

## Marketing 4.0 Strategies to Increase Customer Loyalty with Customer Satisfaction and Customer Decision as Mediators

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### ABSTRACT

*Customer loyalty will be established if they purchase or use services repeatedly and refer the service to their colleagues. Based on this, the quality of a product and excellent service simultaneously influence customer satisfaction. To achieve this goal, marketing 4.0 is needed. Marketing 4.0 can combine offline and online interactions to make it easier for customers to choose health service facilities. The aim of this research is to determine whether the use of marketing 4.0 can increase customer loyalty with customer satisfaction and customer decisions as a mediator. This type of research is qualitative with a cross-sectional approach. This research was carried out at the Niki Diagnostic Center in Denpasar City, sampling using a purposive sampling method with a total of 110 samples, with data collection through questionnaires and data analysis using Partial Least Square (PLS). The research results show that customer loyalty can be mediated by customer decisions using Marketing 4.0 strategies. It is hoped that future researchers can add other variables to increase customer loyalty.*

### KEYWORDS

Customer decisions, Customer satisfaction, Customer loyalty, Marketing 4.0



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## INTRODUCTION

Healthcare facilities face significant challenges due to the abundance of similar businesses, both government-owned and private. The public is free to choose which healthcare facility to visit, leading to competition among these facilities to attract users to access their services. It has been stated that marketing activities are essential to attract the attention of potential service users (Musfar & Se, 2020). According to the American Marketing Association, marketing is an organizational activity that communicates or delivers an offering of value to its customers. Meanwhile, the UK Chartered Institute of Marketing considers

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marketing a managerial process that includes identifying, anticipating, and providing what customers need and expect efficiently and profitably.

The marketing mix strategy is often referred to as the core concept of marketing theory. It is a tool in the marketing process and is frequently used by companies to pursue marketing targets in the intended market. There are seven components of the marketing mix in service marketing, consisting of Place, Product, Price, Promotion, People, Process, and Physical Evidence (Kotler & Armstrong, 2018). Marketing mix components such as product, price, promotion, and place have a positive influence on customer satisfaction (Setiawan et al., 2016).

Current marketing approaches often involve a combination of digital (online) and offline interactions (Radu et al., 2017). Even though many situations are handled online, offline interactions are still needed to represent strong differentiation. The integration of online and offline interactions is known as Marketing 4.0, which connects customer engagement and their relationships with both humans and machines (Alexandru et al., 2018).

To achieve the company's goals and objectives, the best strategy is needed by setting the composition of these goals and objectives. In Marketing 4.0, we recognize a mix of co-creation, currency, communal activation, and conversation (Rahmasari et al., 2023). With the numerous similar healthcare facilities, healthcare service users often have to choose which facility to use. Therefore, easy access to information about the types of services needed is essential. Marketing must understand what buyers/users want, their perceptions, preferences, and behavior to decide to use their products/services (Yuni, 2024). After deciding and receiving services from the healthcare facility, users will have an experience that can be categorized as fulfilled or unfulfilled (Kartajaya et al., 2019).

Customer satisfaction is a level of feeling where someone feels pleased or disappointed after comparing their expectations with the service they received. If the service received fails to meet expectations, the customer is dissatisfied, whereas if the service meets expectations, the customer is satisfied (Kotler & Armstrong, 2018). Satisfied users tend to decide to revisit the same facility when they need healthcare services in the future. It is stated that there is a positive relationship between customer satisfaction and loyalty with the company's revenue (Kusumowardhani, 2021).

Customer loyalty is a condition where the relationship between the customer and the company is closely established, as indicated by repeated purchases or service use, and customers are happy to refer the service to their colleagues (Nafisa & Sukresna, 2018). Several previous studies have explored customer satisfaction factors but have not discussed Marketing 4.0. For example, previous research stated that product quality and excellent service simultaneously affect customer satisfaction at Prodia Clinical Laboratory Kramat Branch (Listyowati et al., 2021).

Therefore, the researcher is interested in continuing research on Marketing 4.0 strategies for customer loyalty through customer satisfaction and customer decisions as mediators in choosing healthcare facilities.

