

# Internet marketing and its impact on customer loyalty in a car wash company, SJL, 2022

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*Abstract– The objective of this research was to determine the incidence of internet marketing with customer loyalty (and its dimensions: information, internal marketing, communication, customer experience and incentives and privileges) in a car wash company, SJL, 2022. The methodology had a quantitative approach, applied type, explanatory and descriptive level, non-experimental and cross-sectional design. The population consisted of the company's customers (infinite). The study sample consisted of 68 of the company's customers. The technique applied was the survey. The instrument was a questionnaire and consisted of 18 items. It was concluded that internet marketing has a significant impact on customer loyalty in a car wash company, SJL, 2022 (sig.=0.000; r<sup>2</sup>=0.5929) as well as in its dimension's information, internal marketing, communication, customer experience and incentives and privileges (sig.=0.000, r<sup>2</sup>=0.3102; sig.=0.000, r<sup>2</sup>=0.2304; sig.=0.000, r<sup>2</sup>=0.3271; sig.=0.000, r<sup>2</sup>=0.3158; sig.=0.000, r<sup>2</sup>=0.4872) respectively. Finally, a discussion with background and final conclusions was issued.*

**Keywords-- Internet marketing, customer loyalty, marketing.**

## I. INTRODUCTION

In the challenging reality we face, it is crucial to emphasize that Internet marketing plays a vital role in achieving market positioning and boosting sales, while also fostering customer loyalty through unique offerings. In recent years, the unexpected impact of the global COVID-19 pandemic has compelled the majority of organizations to adapt by utilizing technological advertising media and channels.

These platforms enable them to disseminate information about their products and services, maximizing sales and retaining customers. Today, most organizations maintain an online presence through websites, fan pages, content uploads, online promotions, and interactive engagement with customers across various social networks and through email [1].

The health crisis caused by the coronavirus (COVID-19) and its effects on organizations [2], [3], [4]. According to the newspaper MurciaEconomía [5], e-commerce increased by 53% last year in the autonomous community of Murcia in southeastern Spain. For this reason, organizations seek to differentiate themselves from their competitors through online marketing strategies through digital marketing agencies in the

implementation of websites, SEO positioning and management of social networks. As for the newspaper Siglo XXI [6], the Mais marketing is an SEO agency for SMEs that favors its customers through various channels of digital marketing communication, aimed at increasing the visit of the website through algorithms in search engines, most notably Google and Bing. In addition to this, investment in digital advertising has been growing over the years, this event demonstrates the importance of digital marketing, according to the newspaper Siglo XXI [6], the company Setroi uses Seo for its effective positioning techniques and visibility of brands with favorable results.

According to the newspaper América Retail [7], Hernán Millas, member of G100 and founder of Alianza, states that the most important aspect of digital marketing in Chile is to attract prospects through social networks and websites, where a relationship between customers will be created by knowing the interests of the organization, maintaining direct contact with the potential customer and generating growth through sales.

Likewise, the newspaper PuroMarketing [8], notes that today 58% of businesses in Spain according to respondents use social networks, 20% use email marketing, 17% have their own blog and 11% already have their own app, this gives us to understand that the pandemic accelerated the implementation of digital marketing to SMEs.

In San Juan de Lurigancho, a private company of car wash presents inconvenient with the loyalty due to the amount of competition, in which a solution strategy is proposed as the implementation of internet marketing, this could prosper the link with its customers covering their expectations and needs making them come back soon to the private company of car wash, located in the most populated district of Lima, San Juan de Lurigancho 2022.

SJL (San Juan de Lurigancho) is the largest district in Lima, Peru, both in terms of area and population. It is situated in the eastern part of Lima and is known for its rapid urbanization and significant population growth over the years. SJL is a densely populated district with a mix of residential, commercial, and industrial areas.

Quoting Delgado [9], the problem statement consists of describing the problematic reality of which is being taken as a study with the objective of clarifying itself, structuring the main idea. Likewise, the formulation of the problem starts from the

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general to the specific, starting from a question of the problem that will be explained by fragment.

In this aspect, the general problem of the research was defined as follows: Is there an incidence of internet marketing with customer loyalty in a car wash company, SJL, 2022?

While the specific problems were:

- a) Is there an incidence of internet marketing with customer information in a car wash company, SJL, 2022?
- b) Is there an incidence of internet marketing with internal marketing of customers in a car wash company, SJL, 2022?
- c) Is there incidence of internet marketing with customer communication in a car wash company, SJL, 2022?
- d) Is there incidence of internet marketing with customer experience in a car wash company, SJL, 2022?
- e) Is there incidence of internet marketing with customer incentives and privileges in a car wash company, SJL, 2022?

