

## Facebook digital marketing analysis in Pachuca, Hidalgo restaurants in historic downtown, Mexico

### Análisis del marketing digital modalidad Facebook en restaurantes del centro histórico de Pachuca, Hidalgo México

Pedro Alfonso Ramos Sánchez<sup>a</sup>, Carolina González Espinoza<sup>b</sup> José Sergio Rodríguez Martínez<sup>c</sup>

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#### Abstract:

This research is about digital marketing since its considerable importance because today we are a digital society and this influences people's decisions. This work focuses on restaurant-type establishments in Pachuca, Hidalgo downtown, and presents through an exploratory, transversal and quantitative research the results of the variables attention, interest, desire and action of the Facebook pages. Through a survey with a Likert scale with 28 indicators, the concepts of marketing, digital marketing and inbound marketing are also explored, as well as the importance of the restaurant industry in the global and national economy. The results show the usefulness of the instrument to know the application of digital marketing in the aforementioned establishments. The main conclusions consider that the instrument allows the comparability of restaurants, as a group or by the individuality in companies, another fact is that this restaurants could improve their content on Facebook by considering the recommendations and results of the applied instrument. It is applicable to other types of social networks such as Instagram and web pages. The survey solves the problem of how to improve the approach of consumers in digital media.

#### Keywords:

Tourism, digital marketing, restaurants, downtown, Pachuca

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#### Resumen:

La presente investigación tiene que ver con el marketing digital ya que su importancia en la actualidad es muy considerable ya que somos una sociedad digital y esto influye en las decisiones de las personas. Este trabajo se centra en los establecimientos tipo restaurante en el centro histórico de Pachuca, Hidalgo y presenta a través de una investigación exploratoria, de tipo transversal y cuantitativa los resultados de las variables atención, interés, deseo y acción de las páginas de Facebook, a través de una encuesta con escala de Likert con 28 indicadores, también se exploran los conceptos de marketing, marketing digital e inbound marketing así como la importancia de la industria restaurantera en la economía global y nacional. Los resultados muestran la utilidad del instrumento para conocer la aplicación del marketing digital en los establecimientos mencionados. Las principales conclusiones consideran que el instrumento permite realizar la comparabilidad de restaurantes, de manera grupal e individual y que los restaurantes podrían mejorar sus contenidos en Facebook atendiendo las recomendaciones y resultados del instrumento aplicado. Es aplicable en otro tipo de redes sociales como Instagram y páginas web. Soluciona la problemática de cómo mejorar el acercamiento de los consumidores en los medios digitales.

#### Palabras Clave:

Turismo, marketing digital, restaurantes, centro histórico, Pachuca

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<sup>a</sup> Corresponding author, Universidad Autónoma del Estado de Hidalgo | Instituto de Ciencias Económico Administrativas | Pachuca-Hidalgo | México, <https://orcid.org/0000-0003-3784-6061>, Email: [pedro\\_amos3944@uaeh.edu.mx](mailto:pedro_amos3944@uaeh.edu.mx)

<sup>b</sup> Instituto de Ciencias Económico Administrativas | Pachuca-Hidalgo | México, <https://orcid.org/0000-0001-5004-0172>, Email: [cgesp@uaeh.edu.mx](mailto:cgesp@uaeh.edu.mx)

<sup>c</sup> Instituto de Ciencias Económico Administrativas | Pachuca-Hidalgo | México, <https://orcid.org/0000-0001-5064-8022>, Email: [sergior@uaeh.edu.mx](mailto:sergior@uaeh.edu.mx)

