

Marketing 4.0 to Improve the Positioning of the Optical Products of a Private Company, Trujillo, Peru

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Abstract: The objective of this research was to demonstrate to what extent marketing 4.0 improves the positioning of the optical products of the private company Visión D'luxe, Trujillo, it was applied, pre-experimental design, quantitative approach, hypothetical-inductive method, the population consisted of 35 customers who met 10 loyalty requirements. The sample was not required and sampling was not necessary. The unit of analysis was a loyal customer of the private company Visión D'luxe. The survey technique was applied and the questionnaire was used as an instrument. The results show that marketing 4.0 improved the positioning of the company's optical products. In addition, it was found that marketing 4.0 significantly improved the positioning in the dimensions: brand, quality, price and offer of the company Visión D'luxe. It was concluded that the application of marketing 4.0 tactics improved the positioning of the company's optical products, the applied statistical evidence Student's t (SPSS V.26 Software), resulted in all cases that the p-value was below the significance level ($0.000 < 0.05$), having obtained an excellent reliability of 0.771158 in the application of Cronbach's Alpha.

Keywords: Marketing 4.0, Digital Marketing, Positioning, Products, Brand.

1. INTRODUCTION

Today's companies are impacted in their competitiveness due to the rapid and constant changes in Industry 4.0 and associated technologies, which generates an accelerated race towards the virtualization of traditional marketing strategies. This phenomenon drives companies to acquire technologies that provide them with advantages in their marketing strategies, in order to improve positioning in the target audience. This implies the implementation of tools that facilitate real-time communication to receive feedback on the products and services offered. In addition, the aim is to anticipate the customer's reaction in order to develop effective strategies in terms of positioning, product, brand, quality and prices, among other aspects. All this is achieved through the expansion of the digital structure, with effective simulations of monitoring, testing and programming of continuous improvement of products and services, adjusting to consumer and market demands.

1.1. The Relevance of this Study.

The relevance lies in the fact that marketing 4.0, together with its business capabilities, allows positioning products and/or business services, boosting sales and profits achieving greater competitiveness. This positive impact contributes to business progress by adopting strategies such as digital marketing focused on the customer, seeking their loyalty. This is achieved by humanizing brands, attributing human-like qualities to them, and through the production of advanced digital content, including mobile applications that facilitate customer segmentation, targeting, positioning, satisfaction and loyalty. Ultimately, these approaches promote increased business productivity and efficiency.

1.2. Background.

Globally, marketing 4.0 continues to evolve and be applied in various business activities. This approach uses digitalization as a means to achieve sustainability by introducing and employing new structures. The

evolution in the field of marketing has allowed many medium and large companies to adopt digital media in an ascending and rapid way, thus improving their sales.

The development of marketing 4.0 can be visualized along a timeline. Initially, marketing 1.0 emerged, driven by a focus on products. Subsequently, marketing 2.0 developed, which focused on the customer. This approach evolved into marketing 3.0, which emphasized the human dimension. Today, we are faced with marketing 4.0, which presents a holistic perspective that coordinates the interrelationship between companies and customers both online and offline [8].

At the national level, marketing 4.0 is still uncommon and is beginning to be considered by companies through the digitization of communications with customers. In Trujillo, at the local level, few companies have started to adapt and use the internet through marketing 4.0 in their commercial and advertising activities after the pandemic.

Visión D'luxe has digitized approximately 70% of its customer communication operations. This adoption has led to improvements in sales and services, supported by the implementation of marketing 4.0 that managed to overcome the problematic reality of a low level of effective positioning of its optical products, which impacted its revenues.

Internationally, marketing 5.0 is currently evolving and manifests itself through three dimensions: predictive marketing, contextual marketing and augmented reality marketing. These dimensions represent human-centric technologies that transform traditional marketing environments into real-world environments. This is achieved by researching customers in real time during the shopping process in commercial establishments, the objective is to investigate customer intentions and behavior, as well as their purchasing decisions and achieve customer loyalty, through performance-based marketing.

With marketing 5.0, the aim is to analyze the effects on marketing results, refine the customer buying experience and achieve marketing objectives using up-to-date customer data. Performance marketing is used to provide contextual proposals in real time and direct, thus taking advantage of the influence of these technologies on the shopping experience, this information is supported by the work of Philip Kotler and other authors [8].

The private company Visión D'luxe has made the strategic decision to take advantage of marketing 4.0 tools in its advertising activities, thanks to this implementation, it has been able to effectively position its optical products in various dimensions such as brand, quality, price and offer. This approach has generated significant improvements in its competitiveness, sustainability and profitability at the regional level and in its business development. In the context of marketing, the positioning of a company, product or service implies defining or selecting the way in which we wish to be perceived by customers.

According to Kotler [8], positioning implies that the company distinguishes itself by offering products or services with characteristics that target customers consider important and preferential. Customers choose the company as the best option when considering the brand, price, quality, offer, product and service, perceiving them as different from the competition and solving their needs with greater perceived value. In the case of Visión D'luxe, this approach has been key to its success at the regional level.

Social media optimization is gaining in importance thanks to the rise of the social Web. This allows businesses to become participants through online communication, providing data for marketing. Internet businesses through digital pages provide notoriety facilitating the commercial opening achieving a better position in the market, it is essential that people find the company during online searches, while browsing social media or when they think about it [3].

An effective positioning strategy requires transparent information to the consumer, the target audience or the market segment. According to Kotler [8], in a successful positioning, the offer must be presented in such a

way that the consumer can objectively distinguish it from the competitor's offerings. Clarity in the communication of the value proposition is essential for positioning to be effective and to last in the consumer's mind.