### Theoretical Review

No	Article Identity	Summary of Research Findings	Methods Used
1	Listyowati D, Fadilah E (2021). "The Effect of Product Quality and Excellent Service on Customer Satisfaction: A Case Study of Prodia Clinical Laboratory Kramat Branch." Journal of Management and Business, Volume 2, Number 2, January 2021	The influence of product quality and excellent service on customer satisfaction at Prodia Clinical Laboratory Kramat Branch is simultaneously significant on customer satisfaction.	Quantitative, Questionnaire with 100 respondents, Prodia Clinical Laboratory Kramat Branch customers
2	Kusumowardani D (2021). "Analysis of the Effect of Customer Value, Satisfaction, and Loyalty on Company Revenue in Health Laboratory Services." Journal of Economics, Business and Accounting (JEBA), Volume 23, Number 1, 2021	There is a positive relationship between each variable: customer value, customer satisfaction, and customer loyalty towards company revenue.	Quantitative, Questionnaire with 293 respondents, Prodia Clinical Laboratory Purwokerto customers
3	Nafisa J, Sukresna M (2018). "Analysis of the Effect of Service Quality, Performance Expectations, and Corporate Image on Customer Loyalty through Customer Satisfaction as an Intervening Variable (Study at Sultan Agung Islamic Hospital Semarang)." Diponegoro Journal of Management, Volume 7, Number 3, 2018	Customer satisfaction is not detected as an intervening variable as it does not increase the influence of independent variables (company service quality, perceived company performance, corporate image) on customer loyalty. The direct influence of dependent variables (company service quality, perceived company performance, corporate image) on customer loyalty is greater than the indirect influence through customer satisfaction.	Quantitative, Questionnaire with 155 respondents, Sultan Agung Islamic Hospital Semarang patients
4	Setiawan P, Fudholi A, Satibi (2016). "The Effect of Marketing Mix on	Each component of the marketing mix (product, price, promotion, and place) has a	<i>Mixed methods (qualitative and quantitative),</i>

	Customer Satisfaction and Loyalty of Products." Journal of Management and Pharmaceutical Services, Volume 6, Number 2, 2016	positive effect on satisfaction. The relationship between consumer satisfaction and loyalty has a positive effect on consumer loyalty at PT Karya Pak Oles in Denpasar.	<i>Questionnaire with 421 respondents, PT Karya Pak Oles product customers in Denpasar</i>
5	Novianti, Endri, Darius (2018). "Customer Satisfaction Mediates the Effect of Service Quality and Promotion on Customer Loyalty." Scientific Journal of Management, Volume 8, Number 1, 2018	There is a significant direct influence of service quality and promotion on customer satisfaction and customer loyalty. Service quality also has a significant indirect positive influence on customer loyalty through customer satisfaction. Promotion has a significant indirect positive effect on customer loyalty through customer satisfaction.	Quantitative, Questionnaire with 175 respondents, Cikarang Medika Farma Pharmacy customers
6	Yuni E (2023). "Marketing Strategy in Increasing Customer Satisfaction." Journal of New Trends in Sciences, 2023	The goal of marketing is to meet the needs and wants of consumers. Therefore, marketing needs to understand what consumers want, their perceptions, preferences, and buying behavior as target customers. All companies that want to increase sales volume should use a marketing mix strategy (7P), but the marketing mix strategy for products and services must differ due to the different characteristics of services and goods.	Literature Review
7	Faizal H, Nurjanah S (2019). "The Effect of Quality Perception and Brand Image on Customer Loyalty Mediated by Trust and Customer Satisfaction." Journal of Management and Business Research (JRMB) Faculty of Economics UNIAT, Volume 4, Number 2, 2019	Quality perception and brand image significantly influence customer trust. Quality perception and brand image can significantly influence customer satisfaction. However, quality perception and customer trust do not significantly affect customer satisfaction. Brand image and customer satisfaction can significantly influence customer loyalty. Based on	Quantitative, Questionnaire with 170 respondents, Mazda customers at 17 dealers in Java, Kalimantan, and Sulawesi