## Introduction

This research paper focuses on digital marketing applied to restaurant businesses in Pachuca, Hidalgo, downtown, and its relationship with variables related to improving performance on social media. To achieve this, an instrument was applied to restaurants. The general objective was to analyze the current application of digital marketing, in the case of Facebook, in restaurants in the downtown of Pachuca, Hidalgo. The specific objectives focused on 1) Identifying the elements of digital marketing; 2) Designing an instrument for its diagnosis; 3) Apply the instrument and present results. The paper is divided into six sections. In the first part, the concepts of marketing, digital marketing and inbound marketing are explored. The second section refers to the important contribution that the restaurant industry has made to the global and national economy. This industry is constantly changing. It is good to classify the various services in restaurants that allow better monitoring of their activity. Section three corresponds to describing the municipality of Pachuca in Hidalgo state, which has access to important highways and airports in the country and has hotels and restaurants for tourism, section four deals with the methodology used where an exploratory cross-sectional study uses a questionnaire to analyze the Facebook tool in five restaurants in Pachuca downtown and focuses on the variables attention, interest, desire and action, section five reflects the results that mainly reflect which restaurants are the best evaluated in the sense of giving the names restaurant A, B, C, D and E to ensure their identity and consider the results confidential since the intention of this work is to show the usefulness of the instrument to refine strategies in digital marketing. Finally, the main conclusions consider that the instrument allows the comparability of restaurants, individual restaurants could improve their content on Facebook pages by attending to the recommendations and results of the instrument and can be applied to other types of social networks such as Instagram, websites and other digital media

### Digital marketing & inbound marketing

For this study, the Facebook pages of the five main restaurants in the historic center of Pachuca were evaluated. Facebook business pages, which are public business profiles and dedicated to commercial organizations that allow online connections with users, were considered.

A digital brand is structured through presence in paid, owned, and earned media [1]. The objectives for evaluating the Facebook pages of the selected restaurants were determined through the design of an instrument that considered the attention, interest, desire, and action (AIDA) formula, as it is the way to ensure that a message reaches a specific audience and has an impact. This study assesses the performance of

Facebook pages in five restaurants in the capital of Hidalgo.

Digital marketing has proven to create opportunities for developing successful businesses in a way that was previously unavailable for small businesses [2].

Inbound marketing refers to non-intrusive marketing techniques capable of attracting customers while providing value through various digital marketing actions such as search engine optimization, content marketing, social media presence, lead generation, and analytics [3].

## The Restaurant Industry and Restaurant Classification with the SCIAN Code

The restaurant industry in the United States of America is projected to reach sales of more than \$899 billion by 2022, in the United States alone, and employs approximately 15 million people [4].

75% of restaurant customers are influenced by online reviews and social media, and 80% of restaurant operators believe that technology helps increase sales and efficiency [4].

Of all businesses in the country, 12.2% are related to the restaurant industry, which in turn generates more than two million jobs [5].

Restaurants are generally microenterprises, meaning those that employ up to ten people; 96 out of every 100 are of this size. Others employ 70 out of every 100 people and produce 55.9 out of every 100 pesos. Restaurants use a higher percentage of domestic input, making them very important for job creation and production [5].

This research refers to restaurants with à la carte service or fast food service, which is significant, as shown by the figures above.

## North American Industry Classification System SCIAN, México

The restaurant industry in Mexico can be classified by the different types of restaurants that exist. In this way, there is a classification used by the National Institute of Statistics, Geography and Informatics (INEGI), it is the classification called the North American Industrial Classification System, Mexico SCIAN 2023. The objective of SCIAN Mexico 2023 is to provide a single, consistent and updated framework for the collection, analysis and presentation of statistics on economic activities, which reflect the structure of the Mexican economy. SCIAN is the basis for the generation, presentation and dissemination of all statistics on economic activities in the country, its adoption allows to standardize the economic information produced in the Mexican territory and contribute to the comparability of this in the North American region [6]. In this way, restaurants can be classified as follows: See table 1

Table 1

North American Industry Classification System SCIAN, México

| CODE   | Category                                                                                   |
|--------|--------------------------------------------------------------------------------------------|
| 72251  | Food and alcoholic and non-alcoholic beverage preparation services                         |
| 722511 | Restaurants that prepare à la carte                                                        |
| 722512 | Restaurants that prepare fish and seafood                                                  |
| 722513 | Restaurants that prepare snacks                                                            |
| 722514 | Restaurants that prepare tacos & baguettes                                                 |
| 722515 | Cafeterias, soda fountains, ice cream parlors, refreshment shops, and similar              |
| 722516 | Self-service restaurants                                                                   |
| 722517 | Restaurants that prepare pizzas, hamburgers, hot dogs, and rotisserie chickens for takeout |
| 722518 | Restaurants that prepare other types of food for takeout                                   |
| 722519 | Preparation services for other foods for immediate consumption                             |

[6].