On the other hand, the general objective was defined as: to determine the incidence of internet marketing with customer loyalty in a car wash company, SJL, 2022.

Regarding the specific objectives, it was defined as:

- a) To determine the incidence of internet marketing with customer information in a car wash company, SJL, 2022.
- b) To determine the incidence of internet marketing with internal customer marketing in a car wash company, SJL, 2022.
- c) To determine the incidence of internet marketing with customer communication in a car wash company, SJL, 2022.
- d) To determine the incidence of internet marketing with customer experience in a car wash company, SJL, 2022
- e) To determine the incidence of internet marketing with customer incentives and privileges in a car wash company, SJL, 2022.

Finally, it was proposed as a general hypothesis: there is a significant incidence of internet marketing with customer loyalty in a car wash company, SJL, 2022.

Also, the specific hypotheses were proposed as follows:

- a) There is a significant incidence of internet marketing with customer information in a car wash company, SJL, 2022.
- b) There is a significant incidence of internet marketing with internal marketing of customers in a car wash company, SJL, 2022.
- c) There is a significant incidence of internet marketing with customer communication in a car wash company, SJL, 2022.
- d) There is significant incidence of internet marketing with customer experience in a car wash company, SJL, 2022.
- e) There is significant incidence of internet marketing with customer incentives and privileges in a car wash company, SJL, 2022.

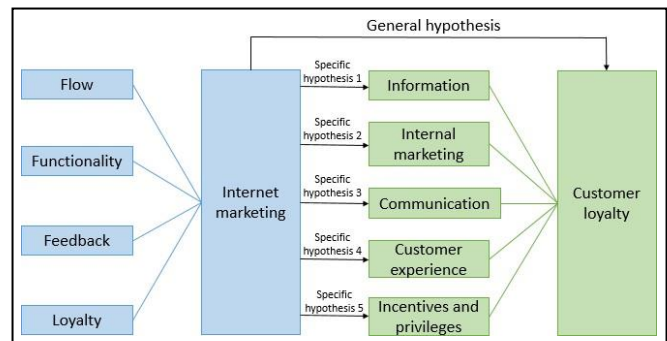


Fig. 1 Summary of hypothesis.

## II. LITERATURE REVIEW

### A. Previous works

In Potosí (Bolivia), the author Otondo [10] presented research on the clients of a transport line. The approach integrated a mixed study and used 383 people over 18 years of age in the municipality of Potosí as a sample. The statistical test was percentage graph. It is concluded that, in order to obtain the loyalty of the users of the Potosí transport line, it is necessary to implement various digital marketing strategies, given that the vast majority use social networks.

In Chimbote (Peru), authors Alvarado and Risco [11] presented a research project using a quantitative approach, and taking into account a sample of 278 clients. The Spearman's rho statistical test was used and a final value of  $p=0.000$ ;  $r^2=0.965$  was determined. It was concluded that digital marketing does indeed have a direct impact on the behavior of each customer, and that the company must be relevant in the strategies it implements in digital marketing in order to achieve its objective.

In the city of Huaraz (Peru), the author Quintana [12] presented scientific research that was developed using the quantitative approach, and 106 users were considered as a sample. The statistic used in the research was Spearman's rho and it was possible to obtain  $p=0.000$ ;  $r^2=0.627$ . In summary, the company Olguita Tours S.A.C. should use more frequently the management of online marketing through the social network and website making known its services and promotions to connect future users.

In Cerro de Pasco (Peru), the author Maldonado [13] exhibited research, in this research the quantitative approach was practiced, and was composed of 172 users as a representative sample. The non-parametric Spearman's rho test was used, and the values of  $p=0.000$ ; and  $r^2=0.658$  were obtained. It is concluded that the quality of service has a positive relationship with the loyalty of users, and that if the company improves the quality of service it offers, the greater the loyalty of users to the company will be.

### B. Theories related to the subject

According to Paul Fleming's 4F's theory that he talks about in his literary work "Let's talk about Interactive Marketing" in

the year 2000, it refers to the high interactivity that there is in a website and an added value, which enters users to share their knowledge and experiences with others. Martinez [14] shares that Fleming mentions four factors such as: flow, functionality, feedback and loyalty that are relevant for the creation of a website strategy.

