Available online at www.centmapress.org



Proceedings in
System Dynamics and Innovation in Food Networks 2023

DOI: http://dx.doi.org/10.18461/pfsd.2023.2308

Conventional food retailers' communication on sustainability on LinkedIn: Analysis of selected German supermarkets and discounters

Tara A. Sadeghi-Esfahlani and Vera Bitsch

Technical University of Munich, School of Management and School of Life Sciences, Chair of Economics of Horticulture and Landscaping

tara.esfahlani@tum.de; bitsch@tum.de

Abstract

Food retail chains are the intermediaries between most consumers and the other supply chain actors. In this pivotal role, they have the opportunity to contribute to both sustainable consumptions and production patterns. Among the many potential communication channels, which food retailers can use to communicate with different stakeholder groups, social media have become more important during the past decade. Using thematic analysis, the current study analyzed German food retailers' sustainability communication on the social media channel LinkedIn, for one year. All food retail chains analyzed used LinkedIn for sustainability communication extensively. They communicated on topics of each of the three pillars of sustainability, but predominately on environmental topics. There was no systematic difference in the number of posts between supermarket and discount chains. While all chains seemed to appreciate the professional environment provided by LinkedIn for their sustainability communication, style and use of visuals differed among the retailers analyzed.

Keywords

Discount chains; food systems; LinkedIn; SDG 12; social media; supermarket chains; sustainability communication; sustainability reporting

Introduction

Increasing societal interest in and attention to sustainability issues has led many food retail chains to start sustainability initiatives and develop sustainability communication as part of their business strategies. Food retailers can use different communication channels to address their different stakeholder groups, especially suppliers along the supply chain and consumers. Since food retailers serve as the most important point of contact between producers and consumers, they are uniquely positioned to promote sustainability. They can increase sustainability awareness and thus influence consumers' purchasing decisions in a more sustainable direction (Bonini & Oppenheim, 2008). Sustainability is part of the group of credence attributes, reaching beyond the experience and search attributes of classical consumer demand analysis (Peterson, 2009). In comparison to other credence attributes, such as place-of-origin, organic, or locally-grown, sustainability is more complex and ill-defined as an example of a "wicked problem" (Peterson, 2009). Due to the wicked characteristics of the sustainability concept, consumers need to be educated on the concept to fully appreciate sustainability and base their decisions on such characteristics, which constitutes a challenge to retailers.

Nevertheless, to increase the sustainability of consumption, consumers need to understand the concept and the consequences of irresponsible consumption (Naidoo & Gasparatos, 2018). As a result, consumers may choose to make more sustainable purchasing decisions, and may purchase non-sustainable products less frequently,

leading to pressure on producers and other supply chain participants to improve the sustainability of their production processes (Grunert, 2011). Upwards as well as downwards the supply chain, increased communication can have a significant impact reaching a wide range of stakeholders, increasing their awareness of sustainability, and thus leading to decision making that contributes to increased sustainability.

Several earlier studies have examined and assessed the sustainability communication of food retailers. Jones et al. (2011a) analyzed leading food retailers worldwide and found that while the retailers examined consistently stressed their commitment to sustainability in their sustainability reports, the main focus was on efficiency gains in their own businesses. The sustainability of society as a whole and retailers' impact on the broader ecosystem were secondary considerations. The authors also observed that the three sustainability pillars were discussed separately rather than jointly. They concluded that retailers typically used a weak sustainability model. In a different study, Jones et al. (2011b) investigated the extent to which messages regarding sustainable consumption were directed at consumers through marketing measures, for leading food retailers in the UK. They uncovered that promotions often overshadowed sustainability messages, as pricing was the most significant factor influencing consumers' purchasing decisions.

