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ORIGINAL



The influence of Artificial Intelligence on the online consumer information search process

La influencia de la Inteligencia Artificial en el proceso de búsqueda de información del consumidor online

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ABSTRACT

Online sales have increased exponentially over the past year in a context of pandemic and containment. This paper seeks to determine the aspects and qualities that the digital consumer seeks when choosing a product or brand. This within a context of a versatile and competitive market, where companies to stand out and be present in the mind of the buyer, must know the variables that influence their decisions. Together with e-commerce, technology increases day by day and is part of our lives even without being present. Artificial intelligence is a clear example of this, generating solutions for entrepreneurs and consumers, who are looking for quick, simple and safe answers. Words like Artificial Intelligence, Big Data, chatbot, cookies and privacy or manipulation issues seem to go hand in hand. This production showed the differences, points for and against the coding of data through these tools, when offering a product or service on the internet. Through a type of exploratory and descriptive research, from the perspective of the entrepreneur and the consumer, you will know the generational gap that separates the acceptance of the insecurity generated by the use of Artificial Intelligence. You will discover the relevant aspects for the sale that you must know about your client. In parallel, as a buyer, it will give you an answer to your big questions about the famous manipulation of entrepreneurs.

Keywords: Information Search; Artificial Intelligence; E-Commerce; Consumer.

RESUMEN

Las ventas online han aumentado exponencialmente en el último año en un contexto de pandemia y confinamiento. El presente trabajo, procura determinar los aspectos y cualidades que el consumidor digital busca a la hora de elegir un producto o una marca. Esto dentro de un contexto de un mercado versátil y competitivo, en donde las empresas para destacarse y estar presente en la mente del comprador, deben conocer las variables que influyen en sus decisiones. En conjunto con el e-commerce, la tecnología aumenta día a día y forma parte de nuestras vidas incluso sin estar presente de ello. La inteligencia artificial es un claro ejemplo de ello generando soluciones a los empresarios y a los consumidores, quienes buscan respuestas rápidas, sencillas y seguras. Palabras como Inteligencia Artificial, Big Data, chatbot, cookies y problemas de privacidad o manipulación parecen ir de la mano. Esta producción mostró las diferencias, puntos a favor y en contra de la codificación de datos por medio de estas herramientas, a la hora de ofrecer un producto o servicio en internet. Por medio de un tipo de investigación exploratoria y descriptiva, desde la mirada del empresario y el consumidor, conocerás la brecha generacional que separa la aceptación de la inseguridad generada por la utilización de la Inteligencia Artificial. Descubrirás los aspectos relevantes para la venta que deberás conocer de tu cliente. En paralelo, como comprador, te dará una respuesta a tus grandes interrogantes que posees frente a la famosa manipulación de los empresarios.

Palabras clave: Búsqueda de Información; Inteligencia Artificial; E-Commerce; Consumidor.

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INTRODUCTION

In the present project, we investigate and analyze factors related to Artificial Intelligence (AI) that should be taken into account to help the consumer to have a satisfactory online shopping process, taking into account the multiple current technological tools. The information obtained from this project, is valuable from a bilateral point of view, on the one hand to offer the user a pleasant online shopping experience and an efficient search for information according to their demands; as well as in the vision of companies, which must provide these tools both to increase their sales and market positioning, improve customer experience, create a better comfort in the digital world.

From this point, three main actions that can be improved thanks to the use of Artificial Intelligence are broken down following Pecorino⁽¹⁾ and the Asociación Marketing Digital Argentina (AMDAR)⁽²⁾. Considering the studies carried out the latter, it is described which are the most used in 2020 in Argentina.

In addition, a brief section is incorporated to dedicate an explanation to the recent boom of augmented reality, with its definition and the use of them by companies.

As previously mentioned, consumption and leisure habits have changed for the consumer, and thanks to technology and smartphones, we spend most of the day in front of the screen. Within this context, consumers inquire their queries at any time of the day, chatbots offer a solution in front of this situation to get a quick answer to frequently asked questions.⁽¹⁾ But what are they?