### Pachuca, the capital of Hidalgo State, its historic downtown, & restaurants

The state of Hidalgo has a population of 3,082,841 inhabitants, of which 1,601,462 are women and 1,481,379 are men. In the case of Pachuca, the state capital, its population is 314,331 [7]. Pachuca's population distribution is 57% urban and 43% rural; at the national level, the figure is 79% and 21% respectively. The educational attainment rate is 9.4 (just over high school completed); 9.7 is the national average. Regarding indigenous language speakers, 12 out of every 100 people speak an indigenous language; this same figure is true nationally: 6 out of every 100 people speak an indigenous language. In Pachuca, the activity that contributes the most to the national GDP is trade, with 1.6% [8]. Pachuca has excellent connectivity with the rest of the country, is located 45 minutes by road from Mexico City and is very close to two international airports Benito Juarez and Felipe Angeles. In terms of tourism Pachuca has 35 hotels, 6 motels, 1,185 restaurants and 343 cafes, in the Historic Center of Pachuca there are 10 hotels and 10 restaurants with the category of restaurants with food preparation service a la carte or cooked food [9].

### Methodology

The study was conducted during March and June 2024. This is an exploratory, cross-sectional study with a quantitative approach, including documentary and field research. The documentary section analyzes the basic concepts that make up the theoretical framework, along with socioeconomic data from the Hidalgo capital. A

questionnaire design phase was also carried out, selecting four variables: attention, interest, desire, and action (AIDA), with the following 28 indicators. See Table 1. The response options were based on a Likert scale with the following values: 1) Never 2) Should be improved 3) Sometimes 4) Always. See Table 2.

The AIDA formula, created by Elmo Lewis in 1898, emerged as a model to explain how companies can guide consumers from attention to action [10]. Although it was conceived more than a century ago, it remains fundamental in marketing studies, especially in highly visual sectors such as tourism [11].

A non-probability sample was used, selecting 5 restaurants in the historic center and 11 tourism experts to answer the questionnaire, which was administered digitally using Microsoft Forms, and pilot testing was used to avoid the use of confusing questions.

The results identify the variables with the highest and lowest success rates according to the AIDA formula, using the average of the responses from the eleven respondents. These results are represented in spider charts, allowing for comparison of the differences in values between the establishments. Data triangulation included the AIDA answers, and field visits to the restaurants (observation), allowing for verification of whether the information presented in person corresponded with the information on their Facebook pages.

**Table 2**

#### Instrument variables & indicators

| Attention                            | Desire                                   |
|--------------------------------------|------------------------------------------|
| 1. Use of attractive banners         | 16. Arouses emotion                      |
| 2. Solves customer needs             | 17. Evokes a need                        |
| 3. Segments ideas                    | 18. Evokes feelings                      |
| 4. Responds to search engines        | 19. Recommendations from other customers |
| 5. Has awareness                     | 20. Captivates                           |
| 6. Stands out from other campaigns   |                                          |
| Interest                             | Action                                   |
| 7. Represents advantages of using it | 21. Builds loyalty                       |
| 8. Personalizes messages by segment  | 22. Generates a customer database        |
| 9. Offers valuable content           | 23. Encourages purchases                 |
| 10. Potential customers              | 24. Has various payment methods          |

|                          |                                   |
|--------------------------|-----------------------------------|
| 11. Occasional customers | 25. Closes a purchase             |
| 12. Frequent customers   | 26. Provides information feedback |
| 13. Captive customers    | 27. Uses QR codes                 |
| 14. Offers promotions    | 28. Uses artificial intelligence  |
| 15. Offers discount      |                                   |

Source: Own design based on AIDA formula

A non-probability sample was used, selecting 5 restaurants in the historic center and 11 tourism experts to answer the questionnaire, which was completed digitally using Microsoft Forms. The results identify the most and least successful variables with respect to the AIDA formula, using the average of the responses of the eleven respondents. These variables are represented in spider graphs, allowing for a comparison of the differences in values between establishments. Information triangulation included field visits to the restaurants, allowing for an in-person identification of whether the information corresponded to the Facebook pages.

