

The Role of Digital Marketing in Promoting a Sustainable Food Culture: Content Analysis of the Algerian Consumer Protection Organization's Facebook Page During Ramadan 2025

دور التسويق الرقمي في تعزيز الثقافة الغذائية المستدامة: تحليل محتوى صفحة

فيسبوك لمنظمة حماية المستهلك الجزائرية خلال شهر رمضان 2025

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الملخص:

يعد شهر رمضان من الأشهر المباركة عند المسلمين حيث تتجلى فيه مظاهر التضامن والتكافل الاجتماعي، غير أنه يشهد أيضا سلوكيات استهلاكية سلبية كالتبذير الغذائي والتي تؤثر بدورها على الأمن الغذائي. وفي ظل التحول الرقمي، تبرز أهمية توظيف منصات التواصل في تعزيز الوعي بالاستهلاك الرشيد والثقافة الغذائية المستدامة.

في هذا السياق، تتناول الدراسة الحالية الدور المحوري للتسويق الرقمي في تعزيز الثقافة الغذائية المستدامة والأمن الغذائي، مع التركيز بشكل خاص على التحديات الاستهلاكية التي تبرز خلال شهر رمضان 2025. كما سنتسلط الدراسة الضوء على جهود المنظمة الجزائرية لحماية المستهلك التي توظف صفحاتها على فيسبوك لتوعية المواطنين وتوجيه سلوكياتهم الاستهلاكية خلال شهر رمضان. كما تهدف الدراسة إلى استكشاف وتحليل المحتوى الرقمي الذي تنشره المنظمة على صفحاتها، حيث بلغ عدد المنشورات المعنية بالتحليل 118 منشور. كما تسعى الدراسة إلى إبراز دور هذه المنشورات في تعزيز ثقافة الاستهلاك المستدام وتسويق السلوكيات الإيجابية التي تساهم في الحد من التبذير الغذائي وتعزيز الأمن الغذائي.

الكلمات المفتاحية: التسويق الرقمي، فيسبوك، الثقافة الغذائية المستدامة، الأمن الغذائي، منظمة حماية المستهلك الجزائرية.

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Abstract:

In this context, the current study examines the pivotal role of digital marketing in fostering a sustainable food culture and food security, with a specific focus on the consumer challenges that arise during Ramadan 2025. The study will also highlight the efforts of the Algerian Organization for the Protection and Guidance of Consumers and their Environment, which utilizes its Facebook page to educate citizens and guide their consumption behaviors during Ramadan. Furthermore, this research aims to explore and analyze the digital content published by the organization on its Facebook platform, comprising 118 posts relevant to the analysis. The study also seeks to highlight the role of these publications in promoting a culture of sustainable consumption and marketing positive behaviors that contribute to reduce food waste and enhance food security.

Key words: Digital Marketing; Facebook; Sustainable Food Culture; Food Security; Algerian Consumer Protection Organization.

Introduction:

The holy month of Ramadan is a significant religious occasion that carries spiritual and social dimensions where Muslims unite in fasting, worship, and the reinforcement of values such as solidarity and mutual support. However, this blessed month also brings about notable changes in daily habits, particularly concerning food consumption patterns. It witnesses a significant increase in spending on consumer goods compared to other months of the year. While Ramadan presents an opportunity to embrace balanced and healthy lifestyles, some communities experience negative practices, most notably extravagance and the excessive purchase and preparation of food, which in turn results in substantial food waste.

Like many other Arab societies, the Algerian community also witnesses these negative practices. In this regard, Nassiba Yaakoubi, the Head of Media at "Netcom"—a waste collection company in Algiers Province—revealed that during the first two weeks of Ramadan 2025, Algerians discarded and wasted 6.5 tons of bread, which were collected from garbage bins.¹

This highlights that food waste in Algeria is not limited to bread but also extends to water and energy resources, particularly during Ramadan. The abundance of certain food products often leads to significant quantities being wasted. Bread tops the list of most wasted items, followed by traditional sweets, and then fruits and vegetables. These detrimental behaviors not only impact individuals but also extend to food security and the national economy, as wastefulness depletes resources and increases food waste. In this context, the Consumer Protection Association has condemned this phenomenon, noting that discarding one million loaves of bread is equivalent to wasting 250,000 kg of wheat². In light of these challenges, adopting effective solutions to raise awareness about the risks of such behaviors becomes crucial. This is where social media platforms play a vital role as powerful tools for disseminating awareness and promoting a sustainable food culture.

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Social media platforms emerge as powerful digital tools that can be leveraged to address these challenges and promote positive behaviors aimed at enhancing food security within the community. After becoming an integral part of most individuals' daily lives, these platforms offer a direct and rapid communication channel to reach diverse segments of society. Their ability to disseminate information quickly can be harnessed to launch widespread awareness campaigns. Furthermore, the multimedia capabilities they support (texts, images, and videos) enable organizations, such as consumer protection agencies, to present information in innovative and engaging ways that capture the public's attention and maintain interest in the content delivered.

