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Exploring the Influence of Digital Communication Tools on Reputation and Loyalty: A Study of Agri-food Firms

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Abstract. Since the issue of food safety is increasingly critical for the population’s purchasing and consumption decisions, communicating these aspects to the market is becoming a critical success factor for competing in global agri-food markets. This is particularly true for digital marketing communication. However, there is little attention in the marketing and management literature on the role played by digital communication of health and food safety in agri-food SMEs. In this respect, the purpose of this research is to investigate how digital communication impacts business reputation and customer loyalty, from the entrepreneurial perspective.

Data were collected from 270 Italian firms operating in the agri-food industry from March to May 2022 through an online questionnaire. Descriptive statistics and regression analysis were performed.

Results highlight that some digital communication tools positively influence reputation and loyalty from the entrepreneur’s perspective. In particular, websites positively influence reputation while websites and email positively influence loyalty.

As all research, also our study has limitations: the main one is that we collected data from a single European country and the results cannot be generalized.

At the authors’ knowledge, no previous studies have investigated the level of adoption of digital communication tools by Agri-food SMEs and tested the influence of these tools on business reputation and customer loyalty.

Keywords: Food safety · Communication · Digital communication · Agri-Food firms · SMEs

1 Introduction

The progressive digitalization in the global economic landscape has strongly impacted all business functions, especially marketing and communication activities [1].

The marketing approaches used on the Web significantly diverge from those employed in traditional media. The intrinsic qualities of the digital medium require

a shift from a traditional, directive (push) strategy to an engaging, invitational (pull) approach. Effective digital marketing entails prioritizing the consumer's needs and preferences throughout the entire purchasing journey – pre-purchase, during the transaction, and in the post-purchase phase. It involves fostering a dialogue grounded in authenticity and trust, where the ultimate goal is not merely the sale itself, but rather it emerges organically as a byproduct of the established relationship.

The Internet represents merely one facet of the heterogeneous digital media landscape, which also includes emails and social networks [2]. These platforms offer ubiquitous access through a myriad of devices, enabling constant interaction from anywhere. Moreover, the integration of the Internet and digital technologies at large with physical systems, which have traditionally had closer proximity to consumers, is progressively evolving [3]. In this evolving context, companies must primarily reconceptualize themselves as information providers and recognize that they are engaging with a new kind of consumer, one who relies on online content and searches for accurate information about brands, and actively participates in the marketing processes [4]. Thus, this evolution of web marketing represents a significant opportunity for growth and expansion in the agri-food sector, offering companies innovative ways to reach and engage with their audience.

Consumers in the agri-food sector have rapidly started to use the Internet to purchase food, and compare prices and characteristics of various food items, among other activities. Food-related content is among the most prevalently shared topics on social media platforms.

In recent years, agri-food firms have initiated processes to adapt their strategic and operational marketing activities, aiming to seamlessly integrate digital systems and harness their full potential [5].

In particular, food companies - such as Dr. Pepper, Kellogg's, Coca-Cola, PepsiCo, etc. – have started soon to invest strongly in digital advertising and frequently collaborate with advertising agencies and high-tech experts to create campaigns that effectively engage consumers in various platforms such as social media, mobile phones, and virtual worlds [5]. However, the adoption of digital marketing and communication concerns mainly large enterprises, while smaller firms have to face many obstacles when attempting to adopt these approaches.

Previous research has analyzed the impact of a product's attributes on consumer perception, which subsequently influences their usage decision [6] and their willingness to pay [7]. Other studies on communication of Agri-food companies are mainly focused on digital communication related to single communication tools such as websites or social media and in specific sector [8].

The literature stressed the necessity to improve web marketing strategies in providing better communication and right information to the consumers; further, a lack of in-depth analysis of consumer behavior and comprehensive statistics still remains [5].

As online content and information play a key role for consumers in the digital era, especially related to health and food security, understanding the intensity of use of the main digital communication tools by agri-food firms remains crucial. Each digital communication tool possesses distinct characteristics that facilitate the effective distribution of content, enabling tailored and impactful dissemination of critical information.

Further, the marketing literature has outlined that effective communication impact positively on reputation and on loyalty. In the managerial and marketing literature it is well-known that reputation management strategies impact customer behavior, financial performance, and overall firm success [9, 10]. Further, the marketing literature has stressed that customer satisfaction is the foundation upon which customer loyalty is built or a critical antecedent of loyalty [11].