## Results and discussion

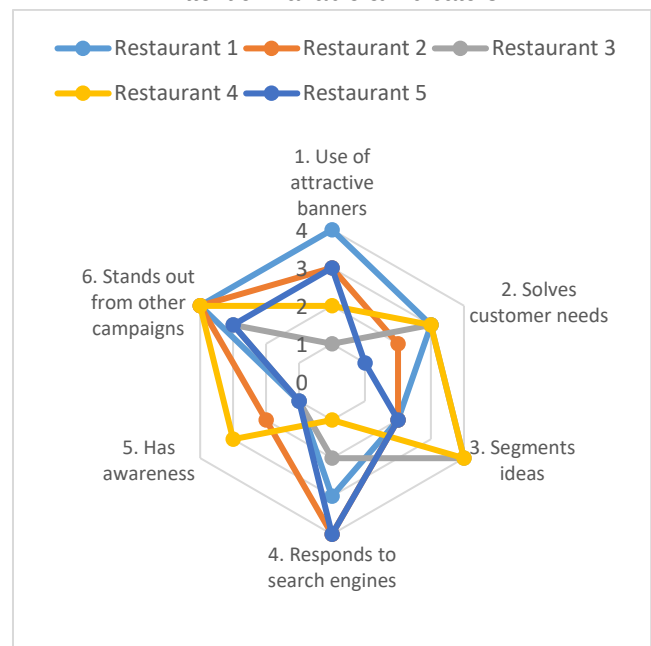
The results of the analysis of the reviewed pages are presented below, with each page being evaluated and the final averages being summed and divided to generate an overall assessment. The results allow for the identification of opportunities for improvement in the application of digital marketing.

Five restaurants in the historic center of Hidalgo were selected, designated as restaurants A, B, C, D, and E to respect the identity and information that may be considered confidential by the establishments. The restaurants are located in the heart of the city and represent the dining scene in terms of restaurants with à la carte or fast food service.

The selected restaurants compete with each other, hence the importance of identifying the highest-rated aspects, as they represent the businesses that are best prepared and offer better information to the public on their Facebook pages. Each variable was addressed: attention, interest, desire, and action, with their respective indicators.

In the case of the attention variable, restaurants D and E & C have the same score; both do not respond to search engines, and this aspect was the difference that led them to rank first in this variable. The scores for restaurants A, B, and C are very similar, although hotel B had the lowest score, without excelling in any indicator (See Chart 1 and Table 3).

**Graph 1**  
Attention variable & indicators



Source: Authors' elaboration, 2024

**Table 3**  
Attention Variable & indicators

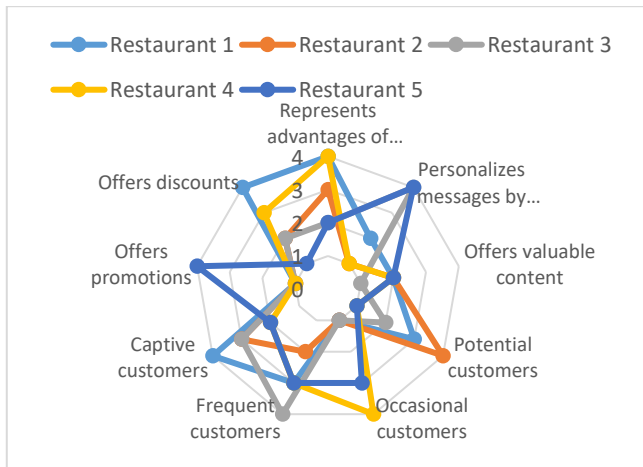
| Variable attention                 | A         | B         | C         | D         | E         |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|
| 1. Use of attractive banners       | 4         | 3         | 4         | 4         | 4         |
| 2. Solves customer needs           | 3         | 3         | 3         | 4         | 4         |
| 3. Segments ideas                  | 3         | 3         | 3         | 4         | 4         |
| 4. Responds to search engines      | 3         | 3         | 4         | 2         | 2         |
| 5. Has awareness                   | 3         | 3         | 4         | 4         | 4         |
| 6. Stands out from other campaigns | 3         | 3         | 3         | 3         | 3         |
| <b>TOTAL</b>                       | <b>19</b> | <b>18</b> | <b>21</b> | <b>21</b> | <b>21</b> |

