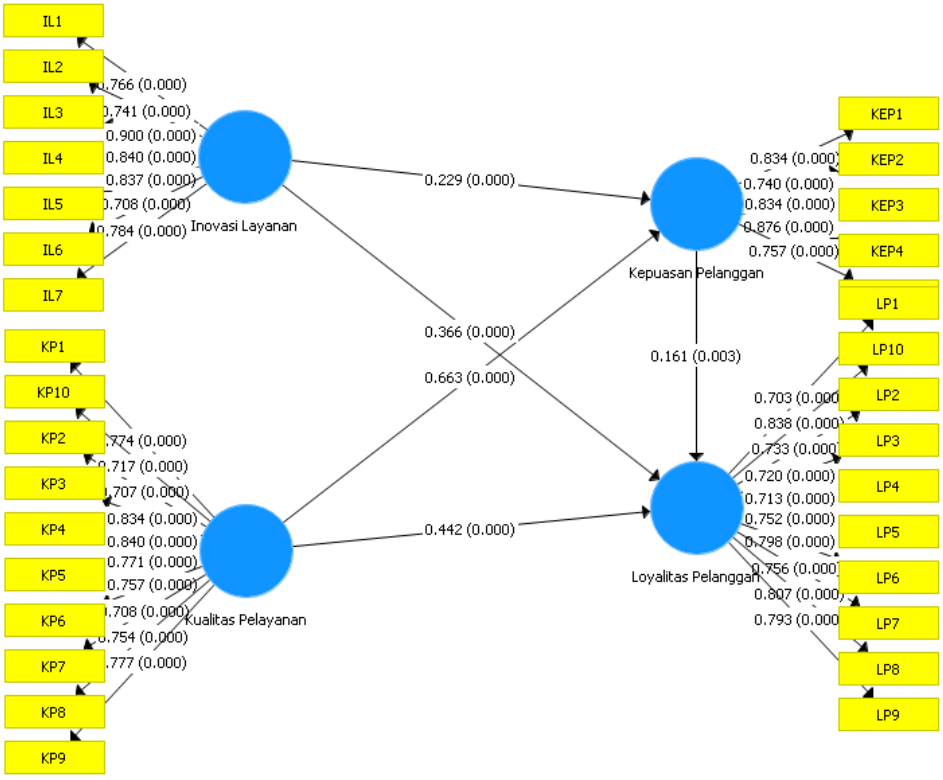


Figure 1.
Original Sample (Coefficient)
Source: Results of Data Processing with SmartPLS version 3.2.9 (2021)

The results of the hypothesis based on Figure 1 above, can be seen more clearly in the following table.

Table 3.
Value of Path Coefficient, t-Statistics and P-Values

	Original Sample (O)	T Statistics (|O/STDEV|)	P Values
Service Innovation -> Customer Satisfaction	0,229	3,568	0,000
Service Quality -> Customer Satisfaction	0,663	10,557	0,000
Service Innovation -> Customer Loyalty	0,366	8,096	0,000
Service Quality -> Customer Loyalty	0,442	6,802	0,000
Customer Satisfaction -> Customer Loyalty	0,161	2,941	0,003

Source: Results of Data Processing with SmartPLS version 3.2.9 (2021)

3. Results and Discussion

First Hypothesis (H1)

Based on Table 3 above, the results of testing the first hypothesis on the Service Innovation variable on Customer Satisfaction resulted in a t-statistics value of 3.568 > t-table of 1.966, and a P-Value of 0.000 <0.05. Thus H1 is accepted, so it can be concluded that the Service Innovation variable has an effect on Customer Satisfaction. Companies in expanding the market are not enough to design and implement creative marketing programs but also need to be accompanied by improving the quality of goods or services through the creation of innovations (Sumarwan, 2008).