- a) *Flow*: involves the state of mind of an internet user that when navigating a web page offers a high level of interaction and exchange of knowledge and experiences with other users who have the same interest.
- b) *Functionality*: refers to the homepage of any URL of a web page, creating a page should take into account the restrictions of technology, the homepage has to be attractive, simple and beneficial to the user.
- c) *Feedback*: it is focused on collecting information about the users' tastes and building a link based on their interests and needs to personalize the page.
- d) *Loyalty*: the Internet offers the possibility of creating groups of users that interact and exchange information, thus linking a direct and personalized communication with customers, paying attention to keep them loyal.

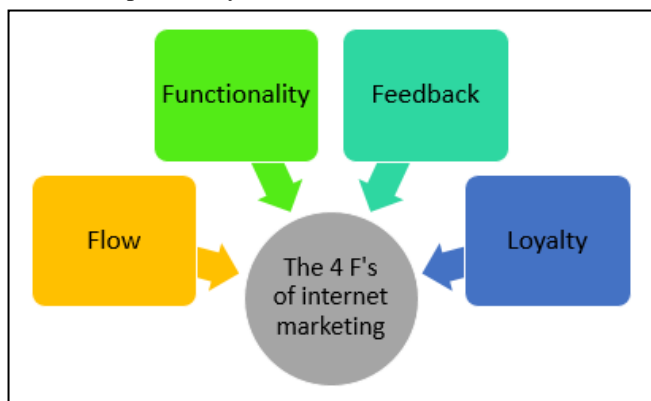


Fig. 2 The 4 F's of internet marketing.

Regarding the theory of customer loyalty, in 2010 Juan Carlos Alcaide wrote a work, the name of his book is "Customer Loyalty" where he conveys the importance of corporate culture that is key to achieving customer loyalty, such culture should be aimed at quality, competitiveness and especially the customer experience and satisfaction, these being essential factors for a good profitability of the company. On the other hand, Pérez [15] reports that Alcaide gives us a representative graphic with the name of "The clover of loyalty" which is composed of five petals and a heart, these elements are key to retain and maintain customers.

- a) *Information*: are the data collected from the customer, where it establishes the expectation, need and interest of customers. The process management allows us to know the connection between the organization and the customer, through specialized software such as CMR, helps us to make decisions.

- b) *Internal marketing*: an essential factor in any organization is the human factor, which is the engine of any organization, therefore, a strategy aimed at the staff that allows to increase the value of the service, to let them know and feel that their work in the company is important.
- c) *Communication*: goes beyond offering quality products and services, it consists of establishing emotional ties with the customer to maintain and build customer loyalty, which requires direct and personalized communication between both parties.
- d) *Customer experience*: it is based on the customer's perceptions after interacting with the company and/or brand, this involves reasoning, physical and emotions, these perceptions influence the customer's behavior and loyalty.
- e) *Incentives and privileges*: a customer remains loyal when the company establishes loyalty strategies through prizes, benefits, activities, etc. The company must take actions to maintain and build customer loyalty, this increases profitability and strengthens the bond with the loyal customer.



Fig. 3 The loyalty clover.

### III. METHODOLOGY

The approach was quantitative. From the position of Hernandez et al. [16] in this research approach, numerical and statistical data collection and analysis were used, and a large sample was taken to measure the study variables with the help of statistical methods with the aim of confirming hypotheses and theories. In that sense, this research exposed as general hypothesis "there is significant incidence of internet marketing with customer loyalty in a car wash company, SJL, 2022", since IBM SPSS v.27 software was applied in order to develop the statistical analysis.

The type was applied. As Del Cid et al. [17] say, this type of research its approach was practical that proposes alternative

solution to the issues that arise in the study through methodologies. This study is of applied type because solutions will be suggested based on the problematic reality of the two study variables.

The level was explanatory. According to Hernandez et al. [16] it is about clarifying the reason for physical or social events and phenomena. This level of research is characterized by clarifying why an event or occurrence arises and in what situation it occurs or what relationship the two study variables have.

The level was also descriptive. According to Hernández et al. [16], it consists of detailing relevant properties and particularities of the phenomena (people, groups, communities, process, etc.) under study. This level of research seeks to measure or collect information separately or grouped among the variables being analyzed; its function is not to determine whether there is a relationship between them.

The design was non-experimental. As expressed by Hernández et al. [16] it is research that is developed without the intention of altering the study variables and through it only observes the phenomena in their natural context in order to carry out the analysis that is being investigated. This research design focuses on observing the study variables, without causing any intentional change in the independent variables, since it is not possible to control the variables, nor is it possible to influence them.