It is crucial to understand the evolution of positioning and generational interaction in the twenty-first century. It is necessary to rethink the concept of commercial position taking into account the changes in demand according to the generational evolution of the market that encompasses four generations coexisting today. Applying the hermeneutic interpretation, it is concluded that market positioning is dynamic. In fact, positioning also undergoes a life cycle i.e. beginning, development and end, these continuous changes substantiate the requirement to continuously manage the business position [4].

The purpose of positioning is to persuade the target public or customers to enhance and perceive the values of the company, service, brand or product, so that the effective value proposition favors and enables the target market to consume the product or service offered. In other words, users, customers or buyers are positioned through specific attributes or dimensions of the company's products or values.

Brand position refers to the importance it occupies in consumers' thinking vis-à-vis competitors. This involves the basis of why a person chooses to think of a specific brand over the competition. In the past, companies used to seek to position themselves massively through promotions and offers, but today, the most effective brand positioning strategy focuses on highlighting the solutions the product offers and the value it brings to the customer, in addition to delivering what is promised.

In the process of achieving competitive position, all the attributes offered are differentiated in the customer's thinking. This process also involves the perception of corporate competitive strength. In summary, successful brand positioning involves effectively communicating how the product or service solves problems and adds value, combined with quality delivery and consistency in what is promised.

The implementation of a commercial strategic plan should allow MSEs to understand the importance of internet marketing and adopt it for their benefit, their goal is to be more competitive and have higher performance [1].

Appearing in the virtual space has become vital for companies seeking to develop and strengthen their business, which is very common in other advanced countries, although it is still not given this importance, which detracts from the competitiveness of the local business environment. Abe [1] advocates changing this perspective, highlighting the critical urgency of adopting online marketing tactics to thrive in today's digital economy and survive as a business.

Marketing has undergone such an accelerated evolution brought about by technological advances and has revolutionized the concept and thinking of commerce today at the level of business survival, with business competitive strategies being very important. This change reflects the increasing importance given to marketing as a fundamental tool for business achievement in an active and ever-evolving digital business environment.

However, the obstacle lies in the fact that many brands do not approach digital marketing in a planned and strategic way, but in a haphazard manner. On many occasions, they do so simply by imitation, without truly understanding the importance of intervening effectively in the digital environment [10]. This highlights the importance of a strategic and well-thought-out approach to digital marketing to maximize its benefits.

The peculiarities of the communicative policy of trade name management and internet marketing for digital products play a fundamental role in business and its positioning around the advertisement. The modern practice of using digital technologies in marketing is essential in competitive improvement of a company, addressing the market and forming its consumer base [7].

In this context, the research proposed the use of 4.0 marketing tactics to overcome the problem of a low

level of positioning, achieving a better position of the optical products of the company Visión D'luxe after its implementation. This involves the implementation of a specific website on the internet and the active use of platforms such as Instagram and TikTok as part of a dynamic and communicative strategy. However, it is important to note that these strategies require constant changes in content and digital updates to keep up with current technological advances. This adaptability and responsiveness are critical in the constantly evolving global digital environment.

1.3. The General Problem.

In view of this reality, the general research problem was formulated as follows:

PG: To what extent does the application of Marketing 4.0 improve the market position of the optical products of the company Visión D'luxe? And the specific problems were:

PE1: To what extent does Marketing 4.0 improve the market position of the brand of the optical products of the company Visión D'luxe?

PE2: To what extent does Marketing 4.0 improve the market position of the quality of Vision D'luxe's optical products?

PE3: To what extent does Marketing 4.0 improve the market price position of Vision D'luxe's optical products?

PE4: To what extent does Marketing 4.0 improve the market position of Vision D'luxe's optical product offering?

1.4. The Justification for the Research.

The justification for the research is supported by the significant influence that the digital era has on business and academia. Various technological tools were designed to obtain data and provide important knowledge. Digital platforms generate a growing interest in very competitive and profitable companies, in this context the use of online marketing is chosen, specifically in its version Marketing 4.0.

The study contributes to the strengthening of new knowledge for future projects based on this approach. The relevance of the use of online marketing to enhance the position of the company Visión D'luxe in the market was highlighted. The analysis conducted in the study provides proposals for improvements, and the proper implementation of digital marketing mechanisms allowed for more effective strategic business management. In summary, the study provided a solid basis for understanding and implementing online marketing plans in the specific business context, thus improving its market position.

The research is also theoretically justified by increasing knowledge in both theory and practice by applying the practical knowledge of online marketing. In addition, it seeks to consolidate the expertise gained by employing these theories in achieving a better position in the market for optical products. The business still lacks the necessary knowledge to effectively utilize marketing mechanisms in digital environments, the research set out to address this deficiency with the goal of generating a positive impact on the steady improvement of the company's positioning.

In addition, the research is positioned as a solid basis for future studies connected to the field of marketing. 4.0 as well as product positioning. By contributing to theoretical and practical knowledge in these areas, it provides a foundation on which other researchers can build and deepen future studies. In this sense, the research not only addresses the present need of the company, it also lays the foundation for the expansion of knowledge in the field of online marketing and its strategic application by improving Vision D'luxe's competitive positioning.

This research is also methodologically justified, because the results obtained will serve as the basis for the methodological framework duly approved and validated by experts. This validation by experts guarantees an impartial development and highly reliable results adjusted to reality, based on the use of the scientific methodological system.