Next, innovation will increase the added value of a product or service, and can provide better solutions for solving problems faced by customers. Companies that are continuously able to create differentiation through innovation and are able to communicate these products or services, customers will view them as products or services that are different from competitors (Sumarwan, 2008). With this innovation, there will be continuous quality improvements that will increase so that consumers will feel more satisfied and reluctant to switch to other products or companies (Chao et al., 2015). This result is in line with research conducted by Daragahi (2017) which found that innovation has a significant positive effect on customer satisfaction, the better the company is to innovate products and services, the higher the customer satisfaction. Likewise with Kurniawan (2019) who found service innovation to have an effect on customer satisfaction, but through the company's reputation.

Second Hypothesis (H2)

Based on the results of testing the second hypothesis on the Service Quality variable on Customer Satisfaction resulted in a t-statistics value of 10.557 > t-table of 1.966, and a P-Value of 0.000 <0.05. Thus H2 is accepted, so it can be concluded that the service quality variable has an effect on customer satisfaction. Service quality is not only determined by the party serving, but is more determined by the party being served, because the party being served enjoys the service so that it can measure the quality of service based on their expectations in fulfilling their satisfaction. Improving the quality of service is very important for companies, because the quality of services

provided is in accordance with customer expectations, this will create customer satisfaction (Hidayat et al., 2009).

Zarei et al. (2015) in their research suggests that there is a strong relationship between service quality and patient satisfaction in hospitals in Iran. And it was found that there were 3 dimensions that were felt and greatly influenced, including service costs, process quality and interaction quality. This result is also in line with the research of Golmohammadi et al. (2014) if the patient will feel satisfied if the quality of service increases or it can be said that the quality of service has a significant positive influence on patient satisfaction.

Third Hypothesis (H3)

Based on Tables above, the results of testing the third hypothesis on the Service Innovation variable on Customer Loyalty resulted in a t-statistics value of 8.096 > t-table of 1.966, and a P-Value value of 0.000 <0.05. Thus H3 is accepted, so it can be concluded that the Service Innovation variable has an effect on Customer Loyalty. Innovation is based on the goal of creating customer satisfaction which later from customer satisfaction will create customer loyalty (Rojiana & Sari, 2018).

Companies are able to change or modify existing services to meet specific needs of customers and can provide new offerings compared to other companies. So that service innovation creates value for all company stakeholders. The success of the company to achieve its goals by creating innovation. Innovation must be created by the company because innovation is the source of company growth. High innovation, both process innovation and product or service innovation, will increase the company's ability to create quality products or services (Putra and Ekawati, 2017).

Kyei et al. (2016) found the same results in their research that service innovation has a significant positive effect on customer loyalty, or consumers who are satisfied with service innovations tend to be more persistent in buying products or services. The results of this study are similar to the results found by Naveed et al. (2015) that service innovation has a significant positive effect on customer satisfaction and loyalty, where consumers who are satisfied with service innovation will be more loyal.

Fourth Hypothesis (H4)

Based on the results of testing the fourth hypothesis on the Service Quality variable on Customer Loyalty Customers produce a t-statistics value of 6.802 > t-table of 1.966, and a P-Value value of 0.000 <0.05. Thus H4 is accepted, so it can be concluded that the variable of Service Quality has an effect on Customer Loyalty. Quality must start from customer needs and end with customer perceptions, it can be said that good quality is based on the customer's point of view or perception which provides a comprehensive assessment of the superiority of a service (Kotler and Keller, 2012). If the quality of service provided by the company is in line with expectations and performance, consumers will be happy because the expectations and performance of the service are good and consumer loyalty will directly arise in the company (Wahyuni and Rofiah, 2017). Quality provides an impetus to customers to establish a strong relationship with the company. In the long term this kind of bond allows the company to understand carefully the customer's expectations and their needs.

The results of this study are in line with Jumawan (2018) in his research finding that service quality has a significant positive effect on customer satisfaction and loyalty, where the better the quality of service from the hospital, the higher the patient loyalty.