However, these relationships in the Agri-good sectors are understudied [5, 23, 24].

Hence, this study aims to fill the above research gaps and identify how Italian SMEs of Agri-food sectors adopts the main digital communication tools and how they impact reputation and loyalty. The main research questions are the following:

RQ1: How do agri-food firms intensively use digital communication tools to disseminate information about food safety?

RQ2: Which digital communication tools, specifically, website, social media, email, instant messaging, chatbot and influencer, if effectively managed, have a positive influence on reputation?

RQ3: Which digital communication tools, specifically, website, social media, email, instant messaging, chatbot and influencer, if effectively managed, have a positive influence on loyalty?

2 Theoretical Background

2.1 Communication, Reputation and Loyalty

When positioning an organization it is necessary to take into consideration factors such as communication and reputation. Effective communication and a strong reputation are important factors that influence the target public's perception of an organization; these elements can be transmitted and retransmitted in the process of creating and adjusting the communicative and reputational space of an organization [12]. Marketing communication is one of the most important ways to create the target's primary perception of information about products or services, to develop and maintain the value of the brand [13].

The whole reputation depends on how an organization is rated by stakeholders while from the perspective of marketing, reputation mostly consists on the opinions and experiences of each customer [14]. As today most of the communication activities take place online, reputation management is related to the efficiency of online communication and on how brands manage in time the reputation in the internet environment [15].

If an enterprise knows how customers behave in the internet environment, it can get the most out of the opportunities by creating online reputation management. Customers use various online communication channels (or tools) to get in touch with companies - especially websites, social networks, email, instant messaging, chatbots and influencers - and their behavior online can be easily traced [2].

The effectiveness of message personalization, as it can significantly enhance the results of strategic communication [16]. In particular, personalization is a widely adopted technique by professionals in strategic communication across diverse online communication tools and it can enhance engagement, prompting deeper contemplation of the messages, and improving recall [17]. Message personalization, through the usage of

algorithmic micro-targeting, has gained increasing popularity in the advertising and public relations industry, and its growth has been enhanced by the availability of “big data”. However, [18] observed that the reputation of organizations is closely tied to the algorithmic practices and responsibility of major digital media corporations like Facebook and argued that the application of algorithms could create risks associated with corporate identity and reputation.

Further, a recent study has shown that algorithmic personalization of messages in crises can affect stakeholders’ assessments of reputation via the perceived credibility of the source, with notification of personalization playing a moderating role [19].

Thus, we affirm that, if properly managed, the main communication tools influence reputation and loyalty.

2.2 Corporate Websites

A corporate website serves as the primary and most significant online representation of a company. Most of the contributions to web marketing concern the website analytics label [5]. This concept refers to the assessment of a variety of data such as web traffic, and web-based transactions, to understand the online visitor experience [20].

Sentiment analysis is a specific analysis to identify positive or negative attitudes toward a brand. Given that a website is among the most crucial touchpoints for customers interacting with brands—arguably the most important one—the initial impression and the brand’s image are primarily established through the navigation of this digital platform. We believe that this rule applies also to the agrifood firms. Accordingly, the following hypothesis is formulated:

H1: Effectively managed websites have a positive influence on reputation.

In the food sector, for example, Coca-Cola uses big data analytics to build a digital-led loyalty program and drive customer retention [21]. Amazon Fresh and Whole Foods is an example of how big data analytics help to develop new products and penetrate large market [22]. In the digital era, it’s easier to satisfy customers because it’s easier to segment the target market in a refined and scientific manner [4]. Consequently, the greater satisfaction that can potentially be achieved online might positively impact consumer loyalty. Thus, the following hypothesis is advanced:

H2: Effectively managed websites have a positive influence on loyalty.

2.3 Social Media Marketing

Many studies have revealed the strategic role of social media within digitalized business era. Through the use of these media, individuals engage in a dynamic interplay of roles: on one hand, they assume a passive role by absorbing a diverse array of information; on the other hand, they actively participate by disseminating recommendations and advice [2]. Therefore, social media, especially social network cannot be ignored by all kinds of firms.

Brand value (brand equity) is one of the fundamental intangible resources for an agrifood company [23, 24] and both traditional and digital communication have an impact

on it [5]. However, while traditional communication tools have an impact mainly on brand awareness, digital communication tools, especially social media, have a profound influence on brand image and consumer perception in the marketplace [5]. Thus, the following hypothesis is advanced:

H3: Effectively managed social media has a positive influence on reputation.