The cut was cross-sectional. As pointed out by Hernández et al. [16], this research cut is part of the non-experimental design that consists of collecting data only once from a specific group or sector.

From Bernal's point of view, the population is the general group of subjects who maintain some similarities, in which a sampling deduction is made, taking into consideration these factors: elements, scope, sampling units and time [18].

The study population is considered to be the clients of Metropolitan Lima who have requested the service in a car wash company in the district of San Juan de Lurigancho during the last 12 months.

In this research, the population is infinite. Del Cid et al. [17] point out that the totality of the population is unknown and it is impossible to know.

Cruz et al. [19] express that the sample is a subgroup of people from a defined population, whose purpose is to find generalities according to the results of the entire study population. Likewise, in this present investigation, the sample was carried out on 68 clients.

In this study, probabilistic sampling was carried out, of a simple random type. According to Cruz et al. [19], refer to the fact that all the people in the population being considered in the study have an equal probability of being chosen, so all people must be involved.

On the other hand, the same authors define that the simple random consists in that each member in the target population has the same way the probability of being chosen.

It is concluded that the analysis unit is made up of the clients of the car wash company who purchase the service in San Juan de Lurigancho, who have frequented the premises between the period of August 29, 2022 to July 12, 2023, the same as formulated in the inclusion criteria section.

The technique applied was the survey. Arias [20] argues that the survey as a technique is the action that allows the collection of data by means of questions to various respondents with the objective that they provide us with relevant information for the research.

The instrument used was the questionnaire. As noted by Hurtado [21], the questionnaire is based on a series of questions with possible answers that the respondent must fill out. It is important to point out that there is no good or bad answer, but that each answer has a different result, and it is generally applied to a sample of a given population.

#### IV. RESULTS

Immediately afterwards, the results of the measurement of the levels of the variables that were calculated are disclosed:

TABLE I  
MEASUREMENT OF VARIABLE LEVELS (IN UNITS)

Levels	Variable: internet marketing	Variable: customer loyalty
High [ 3.6666 - 5.0000]	59	61
Medium [ 2.3333 - 3.6666 ]	3	1
Low [ 1.0000 - 2.3333 ]	6	6

TABLE II  
MEASUREMENT OF THE LEVELS OF THE VARIABLES (IN PERCENTAGES)

Levels	Variable: internet marketing	Variable: customer loyalty
High [ 3.6666 - 5.0000]	86.76%	89.71%
Medium [ 2.3333 - 3.6666 ]	4.41%	1.47%
Low [ 1.0000 - 2.3333 ]	8.82%	8.82%

As can be seen in Tables 1 and 2, the first variable "Internet marketing" was positioned in the high level in most of the subjects that have been surveyed (59 people, 86.76%), the medium level was 3 people surveyed (4.41%) and the low level was 6 people (8.82%).

Similarly, Tables 1 and 2 also show that the second variable "customer loyalty" resulted in 61 respondents at the high level (89.71%), 1 person at the medium level (1.47%) and 6 at the low level (8.82%).

General hypothesis:

There is significant incidence of internet marketing with customer loyalty in a car wash company, SJL, 2022.

TABLE III  
SPEARMAN'S RHO STATISTIC FOR THE GENERAL HYPOTHESIS

			Variable: internet marketing	Variable: customer loyalty
Rho de Spearman	V. Internet marketing	Correlation coefficient	1.000	0.770
		Sig. (bilateral)		0.000
		N	68	68
	V. Customer loyalty	Correlation coefficient	0.770	1.000
		Sig. (bilateral)	0.000	
		N	68	68

According to Table 3, the bilateral asymptotic significance calculated for Spearman's rho test yielded a value of 0.000. This result obtained, showing a number less than 0.05 gives way to the research study to consider the alternative hypothesis as acceptable, so there is a significant incidence of internet marketing with customer loyalty in a car wash company, SJL, 2022.

TABLE IV  
CALCULATION OF THE R<sup>2</sup> FOR THE GENERAL HYPOTH

Correlation coefficient (r)	Coefficient of determination (r <sup>2</sup> )
0.770	0.5929

As shown in Table 4, after evaluating the r<sup>2</sup>, 0.5929 was obtained. This allows us to elaborate a pattern that explains the incidence of the first variable "Internet marketing" in relation to the second variable "customer loyalty" in 59.29% of chance.