A questionnaire was used as a tool, using the survey as a technique. It is important to note that these instruments were previously validated by five doctors who are experts in the subject, which contributes to the robustness and reliability of the results. In summary, the research adopts a rigorous and scientific approach in its methodology to ensure authenticity and applicability.

Value of the research. This research also has significant practical value, as the company benefited from knowing and applying internet marketing tactics and procedures to better position its products. It is especially relevant, considering the scenario marked by the COVID pandemic until today, where digital strategies have become essential to excel in a highly competitive market. The effective implementation of these strategies improved the company's competitive position and contributed to the achievement of its objectives despite the challenging environment.

In addition, the company experienced improvements in its image, which contributed to a stronger positioning in the market. The use of online marketing tactics translates into tangible benefits and increased sales, and also positively influences business appreciation. In this sense, the research not only provides theoretical and methodological knowledge, but also had a practical and positive effect on Visión D'luxe by raising its position and image in the marketing of its products and services.

The social value of research at the community level is justified through the good positioning of the company's products. Research not only benefits the company itself, but also contributes to the community environment by contributing to the improvement of the company's business position and products through Marketing 4.0 plans. This positive impact on the company's business operations not only has internal repercussions, but also extends to other organizations that can benefit from the lessons learned and successful strategies implemented.

The fact of having achieved a good positioning for the company suggests that the Marketing

4.0 strategies applied can be replicated and adapted by other organizations in various contexts, this contributes to the competitive development of businesses at the community level. Therefore, the research not only has a direct impact on the company under study, but also contributes social value by providing knowledge and strategies that can be applied by other organizations to improve their position in the business.

Epistemology. Valuable epistemology in the business sector poses significant challenges by forcing the analysis of whether research techniques are adequate to address the complexities of the business context. The application of complex thinking and complex sciences in business contributes to a deeper understanding of the interconnectedness and dynamics of the elements that influence the business position in a digital context. This goes beyond a linear approach and allows consideration of the multiple interrelationships and factors that impact the success of a marketing 4.0 strategy. Therefore, the epistemological value in this research lies in the application of a more holistic and complex approach to understanding and addressing business challenges in a digital and competitive environment.

Research objectives. The general objective is as follows:

GO: To demonstrate how Marketing 4.0 improves the business position of optical products at Vision D'luxe, and as specific objectives the following were set out:

SO 1: Calculate the effect of the application of Marketing 4.0 on the improvement of the brand position of optical products at Vision D'luxe.

SO 2: Calculate the effect of the application of Marketing 4.0 on the improvement of the quality position of optical products at Vision D'luxe.

SO 3: Calculate the effect of the application of Marketing 4.0 on the improvement of the price position of the optical products of the company Vision D'luxe.

SO 4: Calculate the effect of the application of Marketing 4.0 on the improvement of the position in the offer of optical products at Vision D'luxe.

Research Hypothesis. According to the stated objectives, the general hypothesis of the study is defined as follows

Hi: Marketing 4.0 will improve the position of the optical products of the company Visión D'luxe. As null hypothesis Ho: Marketing 4.0 will not improve the position of the optical products of the company Visión D'luxe, and as specific hypotheses:

HE 1: Marketing 4.0 will improve the brand position of Vision D'luxe's optical products. HE 2: Marketing 4.0 will improve the quality position of Vision D'luxe's optical products. HE 3: Marketing 4.0 will improve the price position of Vision D'luxe's optical products.

HE 4: Marketing 4.0 will improve the position in the offer of Vision D'luxe's optical products.

2. MATERIALS AND METHODS

An applied research model was chosen, using an independent variable with the intention of impacting the dependent variable [9]. Due to its specific objective, it was classified as applied research, since it sought to solve the problem linked to the positioning of business products by applying theoretical knowledge in the field of digital marketing. On the other hand, the study used the hypothetical-inductive method, this because in the study hypotheses were formulated and tested, which were tentative assumptions according to what was observed in the private company of optical products Visión D'luxe. Thus, this method was used throughout the research process and ended with the analysis and conclusion of the statistical evidence. The research was defined by its impartiality, adopting a quantitative approach in its perspective and being fundamentally classified as quantitative in nature.

On the other hand, the structure of the work was adapted to the pre-experimental design, with Marketing 4.0 as the independent variable and positioning as the dependent variable.

In this study, the population has been defined as the 35 customers who have shown loyalty to the company, whose selection and inclusion criteria are based on customers who meet the 10 requirements to be considered as loyal customers: adult customers (men or women) with purchasing capacity; customers who have generated monthly earnings to the company from 2020 to 2022; customers who only buy products and use optical services of the company; customers who actively promote the products and services; brand; quality; prices; and offers of the company; customers who use social networks such as Instagram and TikTok as well as web pages to interact with the company are also included; finally, those customers who have brought other customers to the company are included.

After discrimination, the result was 35 loyal customers of the private company Visión D'luxe, who were included in the study. Sampling was therefore not required, with the private company Visión D'luxe and the aforementioned loyal customers as the unit of analysis.

The inclusion criteria established for this research were: company clients who expressed their willingness to collaborate in the study by submitting an informed consent form, and company clients who showed commitment to the goals of the study and were ready to provide the requested answers. The exclusion

criteria defined for this research were: company clients who refused to participate in the research by not giving their informed consent and did not provide the requested answers.

The methodological strategy employed was based on surveys designed in accordance with the research objectives and the operationalization of the variables. The instrument used was a questionnaire, which was implemented by means of a form addressed to the population under study. According to the definition of Hernández [9], the survey is described as a procedure to obtain information directly from the study subjects, which is provided by them.