Chatbots are a technological solution, which simulates a verbal interaction with a virtual assistant, facilitating access to business intelligence to the user and a bot.⁽³⁾ Thanks to an encoding, an accurate and precise response is obtained. Through the interaction of data and its due process, it is intended to create a real communication with the consumer. This medium can be accessed in different channels:

- Social networks.
- Websites.
- Applications.
- · Messaging.
- Phone calls.

On the other hand, companies improve their content and digital advertising with the intention of reaching their target with greater precision, finding those users who possess tendencies to perform actions offered by the advertiser. Google integrates machine learning, i.e. machine learning. It aims to increase data quality by boosting consumer profiling and "reduce the need for specialized skills to generate and manage advanced analytical models". The intent is to take automation to another level, offering the user what they are actually interested in and can actually consume. This need for companies to collect large volumes of data through technologies and strategies, Big Data arises. Big Data is beyond data collection, it is a socio-technological solution, where technologies, storage devices, statistical methods are involved, which aims to collect data to offer the consumer ease in finding information, but there are "problems related to privacy, property, identity, privacy, trust or reputation".

Through Search Engine Optimization (SEO), the search is refined for the user, thanks to matching options by means of a list of keywords. In this way, companies ensure that they reach their target audience; (5) and in turn, the consumer gets a more accurate search. Finally, augmented reality (AR) as a paradigm shift, intends to bring the store to the consumer. Through 3D technology, it seeks to enhance the consumer's online shopping experience. E-commerce can experiment with AR can solve problems, such as high product return rates, decreased store traffic and customer loyalty. (6)

Artificial Intelligence (AI) is one of the most significant advances in the last 60 years. Following Banda⁽⁷⁾ "Artificial Intelligence comprises the scientific and technological research of intelligent systems." Intelligent systems are deep and permanent learning, thanks to complex algorithms that are able to reason, learn, help simplify and segment information, making it easier for the consumer to search for information.

Artificial Intelligence collaborates in improving customer service, and streamlines processes that they are no longer interested in performing. The search for information or the active evaluation mentioned in previous paragraphs, is developed in less time and in a more agile way with the purpose of saving time to the consumer, discarding data that will not be relevant to him.

Some applications that use this tool to speed up the decision-making process and improve the customer's online shopping experience are Google (as mentioned above), social networks such as Facebook and Instagram, removing inappropriate and "uninteresting" publications for the consumer, and Mercado Libre and Amazon, which send products and advertisements to the customer before they make the purchase.⁽⁸⁾

Following Martorell⁽⁹⁾, the challenges of this discipline are mentioned from the viewpoint of the diverse appreciations that society has. It includes technophiles and technophobes, hopeful and apocalyptic, who are located from a position of an ideal world but with a dystopian, imaginary vision.

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broken down following Pecorino⁽¹⁾ and the Asociación Marketing Digital Argentina (AMDAR)⁽²⁾. Considering the studies carried out the latter, it is described which are the most used in 2020 in Argentina. In addition, a brief section is incorporated to dedicate an explanation to the recent boom of augmented reality, with its definition and the use of them by companies.

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Through Search Engine Optimization (SEO), the search is refined for the user, thanks to matching options by means of a list of keywords. In this way, companies ensure that they reach their target audience; and for their part, the consumer gets a more accurate search. Finally, augmented reality (AR) as a paradigm shift, intends to bring the store to the consumer. Through 3D technology, it seeks to enhance the consumer's online shopping experience. E-commerce can experiment with AR can solve problems, such as high product return rates, decreased store traffic and customer loyalty. (6)

Background

Gonzalo Latugaye states that Argentina "became the country that registered the highest growth worldwide, with an annual increase of 79% in its online sales".

Globally, 51 % of consumers say that they use Google to search for information about a purchase they plan to make online. A 59 % of them consider shopping from their smartphones an important factor when deciding on a brand or supplier. Internet influences the purchase decision of Argentines, "7 out of 10 research online before making a purchase and 91 % consider that their final purchase was influenced by previous online research". $^{(11)}$ In turn, 51 % use brand websites for information, and 76 % of users trust them even though it is not their main source of information, the study states that it is mainly due to a good previous experience according to 81 %, "the purchase website (65 %), the brand (62 %), the good opinions of buyers (48 %) and the online trust seal (40 %)". $^{(12)}$