TABLE V  
CALCULATION OF UNSTANDARDIZED COEFFICIENTS FOR THE GENERAL  
HYPOTHESIS

Model	Unstandardized coefficients		Typified coefficients	t	Sig.	
	B	Typical error.	Beta			
1	(Constant)	0.482	0.144		3.357	0.001
	V Internet marketing	0.864	0.035	0.951	24.997	0.000

According to Table 5, the B results that were analyzed for the constant and the first variable were calculated as 0.482 and 0.864. By obtaining this data, a formula can be developed to show how the variable "Internet marketing" affects the variable "customer loyalty".

$$\text{Customer loyalty} = 0.482 + (\text{internet marketing} * 0.864)$$

Specific hypothesis 1:

There is significant incidence of internet marketing with customer information in a car wash company, SJL, 2022.

TABLE VI  
SPEARMAN'S RHO STATISTIC FOR SPECIFIC HYPOTHESIS 1

			Variable: internet marketing	D1: information
Rho de Spearman	V. Internet marketing	Correlation coefficient	1.000	0.557
		Sig. (bilateral)		0.000
		N	68	68
	D1. Information	Correlation coefficient	0.557	1.000
		Sig. (bilateral)	0.000	
		N	68	68

According to Table 6, the bilateral asymptotic significance calculated for Spearman's rho test yielded a value of 0.000. This result obtained, by showing a number less than 0.05 gives way to the research study to consider the alternative hypothesis as acceptable, so there is significant incidence of internet marketing with customer information in a car wash company, SJL, 2022.

TABLE VII  
CALCULATION OF THE R<sup>2</sup> FOR SPECIFIC HYPOTHESIS 1

Correlation coefficient (r)	Coefficient of determination (r <sup>2</sup> )
0.557	0.3102

As shown in Table 7, after evaluating the r<sup>2</sup>, 0.3102 was obtained. This allows us to elaborate a pattern that clarifies the incidence of the first variable "Internet marketing" in relation to the dimension "information" by 31.02% chance.

TABLE VIII  
CALCULATION OF UNSTANDARDIZED COEFFICIENTS FOR SPECIFIC HYPOTHESIS  
1

Model	Unstandardized coefficients		Typified coefficients	t	Sig.	
	B	Typical error.	Beta			
1	(Constant)	-0.014	0.260		-0.054	0.957
	V Internet marketing	1.032	0.062	0.897	16.512	0.000

According to Table 8, the B results that were analyzed for the constant and the first variable were calculated as -0.014 and 1.032. By obtaining this data, a formula can be developed to show how the "Internet marketing" variable affects the "information" dimension.

$$\text{Information} = -0.014 + (\text{internet marketing} * 1.032)$$

Specific hypothesis 2:

There is significant incidence of internet marketing with internal marketing of customers in a car wash company, SJL, 2022.

TABLE IX  
SPEARMAN'S RHO STATISTIC FOR SPECIFIC HYPOTHESIS 2

	Variable: internet marketing	D2: internal marketing

Rho de Spearman	V. Internet marketing	Correlation coefficient	1.000	0.480
		Sig. (bilateral)		0.000
		N	68	68
	D2. Internal marketing	Correlation coefficient	0.480	1.000
		Sig. (bilateral)	0.000	
		N	68	68

According to Table 9, the bilateral asymptotic significance calculated for Spearman's rho test yielded a value of 0.000. This result obtained, by showing a number less than 0.05 gives way to the research study to consider the alternative hypothesis as viable, so there is significant incidence of internet marketing with the internal marketing of customers in a car wash company, SJL, 2022.

TABLE X  
CALCULATION OF THE R<sup>2</sup> FOR SPECIFIC HYPOTHESIS 2

Correlation coefficient (r)	Coefficient of determination (r <sup>2</sup> )
0.480	0.2304

As shown in Table 10, after evaluating the r<sup>2</sup>, 0.2304 was obtained. This allows us to elaborate a pattern that clarifies the incidence of the first variable "Internet marketing" in relation to the second dimension "internal marketing" by 23.04% of chance.

TABLE XI

CALCULATION OF UNSTANDARDIZED COEFFICIENTS FOR SPECIFIC HYPOTHESIS 2

Model	Unstandardized coefficients		Typified coefficients	t	Sig.
	B	Typical error.	Beta		
1	(Constant)	1.010	0.396	2.551	0.013
	V Internet marketing	0.580	0.095	6.089	0.000

According to Table 11, the B results that were analyzed for the constant and the first variable were calculated as 1.010 and 0.580. By obtaining this data, a formula can be developed to show how the "Internet marketing" variable affects the "internal marketing" dimension.

$$\text{Internal marketing} = 1.010 + (\text{internet marketing} * 0.580)$$

Specific hypothesis 3:

There is significant incidence of internet marketing with customer communication in a car wash company, SJL, 2022.