		the research results, companies need to implement a 6P marketing strategy (people, payplan, product, price, place, promotion) to enhance positive impressions and quality perceptions and build customer trust through marketing activities to ensure customer loyalty to Mazda in Indonesia.	
8	Radu GS, et al (2017) The adaptation of health care marketing to the digital era, Jurnal of Medicine and Life Vo. 10, Issue 1, January-March 2017, p44-46	The research results indicate the need for digital promotion methods for medical care services to expand business. Strategic thinking in this regard implies attracting new patients and offering quality health care services, ensuring their satisfaction and the likelihood of recommending the health facility further.	Qualitative method, with 126 respondents who had not previously received care at a dental clinic in Bucharest. Conducted over 22 months from January 2015 to October 2016.
9	Jaya, DL, et al. (2023). "The Effectiveness of Digital Marketing Technology Implementation in Health Services," Journal of FKM UI, Volume 6, Number 1, pp. 162-168, January 2022	It was found that digital marketing plays a role in enhancing engagement with potential consumers, serving as a promotional effort for hospitals and health services. Digital marketing is effective as a promotional medium in health services.	Literatur Review
10	Rahmasari FF (2023). "The Effect of Marketing 4.0 Strategy on the Use of Telemedicine Services Through the Halodoc Application in Bogor City." Diponegoro University Institutional Repository	The Marketing 4.0 strategy is proven to influence the use of Telemedicine services through Halodoc in Bogor City, with Co-creation and Conversation, while Currency and Communal Activation have no effect.	Quantitative method with a cross-sectional approach, with 270 respondents who use Telemedicine through the Halodoc application in Bogor city, using accidental sampling.

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This research differs from the 10 studies above in terms of:

1. Location and variables.  
*Independent variables: product quality and excellent service.*  
*Dependent variable: customer satisfaction.*
  2. Location and variables.  
*Independent variables: customer value, customer satisfaction, and customer loyalty.*  
*Dependent variable: company revenue.*
  3. Location and variables.  
*Independent variables: service quality, performance expectations, corporate image.*  
*Dependent variable: customer loyalty.*  
*Mediating variable: customer satisfaction..*
  4. Mixed methods, location, and variables  
*Dependent variables: customer satisfaction and loyalty.*
  5. Location and variables.  
*Independent variables: service quality and promotion.*  
*Mediating variable: customer satisfaction.*  
*Dependent variable: customer loyalty..*
  6. Literature review
  7. Location and variables.  
*Independent variables: quality perception and brand image.*  
*Dependent variable: customer loyalty.*  
*Mediating variables: trust and customer satisfaction.*
  8. Qualitative method, location, and variables.  
*Independent variable: digital marketing.*
  9. Literature review.
  10. Location and variables.  
*Dependent variable: telemedicine use..*
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## RESEARCH METHOD

This research was conducted at Niki Diagnostic Center in Denpasar City. The design of this study is descriptive, which includes qualitative research using a cross-sectional research design. The sample size is 110 service users of Niki Diagnostic Center, determined using Hair's formula. The consideration for selecting this sample is that the respondents must have used the services of Niki Diagnostic Center at least once. This study will test the model that has been developed to examine the influence of co-creation, currency, communal activation, and conversation on customer loyalty with customer satisfaction and customer decision as mediating variables. Two stages of testing will be carried out: the measurement model test (Outer Model) and the structural model test (Inner Model). Data processing techniques in this study use the SEM method based on Partial Least Square (PLS), with data processing performed using the Smart PLS 3.0 program. The purpose of using PLS is to find the optimal predictive linear relationship in the data.

## RESULT AND DISCUSSION

This study was conducted with service users of Niki Diagnostic Center who have used the services at least once. The respondents in the study totaled 162.

**Table 1. General Overview of Respondents Based on Age**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid > 65 Years	2	1.2	1.2	1.2
17 - 25 Years	52	32.1	32.1	33.3
26 - 35 Years	47	29.0	29.0	62.3
36 - 45 Years	34	21.0	21.0	83.3
46 - 55 Years	22	13.6	13.6	96.9
56 - 65 Years	5	3.1	3.1	100.0
Total	162	100.0	100.0	

Source: Processed Primary Data (2024)

Based on Table 1 above, the age groups are dominated by respondents aged 17-25 years, with 52 individuals or 32.1%, and 26-35 years, with 47 individuals or 29%. These age ranges are considered young and productive, and they are generally more health-conscious and likely to undergo laboratory tests to understand their health condition and prevent serious diseases. Additionally, young people often need laboratory test results for various purposes, such as applying to colleges or finding employment. Therefore, it is not surprising that these age groups dominate the sample in this study.