Transactions are increasing year after year, and the consumer is looking for convenience, and leisure time. Eighty-five percent of Argentines are looking for new ways to streamline their time and 80 % shop online to gain free time. What motivates the Argentine consumer to shop online according to CECE statistics⁽¹³⁾ is 75 % effort and energy, 54 % time and 27 % security. Argentine companies are aware of these figures and are adapting to these information tools thanks to the increase in technologies resulting from the pandemic, for example, BBVA has 97 % of queries made by customers through Artificial Intelligence.⁽¹⁴⁾ 38,2 % of Argentine businessmen use Whatsapp Business as a consultation tool.⁽²⁾

Argentina ranks third in implementation and development of Artificial Intelligence in Latin America (iProUP, 2020). For their part, more than 57 % of Argentine companies in 2020 admitted to be in the experimentation phase of new technology, or adoption with 37 % in some business unit. In other words: more than half of the entrepreneurs are not yet using this potential. (16,17,18,19)

KPMG in 2018, predicted in a way, that by 2020 85 % of transactions will be based on artificial intelligence. The curious thing, is that these figures are not far from reality. For the first half of 2020, 60,4 % of Argentine businessmen used Google Ads for their marketing strategies, and 53,3 % have a budget allocated to this tool. (2,20,21,22) Nearly 25 % of companies spend time on mobile optimization as one of their main SEO tactics. (16,23,24) Artificial Intelligence collaborates in improving customer service, and streamlines processes that they are no longer interested in performing. Thanks to Machine Learning, the machine participates in the data we generate, arriving at results automatically. (8,25,26) In turn, 68 % of companies use automation in some way to streamline mechanisms. (16,27,28) In fact, thanks to a study conducted by Gatner Survey, it was estimated that the use of artificial intelligence increased by 240 % over 2019. (17,29) Compared to 2 % in 2017 that used this technology in Argentina. (18,30,31) According to the study conducted by Futurum Research12 in 2019, 78 % of companies consider that consumers are not comfortable with the use of artificial intelligence, however, 65 % state that this is not the case. Similarly, companies are investing money based on AI, and bet 53 % on augmented reality. (19,32,33) On

the other hand, Google in 2018 states that thanks to the use of artificial intelligence, it is possible to predict with 76 % readmission effectiveness from 24 to 48 hs. $^{(2,34)}$

A study in 2019 estimated that by 2030 thanks to augmented reality, \$1,5 billion will be gained in the global economy. (20,35)

Globally, 2020 has been a year of changes, and we have had to adapt as we had never thought, considering digital shopping as necessary. Thanks to statistical data issued by the Argentine Chamber of Electronic Commerce, we know that 1 284 960 million new buyers have increased, of which have generated a 10 % increase in web banking transactions, and a 43 % increase in food orders. (36) Finally, 99 % of consumers are satisfied with online shopping. Consumers say that it saves energy, time and security, and that the biggest disadvantage is not being able to see the product before buying it. (13)

What important and influential aspects, for the consumer in their information search process in the online environment, can be solved or facilitated thanks to artificial intelligence?

Objective

With the above, the aim is to know to what extent Artificial Intelligence and the Internet influence the online purchasing process of consumers in a context of potential increase of e-commerce, mainly oriented to the recognition of the consumer's need and search for information.

METHOD

Research Design

In order to accurately analyze the aspects that influence the purchasing process, a mixed type of research was carried out, with a first exploratory phase of qualitative type, followed by a descriptive phase of quantitative type.

Exploratory phase

The technique used in this phase was an in-depth interview.

The population of interest were people living in Argentina, both sexes with an age range of 18 to 60 years. It was divided into two groups, consumers and businessmen oriented mainly to the marketing and administrative areas.

A guide of questions was used as a collection instrument according to the selected group, with a non-probabilistic sampling procedure by convenience, that is, that which is selected for the convenience of the researcher.

In this first phase, an attempt was made to reach a first approximation of the research, for this reason a total of 12 interviews were conducted.

Descriptive phase

The technique used in this phase is quantitative, carried out for consumers, by means of self-administered questionnaires through the Internet. It was determined by means of surveys as a collection instrument.