Fifth Hypothesis (H5)

Based on Table 3 above, the results of testing the fifth hypothesis on the variable Customer Satisfaction on Customer Loyalty resulted in a t-statistics value of 2.941 > t-table of 1.966, and a P-Value of 0.003 <0.05. Thus H5 is accepted, so it can be concluded that the Customer Satisfaction variable has an effect on Customer Loyalty. Loyalty or customer loyalty is formed in a short time, but through a learning process and based on the results of experiences from customers who use the product or service. The company is considered successful in getting a lot of customers if the customer is satisfied with the expected service, the customer gives a good assessment of the service he receives (Panjaitan & Yuliati, 2016). If performance is below expectations, consumers are dissatisfied. On the other hand, if performance meets expectations, consumers are satisfied. If performance exceeds expectations, consumers will feel very satisfied / happy.

In the study of Addo et al. (2020) the same results were found, namely the service quality of medical personnel has a positive effect on patient loyalty with patient satisfaction mediating the effect of medical personnel quality on patient loyalty. This result is also in line with Hashem and Ali (2019) where the level of service quality of Jordanian dental clinics has a statistically significant positive effect on customer loyalty.

4. Conclusion

Based on the results of the research that has been done, it can be concluded some of these studies are as follows:

1. Service innovation has a significant positive effect on customer satisfaction.
2. Service quality has a significant positive effect on customer satisfaction.
3. Service innovation has a significant positive effect on customer loyalty.
4. Service quality has a significant positive effect on customer loyalty.
5. Customer satisfaction has a significant positive effect on customer loyalty.

Recommendation

Based on the results of the research, discussion, and conclusions obtained, the following suggestions can be given.

1. For Company Management

Based on the research results, it is proven that service innovation and service quality have a positive effect on customer satisfaction and loyalty. For this reason, it is recommended for hospital management to be more innovative in providing services by doing new ways that can make patients feel satisfied with the services provided. This can be done, among others, by replacing all services that are still done conventionally to digital services, so as to shorten service time or shorten queues or avoid crowds of patients. From the service factor, both medical staff (nurses and doctors) and non-medical personnel (administration, security) to be able to work professionally and in accordance with established SOPs so that patients are satisfied with the services provided by the hospital.

2. For Further Research

For further research, it can develop models of Customer Satisfaction and Customer Loyalty by involving other variables such as promotion, relationship quality, word of mouth. Besides that, further researchers can also expand the sample by involving several hospitals that have relatively the same criteria as the RSCM, so that the results of the study can analyze the comparison between hospitals and the impact of each variable in the research model.

Acknowledgements

We would like to thank the Growingscholar publisher for publishing the current research.

References

Addo, P. C., Jiaming, F., Kulbo, N. B., & Liangqiang, L. (2020). COVID-19: fear appeal favoring purchase behavior towards personal protective equipment. *The Service Industries Journal*, *40*(7-8), 471-490.

Chao, R. F., Wu, T. C., & Yen, W. T. (2015). The Influence of Service Quality, Brand Image, and Customer Satisfaction on Customer Loyalty for Private Karaoke Roomsin Taiwan. *The Journal of Global Business Management*, *11*(1), 59-67.

Elu, B. (2005). Manajemen penanganan komplain konsumen di industri jasa. *Jurnal Ilmu Administrasi dan Organisasi, Bisnis&Birokrasi*, *13*(3).

Golmohammadi, K., Zohoori, M., Hosseinipour, S. J., & Mehdizadeh, S. (2014). The impact of Service Quality on patient Satisfaction in Malaysian Hospitals.

Griffin, J. (2009). *Customer Loyalty : Menumbuhkan Dan Mempertahankan Pelanggan*. Erlangga.

Gunawan, Y. I., & Saragih, M. (2019). Pengaruh Kualitas Pelayanan Medis Dan Inovasi Layanan Administrasi Terhadap Kepuasan Pasien. *Jurnal Manajemen Kewirausahaan*, 16(1), 33-42.

Hashem, T. N., & Ali, N. N. (2019). The impact of service quality on customer loyalty: A study of dental clinics in Jordan. *International Journal of Medical and Health Research*, 5(1), 65-68. https://doi.org/10.12816/0037551

Hidayat, R., Industri, J. T., & Madura, U. T. (2009). Pengaruh Kualitas Layanan, Kualitas Produk dan Nilai Nasabah Terhadap Kepuasan dan Loyalitas Nasabah Bank Mandiri. *Jurnal Manajemen Dan Kewirausahaan*, 11(1), 59-72.