**Table 2 Hypothesis Testing**

Path	Original Sample	T Statistics	P Values	Infotmation
<i>Co-creation -&gt; Customer loyalty</i>	-0,010	0,164	0,870	Not Significant
<i>Currency -&gt; Customer loyalty</i>	-0,006	0,097	0,923	Not Significant
<i>Communal activation -&gt; Customer loyalty</i>	0,272	2,952	0,003	Significant
<i>Conversation -&gt; Customer loyalty</i>	0,205	2,798	0,005	Significant
<i>Co-creation -&gt; Customer satisfaction</i>	0,305	4,453	0,000	Significant
<i>Currency -&gt; Customer satisfaction</i>	0,191	2,077	0,038	Significant
<i>Communal activation -&gt; Customer satisfaction</i>	0,008	0,137	0,891	Not Significant
<i>Conversation -&gt; Customer satisfaction</i>	0,049	0,703	0,483	Not Significant
<i>Co-creation -&gt; Customer decision</i>	0,159	2,450	0,015	Significant
<i>Currency -&gt; Customer decision</i>	0,060	0,806	0,421	Not Significant
<i>Communal activation -&gt; Customer decision</i>	0,590	8,612	0,000	Significant
<i>Conversation -&gt; Customer decision</i>	0,303	3,400	0,001	Significant

<i>Co-creation -&gt; Customer satisfaction -&gt; Customer loyalty</i>	0,000	0,054	0,957	Not Significant
<i>Currency -&gt; Customer satisfaction -&gt; Customer loyalty</i>	0,023	0,727	0,468	Not Significant
<i>Communal activation -&gt; Customer satisfaction -&gt; Customer loyalty</i>	0,004	0,402	0,688	Not Significant
<i>Conversation -&gt; Customer satisfaction -&gt; Customer loyalty</i>	0,045	0,693	0,488	Not Significant
<i>Co-creation -&gt; Customer decision -&gt; Customer loyalty</i>	0,169	2,687	0,007	Significant
<i>Currency -&gt; Customer decision -&gt; Customer loyalty</i>	0,119	1,837	0,067	Not Significant
<i>Communal activation -&gt; Customer decision -&gt; Customer loyalty</i>	0,099	2,175	0,030	Significant
<i>Conversation -&gt; Customer decision -&gt; Customer loyalty</i>	0,189	2,989	0,003	Significant

Source: Processed Primary Data (2024)

Out of 20 tests, 10 hypotheses were accepted, and 10 were rejected. The accepted hypotheses include the relationships between communal activation and customer loyalty, conversation and customer loyalty, co-creation and customer satisfaction, currency and customer satisfaction, communal activation and customer decision, conversation and customer decision, co-creation and customer loyalty mediated by customer decision, communal activation and customer loyalty mediated by customer decision, and conversation and customer loyalty mediated by customer decision. Based on the table above, it can be concluded that the aspects of Marketing 4.0 that significantly influence customer loyalty are communal activation and conversation. Meanwhile, co-creation must be mediated by customer decision to affect customer loyalty. Currency only influences customer satisfaction but does not extend to customer loyalty.

Based on the third hypothesis test, the variable communal activation has a positive effect on customer loyalty. This indicates that the better the communal activation, the higher the customer loyalty. Currently, communal activation can be both online and offline. In this technological era, communal activation can easily be done through social media or other online platforms. Regarding service delivery, customers can read reviews about the service before making a reservation and can easily access the service registration link, thereby increasing their confidence in using the service again. With the acceptance of this hypothesis, it can be concluded that customer loyalty is determined by communal activation.

Based on the fourth hypothesis test, the variable conversation has a positive effect on customer loyalty. This indicates that the better the conversation, the higher the customer loyalty. Conversation is an effective marketing strategy to attract customers' interest. It requires communication techniques with consumers so that

they know and understand the products or services offered by Niki Diagnostic Center Laboratory. This helps consumers make decisions in choosing to use Niki Diagnostic Center Laboratory services again, thus increasing customer loyalty. With the acceptance of this hypothesis, it can be concluded that customer loyalty is determined by conversation.

Based on the fifth hypothesis test, the variable co-creation has a positive effect on customer satisfaction. This indicates that the better the co-creation, the higher the customer satisfaction. Co-creation involves an interaction process between customers and the company to jointly create agreed-upon value and provide optimal benefits for customers (Chiu et al., 2017). With the acceptance of this hypothesis, it can be concluded that customer satisfaction is determined by co-creation.