The population of interest are people living in Argentina in the province of Cordoba, with an age range between 18 and 60 years old, of both sexes.

Simple random probability sampling was used.

Regarding the sample size, the last census conducted in 2010 was considered, according to which the Province of Córdoba had 1 454 536 inhabitants, with a confidence level of 95 % and a margin of error of 5 %, the number of surveys that were conducted, taking into account both sexes, is 387 cases.

Fase de investigación	Exploratoria		
Metodología	Cualitativa		
Técnica	Entrevistas en profundidad		
Instrumento	Guía de Pautas		
Alcance	Argentina		
Población	Argentinos – Mayores a 18 años hasta 60 años		
Criterio muestral	No probabilístico — Por conveniencia		
Tamaño de la muestra	6 casos		
Lugar de realización	A coordinar		

Figure 1. Fact sheets

Fase de investigación	Exploratoria		
Metodología	Cualitativa		
Técnica	Entrevistas en profundidad		
Instrumento	Guía de Pautas		
Alcance	Argentina		
Población	Argentinos – Mayores a 30 años hasta 60 años		
Criterio muestral	No probabilístico — Por conveniencia		
Tamaño de la muestra	6 casos		
Lugar de realización	A coordinar		

Figure 2. Exploratory phase: Entrepreneurs

Fase de investigación	Exploratoria		
Metodología	Cuantitativa		
Técnica	Encuesta		
Instrumento	Cuestionario		
Alcance	Argentina		
Población	Argentinos – Mayores a 18 años hasta 60 año		
Criterio muestral	Probabilístico — Aleatorio simple		
Tamaño de la muestra	387 casos		
Lugar de realización	Internet		

Figure 3. Descriptive: Consumers

RESULTS

First of all, the results obtained from the exploratory research are presented. Beginning with the in-depth interviews conducted with consumers, then with those conducted with businessmen in the administrative and marketing areas.

All the consumers interviewed coincided with regard to the high use of cell phones during the day. They also determined that this is their main tool for searching for information prior to making a purchase. The main means as a source of data are, firstly, Google search engines, followed by social networks and, lastly, company web pages. In all cases, the importance of finding information in a simple and fast way was presented due to the lack of interest in wasting time; and they described as an influential factor in obtaining an efficient search, the possibility of having a dialogue with an advisor and a friendly and affable web design.

A $50\,\%$ of the interviewees estimated answers close to the real definition of Artificial Intelligence, compared to a half that did not know how to answer or what examples to give. In parallel, $100\,\%$ claimed to understand data automation due to their buying behaviors. With this result, a percentage of respondents claimed to experience a sense of loss of privacy in their lives, coupled with the perception of being watched; a smaller percentage felt indifferent to the issue.

Following the line, all cases confirmed paying attention to the posts/publications presented on their cell phones because they are of interest to them. Positive answers were obtained when asked about their attractiveness, some of them named, as a determining aspect, the saturation of the same that brings with it an inevitable influence of purchase at a later time.

With respect to the interviews conducted with businessmen, in all cases they agreed that the search for information is an influential phase in the consumer's decision making process. They also agreed that consumers increasingly want to have more information about a product or service before making the purchase as such. The five interviewees agreed that Artificial Intelligence collaborates in this process, but only one third of them said they use it through Google ADS and metrics for data analysis.

Regarding the knowledge of this discipline, all agreed that it is a complex area, the consumer does not know in depth, and even some entrepreneurs lack understanding of the subject.

For the decomposition of the results obtained in the descriptive phase, we began by contextualizing the questionnaire based on the data obtained from the respondents' ages with a wide range. The same, were attributed taking into account the generations: Generation Z (18 to 24 years) as the youngest, were those who responded the most with 40 %, followed by the Milleniars (25 to 34 years) with 25 %, Generation X (35 to 44 years) with 20 %, Baby Boomers (45 to 54 years) with 8,78 % and those over 55 years with 5,17 %.

The survey did not ask about gender, since the project was oriented to the purchase process as such, and not taking into account products or services that may be consumed, in addition to a more visible generational equality, purchases are made by both men and women.