Research Problem

In the era of digital transformation, digital marketing has become one of the prominent tools for relevant organizations to reach a wide audience in innovative and engaging ways, especially concerning crucial issues like consumption and food security. Facebook pages managed by consumer protection organizations serve as effective platforms for disseminating awareness and educational messages related to food security. Through these pages, content is presented that focuses on rationalizing consumption and promoting sound dietary practices, thereby contributing to the preservation of food resources and the reduction of waste, which poses a direct threat to both food security and the national economy.

In Algeria, The Algerian Organization for Consumer Protection and Guidance and his Environment (APOCE) stands out as an entity dedicated to guiding consumers and enhancing their consumption culture. The organization's Facebook page, boasting a large audience of over 1.7 million followers, represents a strategic communication channel aiming to reach a broad segment of Algerian consumers. Through this digital platform, the organization delivers targeted messages to raise public awareness on various aspects of consumption, such as promoting responsible consumption practices that help preserve resources and avoid waste, particularly during the month of Ramadan. Within this context, the primary research question of this study emerges as follows: How does the Algerian Organization for Protection and Guidance of Consumer and his Environment (APOCE) utilize its Facebook page to guide consumer behavior during Ramadan 2025?

Research Questions

- What types of content does the Algerian Consumer Protection Organization publish on its Facebook page during Ramadan 2025?
- What topics and issues related to food security do the organization's Facebook posts focus on during the study period?
- What communication objectives does the organization aim to achieve during Ramadan 2025 to convey its food security messages?
- Who is the target audience for the consumer protection organization's posts during Ramadan 2025?
- How does the audience interact with the organization's Facebook posts during Ramadan?

Research Objectives

- To highlight the efforts of the Algerian Organization for Consumer Protection and Guidance and his Environment in raising consumer awareness during Ramadan 2025.
- To analyze the topics and issues addressed in the organization's Facebook posts during Ramadan 2025.
- To identify the communication strategies employed by the organization in its Facebook posts during Ramadan 2025.
- To examine the methods of audience interaction with the organization's Facebook page posts during Ramadan 2025.

Definition of Terms

-Food Security: Food security is defined as a situation in which all people, at all times, have physical, social, and economic access to sufficient, safe, and nutritious food that meets their dietary needs and food preferences for an active and healthy life. ³

Operationally, food security refers to the ability of individuals and households in Algerian society during the month of Ramadan to access sufficient, healthy, and balanced food while minimizing food waste and ensuring the sustainability of food resources. This is closely linked to the level of consumer awareness regarding rational consumption patterns, which is reinforced through digital awareness campaigns conducted by the Algerian Organization for the Protection and Guidance of the Consumer and his Environment via its Facebook platform.

-Food Culture: Food culture is a system of knowledge and practices that governs the development, production, and consumption of food. It encompasses technological, scientific, and artistic dimensions, as well as customs, traditions, ideas, and philosophies related to the food system. This culture is not limited to fulfilling a biological need but also extends to social and aesthetic aspects, making it an essential part of the cultural identity of societies. ⁴

Operationally, sustainable food culture is defined as the set of knowledge, values, and practices adopted by individuals and the Algerian community during Ramadan 2025. It is based on the rational consumption of food resources, and the avoidance of waste and overconsumption, which are promoted by the Algerian Organization for the Protection and Guidance of the Consumer and his Environment through its Facebook page during Ramadan 2025.

-Digital Marketing: Digital marketing refers to a set of strategies, methods, and techniques used to promote products and services via the internet. It includes the use of multiple platforms such as email, blogs, social media, and websites, in addition to Search Engine Optimization (SEO). The aim of digital marketing is to boost sales and increase brand awareness. ⁵

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In this study, digital marketing is defined as the set of activities and techniques employed by the Algerian Organization for the Protection and Guidance of the Consumer and his Environment on its official Facebook page during Ramadan 2025. These efforts aim to promote concepts of food security and sustainable consumption and influence consumers' dietary behaviors toward adopting positive practices that reduce food waste and enhance food security.

Methodological Procedures of the Study

-Research Method and Tools:

To achieve the objectives of this study and answer its research questions, the case study method will be employed. This approach is primarily aimed at providing an in-depth and comprehensive description of the phenomenon under investigation (the Algerian Consumer Protection Organization's Facebook page in promoting food security). Content analysis will serve as the primary data collection tool by analyzing the content of posts published on the official Facebook page of the Algerian Organization for the Protection and Guidance of the Consumer and his Environment during the month of Ramadan 2025.

To assess the reliability of the content analysis instrument employed in this study, the researcher adopted the test–retest reliability method, a widely used approach in content analysis research for evaluating the stability of coding results over time. A random sample of 24 posts, representing 20% of the total study population of 118 posts, was selected and recoded four weeks after the initial coding session. To ensure objectivity, the researcher did not refer to the results of the first coding during the recoding process.