Source: Authors' elaboration, 2024

In the case of the variable interest, restaurants B and D stand out with the highest scores with 29 and 28 points respectively, followed by 26 for restaurant C, A with 25 points and E with 24. It is noteworthy that the most sensitive points are: the lack of messages to potential customers and the captive ones are: the lack of visible promotions and discounts (See Chart 2 and Table 4).

**Graph 2**

Interest variable &amp; indicators



Source: Authors' elaboration, 2024

**Table 4**

Interest variable &amp; indicators

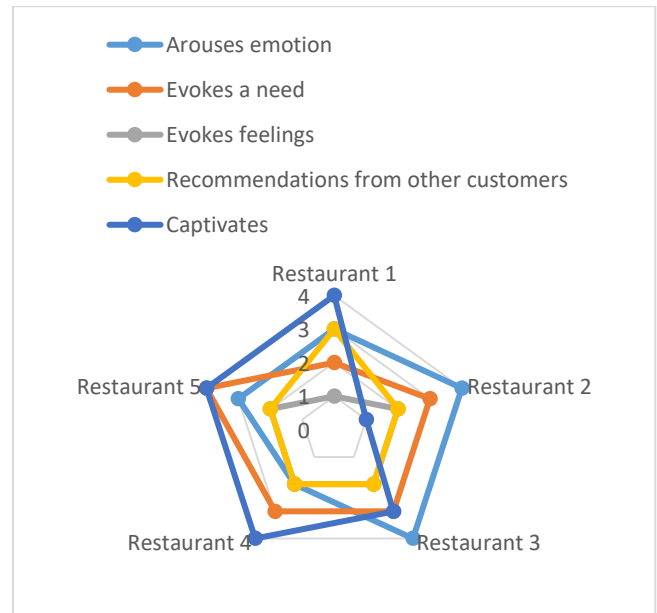
| Variable interés                     | A         | B         | C         | D         | E         |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|
| 7. Represents advantages of using it | 3         | 3         | 2         | 2         | 3         |
| 8. Personalizes messages by segment  | 3         | 3         | 3         | 3         | 3         |
| 9. Offers valuable content           | 4         | 3         | 4         | 4         | 4         |
| 10. Potential customers              | 3         | 3         | 3         | 3         | 2         |
| 11. Occasional customers             | 3         | 3         | 2         | 3         | 2         |
| 12. Frequent customers               | 3         | 4         | 3         | 3         | 4         |
| 13. Captive customers                | 3         | 3         | 2         | 2         | 4         |
| 14. Offers promotions                | 1         | 4         | 3         | 4         | 1         |
| 15. Offers discounts                 | 2         | 3         | 4         | 4         | 1         |
| <b>TOTAL</b>                         | <b>25</b> | <b>29</b> | <b>26</b> | <b>28</b> | <b>24</b> |

Source: Authors' elaboration, 2024

The action variable restaurants B, C and D present high values in generating databases, diverse payment methods and in encouraging purchases. It stands out that only restaurant C provides feedback information and manages artificial intelligence with the highest levels, all establishments do not present loyalty programs in an outstanding way, restaurants B, D and E with low values in management of Artificial Intelligence (AI).