Social media communication connects brands to consumer life and increases the possibilities of using social media as a tool to enhance consumer engagement, brand-related behaviors [25] and loyalty [26–29]. Customer loyalty is a key objective for all businesses, and social media communication is becoming a powerful way to increase touchpoints with customers and loyalty. However, scant research evaluates the impact of social media behavior on program loyalty in Agri-food companies.

Accordingly, the following hypothesis is formulated:

H4: Effectively managed social media marketing has a positive influence on loyalty.

2.4 E-mail Marketing

The increasing importance of online communication channels will not lead to the disappearance of traditional marketing communication tools, but marketing needs to be strongly integrated with new strategies aimed at building relationships with customers [5]. E-mail is considered one of the most important communication tools in the digital era for the company's presentation and brand building it is also used to increase web traffic and sales support [30]. Thus, email may influence brand reputation. Consequently, effective email communication in Agri-food firms may positively contribute to improve reputation.

On this basis, the following hypotheses are proposed:

H5: Effectively managed email marketing has a positive influence on reputation.

Recent literature stresses that frequent contact with customers via e-mail enhances brand loyalty [31–33]. Email marketing encourages consumers to visit retail stores and consumers exposed to e-mail marketing recommend the brand to their friends. Loyal customers appreciated regular communication and various other information content from the brand more than mere offers. These results encourage also Agri-food firms' marketers to keep in touch regularly with customers with the aim of enhancing brand loyalty. Accordingly, the following hypothesis is formulated:

H6: Effectively managed email marketing has a positive influence on loyalty.

2.5 Instant Messaging

With the large usage rates of mobile phones, mobile instant message (MIM) services have been widely adopted. MIM is, therefore, a very important digital communication tool to improve satisfaction, reputation and loyalty. Elements such as trust, perceived quality of service, and perceived customer value, encompassing both functional and emotional aspects, play a crucial role in fostering customer satisfaction with MIM [34]. Accordingly, the following hypothesis is formulated:

H7: Effectively managed instant messaging has a positive influence on reputation.

Additionally, trust, customer satisfaction, and the cost of switching are direct and significant contributors to enhancing customer loyalty [34]. Further, a recent study indicates that factors like perceived interactivity, perceived playfulness, and perceived usefulness significantly impact users' intentions to continue using and recommend a product in scenarios involving single-platform usage [35]. These aspects strongly characterize instant messaging. Accordingly, the following hypothesis is formulated:

H8: Effectively managed instant messaging has a positive influence on loyalty.

2.6 Chatbot

Chatbots are software applications designed as virtual assistants, engaging with users via text or speech to prove interactive communication. They can be simple, or AI guided. As consumers need immediate answers chatbot allows immediate and personalized reply.

A recent study shows that chatbots increase customers' pleasure and confidence in the products [36]. According to another recent study, perceived performance, perceived trust and corporate reputation significantly affect customer satisfaction with chatbot usage [37]. Thus, the following hypothesis is advanced:

H9: Effectively managed chatbot has a positive influence on reputation.

Other recent contributions show that chatbots positively influence customer satisfaction and improve customer relationships with the brands [38] and customer loyalty [39]. Thus, the following hypothesis is advanced:

H10: Effectively managed chatbot has a positive influence on loyalty.

2.7 Influencer Marketing

One of the most pervasive phenomena is influencer marketing and it is expected that Italian firms invest greatly on it in the coming years [40]. Influencer is considered as a source of information recognized by the public as an opinion leader since he or she gives advice able to greatly influence other people's purchasing decisions [41]. Appropriateness, relevance and congruence between a celebrity and a brand plays an important role in shaping public response. When this pairing is viewed as well-matched or harmonious, it significantly enhances the effectiveness of the advertising, positively influencing both consumer attitudes and, potentially, their purchasing intentions [42].

In the food industry, food and wine influencers are becoming more and more important for consumers to have and exchange information [43].

We can assume, therefore, that influencer may positively influence reputation. Hence, the following hypothesis is proposed:

H11: Effectively managed influencer marketing has a positive influence on reputation.