The reliability assessment covered five analytical dimensions: content type, thematic category, publication objective, content source, and target audience. The degree of agreement between the two coding sessions was measured using Holsti's reliability coefficient, calculated according to the following formula: $H = 2M / (N_{\square} + N_{\square})$

The findings revealed high levels of reliability across all analytical dimensions. Holsti's coefficient reached 1 for both content type and publication objective, and 0.92 for thematic category, content source, and target audience. The overall reliability coefficient was 0.95 corresponding to an agreement rate of 95%. This value exceeds the commonly accepted academic threshold of 0.80, indicating that the content analysis instrument possesses a high degree of reliability and consistency, thereby enhancing the methodological credibility and trustworthiness of the study findings.

-Research Population and Sample:

This study will rely on a purposive sampling technique, in which the researcher selects a specific category from the population based on scientific or logical criteria that justify the selection. Accordingly, the research population consists of the posts published on the Facebook page of the Algerian Organization for the Protection and Guidance of the Consumer and his Environment. The selected sample includes the posts published during the month of

Ramadan 2025 (from March 1 to March 30), totaling 190 posts. Posts that are unrelated to the topic of food security were excluded, resulting in a final sample of 118 relevant posts.

The month of Ramadan was selected as the study period for several reasons aligned with the research objectives and questions. The justification for using this sample lies in the heightened importance of food security during this time, given the increased demand for food products and changes in consumption patterns. Additionally, the prevalence of negative consumption behaviors intensifies during Ramadan, making this period particularly relevant for analysis and examination to better understand the causes and implications of such behaviors on food security.

1- Theoretical Framework of the Study

1.1- Social Marketing Theory

The present study is grounded in Social Marketing Theory, which involves applying marketing principles and techniques to influence voluntary behaviors that benefit individuals and society. Unlike commercial marketing, which primarily promotes products and services, social marketing seeks to drive positive behavioral change and address social issues through awareness, persuasion, and audience engagement. The theory emphasizes the importance of understanding the target audience, identifying undesirable behaviors, and developing communication strategies designed to motivate individuals to adopt socially beneficial practices. The relevance of Social Marketing Theory to this study lies in its focus on promoting behavioral shifts in food consumption practices. Through its Facebook page, the Algerian Organization for Consumer Protection, Guidance, and the Environment (APOCE) seeks not only to provide information about food security issues but also to encourage consumers to adopt responsible, sustainable consumption habits, reduce food waste, and make healthier dietary choices during Ramadan. In this context, the organization employs various digital marketing tools -including awareness campaigns, educational content, warning messages, visual materials, and interactive communication- to shape consumer attitudes and behaviors.

Accordingly, Social Marketing Theory provides an appropriate framework for understanding how APOCE leverages Facebook as a digital communication platform to market positive social behaviors and foster a sustainable food culture. It also helps explain the organization's emphasis on awareness, education, behavioral modification, and public engagement as essential components of its efforts to enhance food security and mitigate food waste during Ramadan 2025.

1.2- Dimensions of Food Security

Food security consists of six main dimensions:

- **Availability:** Ensuring the presence of sufficient quantities of safe and nutritious food across a given region, whether through local production, imports, or food aid.

- **Accessibility:** The ability of all individuals to obtain the necessary resources to secure adequate food, including purchasing power and access to markets.
- **Stability:** Guaranteeing the stability of food supplies and minimizing their vulnerability to natural disasters or economic crises.
- **Utilization:** Ensuring that food is used in a healthy and balanced manner to meet individuals' nutritional and energy needs, taking into account hygiene standards, the availability of clean drinking water, and access to healthcare services (Gibson, 2012).
- **Agency:** Agency refers to the ability to make decisions related to the food that is consumed and produced. As a dimension of food security, it denotes the capacity of individuals and communities to make choices and take actions that define their relationship with food and food systems. This includes decisions about what to eat, what to produce, and how food is processed, distributed, and prepared.
- **Sustainability:** Sustainability refers to the capacity of the food system to ensure food security in the long term. It involves practices within food systems that contribute to the long-term regeneration of natural, social, and economic systems, thereby guaranteeing that the nutritional needs of current generations are met without compromising the ability of future generations to meet their own needs.⁶

The foregoing illustrates that food security cannot be achieved by addressing a single aspect in isolation; rather, it results from the integration of multiple dimensions working in harmony to ensure that all individuals have sustained access to safe and adequate food. Accordingly, building strong food systems requires strengthening infrastructure and promoting food awareness. Food security is not merely an end in itself but a fundamental pillar for achieving social stability and sustainable development.

1.3-The Importance of Social Media Platforms in Enhancing Food Security

Global food loss and waste represent a significant challenge within the food system. According to estimates by the Food and Agriculture Organization (FAO), approximately 690 million people worldwide, or nearly 8.9% of the global population, suffer from undernourishment. Even in developed countries, such as the United States, more than one in eight households experience food insecurity. Therefore, reducing food loss and waste is paramount for addressing food insecurity and ensuring national food security. Moreover, food waste leads to substantial economic losses.