Respondents were asked to answer the frequency with which they shop online, taking as a reference the first half of the year 2021:

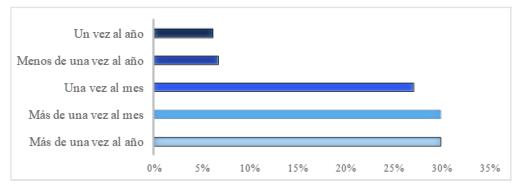


Figure 4. Frequency of purchases

Continuing with the presentation of data, it opens to give relevance to the data obtained regarding the information search process, in order to gradually start with the relevant results that the user takes into account for a satisfactory purchase process. Regarding this, most of the respondents assured that their pre-purchase search is very important and important. In addition, they were asked if it is an influential factor in their final decision, for which, more than 90 % responded as "totally agree" and "agree".

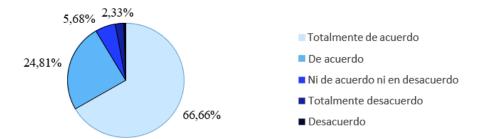


Figure 5. Is pre-purchase information search an influential factor in the final decision?

		Opciones				
		Muy importante/importante	Irrelevante	Poco importante/más o menos importante		
En un rango de 1 a 5, de poco importante a muy importante, marqué qué tanto influye los siguientes elementos para obtener una experiencia de compra satisfactoria de	Agilizar mis tiempos en la búsqueda de información, ahorrar tiempo	83,46%	11%	5,44%		
	Ahorrar dinero	87,6%	10,1%	2,32%		
	Obtener sitios de búsqueda de información más sencillos, amigables y seguros	87,33%	10,33%	2,52%		
	Rapidez y facilidad a la hora de encontrar la información	91,73%	7,73%	1%		
	Tener la posibilidad de ver el producto	86,82%	10,44%	2,84%		

Figure 6. Factors influencing a satisfactory online shopping experience

When inquiring about the relevant aspects that consumers have in their online purchase, it was recorded that more than 80 % of the respondents gave a relevance in a range of 4 to 5 to the variables shown below, being the most voted and important, the speed and ease of finding information prior to purchase, followed by saving money.

In order to know the opinion and understanding that respondents have of Artificial Intelligence, a multiple choice question was asked, oriented to the evolution of this area according to their criteria. In this question they could select up to three options, this was reduced in this way with the intention of motivating the respondent to elaborate a deeper internal analysis at the time of making the choice, which resulted in a total of 742 responses. The table below shows a recount of the voters in relation to their ages. As the age range increases, the percentage of votes for the options "it collaborates to a great extent in facilitating tasks that we no longer want to do" and "it helps save time" decreases; on the contrary, the answers "it will lead to greater abuse of data and personal information" and "companies use it to manipulate the consumer" begin to grow.

		Evolución de la tecnología basada en Inteligencia Artificial según su criterio				
		Llevará a mayores abusos de datos e información personal	Colabora en gran medida en facilitarnos tareas que ya no queremos realizar	Las empresas la utilizan para manipular al consumidor	Ayuda en ahorrarnos tiempo	Total
Edad	18 a 24 años	61	97	56	69	155
	25 a 34 años	35	60	42	48	97
	35 a 44 años	34	49	39	46	81
	45 a 54 años	12	19	18	16	34
	Más de 55 años	11	13	8	9	20
Total		153	238	163	188	387

Figure 7. Which do you consider to be more in line with the evolution of Artificial Intelligence based technology according to your criteria?

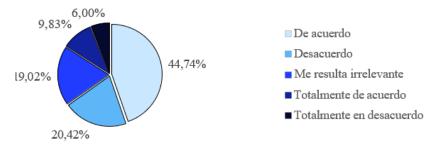


Figure 8. How much do you agree with this data collection and recording of behavior on the part of companies?

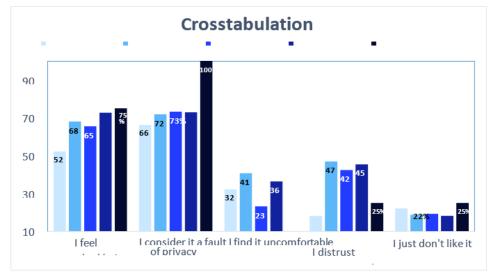


Figure 9. If your previous answer was "strongly disagree", "disagree", point out the reason for your answer

CONCLUSIONS

The purpose of this project is to describe the aspects that the Cordovan consumer takes into account in order for his information search process to be satisfactory. The main variable for the development of the work is Artificial Intelligence (AI).