The characteristics of an influencer like expertise, physical attractiveness, authenticity and homophily can influence the formation of follower trust, strengthen relationships and brand loyalty [44, 45]. Thus, the following hypothesis is formulated:

H12: Effectively managed influencer marketing has a positive influence on loyalty

3 Methodology

3.1 Sample and Questionnaire Design

The present study aims to answer the research questions using empirical analysis. A self-administered questionnaire was developed to measure:

- the respondents' perception of the frequency of communication tools used to communicate food safety;
- the impact of food safety communication on reputation;
- the impact of food safety communication on loyalty.

In particular, the population of Italian companies working in the agri-food industry (our universe) was extracted from the Atoka database, including firms from Agriculture, Manufacturing, and Fishing sectors. A total of 4614 companies were identified. The survey ran from March to May 2022, and 270 participated. The interviews involved the entrepreneurs of agri-food firms and took place in the period March-April 2022.

The questionnaire consisted of three sections. The first section includes firms' characteristics: size, revenue, legal form, provenance, sub-sector. The second part examines the level of adoption of digital communication tools to communicate food security. In particular, a total of 6 digital communication tools were chosen. In this section, we provide the following definition of food safety:

“the condition of the foodstuffs in all stages of production, processing, and distribution, required to guarantee the protection of consumer's health, also taking into account normal circumstances of use and information available for the foodstuffs concerned” [46]. Notably, the communication tools were taken from the marketing literature on digital communication [2].

The third part of the questionnaire includes two questions about the impact of these tools on business reputation and brand loyalty.

Except for the socio-demographic information of firms, all questions were measured using a 7-point Likert scale; in particular questions of section (2) were measured using the level of use from 1 = little or not used at all 7 = very used, while questions of section (3) were measured using the level of strength/intensity of the impact where 1 = very low and 7 = very high.

3.2 Data Analysis

The data were processed using Statistical Package for Social Sciences (SPSS) version 25.0 for Windows. A regression analysis was implemented to understand the impact of communication tools on brand reputation and on brand loyalty, from the entrepreneurial perspective.

Differences and associations were considered significant at $p < 0.05$.

4 Findings

Statistics described in Table 1 summarize the characteristics of the sample. The sample is composed of 270 Italian firms operating in the agri-food industry. The businesses that took part in the study are mainly small firms (60%), followed by medium (30%)

operating in the B2B market. The remaining are large (7%) and micro (3%) firms. Most of the firms have revenues between 10 and 49.9 million euros (31%), limited liability companies (57%), and are located in the North of Italy (44%).

Table 1. Sample descriptive statistics

Variable	Description	N	N (%)
Size	Micro (<9 employees)	7	3%
	Small (10–49)	165	60%
	Medium (50–249)	80	30%
	Large (>250)	18	7%
Revenue	> 1 millions	5	2%
	1–4.9 millions	74	27%
	5–9.9 millions	56	21%
	10–49.9 millions	84	31%
	<50 millions	51	19%
Legal form	Limited liability company	153	57%
	Joint stock company	73	27%
	Cooperative company	44	16%
Provenance	Northern Italy	118	44%
	Central Italy	108	40%
	South Italy	44	16%
Sub-sector	Agriculture	112	42%
	Manufacturing	158	58%

(Source: our elaboration).

Table 2 shows the intensity of use of the main digital communication tools to disseminate information about food security by the sample firms. The communication tools have been measured through a 7-point Likert scale. The results show that the scale is reliable (Cronbach's $\alpha > 0.90$).

The most intensively used digital communication tools are websites (mean 5.09), social networks (mean 3.97), and e-mail (3.49). The intensity of use of the most innovative digital tools such as chatbots and the use of influencers, which could enrich the potential of web marketing, is scarce.

To understand the impact of digital communication tools on business reputation, from the entrepreneurial perspective, we conducted a regression analysis.

To select variables characterized by a greater predictive power, we perform the multicollinearity analysis through the VIF method – variance inflation factor [47].

Therefore, according to the literature [48] we deleted all variables that have a value greater than 3. As a result, we have not eliminated any tools.

Table 2. The intensity of digital communication tools use by agri-food firms

Digital communication tool	Min	Max	Mean	Std. Dev.
Website	1	7	5.09	1.668
Instant messaging	1	7	2.49	1.788
E-mail	1	7	3.49	2.005
Chatbot	1	7	1.96	1.438
Influencer	1	7	2.18	1.641
Social Network	1	7	3.97	2.119

(Source: our elaboration).