In parallel with this shift in the approach to addressing food waste, the internet era has contributed to the integration of traditional media with modern digital platforms, leading to the emergence of a hybrid media system increasingly reliant on new media. Social media platforms, particularly Facebook, have emerged as prominent components of this new system. With the evolution of communication technologies, these platforms have become effective tools in shaping public awareness, especially in vital areas such as sustainable food culture. Through interactive campaigns and engaging content, these platforms can influence consumer behaviors, such as instilling concepts of reducing food waste and choosing eco-friendly products.⁷

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With growing global interest in food security issues, social media platforms have become a pivotal tool in supporting sustainable food culture. They enable institutions to highlight their commitment to social responsibility by marketing initiatives aimed at reducing food waste. Furthermore, these practices gain importance in light of the shift in consumer behavior towards food choices that consider environmental and social values, making these platforms an effective means to enhance awareness and stimulate responsible consumption behavior.⁸

2- Presentation and Discussion of Results

2.1- Profile of the Algerian Organization for Consumer Protection and Guidance and his Environment (APOCE)

- **Name:** The Algerian Organization for Consumer Protection and Guidance and his Environment (L'Organisation APOCE)
- **Legal Nature:** Independent, non-profit organization
- **Official Accreditation Date:** August 6, 2015
- **Establishment of Wilaya (Provincial) Offices:** Started November 11, 2015 (Chlef, Blida, Relizane)
- **Expansion:** Currently possesses 48 wilaya offices and 4 delegated offices, in addition to municipal offices established since 2019.
- **Primary Objective:** To foster a rational consumer culture within Algerian society, defend consumer rights, and empower consumer to contribute to comprehensive development⁹

2.2- Profile of the Algerian Organization for Consumer Protection and Guidance and his Environment's Facebook Page

- **Page Name:** L'Organisation APOCE (The Algerian Organization for Consumer Protection)
- **Page Link:** https://www.facebook.com/apoce.algerie/?locale=ar_AR
- **Year Established:** June 16, 2012
- **Number of Page Followers:** 1.7 million followers
- **Numbers of Page Likes:** 1.4 million likes.¹⁰

2.3- Quantitative and Qualitative Analysis of the Figure Categories:

Table N°1. Classification of Content Types in Posts Published on the Consumer Protection Organization's Facebook Page

Type of Content	Number	Percentage
Video	37	31.35
Text + image	79	66.94
External links	2	1.69
Total	118	100%

Source: Prepared by the researcher.

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The results presented in the table above indicate that the Algerian Consumer Protection Organization primarily relies on the text + image content category, which accounts for 66.95% of the total posts. This reflects the organization's awareness of the importance of visual elements in attracting audience attention and simplifying awareness messages. Texts may include essential information, advice, or statistics, while images reinforce these messages and make them more appealing. The combination of text and images allows for information to be communicated in a clear and accessible manner, enhancing both understanding and engagement.

This is followed by video content, representing 31.35% of the total posts. Videos are a powerful medium for capturing attention and conveying messages in a dynamic and emotionally resonant way. The organization uses videos on its page to present consumer testimonials, provide detailed explanations on food waste issues through experts or religious leaders offering guidance, or to launch awareness campaigns that influence consumer behavior.

In contrast, videos tend to achieve high engagement rates on social media platforms, particularly with the introduction of the “Reels” feature on Facebook, which helps extend the reach of videos to the widest possible audience. This, in turn, ensures that awareness messages related to food security issues reach a broader segment of the public. Meanwhile, the category of external links represented only 1.69%.

Hence, the diversity of content types enhances the chances of influencing consumer behavior, especially regarding rational consumption and the reduction of food waste, thereby contributing to strengthening food security and limiting negative behaviors during the month of Ramadan.%.

Table N°2. Classification of Audience Interaction with Posts on the Consumer Protection Organization’s Facebook Page

Category	Like		Category	Comment		Share	
	Number	Percentage		Number	Percentage	Number	Percentage
1-500	87	73.72	1-50	90	76.27	92	77.96
501-1000	16	13.55	51-100	8	6.77	9	7.62
1001 more	15	12.71	101 more	20	16.94	17	14.4
Total	118	100	Total	118	100%	118	100%

Source: Prepared by the researcher.

The table results indicate that videos posted by the Algerian Consumer Protection Organization on its Facebook page have high viewership rates, with the highest relative representation (40.54%) recorded in the "10K views or more" category. This is followed by the "5K–10K views" category at 35.13%, while 24.32% of the videos fell under the "less than 5K views" category. Notably, one video reached an exceptional 1.7 million views during the study period.

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In contrast, when examining likes, the "500 or fewer" category ranked first with 73.72%, followed by the "501–1000 likes" category at 13.55%, and then the "1001 or more" category at 12.71%. The highest number of likes recorded for a single post during the study period exceeded 10K.

As for comment-based interactions, the "50 comments or fewer" category topped the list with 76.27%, followed by the "101 comments or more" category at 16.94%, and the "51–100 comments" category at 6.77%. The peak number of comments reached 2.4K for a single post.