This paper raises the questions: What important and influential aspects for consumers in their information search process in the online environment can be solved or facilitated thanks to Artificial Intelligence, and Do consumers consider that Artificial Intelligence could improve their shopping experience? There are numerous studies conducted on the information search and online shopping process, which are discussed in the background section, but this paper wants to take a closer look at the discipline of Artificial Intelligence currently used by companies, and consequently, at the rise of technologies. In a context where online shopping has increased, the consumer demands from other perspectives. Variables are provided that will respond to satisfy the consumer in the e-commerce environment. To start our objectives, the first instance of study is the frequency of purchase in the online consumer in the province of Cordoba. Results were obtained with high percentages in those oriented to a high purchase regularity (see figure 4: "purchase frequency"), obtaining with 30 % a monthly purchase frequency in more than one opportunity. In this way, the increase of purchase frequency in the online environment is evident; as stated by the Argentine Chamber of Electronic Commerce (CACE) this year, the consumer who buys online is here to stay, and due to a natural process resulting from the pandemic, e-commerce is increasing day by day.

The relevance that consumers give to the search for information online is investigated. According to the data obtained in the questionnaire, 66,66 % of respondents say they "totally agree" that the search for information is an influential aspect in the final purchase decision. This data is relevant to consider the strategies that businessmen should propose, considering promotion from a fundamental place to be present in the consumers' alternatives.

This tendency to give a space of importance to this first moment of purchase is what makes us reaffirm and consider what has been stated by the authors. As addressed by Kotler et al.⁽²¹⁾, active evaluation is a process of research, discarding and incorporating alternatives and possible brands. In this way, the consumer feels a need or a desire, and at his fingertips he can find the solution; this approach determines the demand of customers, and the importance for companies to be present in the First Moment of Truth raised by Lecinski⁽²²⁾. In order to be effective, the brand must distinguish itself.

The questionnaire asks about the platforms most used for their search for information. Among the responses, 74,2 % said they use Mercado Libre as their main source, compared to 73 % who use Google searches, 50,4 % use social networks. Some of the responses obtained, outside the established options, are Instagram and YouTube reviews with a high percentage. What do we want to conclude with this? All the mentioned platforms are online, in real time and at the reach of our smartphones. Companies must keep in mind that the Zero Moment of Truth (ZMOT) happens at all times and on all platforms and, as entrepreneurs, they must consider every space that the consumer interacts to transform a two-way relationship, because search is the key moment for the consumer's final decision.

To respond to our second specific objective, the need for companies to reach their specific target, and to be present in the aforementioned ZMOT, using Artificial Intelligence as a tool for data collection and coding, is considered as a foundation. Thanks to machine learning, companies know precisely the characteristics and consumption habits of their customers; added to Big data technology that aims to store and find business opportunities. In this way, the questionnaire examines how much they agree with these actions mentioned in a scale from "totally disagree" to "totally agree", where positive responses were obtained in 44,7 % in "agree", followed by 20,4 % in "disagree", and 19,1 % found it "irrelevant". At first glance, there are favorable responses to these strategies used by companies, but if we analyze the "disagree" responses in detail, there is a tendency to consider a lack of privacy and the feeling of being spied on as a key factor. Reaffirming what Martorell⁽⁹⁾ mentioned, who affirms these aspects as the great challenges that AI has, where technophobes and technophiles are included.

On the other hand, if we look at figure 9, which responds to the justification by the respondents to their previous answer, we distinguish the tendency to the lack of distrust by companies in people with an older age range, those between 35 to 54 years, whose results hover between 45 % of their votes, compared to 18 % in young people aged 18 to 24 years. This result is considered of great relevance for companies to take into consideration a generational gap that influences the understanding and acceptance of these measures.