The result of the regression analysis shows that the website has a positively significant impact on reputation, while influencer is the communication tool that has a negative significant impact on reputation ($P < 0.05$) (Table 3).

Table 3. Regression analysis of digital communication tools on reputation

Digital communication tool	B	S.E.	Wald	gl	P-value	Exp (B)
Web site	0.759	0.275	7.642	1	0.006	2.136
Instant messaging	-0.135	0.293	0.213	1	0.645	0.874
E-mail	0.294	0.233	1.593	1	0.207	1.342
Chatbot	1.840	1.048	3.084	1	0.079	6.294
Influencer	-0.664	0.298	4.953	1	0.026	0.515
Social Network	0.224	0.278	0.648	1	0.421	1.251
Constant	-1.482	1.227	1.458	1	0.227	0.227

(Source: our elaboration).

The result of the regression analysis (Table 4) shows that the website and the email have a positively significant impact on loyalty while instant messaging is the communication tool that has a negatively significant impact on the loyalty of agri-food firms ($P < 0.05$).

Table 4. Regression analysis of digital communication tools on loyalty

Digital communication tool	B	S.E.	Wald	gl	P-value	Exp (B)
Website	0.703	0.265	7.022	1	0.008	2.020
Instant messaging	-0.613	0.256	5.752	1	0.016	0.542
Email	0.544	0.259	4.415	1	0.036	1.723
Chatbot	0.627	0.506	1.533	1	0.216	1.872
Influencer	-0.221	0.308	0.513	1	0.474	0.802
Social Networks	0.170	0.254	0.447	1	0.504	1.185
Constant	-0.440	0.766	0.329	1	0.566	0.644

(Source: our elaboration).

5 Discussion, Implications and Conclusions

This study, grounded in empirical analysis of a sample from Italian agrifood firms, reveals how these enterprises employ digital communication tools to convey information about food safety and the influence of such tools on brand reputation and customer loyalty.

The first result from the descriptive statistics provides an answer to RQ1: How do agri-food firms intensively use digital communication tools to disseminate information about food safety? Our study suggests that websites, social networks, and email are the digital communication tools most intensively used for disseminating information about food safety, from the entrepreneur's perspective. This result confirms the main communication tools adopted by firms in the digital marketing literature [20, 30]. These are now widely consolidated digital communication tools, which however do not include the use of new forms of digital marketing. Indeed, for instance, chatbots and influencers remain underutilized, despite being recognized as emerging communication trends [35, 42]. This result implies that the Italian agri-food industry, predominantly composed of small B2B firms, has not yet fully embraced or trusted the array of new digital communication tools available. This is probably due to insufficient financial resources and marketing skills. Additionally, as highlighted in the literature [5], SMEs in the agrifood sector seem to lack comprehensive analyses of consumer behaviors, which are essential for developing effective communication strategies. Conversely, large food companies are using all the new digital tools to communicate with end consumers [21].

Referring to RQ2: Which digital communication tools, specifically, website, social media, email, instant messaging, chatbot and influencer, if effectively managed, have a positive influence on reputation? Our research has a second interesting result highlighting that websites have a positive impact on reputation, thereby confirming Hypothesis 1. This implies that firms that adopt this innovative communication tool experience a positive and significant effect on their reputation. Conversely, influencer marketing appears to negatively affect reputation, thus refuting Hypothesis 11. This outcome suggests that Italian agrifood firms within the B2B context consider websites as the most important digital communication that has an impact on reputation, thus confirming the marketing

literature. Further, it emerges that the entrepreneurs interviewed associate the ability to increase corporate reputation with the use of now well-known digital marketing tools, while they seem to ignore or underestimate the role of influencers, especially for the targets of younger consumers who are strongly influenced by the opinion of famous people on the web in purchasing and consumption decisions. However, influencer marketing holds significant potential in communicating about food safety, as it could effectively reassure people.

More broadly, marketing literature has emphasized the importance of investing in communication, particularly within digital environments, to build and improve reputation [13], thus affecting business performance and consumer behaviors [9, 10]. Given that influencers actively engage by sharing recommendations and advice [2], and food and wine influencers are becoming more and more important for consumers [43], communicating about food safety becomes essential in all markets, both B2C and B2B.