Regarding shares, 77.96% of posts were in the "50 shares or fewer" category, followed by 14.4% in the "101 shares or more" category, and 7.62% in the "51–100 shares" category. The highest number of shares recorded during the study period was 3.2K on a single post.

These findings suggest that video content has a strong capacity to capture the attention of a wide audience, with the majority of videos achieving more than 5K views and some reaching exceptional numbers—such as 1.7 million views. This reflects the platform's effectiveness in raising awareness about rational consumption and combating food waste during Ramadan.

However, the high view counts contrasted with relatively lower interaction rates (likes, comments, shares) indicate that many users watch and benefit from the content without directly engaging with it. Despite the fact that most posts generated limited engagement, the notable success of select posts—exceeding 10K likes, 2.4K comments, and 3.2K shares—demonstrates that certain messages or content types delivered by the organization are capable of generating substantial public interaction and having a meaningful impact.

2.3- Quantitative and Qualitative Analysis of Content Categories

Table N°3. Content Categories of Posts Published on the Algerian Consumer Protection Organization's Facebook Page

Topic	Number	Percentage
Monitoring Food Waste Cases	6	4.34
Raising Awareness about Food Waste	20	14.49
Organizational Activities and Events	37	26.81
Promoting Healthy Eating Habits	16	11.59
Tips for Rational Consumption	14	10.14
Educational Media Campaigns	6	4.34
Warnings about Harmful Dietary Habits	23	16.66
Other	16	11.59
Total	138	100%

Source: Prepared by the researcher.

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The table results highlight the focus of the Algerian Consumer Protection Organization on publishing content related to the activities and events carried out by its offices across various provinces during the month of Ramadan. This includes awareness campaigns aimed at combating food waste, as well as field visits for market inspection—an area that accounted for the largest proportion at 26.81%. This emphasis on showcasing field activities and events indicates a strategic communication approach that enhances the organization's credibility. Additionally, presenting food waste prevention initiatives provides consumers with practical examples of how to implement responsible consumption behaviors in their daily lives. Consequently, publicizing these field activities encourages citizens to actively engage with the organization's efforts, making them more likely to adopt such behaviors and thus contribute to reducing food waste at the community level.

The second most represented category was warnings against harmful dietary habits, which constituted 16.66%. This reflects the organization's aim to address unhealthy consumer practices that are prevalent during Ramadan, such as excessive consumption or the purchase of unhealthy products. These habits are linked to both economic and health risks, including rising food prices and the increased incidence of malnutrition-related diseases, thereby empowering consumers to make more informed consumption decisions.

Despite awareness-raising about food waste is of great importance, it ranked fourth with a representation of 14.49%, which points to the need to strengthen this type of content. Raising awareness of the dangers of food waste is a critical factor in preserving food resources and ensuring food security within the community.

With equal proportions of 11.59%, both the category of promoting healthy eating habits and the category of other topics—such as reporting on market conditions or detecting cases of fraud in certain food products—were represented. This reflects the organization's commitment to encouraging healthy and positive practices that consumers should adopt during Ramadan. Promoting a healthy and balanced diet also addresses an important aspect of the food waste problem, such as purchasing quantities beyond actual needs or overconsumption of certain products.

The category of consumption rationalization tips ranked seventh with 10.14%, illustrating the organization's efforts to provide consumers with practical advice on how to manage their consumption more effectively and avoid waste, often incorporating religious messaging through the involvement of religious leaders.

Conversely, the categories of documenting instances of food waste and general awareness campaigns ranked last, each with a share of 4.34%. This indicates a limited amount of visual documentation of food waste. Notably, all posts related to food waste documentation were shared content. In this sense, the Consumer Protection Organization relies on sharing images already circulated on the analyzed platform.

Table N°4. Categories of Publishing Objectives on the Facebook Page of the Consumer Protection Organization

Publishing Objectives	Number	Percentage
Awareness and Education	32	27.11
Advocacy for Changing Negative Behaviors	16	13.55
Promotional	32	27.11
Warning	23	19.49
Informational	15	12.71
Total	118	100%

Source: Prepared by the researcher.

The table results indicate a balance among the publishing objectives pursued by the Consumer Protection Organization. Both the category of “raising awareness and educating about food security issues” and the category of “promoting the organization’s field activities” ranked first, each accounting for 27.11%. This equal distribution reflects a strategic equilibrium in the organization’s goals, as it seeks to disseminate information about food security and the societal impact of food waste, while simultaneously highlighting its field efforts, which include awareness campaigns on food waste. This dual focus demonstrates the organization’s intent to integrate digital influence through Facebook with real-world engagement to ensure the message reaches diverse segments of society.

The warning-oriented objectives rank second, accounting for 19.49%. This reflects the organization’s role in alerting consumers to common negative consumption practices during Ramadan, such as commercial fraud, excessive waste, and health risks associated with overconsumption of certain foods. These warning messages are essential for protecting consumers from harmful practices and fostering a more conscious consumer environment.