Jumawan. (2018). The Effect of Service Quality on Loyalty using Satisfaction as an Intervening Variable (Study on Entrepreneurs in Bekasi Bonded Zone). *International Journal of Advanced Engineering, Management and Science*, 4(5), 389-394.

Kotler, P. & Keller, K. L. (2012). *Marketing Management (14th ed.)*. Prentice Hall.

Kurniawan, I. (2019). Pengaruh Kualitas Pelayanan dan Kepercayaan Terhadap Kepuasan Pelanggan Pada Klinik Hewan Pet Smile. *Jurnal Administrasi dan Manajemen*, 9(2), 186-191.

Maulana, E., Suhud, U., Susono, J., Buchdadi, A. D., & Amiruddin, K. (2020). Measuring YouTube Channel Subscriber Loyalty. *The International Journal of Social Sciences World (TIJOSSW)*, *2*(2), 32-39.

Panjaitan, J. E., & Yuliati, A. L. (2016). Pengaruh Kualitas Pelayanan terhadap Kepuasan Pelanggan pada JNE Cabang Bandung. *DeReMa Jurnal Manajemen*, 11(2), 265-289.

Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64(1), 12-40.

Putra, M. C. S. D., & Ekawati, N. W. (2017). Pengaruh Inovasi Produk, Harga, Citra Merek Dan Kualitas Pelayanan Terhadap Loyalitas Pelanggan Sepeda Motor Vespa. *E-Jurnal Manajemen Universitas Udayana*, 6(3), 1674-1700.

Realino, D., & Moko, W. (2021). The Effect of Customer Experiential Quality on Revisit Intention with Positive Emotion and Perceived Value as Mediation Variables. *The International Journal of Social Sciences World (TIJOSSW)*, *3*(01), 245-258.

Rofingatun, S., & Larasati, R. (2021). The Effect of Service Quality and Reputation on Student Satisfaction using Service Value as Intervening Variables. *The International Journal of Social Sciences World (TIJOSSW)*, *3*(01), 37-50.

Rojiana, D., & Sari, N. (2018). Pengaruh Inovasi Layanan terhadap Loyalitas Konsumen dengan Konsumen Inovatif sebagai Variabel Moderasi. *Jurnal Digest Marketing*, 3(2), 139-146.

Samadara, P. D. (2020). Internal service quality and employee performance. *The International Journal of Social Sciences World (TIJOSSW)*, *2*(01), 109-115.

Samuel, H., & Foedjiawati. (2005). Pengaruh Kepuasan Konsumen Terhadap Kesetian Merek (Studi Kasus Restoran The Prime Steak & Ribs Surabaya). *Jurnal Manajemen Dan Kewirausahaan*, 7(1), 74–82. https://doi.org/10.9744/jmk.7.1.pp.74-82.

Sirrullah, T. P., Purwana, D., Susono, J., Rasbi, M., & Yohana, C. (2020). Organizational Culture and Job Satisfaction. *The International Journal of Social Sciences World (TIJOSSW)*, *2*(2), 196-204.

Tammubua, M. H., & Pattiasina, V. (2019). Quality academic services antecedent towards the level of students satisfaction in distance learning program unit Universitas Terbuka Jayapura. *The International Journal of Social Sciences World (TIJOSSW)*, *1*(01), 21-35.

Wahyuni, D., & Rofiah, C. (2017). Kualitas Pelayanan dan Pengaruhnya Terhadap Loyalitas Pelanggan Yang Di Mediasi Oleh Kepuasan Di Bank Muamalat Jombang. *Jurnal Riset Ekonomi Dan Bisnis*, 12(1), 69-82. https://doi.org/10.26533/eksis.v12i1.84

Zarei, E., Marzban, S., & Daneshkohan, A. (2015). An Empirical Study of the Impact of Service Quality on Patient Satisfaction in Private Hospitals, Iran. *Global Journal of Health Science*, 7(1), 1-9.