TABLE XII  
SPEARMAN'S RHO STATISTIC FOR SPECIFIC HYPOTHESIS 3

		Variable: internet marketing	D3: communication
Rho de Spearman	V. Internet marketing	Correlation coefficient	1.000
			0.572

		Sig. (bilateral)		0.000
		N	68	68
	D3. Communication	Correlation coefficient	0.572	1.000
		Sig. (bilateral)	0.000	
		N	68	68

According to Table 12, the bilateral asymptotic significance calculated for Spearman's rho test yielded a value of 0.000. This result obtained, by showing a number less than 0.05 gives way to the research study to consider the alternative hypothesis as acceptable, so there is significant incidence of internet marketing with customer communication in a car wash company, SJL, 2022.

TABLE XIII  
CALCULATION OF THE R<sup>2</sup> FOR SPECIFIC HYPOTHESIS 3

Correlation coefficient (r)	Coefficient of determination (r <sup>2</sup> )
0.572	0.3271

As shown in Table 13, after evaluating the r<sup>2</sup>, 0.3271 was obtained. This allows us to elaborate a pattern that clarifies the incidence of the first variable "Internet marketing" in relation to the "communication" dimension by 32.71% chance.

TABLE XIV

CALCULATION OF UNSTANDARDIZED COEFFICIENTS FOR SPECIFIC HYPOTHESIS 3

Model	Unstandardized coefficients		Typified coefficients	t	Sig.
	B	Typical error.	Beta		
1	(Constant)	1.026	0.309	3.319	0.001
	V Internet marketing	0.757	0.074	10.187	0.000

According to Table 14, the B results that were analyzed for the constant and the first variable were calculated as 1.026 and 0.757. By obtaining this data, a formula can be developed to show how the "internet marketing" variable affects the "communication" dimension.

$$\text{Communication} = 1.026 + (\text{internet marketing} * 0.757)$$

Specific hypothesis 4:

There is significant incidence of internet marketing with customer experience in a car wash company, SJL, 2022.

TABLE XV  
SPEARMAN'S RHO STATISTIC FOR SPECIFIC HYPOTHESIS 4

		Variable: internet marketing	D4: customer experience
Rho de Spearman	V. Internet marketing	Correlation coefficient	1.000
		Sig. (bilateral)	0.000
		N	68

	D4. customer experience	Correlation coefficient	0.562	1.000
		Sig. (bilateral)	0.000	
		N	68	68

According to Table 15, the bilateral asymptotic significance calculated for Spearman's rho test yielded a value of 0.000. This result obtained, by showing a number less than 0.05 gives way to the research study to consider the alternate hypothesis as acceptable, so there is significant incidence of internet marketing with customer experience in a car wash company, SJL, 2022.

TABLE XVI  
CALCULATION OF THE R<sup>2</sup> FOR SPECIFIC HYPOTHESIS 4

Correlation coefficient (r)	Coefficient of determination (r <sup>2</sup> )
0.562	0.3158

As shown in Table 16, after evaluating the r<sup>2</sup>, 0.3158 was obtained. This allows us to elaborate a pattern that clarifies the incidence of the first variable "Internet marketing" in relation to the dimension "customer experience" by 31.58% chance.

TABLE XVII  
CALCULATION OF UNSTANDARDIZED COEFFICIENTS FOR SPECIFIC HYPOTHESIS 4

Model	Unstandardized coefficients		Typified coefficients	t	Sig.	
	B	Typical error.	Beta			
1	(Constant)	0.301	0.244	1.233	0.222	
	V Internet marketing	0.949	0.059	0.894	16.186	0.000

According to Table 17, the B results that were analyzed for the constant and the first variable were calculated as 0.301 and 0.949. By obtaining this data, a formula can be developed to show how the variable "internet marketing" affects the dimension "customer experience".

$$\text{Customer experience} = 0.301 + (\text{internet marketing} * 0.949)$$

Specific hypothesis 5:

There is significant incidence of internet marketing with customer incentives and privileges in a car wash company, SJL, 2022.