Referring to RQ3: Which digital communication tools, specifically, website, social media, email, instant messaging, chatbot and influencer, if effectively managed, have a positive influence on loyalty? Our study provides some interesting answers, thanks to the results of the empirical investigation. Specifically, it was found that only websites and email marketing significantly and positively affect loyalty while instant messaging impacts negatively. Hence, Hypotheses H2, H6 are confirmed whereas H8 is rejected.

This result confirms the positive impact of website and email marketing on loyalty [31–33]. Instant messaging, as seen above for influencers, even has a negative impact on the examined variable. This result is consistent with the findings of the descriptive analysis, namely that some digital communication channels are not intensively used and aren't even believed to have an impact whatsoever on reputation and loyalty, respectively. Conversely, the marketing literature suggests that adopting these digital tools is essential for enhancing customer satisfaction and experience, which are key precursors of loyalty [11].

Therefore, only three out of twelve hypotheses were confirmed. Specifically, effective website management positively influences both reputation and loyalty, and email marketing positively influences loyalty. Influencers have a negative impact on reputation and instant messaging has a negative impact on loyalty, in the entrepreneur's perception. However, existing literature has already extensively confirmed that these two innovative tools affect positively both reputation and loyalty. The overall results of this study, suggest that Italian agrifood firms need to develop their marketing and communication resources and competencies.

This study enriches the communication and marketing literature both from the methodological and theoretical perspectives. Methodologically, this research focuses on a wide survey conducted on a specific sector, that is the agri-food sector, and on the entrepreneurs' perspective on the food safety communication strategy in the Italian context. These two aspects have been rather unexplored until now.

From the theoretical standpoint, the originality of our research primarily lies in the adoption of a comprehensive framework to understand the use of digital communication in food safety. This involves an analysis of both the intensity with which key digital communication tools are used to spread information about food safety and the impact

these tools have on brand reputation and customer loyalty. Secondly, our study corroborates findings from previous research results that highlight websites, social networks, and email marketing as the main communication tools used by firms in the digital marketing literature [20, 30]. It also stresses the relatively slow adoption of newer tools such as influencers and instant messaging. Thirdly, we have discovered that effective management of websites significantly influences reputation and loyalty, while impactful email marketing positively influences loyalty [31–33].

Several managerial implications emerge.

The main managerial implication that emerges from this study concerns the need to innovate and expand the marketing skills of entrepreneurs, currently focused mainly on the role of the website in communicating their offer and food safety issues to the market, while they seem to underestimate the new tools that marketing literature [49–51] indicates as among the most effective for increasing corporate reputation and customer loyalty and sales. Above all, SMEs within the Italian agrifood sector operating in a B2B context should enhance their marketing culture. This begins with a deeper comprehension of customer needs and desires, aiming to enrich the customer experience. Moreover, these enterprises should improve their communication strategies by incorporating modern and impactful digital communication tools, including instant messaging and influencer marketing. These tools have demonstrated effectiveness across various sectors and markets, both B2C and B2B. Notably, food safety represents a timely and pressing concern, attracting significant attention from both end consumers and intermediaries. To encourage these processes of managerial innovation, we believe it is essential to launch entrepreneurial training and refresher courses on marketing and digital communication issues. Particularly useful could be the inclusion of young graduates in companies, also through training courses, thanks to which companies could learn new marketing trends and be more aware of the effectiveness of new digital tools for company competitiveness [52]. Given the lack of financial resources that characterizes many small businesses in the agri-food sector, we believe it is essential that European and national policymakers activate support programs for managerial training and the recruitment of young talents with digital marketing skills.

The originality of the study consists in the empirical investigation of a poorly investigated aspect of agrifood firms, specifically communication of food safety.

The study presents some limits connected to its exploratory nature. The survey was conducted in one country. Nonetheless, our sample is representative of the agrifood firms within Italy. Future research is essential to deepen our understanding of this topic. This includes quantitative studies, particularly with larger and more diverse samples from different countries to explore variances in content strategy and impact on reputation and loyalty. Additionally, qualitative research, such as case studies, is crucial to identify and scrutinize best practices in communicating food safety. For instance, future research should aim to understand the dynamics of successful management and collaboration between food firms and influencers. This research topic remains significantly underexplored within the marketing literature [41, 53].

To have a better cognitive framework regarding the role of food safety in purchasing and consumption processes, we finally believe it is necessary to develop surveys on final

consumers who are increasingly sensitive to these problems, but perhaps not as attentive when making purchases. Consumer behavior could vary by country, region, age, and other factors.

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