Likewise, the measurement was carried out using the Likert scale and, as a complement to the study, a data sheet was used. These instruments were subjected to reliability evaluation by means of specific tests, such as the application of Student's t-test (using SPSS V.26 software). The instruments were validated by five doctors who are experts in research and in marketing and positioning, certifying the authenticity of the content of the marketing 4.0 assessment instrument (independent variable) and certifying the authenticity of the content of the positioning assessment instrument (dependent variable).

As a procedure, a descriptive analysis of the general objective and of each of the dimensions of the positioning of the optical products of the private company Visión D'luxe was carried out. In addition, an inferential analysis of the dependent variable "positioning" and of each of its dimensions was carried out. In each instance, it was observed that the significance level (p) was 0.000, which is less than 0.05. Consequently, the null hypothesis is rejected, and in all cases the alternative hypothesis is accepted.

The interpretation of the results was performed by means of univariate assessment using before and after observation in the same subjects, each of the variables, particularly the dependent variable, was evaluated using the instruments previously described. In addition, inferential statistics was performed to contrast the hypotheses using the t-Student test, specifically for the mean of the differences in correlated before-after data (according to RB biostatistics Norma and Steiner). The validation of the hypotheses was performed with a reliability level of 95 %, assuming a significance level of 0.05.

In addition, the relationship with the institutions and persons involved has been ethically addressed, emphasizing the use of informed consent, respect for personal and institutional dignity, preservation of the confidentiality of identity, return of results as a gesture of recognition and gratitude, as well as the guarantee of security and discretion in the handling of the information provided. This ethical approach reinforces the integrity and validity of the research.

4. RESULTS

GO: The general objective was to demonstrate how Marketing 4.0 improves the business position of optical products in Visión D'luxe. Table 1 shows that, during the pretest conducted before the implementation of the experimental proposal, 77.0% of the participants in the sample, equivalent to 27 customers, indicated that the positioning was at the low level.

Table 1 Pre-test and post-test results: Business position of optical products in Visión D'luxe.

Values	Pretest		Posttest	
	f	%	f	%
High	0	0,0	32	91,0
Regular	8	23,0	3	9,0
Under	27	77,0	0	0,0
Totals	35	100,0	35	100,0

Note: Statistical analysis (from untabulated data) Average increase in positioning test: 24.1 t=24.38 P<0.01

In contrast, 23.0% of the sample placed it at the regular level, indicating initially a low perception of the company's position by most of the participants. However, in the post- test carried out after the implementation

and execution of the experimental proposal or Marketing 4.0, 9% of the sample (3 clients) considered that the product position was at the regular level. In addition, the remaining 91%, consisting of 32 customers, perceived that the position of this dimension was at a high level. This indicates that Marketing 4.0 significantly improved the positioning of the Vision D'luxe company's optical products. The specific objectives were:

SO 1: Calculate the effect of the application of Marketing 4.0 on the improvement of the brand position of optical products at Vision D'luxe. Table 2 shows that before the application of Marketing 4.0, 40.0% of the sample, composed of 14 customers, ranked the brand position at the regular level. In contrast, 60.0% placed it at the low level, with no participant recognizing it at the high level.

However, after the implementation of the Marketing 4.0 proposal, a significant change in the results was observed. In this sense, 74.0% of the sample, composed of 26 customers, evaluated the position in the brand dimension at a high level. On the other hand, 26.0%, equivalent to 9 users, classified it at a fair level. Therefore, for a large majority of the sample, Marketing 4.0 has significantly improved the aforementioned dimension.

Table 2 Pre-test and post-test results: Brand position of optical products at Vision D'luxe

Values	Pretest		Posttest	
	f	%	f	%
High	0	0	26	74,0
Regular	14	40,0	9	26,0
Under	21	60,0	0	0,0
Totals	35	100,0	35	100,0

Note: Statistical analysis (from untabulated data)

Average increase in positioning test: 3.942 t=13.60 P<0.01

SO 2: Calculate the effect of the application of Marketing 4.0 on the improvement of the position of the quality of optical products in Visión D'luxe. According to Table 3, in relation to the quality dimension provided by the company Visión D'luxe, during the pretest carried out before the application of the proposal or independent variable, 71.0% of the sample (composed of 25 customers) perceived this dimension at a low level.

In contrast, the remaining 29.0%, made up of 10 clients, placed it at a regular or medium level. After implementing and executing Marketing 4.0 as an independent variable, significant changes were observed in the perception of the position in this dimension. For 29.0% of the sample, the level considered was regular, while for 71.0%, composed of 25 customers, the level was this time high. As a result, Marketing 4.0 significantly improved the position in terms of the perceived quality of the Vision D'luxe company.

Table 3 Pre-test and post-test results: Position of the quality of optical products at Vision D'luxe

Values	Pretest		Posttest	
	f	%	f	%
High	0	0,0	25	71,0
Regular	10	29,0	10	29,0
Under	25	71,0	0	0,0
Totals	35	100,0	35	100,0

Note: Statistical analysis (from untabulated data)

Average increase in positioning test: 4.428 t=19.62 P<0.01

SO 3: Calculate the effect of the implementation of Marketing 4.0 on the improvement of the price position of the optical products of the company Visión D'luxe. In relation to the dimension of price setting in the company Visión D'luxe, before the implementation of the experimental proposal or Marketing 4.0, 26.0% of the sample, composed of 9 customers of the company, evaluated the business position as regular.