TABLE XVIII  
SPEARMAN'S RHO STATISTIC FOR SPECIFIC HYPOTHESIS 5

		Variable: internet marketing	D5: incentives and privileges
Rho de Spearman	V. Internet marketing	Correlation coefficient	1.000
		Sig. (bilateral)	0.000
		N	68
	D5. Incentives	Correlation coefficient	0.698
			1.000

	and privileges	Sig. (bilateral)	0.000	
		N	68	68

According to Table 18, the bilateral asymptotic significance calculated for Spearman's rho test yielded a value of 0.000. This result obtained, by showing a number less than 0.05 gives way to the research study to consider the alternative hypothesis as acceptable, so there is a significant incidence of internet marketing with the incentives and privileges of customers in a car wash company, SJL, 2022.

TABLE XIX  
CALCULATION OF THE R<sup>2</sup> FOR SPECIFIC HYPOTHESIS 5

Correlation coefficient (r)	Coefficient of determination (r <sup>2</sup> )
0.698	0.4872

As shown in Table 19, after evaluating the r<sup>2</sup>, 0.4872 was obtained. This allows us to elaborate a pattern that clarifies the incidence of the first variable "Internet marketing" in relation to the dimension "incentives and privileges" by 48.72% chance.

TABLE XX  
CALCULATION OF UNSTANDARDIZED COEFFICIENTS FOR SPECIFIC HYPOTHESIS 5

Model	Unstandardized coefficients		Typified coefficients	t	Sig.	
	B	Typical error.	Beta			
1	(Constant)	0.090	0.235	0.385	0.702	
	V Internet marketing	1.002	0.056	0.909	17.754	0.000

According to Table 20, the B results that were analyzed for the constant and the first variable were calculated as 0.090 and 1.002. By obtaining this data, a formula can be developed to show how the variable "Internet marketing" affects the dimension "incentives and privileges".

$$\text{Incentives and privileges} = 0.090 + (\text{internet marketing} * 1.002)$$

## V. DISCUSSION AND CONCLUSIONS

### A. Discussion

In relation to the research study published by Otondo [10] that focused on the analysis of the variables "digital marketing" and "customer loyalty", like this thesis coincided with the same variables mentioned, unlike the first study was developed in 2023. The origin of Otondo's [10] research study is South American directly from Bolivia in specific Potosi, on the other hand, the present thesis was done in the district of SJL, Lima, where both countries have similar customs and realities. However, both studies had different approaches, one mixed and the other quantitative, in the mixed one information was collected through survey to know the patterns of behaviors and in the interview, it is more perceptible in relation to the

behavior, tastes preferences and the mind of the customer, also in this thesis was quantitative because the instrument that is the questionnaire was used, making use of statistics: Otondo [10] used the percentage graph test instead in the present thesis Spearman's rho was applied. Regarding the sample selected for the research, Otondo [10] determined 383 customers; as for the present thesis, 68 frequenters were considered. The results of the graph test Otondo [10] was analyzed and interpreted jointly each question of the respondents in percentages and units; on the contrary, in the presented thesis was reached to collect the value of the general hypothesis  $p = 0.0000$ ;  $r^2 = 0.5929$ .

The research project presented by Alvarado and Risco [11] focused on the investigation of the variables "digital marketing" and "customer loyalty", as well as this thesis coincided with the same variables mentioned, unlike the first one, which was developed in 2023. There is no doubt that one and other studies have been developed in Peru, at the same time it is important to emphasize that the research project of Alvarado and Risco [11] has been developed in Chimbote, while this research kept as geographical location the city of Lima. Similarly, the two theses had a quantitative approach, through the use of statistics: Alvarado and Risco [11] used Spearman's rho test, as did this study. Referring to the representative sample, Alvarado and Risco [11] assigned 278 customers of the dealership H&S S.A.C; as for, the present research selected 68 frequent customers. Finally, the valuation of the general hypothesis of Alvarado and Risco [11] yield the results obtained  $p = 0.000$ ;  $r^2 = 0.965$ ; in contrast, in this thesis was determined as valuation of the general hypothesis  $p = 0.000$ ;  $r^2 = 0.5929$ .

As for the study presented by Quintana [12] where his variables focused on "digital marketing" and "customer loyalty", we can note that we share the same variables of the present research with the difference that this one was developed in 2023. There is no doubt that both studies were carried out in Peru, but it is important to emphasize that Quintana's research [12] was developed in the province of Huaraz, while this research was geographically located in the province of Lima, specifically in the district of San Juan de Lurigancho. Likewise, both studies had a quantitative approach; if we observe the statistics in detail, we can validate that Quintana [12] applied Spearman's rho in his test as well as this research. We appreciate that Quintana [12] in his research delimited his sample to 106 users; on the other hand, the sixty-eight clients surveyed were those who made up the population in the present research. Finally, in the general hypothesis of Quintana [12] he details that the values in the results conclude that  $p = 0.000$ ;  $r^2 = 0.627$ ; on the contrary of this research, where it is visualized that there is a difference in the value of  $r^2 = 0.5929$  (difference in 0.0341) however in the value of  $p = 0.000$  it is the same.