In contrast, videos tend to achieve high engagement rates on social media platforms, particularly with the introduction of the “Reels” feature on Facebook, which helps extend the reach of videos to the widest possible audience. This, in turn, ensures that awareness messages related to food security issues reach a broader segment of the public. Meanwhile, the category of external links represented only 1.69%.

The objectives aimed at changing negative behaviors come in third with 13.55%, indicating that the organization goes beyond mere awareness and warnings by actively encouraging consumers to adopt positive and sustainable consumption behaviors.

Lastly, the informational objective accounts for 12.71%, placing it at the bottom of the ranking. This suggests that the Consumer Protection Organization prioritizes educational and awareness content over the dissemination of straightforward news and factual updates.

Table N°5. Categories of Sources for Posts on the Facebook Page of the Consumer Protection Organization

Source	Number	Percentage
Consumer Protection Organization	86	72.88
Local Media Outlets	12	10.16
Nutrition Experts	8	6.77
Other	12	10.16
Total	118	100%

Source: Prepared by the researcher.

The data presented in the table indicate that the Algerian Consumer Protection Organization is the primary source of information published on its official Facebook page, accounting for 72.88% of the total posts. This reflects the organization's intent to maintain control over its awareness messages and shape consumer consciousness according to its own strategic vision. It also highlights its effort to position itself as a trustworthy authority and a leader of public opinion in consumer affairs.

In second place came both the categories of local media outlets and other sources (such as the Official Gazette of the People's Democratic Republic of Algeria and the Facebook page of the head of the Consumer Protection Organization), each representing 10.16%. This underscores the importance awareness-raising and its impact on food security, pointing to the need for combined efforts to intensify awareness campaigns. Moreover, relying on diverse sources such as local media enables the organization to provide consumers with different perspectives.

Finally, the category of nutrition experts ranked last with 6.77%. Despite its lower representation, this category contributes valuable, accurate, and up-to-date information on nutrition and health-related issues, enhancing the scientific credibility of the content shared by the organization.

Table N°6. Categories of Target Audience for Posts on the Facebook Page of the Consumer Protection Organization

Target Audience	Number	Percentage
General Consumers	58	49.15
Individuals Interested in Healthy Nutrition	12	10.16
Traders and Shop Owners	7	5.93
Page Followers	41	34.74
Total	118	100%

Source: Prepared by the researcher.

The data presented in the table indicate that general consumers constitute the largest target audience of the posts published on the Facebook page of the Consumer Protection Organization, representing 49.15%. This reflects the organization's core mission of protecting

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consumers and raising awareness about their rights and responsibilities. It also shows that most of the organization's awareness efforts are directed toward all categories of consumers, regardless of their specific interests or socioeconomic status, thereby ensuring that its awareness messages reach the widest possible audience concerned with consumption.

The second most targeted group is page followers, accounting for 34.74%. This highlights the organization's emphasis on engaging and maintaining communication with its existing audience—individuals who have shown interest in its content by following the page. This group is likely to be more receptive to participating in the organization's activities and awareness campaigns.

Individuals interested in healthy nutrition make up 10.16% of the targeted audience, reflecting the organization's awareness of the importance of health-related aspects of consumption, particularly during Ramadan, when unhealthy eating habits may increase. By targeting this category, the organization seeks to provide guidance and advice on healthy and balanced dietary choices, as well as how to avoid health issues associated with poor nutritional practices during the fasting month.

In contrast, traders and shop owners represent the smallest share, at 5.93%. While this lower percentage suggests that the organization's primary focus remains on direct consumer education, targeting this group shows an acknowledgment of their influential role in shaping consumer behavior. Posts directed at this audience may include information on compliance with food safety and hygiene regulations, contributing to responsible business practices in the marketplace.

2.4. Discussion of the Results

-The findings of the study reveal that the Algerian Organization for Consumer Protection and Guidance (APOCE) adopted a digital strategy that aligns with the core principles of social marketing. This framework is based on dissemination of knowledge, raising awareness, and fostering a gradual behavioral shift regarding issues of public interest. The organization relied primarily on integrated multimedia content (text + image) and videos. This reliance reflects its effort to present awareness messages related to food security and rational consumption through engaging formats capable of simplifying information and enhancing its reach among diverse audience segments. Within the context of social marketing theory, these communication formats serve as effective tools for capturing public attention toward the target issue, thereby increasing knowledge about the risks of food waste and the significance of sustainable consumer behavior.

-Furthermore, the results demonstrate that the page's videos achieved high viewership levels, with one video exceeding 1.7 million views during the study period. In social marketing, this can be interpreted as an indicator of the organization's success in capturing audience attention and keeping the issue of food security prominent within the digital environment. Conversely, direct engagement did not reach the same high levels. This discrepancy arises because the organization is marketing a "social behavioral product" aimed at rationalizing consumption and combating waste—a behavior that directly clashes with deep-seated cultural habits

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associated with the month of Ramadan in Algerian society. Culturally and socially, this month is perceived as a season of abundance and variety in consumer products, which is coupled with surplus spending and intensive consumption. Consequently, the recipient tends to settle for passive cognitive reception and virtual viewing without openly adopting the behavior, in order to avoid deviating from the prevailing social norms within their immediate environment.