On the other hand, 74.0%, equivalent to 26 participants of the sample, perceived it at a low level, while for the remaining 0%, the level was high. After carrying out the experimental proposal, 69.0% of the sample, made up of 24 customers, indicated that the price position reached the high level, along with the remaining 31.0% of the sample that considered it at a regular level of positioning. In conclusion, the implementation of Marketing 4.0 significantly improved the price position offered by the company.

Table 4 Pre-test and post-test results: price position of optical products in Vision D'luxe

Values	Pretest		Posttest	
	f	%	f	%
High	0	0,0	24	69,0
Regular	9	26,0	11	31,0
Under	26	74,0	0	0,0
Totals	35	100,0	35	100,0

Note: Statistical analysis (from untabulated data)

Average increase in positioning test: 4.257 t=17.72 P<0.01

SO 4: Calculate the effect of the application of Marketing 4.0 on the improvement of the position in the offer of optical products in Visión D'luxe. In reference to the dimension of the position in the offer provided by the company Visión D'luxe, according to Table 5 in the pretest, 63.3% of the sample, composed of 22 customers, placed this aspect at the low level. In addition, 34.0% of the sample rated it at the medium level, while the remaining 3.0% evaluated it at the high level.

However, after the implementation of the experimental proposal or independent variable, 3.0% of the sample managed to identify the position of this dimension at the medium level,

along with 97.0% of the sample that did so at the high level. Consequently, Marketing 4.0 significantly improved the position in the offer provided by the company Visión D'luxe.

Table 5 Pre-test and post-test results: Position in the offer of optical products at Vision D'luxe.

Values	Pretest		Posttest	
	f	%	f	%
High	3	3,0	34	97,0
Regular	12	34,0	1	3,0
Under	22	63,0	0	0,0
Totals	35	100,0	35	100,0

Note: Statistical analysis (from untabulated data)

Average increase in positioning test: 11.485 t=19.64 P<0.01

Normality test. It was applied to test the null hypothesis that the data are normally distributed.

H0: Product positioning data fit a normal distribution.

H1: Product positioning data do not fit a normal distribution.

Table 6 Evaluation of the normality of the data corresponding to the position variable of optical products in Vision D'luxe.

	Shapiro-Wilk		
	Statistician	gl	Sig.
Initial	,944	35	,075
Final	,951	35	,125

The significance of the final results was reflected in a p-value greater than 0.05, which implies that the null hypothesis (H0) cannot be rejected. This indicates that the product data fit a normal distribution and a parametric test was performed.

Hypothesis testing. Two opposing hypotheses about the population were examined: the null hypothesis and the alternative hypothesis.

Hi: Marketing 4.0 will improve the position of optical products at Vision D'luxe

Ho: Marketing 4.0 will not improve the position of optical products in Vision D'luxe.

Table 7 Hypothesis testing for the dependent variable: Business position of optical products in Vision D'luxe.

		Matched differences					t	gl	Sig. (bilateral)
		Media	Deviation	Average error	95% confidence interval of the difference				
							Inferior	Superior	
Par	PreTest -	24,11	5,84994	,98882	22,104	26,123	24,38	34	,000

Note: Student t-test applied (SPSS V.26 software).

According to the information provided, with a significance level $p=0.000 < 0.05$, the null hypothesis is rejected and the alternative hypothesis is accepted. Consequently, it can be concluded that there is significant statistical evidence to affirm that Marketing 4.0 significantly improves the position of the products offered by the company Vision D'luxe.

Hi: Marketing 4.0 will improve the brand position of Vision D'luxe's optical products.

Ho: Marketing 4.0 will not improve the brand position of Vision D'luxe's optical products.

Table 8 Hypothesis test for the dimension: Brand Position in Vision D'luxe

		Matched differences					t	gl	Sig. (bilateral)
		Media	Deviation	Average error	95% confidence interval of the difference				
							Inferior	Superior	
Par1	PreTest - PostTest	3,942	1,71401	,28972	3,35408	4.53164	13,60	34	,000

Note: Student t-test applied (SPSS V.26 software).

With a significance level $p=0.000 < 0.05$, the null hypothesis is rejected and the alternative hypothesis is accepted. Therefore, it can be concluded that there is significant statistical evidence to affirm that Marketing 4.0 significantly improves the brand position dimension offered by the company Vision D'luxe.

Hi: Marketing 4.0 will improve the quality position of Vision D'luxe's optical products.

Ho: Marketing 4.0 will not improve the position in the quality of Vision D'luxe's optical products.

Table 9 Hypothesis test for the dimension: Position in quality in Vision D'luxe.

		Matched differences							
		Media	Deviation	Average error	95% confidence interval of the difference		t	gl	Sig. (bilateral)
					Inferior	Superior			
Par1	PreTest - PostTest	4,428	1,33473	,22561	3,97007	4.88707	19,62	34	,000

Note: Student t-test applied (SPSS V.26 software).

With a significance level $p=0.000 < 0.05$, the null hypothesis is rejected and the alternative hypothesis is accepted. Consequently, it can be concluded that there is significant statistical evidence to affirm that Marketing 4.0 significantly improves the position dimension in the quality offered by the company Vision D'luxe.

Hi: Marketing 4.0 will improve the price position of Vision D'luxe's optical products.

Ho: Marketing 4.0 will not improve the price position of Vision D'luxe's optical products.

Table 10 Hypothesis test for the dimension: Price position offered by the company Vision D'luxe.