In the study presented by Maldonado [13] where his work focuses on the variables "Quality of service" and "user loyalty", it shows similarities with the second variable of this study, with a two-year difference between the two. The studies were developed in the same country, however, the locations were different while Maldonado's research [13] was carried out in the

province of Cerro de Pasco and this research was developed in the capital city of the country, i.e. Metropolitan Lima. In addition, both studies had the same quantitative approach, by contemplating the statistics of Maldonado [13] in which he used Spearman's rho test as well as this present study. Maldonado [13] in his research work defined his population sample as 172 users, being a larger sample than the present study which was accessed by 68 clients. In the results of Maldonado [13], they show that in the general hypothesis it is concluded that the values of  $p = 0.000$ ;  $r^2 = 0.658$ ; on the contrary, in this research where the general hypothesis shows as a result that the values of  $p = 0.000$ ;  $r^2 = 0.5929$  correspondingly.

## B. Conclusions

As Lam [22] points out, conclusions refer to the final contribution drawn from the problems, results, hypotheses and discussions of a scientific study in a given period, in which he explains in a general way the facts of an investigative process. The conclusions of this research work are described below:

First: the general objective of this study was to determine the incidence of Internet marketing with customer loyalty in a car wash company. In order to achieve this, the general hypothesis of the study was established, and this hypothesis was contrasted with the general objective. Therefore, it is concluded that internet marketing has a significant impact on customer loyalty in a car wash company, SJL, 2022. Likewise, this was contrasted thanks to Spearman's rho statistical test, in which  $p=0.000$  and  $r^2=0.5929$ .

Second: as results obtained from the development of this research, it was determined that the information has a correlation with the dependent variable "customer loyalty", likewise, that dimension has a significant impact on customer loyalty in a car wash company, SJL, 2022. Likewise, it was corroborated by means of Spearman's rho statistical technique, in which  $p=0.000$ ;  $r^2=0.3102$ .

Third: continuing with the thesis developed, it was determined that internal marketing is associated with customer loyalty; likewise, this dimension has a significant impact on customer loyalty in a car wash company, SJL, 2022. Similarly, it was corroborated with the help of Spearman's rho technique, in which the values are  $p=0.000$ ;  $r^2=0.2304$ .

Fourth: according to the study presented, it was concluded that communication is related to customer loyalty, in the same way, that this dimension has a significant impact on customer loyalty in a car wash company, SJL, 2022. In addition, it was verified thanks to Spearman's rho test, in which  $p=0.000$ ;  $r^2=0.3271$  was determined.

Fifth: on the other hand, the present thesis concluded that customer experience is correlated with customer loyalty. This being the dimension that significantly affects customer loyalty in a car wash company, SJL, 2022. Therefore, it was corroborated with the help of Spearman's rho test, in which  $p=0.000$ ;  $r^2=0.3158$  was determined.

Sixth: to conclude with the present investigation, as a final result it is deduced that incentives and privileges are related to



customer loyalty, as well as the dimension in mention has a significant impact on customer loyalty in a car wash company, SJL, 2022, which was corroborated through the statistical technique Spearman's rho, in which it was determined  $p=0.000$ ;  $r^2= 0.4872$ .

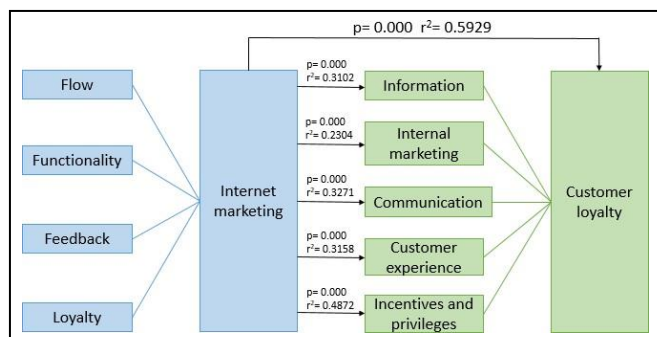


Fig. 4 Graph of conclusions.

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