Based on the sixth hypothesis test, the variable currency has a positive effect on customer satisfaction. This indicates that the better the currency, the higher the customer satisfaction. Currency is closely related to the value of money used to obtain benefits and value from the services purchased by Niki Diagnostic Center customers. The satisfaction obtained by consumers is because the money spent by Niki Diagnostic Center customers is not wasted, but instead provides benefits through the health check services purchased. With the acceptance of this hypothesis, it can be concluded that customer satisfaction is determined by currency.

Based on the ninth hypothesis test, the variable co-creation has a positive effect on customer satisfaction. This indicates that the better the co-creation, the higher the customer satisfaction. Co-creation implies the creation of joint value between consumers and companies, requiring the development of experiences for development and problem-solving efforts in forming commercial relationships (Borges et al., 2016). With changes in how value can be created and presenting customers as value creators based on their unique experiences, customers are more likely to use the services of Niki Diagnostic Center Laboratory. With the acceptance of this hypothesis, it can be concluded that customer decision is determined by co-creation.

Based on the eleventh hypothesis test, the variable communal activation has a positive effect on customer decision. This indicates that the better the communal activation, the higher the customer decision. Communal activation affects Niki Diagnostic Center customer decisions because, in the technology era, information and business distribution can be channeled through an approach between the company and community leaders, which then spreads to community members. The trust and integrity obtained from the members are due to the reputation of the community leaders. This can influence customer decisions in using services at Niki

Diagnostic Center. With the acceptance of this hypothesis, it can be concluded that customer decision is determined by communal activation.

Based on the twelfth hypothesis test, the variable conversation has a positive effect on customer decision. This indicates that the better the conversation, the higher the customer decision. It is important for the company to stimulate customers to be interested in the products or services offered, which will later affect consumer decisions in using Niki Diagnostic Center services. Marketing communication also helps companies raise awareness among all company stakeholders so that consumer needs are understood and met wholeheartedly (Swastha, 1996). With the acceptance of this hypothesis, it can be concluded that customer decision is determined by conversation.

Based on the seventeenth hypothesis test, the variable customer decision can mediate the effect of co-creation on customer loyalty. Zhao et al. (2019) explain the concept of value co-creation, stating that value is not only provided by the company but can also be created by customers through continuous personal interaction. For instance, customers can express their needs, provide suggestions, and decide on the services to be taken at Niki Diagnostic Center Laboratory. The decision to use these services also affects customer loyalty. Therefore, this latest research confirms and strengthens the theory and empirical studies stating that customer decision can mediate the effect of co-creation on customer loyalty.

Based on the nineteenth hypothesis test, the variable customer decision can mediate the effect of communal activation on customer loyalty. Customer decision can mediate the effect of communal activation on Niki Diagnostic Center customer loyalty because the distribution channels of information can influence customer decisions. This can be done through the activation of a community, either through the community's activities or its leaders. Therefore, this latest research confirms and strengthens the theory and empirical studies stating that customer decision can mediate the effect of communal activation on customer loyalty.

Based on the twentieth hypothesis test, the variable customer decision can mediate the effect of conversation on customer loyalty. Customer decision can mediate the effect of conversation on Niki Diagnostic Center Laboratory customer loyalty because conversation, which is part of marketing communication, is an activity carried out by the seller to introduce products or services and influence consumer interest in the products or services offered by the seller. This then affects the decisions made by consumers in using health check services at Niki Diagnostic Center Laboratory. Consumers' decisions to continuously use services will also impact increasing customer loyalty. Therefore, this latest research confirms and strengthens the theory and empirical studies stating that customer decision can mediate the effect of conversation on customer loyalty.

## CONCLUSION

Out of 20 tests, 10 hypotheses were accepted and 10 were rejected. Accepted hypotheses include communal activation with customer loyalty, conversation with customer loyalty, co-creation with customer satisfaction, currency with customer satisfaction, communal activation with customer decision, conversation with customer decision, co-creation with customer loyalty mediated by customer decision, communal activation with customer loyalty mediated by customer decision, and conversation with customer loyalty mediated by customer decision. Based on the data, it can be concluded that Marketing 4.0 significantly affects customer loyalty through communal activation and conversation. Co-creation must be mediated by customer decision to influence customer loyalty. Currency only affects customer satisfaction but does not reach customer loyalty.

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