-The findings also indicate that the organization emphasized highlighting its field activities and initiatives, which ranked foremost among the published topics. This underscores an awareness of the importance of reinforcing media messages with field-based practices. The organization does not merely broadcast guidelines and advice in the digital environment; it supports them with awareness campaigns and on-site inspection routines that are documented and re-published digitally. This approach conforms to a fundamental principle of social marketing, which combines mass media communication with direct personal communication to bolster message credibility and maximize the potential for influence.

-Additionally, the results show a noticeable presence of warning content related to harmful dietary habits and overconsumption. This reflects the organization's endeavor to construct a mental image that links irrational consumer behaviors to their economic, health, and social consequences. By highlighting the dangers of food waste and its repercussions on food security, the organization enhances the public's perception of the problem's severity and connects it directly to their immediate interests—such as linking the disposal of one million loaves of bread to the destruction of 250,000 kilograms of wheat. This mechanism constitutes one of the core avenues utilized in social marketing to influence attitudes and stances.

-Ultimately, the analytical results confirm that the effectiveness of the organization's digital communication messages cannot be understood in isolation from the socio-cultural and economic environment in which these messages are produced and received. The organization's focus on nutritional awareness and warnings against irrational consumption behaviors is intrinsically tied to the specificity of the month of Ramadan. This month is characterized by distinct shifts in consumption patterns and increased expenditure on food supplies, driven by social practices linked to hospitality, family gatherings, and the multiplicity of Ramadan dishes, alongside the characteristic diversity of the Algerian cuisine and its associated dietary traditions. From another perspective, these contents reflect the organization's awareness of the economic dimension's role in guiding consumer behavior. The need to rationalize food spending and curb waste becomes paramount in light of the challenges associated with food security and consumer purchasing power. Furthermore, the study asserts that deeply rooted cultural values and dietary habits play a pivotal role in shaping audience engagement with communication messages, which explains the digital engagement gap observed in the study. This renders the effectiveness of digital social marketing campaigns contingent not only on content quality and appeal, but also on its harmony with the socio-cultural and economic characteristics that govern actual consumer behavior of the Algerian citizen during the month of Ramadan.

-The findings also revealed that the organization constitutes the primary source of the published content, which reinforces its position as a credible and authoritative source of information related to consumer protection and food security. This factor contributes to

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enhancing the effectiveness of communication messages, as social marketing literature emphasizes that the credibility of the communicating organization is a key determinant of audience acceptance of messages and their willingness to engage with them.

-With regard to the target audience, the organization primarily focused on the general public of consumers, a strategy that aligns with the fundamental principles of social marketing, which seek to maximize the dissemination of ideas and promote the adoption of socially desirable behaviors across broad segments of society. Furthermore, directing part of the content toward individuals interested in healthy nutrition, as well as traders and shop owners, reflects the organization's awareness of the importance of involving various stakeholders who play influential roles within the consumer ecosystem.

Conclusion:

This study reveals that digital marketing through social media platforms serves as an effective tool for guiding consumer behavior and promoting a culture of sustainable food consumption—particularly during the month of Ramadan, which is characterized by shifts in consumption patterns that often lead to increased food consumption and, consequently, higher rates of food waste. The findings demonstrate that the Algerian Organization for the Protection and Guidance of the Consumer and his Environment plays a central role in this context. Through its Facebook page, the organization disseminates awareness content that addresses key issues related to consumer behavior, aiming to encourage individuals to adopt more responsible consumption habits.

The analysis of the organization's Facebook posts shows that it employs a range of integrated digital strategies combining education, warnings, and direct engagement with followers. This combination not only deepens the impact of its awareness messages but also broadens their reach, reflecting the organization's commitment to contributing to food security and reducing negative consumer behaviors through both field campaigns and diverse online content. Furthermore, the high levels of user engagement with these posts highlight the growing need for such digital initiatives, which link consumer guidance to ongoing social and technological transformations.

In conclusion, although digital marketing offers vast potential for disseminating awareness and influencing attitudes, its effectiveness is strictly determined within a context governed by intertwined cultural, social, and economic considerations. During the month of Ramadan, awareness messages interact with a complex system of consumer habits, social and religious values, and economic conditions that may either amplify the impact of these messages or constrain their capacity to induce actual behavioral change. Moreover, while digital engagement metrics are vital for measuring the reach and diffusion of awareness messages, they do not provide a sufficient basis for assessing the actual magnitude of impact on consumer behavior. Consequently, understanding the relationship between digital marketing and sustainable food culture necessitates the adoption of integrated research approaches that combine digital content analysis with other empirical tools, such as in-depth interviews, questionnaires, and audience studies. This integration would allow researchers to

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investigate how awareness messages are received and interpreted, and to evaluate the extent of their reflection on actual consumption practices-thereby opening promising research horizons that contribute to understanding the role digital marketing can play in supporting food security and fostering sustainable consumer behavior.