**Graph 3**

Desire variable &amp; indicators



Source: Authors' elaboration, 2024

**Table 5**

Desire variable &amp; indicators

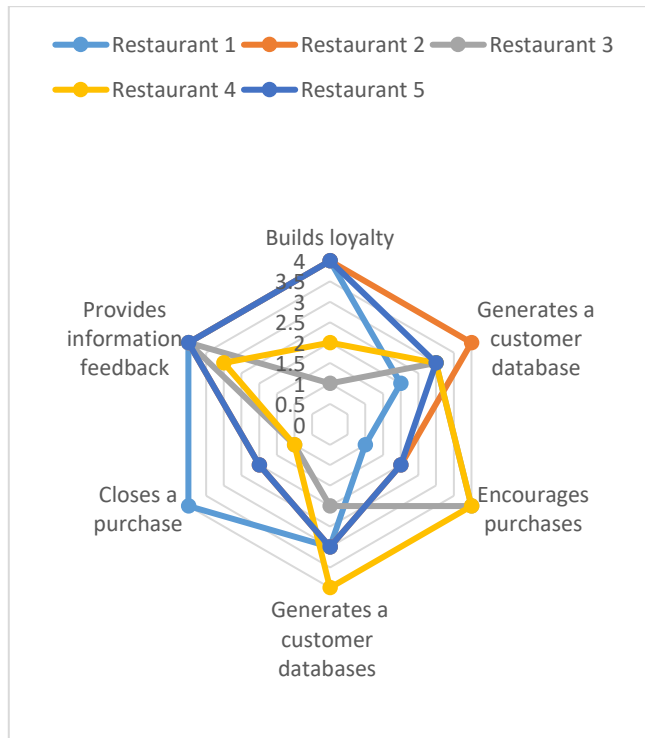
| Variable desire                          | A         | B         | C         | D         | E         |
|------------------------------------------|-----------|-----------|-----------|-----------|-----------|
| 16. Arouses emotion                      | 4         | 4         | 3         | 3         | 4         |
| 17. Evokes a need                        | 3         | 3         | 2         | 3         | 3         |
| 18. Evokes feelings                      | 3         | 2         | 2         | 3         | 2         |
| 19. Recommendations from other customers | 4         | 3         | 3         | 3         | 4         |
| 20. Captivates                           | 3         | 3         | 2         | 2         | 2         |
| <b>TOTAL</b>                             | <b>17</b> | <b>15</b> | <b>12</b> | <b>14</b> | <b>15</b> |

Source: Authors' elaboration, 2024

The action variable restaurants B, C and D present high values in generating databases, diverse payment methods and in encouraging purchases. It stands out that only restaurant C provides feedback information and manages artificial intelligence with the highest levels, all establishments do not present loyalty programs in an outstanding way, restaurants B, D and E with low values in management of Artificial Intelligence (AI).

**Graph 4**

Action variable &amp; indicators



Source: Authors' elaboration, 2024

**Table 6**

Action Variable &amp; indicators

| Variable Acción                   | A         | B         | C         | D         | E         |
|-----------------------------------|-----------|-----------|-----------|-----------|-----------|
| 21. Builds loyalty                | 3         | 3         | 2         | 4         | 2         |
| 22. Generates a customer database | 3         | 3         | 2         | 2         | 1         |
| 23. Encourages purchases          | 3         | 3         | 4         | 4         | 2         |
| 24. Has various payment methods   | 4         | 4         | 4         | 4         | 2         |
| 25. Closes a purchase             | 3         | 3         | 2         | 2         | 1         |
| 26. Provides information feedback | 2         | 3         | 4         | 2         | 2         |
| 27. Uses QR codes                 | 4         | 2         | 3         | 1         | 1         |
| 28. Uses artificial intelligence  | 2         | 3         | 4         | 2         | 3         |
| <b>TOTAL</b>                      | <b>24</b> | <b>24</b> | <b>25</b> | <b>21</b> | <b>14</b> |