		Matched differences							
		Media	Deviation	Average error	95% confidence interval of the difference		t	gl	Sig. (bilateral)
					Inferior	Superior			
Par1	PreTest - PostTest	4,257	1,42133	,24025	3,76890	4.74539	17,72	34	,000

Note: Student t-test applied (SPSS V.26 software).

With a significance level $p=0.000 < 0.05$, the null hypothesis is rejected and the alternative hypothesis is accepted. Consequently, it can be concluded that there is significant statistical evidence to affirm that Marketing 4.0 significantly improves the price dimension offered by the company Vision D'luxe.

Hi: Marketing 4.0 will improve the position of Vision D'luxe's optical product offering.

Ho: Marketing 4.0 will not improve the position in the offer of optical products of the company Vision D'luxe.

Table 11 Hypothesis test for the dimension: Position in the offer at Vision D'luxe

		Matched differences							
		Media	Deviation	Average error	95% confidence interval of the difference		t	gl	Sig. (bilateral)
					Inferior	Superior			
Par 1	PreTest - PosTest	11,485	3,45876	,58464	10,29759	12,67384	19,64	34	,000

Note: Student t-test applied (SPSS V.26 software).

With a significance level $p=0.000 < 0.05$, the null hypothesis is rejected and the alternative hypothesis is

accepted. Therefore, it can be concluded that there is significant statistical evidence to affirm that Marketing 4.0 significantly improves the dimension in the offer offered by the company Visión D'luxe.

Cronbach's alpha coefficient. It was used to evaluate reliability in terms of the internal consistency of a scale, indicating to what extent the items of an instrument are correlated with each other. In the research, this reliability was evaluated, having obtained an excellent reliability of 0.771158 in the application of Cronbach's alpha.

DISCUSSION AND CONCLUSION

Discussion.

According to the findings derived from the fulfillment of the general objective and in accordance with the inferential evaluation carried out, there is a notable improvement in the position of the optical products of the company Visión D'luxe thanks to the implementation of marketing 4.0, this is supported by observing that the bilateral significance value (p-value), which indicates the degree of agreement between the proposed population value and the available sample information, is 0.000, being lower than the significance level established at 0.05. This result was obtained with 34 degrees of freedom, confirming that the significance level $p=0.000 < 0.05$.

In relation to the first specific objective and according to the inferential analysis performed, it can be stated that the introduction of Marketing 4.0 has a considerable impact on the brand positioning dimension of the Vision D'luxe company's optical products. However, after the implementation of the Marketing 4.0 proposal, a significant change in the results is observed. In this sense, 74.0% of the sample, composed of 26 customers, evaluated the position in the brand dimension at the high level. On the other hand, 26.0%, equivalent to 9 users, classified it at a fair level. Therefore, for a large majority of the sample, Marketing 4.0 has significantly improved the aforementioned dimension of the Vision D'luxe company. This is confirmed by the fact that the bilateral significance value (p-value), which indicates the degree of agreement between the proposed population value and the available sample information, is 0.000, being lower than the significance level set at 0.05. This result was obtained with 34 degrees of freedom, showing that the significance level $p=0.000 < 0.05$.

In relation to the second specific objective and according to the inferential analysis carried out, it is found that Marketing 4.0 has a significant impact on the positioning dimension in terms of the quality of the optical products offered by the company Visión D'luxe. After carrying out the implementation and execution of Marketing 4.0 as an independent variable, significant changes were observed in the perception of positioning in this dimension. For 29.0% of the sample, the level considered was regular, while for 71.0%, composed of 25 customers, the level was this time high. As a result, Marketing 4.0 significantly improved the position in terms of the perceived quality of the Vision D'luxe company. This finding is supported by verifying that the bilateral significance (p-value), which reflects the degree of agreement between the proposed population value and the available sample information, is 0.000, which is lower than the significance level set at 0.05. These results were obtained with 34 degrees of freedom, reaffirming that the significance level $p=0.000 < 0.05$.

In relation to the third specific objective and according to the inferential analysis performed, it is confirmed that marketing 4.0 has a significant impact on the dimension of positioning in the price of optical products offered by the company Visión D'luxe. After carrying out the experimental proposal, 69.0% of the sample, made up of 24 customers, indicated that the price positioning reached the high level, along with the remaining 31.0% of the sample that considered it at a regular level of positioning. In conclusion, the implementation of Marketing 4.0 significantly improved the price position offered by Vision D'luxe. This conclusion is supported by observing that the bilateral significance (p-value), which indicates the degree of agreement between the proposed population value and the available sample information, is 0.000, being lower than the significance level established at 0.05. These results were obtained with 34 degrees of freedom, corroborating that the significance level $p=0.000 < 0.05$.

Regarding the fourth specific objective and according to the inferential analysis carried out, it is shown that marketing 4.0 has a significant impact on the dimension of positioning in the offer of optical products provided by the company Visión D'luxe. However, after the implementation of the experimental proposal or independent variable, 3.0% of the sample managed to identify the position of this dimension at the medium level, along with 97.0% of the sample that did so at the high level. Consequently, Marketing 4.0 significantly improved the position in the offer provided by the company Visión D'luxe. This finding is supported by verifying that the bilateral significance (p-value), which indicates the degree of agreement between the proposed population value and the available sample information, is 0.000, being lower than the significance level set at 0.05. These results were obtained with 34 degrees of freedom, confirming that the significance level $p=0.000 < 0.05$.

The findings presented are consistent with the results obtained by Avila [2] in relation to the effectiveness of digital marketing in advertising efficiency, with notable consequences on the effectiveness of external communication of university educational services. In Avila's research, Digital Marketing strategies, which encompass SEO, social networks, Email Marketing and Content Marketing, were identified as significant and influential factors in the field of advertising and external communication. These results reinforce the notion that digital marketing practices can be effective and have a positive impact in several areas, including positioning and perception of products and services.