Recommendations:

-Ensure the continuity of digital awareness campaigns throughout the entire year, not only during Ramadan, in order to foster a sustainable consumer culture aligned with current food and environmental challenges.

-Leverage the influence of social media figures by engaging personalities with a positive impact to spread awareness messages against food waste and promote conscious consumption.

-Given the notable increase in video viewership on the organization's Facebook page, it is essential to focus on video content as a key medium for delivering awareness messages. It is also recommended to expand the organization's digital presence to include other popular visual platforms, most notably TikTok, which has become a leading space for digital engagement, particularly among youth. This strategy would offer an opportunity to broaden the dissemination of awareness messages promoting positive behaviors aimed at supporting sustainable food security and reaching a wider, more diverse audience.

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Appendix No. 1 : Content Analysis Codebook Guide

Section 1 : Publication Metadata

For each of the 118 publications making up the study sample, the following metadata is recorded:

No	Element	Operational Definition
1	Publication Number	A sequential number assigned to each publication from 1 to 118.
2	Publication Date	The day and month the post was published during Ramadan 2025.
3	Publication Link	The direct URL/link to the publication on the APOCE page.

Section 2: the Figure Categories

1-Content Type: Content type" refers to the technical format or modality through which the publication is presented on the page, independent of its thematic substance.		
Category	Operational Definition	
Video	A publication featuring moving visual elements, whether live-action footage, animated content, or motion graphics/animated infographics.	
Text + Image	A publication that combines written text with a static image or a still infographic.	
External Links	A publication that redirects users to an external source outside the platform, such as a website or a press article.	
2-Audience Interaction: These quantitative metrics measure the level of audience responsiveness to the publication. They serve as indicators of reach and public interest rather than direct evidence of behavioral change.		
Metric	Category	Operational Definition
Likes / Reactions	Less than 500 / 501–1,000 / More than 1,000	The total number of positive reactions registered on the publication.
Comments	Less than 50 / 51–100 / More than 100	The total number of textual responses submitted by the audience on the publication.
Shares	Less than 50 / 51–100 / More than 100	The frequency with which the publication was redistributed by followers.

Section 3: the Content Categories

1-Content Categories of Posts: Content categories refer to the conceptual and informational substance primarily addressed by the publication. Although the sample size consists of 118 publications, the total number of thematic classifications reached 138. This is due to the multi-thematic nature of certain publications that addressed more than one topic, necessitating their classification under two categories. Consequently, percentages are calculated based on the total number of classifications (138) rather than the absolute number of publications (118).	
Category	Operational Definition
Monitoring Food Waste Cases	Publications documenting actual instances of food waste in Algeria through photographic evidence or statistical data.
Raising Awareness about Food Waste	Publications explaining the negative socio-economic impacts of food waste without field-based documentation.

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Organizational Activities and Events	Publications highlighting the operations of APOCE provincial (wilayah) offices, including field campaigns and inspection visits.
Promoting Healthy Eating Habits	Publications offering guidance on healthy and balanced dietary patterns during Ramadan.
Tips for Rational Consumption	Publications providing practical guidelines to reduce expenditures, curb waste, and rationalize purchasing behavior.
Educational Media Campaigns	Structured, campaign-oriented publications characterized by a unified slogan or a dedicated hashtag.
Warnings about Harmful Dietary Habits	Publications alerting consumers to the health or economic risks associated with negative consumer behaviors.
Other	Publications that do not fall under the aforementioned categories but remain relevant to food security.
2-Publishing Objectives: refers to the communicative purpose or intent that the publication seeks to achieve regarding the target audience.	
Category	Operational Definition
Awareness & Education	The publication aims to provide the recipient with new information or knowledge concerning food security.
Advocacy for Changing Negative Behaviors	The publication explicitly calls for abandoning a harmful habit and replacing it with a positive alternative.
Promotional	The publication aims to highlight the role of APOCE and enhance its corporate image/institutional reputation.
Warning	The publication alerts consumers to an imminent risk or potential harm that threatens them.
Informational	The publication conveys factual news or data without direct behavioral guidance.
3-Sources for Posts: refers to the entity or origin responsible for producing the information, imagery, or video footage contained within the publication.	
Category	Operational Definition
Consumer Protection Organization	Content directly produced and generated by APOCE.
Local Media Outlets	Content republished or curated from Algerian newspapers or television channels.
Nutrition Experts	Content authored by or sourced from specialists in nutrition, dietetics, and public health.
Other	Diverse sources that do not fit the above, such as the Official Gazette or other digital pages.
4-Target Audience: refers to the specific social or economic segment toward which the publication is primarily directed.	
Category	Operational Definition
General Consumers	The publication is directed toward the general public without targeting a specific demographic segment.

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Individuals Interested in Healthy Nutrition	The publication contains specialized content addressing individuals with a predefined interest in health and dietary habits.
Traders and Shop Owners	The publication is primarily directed toward retailers, vendors, and suppliers.
Page Followers	The publication directly addresses the active, engaged audience of the organization's social media page.