As a company, we must know how to measure these variables more accurately, to understand the public and not waste costs on strategies that will not be profitable, in turn, offer a satisfactory experience to the consumer. Although, as the years go by, the acceptance of cookies and data collection is more consolidated by the population, it should not be totally certain that it happens in the same way in all cases, since, as we have seen, age is an influential factor. Companies must rethink their way of reaching the public and be aware of the importance of a comprehensive understanding of Artificial Intelligence. As mentioned in the Accenture⁽¹⁶⁾

report, Argentina is experiencing a technological clash between consumer expectations and business ambitions. Therefore, entrepreneurs will have to assume the importance of technology in people's lives and rethink their business models.

There is a need to understand how the implementation of Artificial Intelligence improves the online shopping process in today's consumer. To this end, respondents were asked on a scale from "not very important" to "very important", how much certain aspects influence online shopping satisfaction, previously determined in our exploratory phase in the in-depth interviews. If we analyze figure 1: "factors influencing a good online shopping experience", the main variable is speed in finding information about their purchase, reaffirming the importance of the search for information as an influential factor. Saving money is the second most voted response. The third response with the highest percentage of positive votes was the one that determines the possibility of obtaining safe, simple and friendly search sites.

Continuing with the question, 86,82 % of the respondents affirmed the importance of being able to see the product. Currently, due to the exponential increase in online shopping, there is a decrease in purchases in physical stores, so the possibility of incorporating augmented reality into business opportunities should be considered by any company.

Two fundamental aspects that every company must consider when planning its marketing and promotion strategy are the seal of trust and the ease of information. The customer seeks transparency, and in return, will give a positive response leaving a path to bidirectional communication⁽²³⁾ without manipulation approaches, through security and openness. Here comes into play the UX Design (user experience, its name in Spanish), which allows a good web design, achieving a quality experience through interactions with the customer, and a good brand presence.⁽²⁴⁾ As mentioned in the CACE⁽¹³⁾ study, what motivates online shopping is 75 % the effort and energy, 54 % the time and 27 % the security.

To conclude, the importance of implementing Artificial Intelligence strategies and the exponential advance of this discipline is raised throughout the project. Considering the in-depth interviews conducted in the exploratory phase, only half of the businessmen admitted using AI tools, these figures must be modified so that half of them are transformed into totality, not only to increase the profits of the organization, but also to provide a favorable experience to the consumer.

Al is no longer an unknown tool, through the questionnaire it is stated that 83,2 % of respondents from Córdoba, claim to have heard about this concept, and it is present in the life of every individual, in what way? Considering a limited period of time, only one week, the most voted results of our descriptive research tool are, 72 % use the voice assistant, 61,5 % research products by Google recommendations and advertisements and 57 % are guided to watch series, movies or YouTube videos based on the suggestion algorithms used by stream platforms. Despite this, some consumers still believe that these tools serve to manipulate them or could lead to abuse of personal information. As previously mentioned, this type of response has a tendency to be from people over 35 years old versus 18-24 year olds. Even so, there are positive results, with more than 60 % of all respondents saying that Artificial Intelligence "greatly assists in tasks that we no longer want to do" (figure 2). As a company, we must assure our customers that the sole objective of this tool is to offer a comprehensive, secure and reliable service.

In this way, the general objective and the specific objectives that make this project possible are answered. There were some limitations that hindered the possibility of doing a more complete research work, such as the size of the sample, mainly in the exploratory phase, which led to the generalization of certain results that should be expanded in another research. Another weakness that emerged in the project as it was being developed, was the lack of questions that answered the why, due to lack of coding time and costs for a greater scope in the survey, it became an inconsistency. It seems right to raise these points, to serve as a guide for other research designs.

As for the strengths I find in the work, we can mention the novelty of the subject in Argentina, at a personal level, the search for background on Artificial Intelligence in the country, proved to be complex due to the lack of data. This work serves to give an answer to this problem at a commercial level. In addition, the research instruments have been of great contribution and congruent to the project.

The recommendations of the paper can be used in theory, to keep in mind the importance of the search for information and the use of this dynamic and complex tool that technology is providing us with. As it is exposed, it is a discipline that is growing exponentially, but in Argentina the smallest companies still do not know about it, and it can be used to learn about it and expand its range of opportunities. On the other hand, it can be used to propose marketing strategies that will serve as a guide to penetrate the market, placing technology and the consumer at the center.

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CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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