In this regard, the results add to the contributions of Osorio and Jansasoy [11] regarding the classification of the target audience according to their age and consumption patterns, with the purpose of making the offer viable. To achieve this, it is imperative to adopt marketing 4.0 strategies, with the essential participation of a Community Manager in charge of designing new campaigns that increase brand visibility and generate customer loyalty through platforms such as Facebook and Instagram. This process involves re-launching the brand with novel guiding approaches, setting new objectives and communicating fresh messages.

The results presented also relate to the findings of Abe [1] regarding the implementation of business plans that reinforce digital marketing to improve competitiveness and performance in the digital era. According to Abe, the execution of digital marketing strategies provides opportunities to carry out actions with a wide variety of options. This diversity and the possibilities to strategically combine marketing potential allow campaigns to be tailored in a highly segmented and budget-conscious manner, thus responding to the specific needs of users. These parallels suggest a convergence of results that supports the importance of digital marketing in improving competitiveness and business performance in the digital environment.

The results obtained also coincide with those of Chang [5] in relation to marketing and brand position of school supplies in the city of Lima. The importance of this concordance lies in the close connection between these two variables, as well as in the contributions of Tica [13] on the impact of digital marketing on platforms such as Facebook, LinkedIn and YouTube to foster customer loyalty of the company Atanasovski Corredores de Seguros. Thus, the proper use of digital marketing, with a prominent focus on social networks, exerts a significant influence on the acquisition of new customers and their subsequent loyalty.

An interesting observation is that the results obtained are related to those of Salazar

[12] regarding the purchase decisions of millennials, who actively use Marketing 4.0. In this context, a positive correlation between marketing in the online channel and purchase decisions is evident.

In summary, the results coincide with the findings of Del Valle [6] regarding the examination of the impact of social networks as an essential component of a digital marketing strategy aimed at boosting the sales of a real estate company in Peru. In this context, the determination of the amount of investment to be allocated for the implementation of Web 4.0 within the framework of the strategy defined in the varied marketing field should be based on the target audience to which each project is oriented, thus avoiding possible risks associated with excessive investments.

The results obtained have enriched the theoretical contribution on marketing 4.0, since its application has

addressed aspects ranging from business history to the conceptual treatment of product positioning in consulting firms, covering their service contexts and evaluating the effectiveness of the actions undertaken. This initiative has managed to go beyond the contributions of web 3.0 marketing by fostering the generation of knowledge through a variety of data, with the purpose of understanding strategic business decisions in relation to the direct demands of users. This approach is underpinned by two-way communication that values people's principles and preferences, giving importance to knowing and understanding their tastes and trends. This facilitates a closer approach to meeting consumer demands and expectations, with the ultimate goal of achieving customer loyalty.

According to Osorio and Jansasoy [11], the main purpose of Marketing 4.0 is to establish trust as a starting point for loyalty between the company and the customer. This achievement is materialized through online interaction scenarios, in contrast to traditional offline approaches, promoting a dynamic that seeks mutual understanding through direct communication, whether formal or informal, but always sincere. The goal is for service and/or sales systems to effectively validate customer expectations, which is consistent with the results obtained.

In this context, it is essential to recognize that marketing 4.0 channels offer a wider reach option through various physical devices, such as cell phones, tablets, PCs, among others. This approach is characterized as a form of omnichannel communication, where the company-customer interaction plays a fundamental role in achieving the 4 "P's" (product, price, place and promotion), as well as marketing the 4 "C's" (co-creation, currency, communal activation and conversation). The current trend is to be close to the customer, not only attending to their sporadic requests or demands, but also responding immediately to their requirements.

The research experience has shown that the implementation of a wide variety of channels as a strategy to reach Vision D'luxe's users has contributed significantly to provide greater clarity on work content, especially in terms of attention lines. This approach has facilitated the rooting of the brand and attention details in market perception and has fostered their dissemination through digital forwarding and sharing. In other words, the extensive presence and recognition of the company in the virtual sphere has led to effective positioning in four key dimensions: brand, quality, price and offer.

In accordance with the proposal, several activities and operational actions have been carried out within the scope of Marketing 4.0. In the first instance, the insertion of the brand in social networks was achieved and the company's web page was designed, thus allowing the company to exhibit and position its products in Trujillo and the region. The results of these actions include the creation of the web portal <https://visiondluxe.000webhostapp.com>, which provides an interactive platform for interacting with the company. In addition, the brand was included in the list of companies and services at a global level through the Instagram application and social network at <https://www.instagram.com/vision.dlux/>. A dynamic activation was also carried out in TikTok, considered one of the most effective social networks in the global context, through <https://www.tiktok.com/@vision.dlux>. In addition, an institutional email was established in Gmail vision.dlux@gmail.com with access to all other associated tools.

The achievement of all these actions was possible thanks to the hiring of a Community Manager. This professional not only assumed the responsibility of introducing the brand in the 4.0 environment, but also led the renewal of the brand identity through a more aesthetic, stylish and striking institutional logo, adapted to market demands.

Subsequently, another strategic activity was carried out: a review of the way in which clients are reached. This involved reorganizing the quantity and variety of the audience through a more systematic registration of users and the creation of a detailed customer directory. This process also required adjustments to the points of attention of the aforementioned sites or virtual communication channels, considering specific customer profiles according to their real demands for Vision D'luxe's optical products.