Source: Authors' elaboration, 2024

**Table 7**

Final results by variable and indicator

| Variables      |                                   | Indicators                              | A  | B  | C  | D  | E |
|----------------|-----------------------------------|-----------------------------------------|----|----|----|----|---|
|                | Attention                         | 1. Use of attractive banners            | 4  | 3  | 4  | 4  | 4 |
|                |                                   | 2. Solves customer needs                | 3  | 3  | 3  | 4  | 4 |
|                |                                   | 3. Segments ideas                       | 3  | 3  | 3  | 4  | 4 |
|                |                                   | 4. Responds to search engines           | 3  | 3  | 4  | 2  | 2 |
|                |                                   | 5. Has awareness                        | 3  | 3  | 4  | 4  | 4 |
|                |                                   | 6. Stands out from other campaigns      | 3  | 3  | 3  | 3  | 3 |
|                | Interest                          | 7. Represents advantages of using it    | 3  | 3  | 2  | 2  | 3 |
|                |                                   | 8. Personalizes messages by segment     | 3  | 3  | 3  | 3  | 3 |
|                |                                   | 9. Offers valuable content              | 4  | 3  | 4  | 4  | 4 |
|                |                                   | 10. Potential customers                 | 3  | 3  | 3  | 3  | 2 |
|                |                                   | 11. Occasional customers                | 3  | 3  | 2  | 3  | 2 |
|                |                                   | 12. Frequent customers                  | 3  | 4  | 3  | 3  | 4 |
|                |                                   | 13. Captive customers                   | 3  | 3  | 2  | 2  | 4 |
|                |                                   | 14. Offers promotions                   | 1  | 4  | 3  | 4  | 1 |
|                |                                   | 15. Offers a discount                   | 2  | 3  | 4  | 4  | 1 |
|                | Desire                            | 16. Arouses emotion                     | 4  | 4  | 3  | 3  | 4 |
|                |                                   | 17. Evokes a need                       | 3  | 3  | 2  | 3  | 3 |
|                |                                   | 18. Evokes feelings                     | 3  | 2  | 2  | 3  | 2 |
|                |                                   | 19.Recommendations from other customers | 4  | 3  | 3  | 3  | 4 |
| 20. Captivates |                                   | 3                                       | 3  | 2  | 2  | 2  |   |
| Action         | 21. Builds loyalty                | 3                                       | 3  | 2  | 4  | 2  |   |
|                | 22. Generates a customer database | 3                                       | 3  | 2  | 2  | 1  |   |
|                | 23. Encourages purchases          | 3                                       | 3  | 4  | 4  | 2  |   |
|                | 24. Has various payment methods   | 4                                       | 4  | 4  | 4  | 2  |   |
|                | 25. Closes a purchase             | 3                                       | 3  | 2  | 2  | 1  |   |
|                | 26. Provides information feedback | 2                                       | 3  | 4  | 2  | 2  |   |
|                | 27. Uses QR codes                 | 4                                       | 2  | 3  | 1  | 1  |   |
|                | 28. Uses artificial intelligence  | 2                                       | 3  | 4  | 2  | 3  |   |
|                | TOTAL                             | 85                                      | 86 | 84 | 84 | 74 |   |

Source: Authors' elaboration, 2024

Overall, restaurants B, C, and D obtained the highest scores, while restaurant E received the lowest scores.

## Discussion

The AIDA formula's indicators allows us to identify strengths and weaknesses in the information provided by restaurants Facebook pages.

Limitations of the research include the fact that businesses cannot access information about other restaurants; rather, the analysis focuses on each business individually, allowing them to strengthen their Facebook content strategies or other marketing channels.

Future research lines may involve comparing the information with other social networks and continue monitoring the results of the information obtained from Facebook pages.

## Conclusions

Although the instrument allows for comparability of restaurants in terms of the variables and indicators attention, interest, desire, and action (AIDA), the idea is to offer individual guidelines to restaurants to improve their content on Facebook pages, since the results described here keep the identity of the restaurants secret.

The instrument provides an overview of the restaurants application of the AIDA formula to the social media promotion tool Facebook and evaluates 28 highly specialized indicators.

The results offer opportunities to refine strategies not only on Facebook but also to apply them to other types of social media such as Instagram, websites, and other digital media.

It is pertinent to share this information with restaurant businesses in Pachuca, and especially with the selected businesses. This could be done through the Hidalgo Chapter of the National Chamber of the Restaurant and Seasoned Food Industry.

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