An additional strategic action was to establish contact with local "model influencers" to promote the company's

products and services. This not only facilitated greater access to the public, but also contributed to the popularization of the brand and the positioning of Visión D'luxe's optical products.

On the other hand, the Marketing 4.0 research led to the creation of new audiovisual advertising packages, presenting the products and services with the ideation and planning of contents or lines of attention in virtual formats. As a result of these actions, it was possible to improve the positioning of Visión D'luxe's products in the dimensions of brand, quality, price and offer. In addition, additional services were incorporated as added value, such as home visits and virtual communication.

Additional strategies were implemented, such as inviting the client to visit Vision D'luxe's stores and suppliers for personalized service. In addition, a strategic alliance was established with specialized ophthalmologists for those cases requiring professional consultation. Referrals for additional medical services to specialized private and Social Security clinics were also facilitated. These initiatives contributed to strengthening the company's comprehensive offer and the perception of quality in the market.

To conclude, user measurement proved to be a crucial activity for refining marketing content, including changing topics, improving content and expanding it. This process was carried out through the implementation of continuous virtual satisfaction surveys and the registration of recommendations, requests and complaints. These actions allowed for two-way communication between customers and the company, ensuring an effective response to the needs and expectations of the audience.

Conclusion.

It was verified that the 4.0 marketing strategy has a positive impact on the position of the optical products offered by the company Visión D'luxe. This was evidenced by observing that the bilateral significance value (p-value), which indicates the agreement between the proposed value at the population level and the information extracted from the sample, was considerably lower than the established significance level (0.05). With 34 degrees of freedom, the p-value was 0.000, confirming that the level of significance ($p=0.000$) is less than 0.05.

It was found that marketing 4.0 significantly improves the brand positioning dimension of the optical products of the company Visión D'luxe, as it was verified that the bilateral significance (p-value) that shows the degree of compatibility between the proposed population value and the available sample information, p-value (0.000) was less than the significance level (0.05) with 34 degrees of freedom, being the significance level $p=0.000 < 0.05$.

It was also found that the 4.0 marketing strategy has a substantial impact on the quality dimension of the positioning of the optical products offered by the company Visión D'luxe. This was evidenced by verifying that the bilateral significance value (p-value), which indicates the agreement between the proposed value at the population level and the information extracted from the sample, was significantly lower than the established significance level (0.05). With 34 degrees of freedom, the p-value was 0.000, confirming that the significance level ($p=0.000$) is less than 0.05.

It was found that the 4.0 marketing strategy has a significant impact on the dimension of positioning in the price of optical products offered by the company Visión D'luxe. This was evidenced by verifying that the bilateral significance value (p-value), which indicates the agreement between the proposed value at the population level and the information extracted from the sample, was significantly lower than the established significance level (0.05). With 34 degrees of freedom, the p-value was 0.000, confirming that the significance level ($p=0.000$) is less than 0.05.

It was found that the marketing 4.0 strategy has a significant impact on the positioning dimension in the offer of optical products provided by the company Vision D'luxe. This conclusion is based on the finding that the bilateral significance value (p-value), which reflects the agreement between the proposed value at the population level and the information extracted from the sample, was significantly lower than the established

significance level (0.05). With 34 degrees of freedom, the p-value was 0.000, confirming that the significance level ($p=0.000$) is less than 0.05.

Recommendations.

To the managers of the private company Visión D'luxe, specialized in optical products, it is suggested to improve the Digital Marketing 4.0 proposal, orienting towards the new version 5.0. This, in line with the transformations being experienced in the field of brand positioning, quality, price and offer of its products. A comprehensive review and update of digital marketing 4.0 strategies is urged to adapt to these changes.

The management of Vision D'luxe, a private company dedicated to optical products, is advised to optimize the position of the brand, as well as the quality, price and offer of its products. This is due to the considerable importance that these variables have on the company's sales and profit performance.

It is suggested to the managers of Visión D'luxe, the private company dedicated to optical products, to develop strategic actions focused on digital content innovation. Likewise, it is recommended to update the offer of optical products, quality management in the manufacturing processes of products and related services, and the consideration of establishing a physical point of sale in the city of Trujillo. These measures are aimed at improving customer acquisition and loyalty.

The managers of Vision D'luxe, the private company specializing in optical products, are advised to carry out careful planning of user demand for state-of-the-art optical products. In addition, it is suggested to carry out a continuous update of the ophthalmological medical services associated with the company. This will help to stay aligned with the changing needs of users and strengthen the offering of optics-related medical services.

The managers of Vision D'luxe, the private company specializing in optical products, are advised to organize the customer service approach, especially with regard to the demand for state-of-the-art ophthalmic products and services. This organization should cover local, regional, national and international levels, thus ensuring efficient and personalized attention to customers in various geographical areas. This will contribute to strengthen the presence and customer satisfaction at all scales of the company's operation.

It is suggested that the managers of Visión D'luxe, the private company dedicated to optical products, establish strategic alliances with importers of optical products, clinics specializing in ophthalmology and leading specialists in the field. This initiative seeks to improve the positioning of its products and services, as well as to achieve greater competitiveness in the market. Collaboration with key players in the supply chain and in the medical field will strengthen Vision D'luxe's presence and contribute to its success in the optical sector.

The academic recommendation corresponds to marketing studies that should continue to be carried out according to digital technological progress, admitting in the research to be carried out current and futuristic topics such as AI (Artificial Intelligence) applied to the development of marketing 5.0 and related to business activity and neuromarketing.

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