Other researchers focused on the quality of sustainability reporting. As part of their research, Saber and Weber (2019a) compared the quality of sustainability communication by various retail formats, focusing on Germany's leading retailers. The sustainability reporting of conventional supermarkets and discounters was compared both in-store and in their sustainability reports. The evaluation criteria included general characteristics, readability, and data availability. In-store sustainability communication was noticeably lower in discounters than in traditional supermarkets. On the other hand, the quality of the sustainability reports was similar. Building on the study by Jones et al. (2011a), Saber and Weber (2019b) provided another overview of the quality of sustainability reporting by German food retailers. The comparison included traditional supermarkets, discounters, and organic supermarkets. The authors specifically analyzed the reporting on negative aspects. Similar to their prior research, they discovered no evident differences in the quality of sustainability reports among the retail formats. However, some retailers used external auditors and external data verification, to ensure a high standard in their reports. Furthermore, the authors identified differences in the reporting on negative aspects. In general, negative aspects were reported in a vague manner and as a result, the degree of transparency in the reports varied.

Samoggia et al. (2019) focused on the 45 top European food retailers and highlighted that social media can play a significant role in food retailers' sustainability communication. Because of food retailers' role in the supply chain, social media provide an ideal platform for establishing direct contact with consumers. According to Castronovo & Huang (2012), social media also open new possibilities for maintaining customer relationships and communicating with specific target groups. To date, research on food retailers' social media communication is still relatively scarce. While an increasing use of social media, which address multiple stakeholder groups at the same time, was observed, whether social media are suitable for sustainability communication is debated. Accordingly, the current study analyzes (1) how food retailers communicate on sustainability in social media, (2) differences between supermarkets' and discounters' communication, and (3) on which topics they focus their sustainability communication.

Methods

Of the potential social media channels in use, an initial analysis of German food retailers' sustainability communication showed that many focus their presence on LinkedIn to be able to present their sustainability-related information in a professional environment. To be able to develop a profile of German food retailers, it was planned to include the LinkedIn posts of the top three supermarket chains (EDEKA, REWE, and Kaufland) and the top three discount chains (Lidl, Aldi, and PENNY), according to Deloitte (2022) in the analysis. However, as the REWE Group mostly posts jointly for PENNY and REWE, their contributions could not be distinguished and categorized as either belonging to the supermarket or the discounter group. Furthermore, Aldi South and Aldi North post independently of each other and reach a significantly different number of followers (61,500 and 22,000, respectively). Because Aldi South was much more active on LinkedIn during the observation period — Aldi North had gaps of up to three months of not posting at all — only Aldi South was included to ensure comparability of the analyses. However, Aldi North has recently picked up its LinkedIn activity; but this is beyond the one-year observation period (see below).

All LinkedIn posts of the food retail chains enumerated above, addressing any of the three sustainability pillars (environmental, economic, and social) were considered. As LinkedIn was founded as a career network, many posts focused on jobs and careers. While these could have been considered part of the social pillar of sustainability, only contributions related to equal employment opportunity and retailers' health management were included to avoid bias due to the social media channel analyzed. Social media communications are based

on contributions (posts), which lack a time stamp, but are identified by the hours, days, months, or years passed since their first posting. Because contributions vary according to seasons, special holidays or other events, posts were downloaded and archived for one year, going backwards from June 15, 2022, resulting in 283 documents. The analysis followed the approach of reflective thematic analysis suggested by Braun & Clarke (2006; see also Braun and Clarke, 2021). For the implementation of the analysis, the six phases suggested by the authors were followed. These include intensive engagement with the data set; initial data coding; theme generation; revision of themes for the entire data set; refining, defining, and naming themes; final analysis; and writing up the research report. The coding and theme development phases were supported by the use of the Atlas.ti software (version 22.1.0). Mind maps were used for visualization during theme generation and refinement. In general, the process of analysis was extensively recursive, moving back and forth between phases. The report writing was also supported by generating Atlas.ti reports, to describe trends in the data.

Results

Overall, social media, and especially the LinkedIn channel analyzed, seem to be perceived as suitable for sustainability communication by food retail chains, as all retailers examined used LinkedIn to communicate extensively on different sustainability topics. The style of the analyzed LinkedIn posts differed among the retailers in terms of the form of the contributions, text length and use of emojis. Lidl's and Kaufland's posts included a large amount of text with detailed information, and many emojis. Posts by Aldi South and EDEKA were generally shorter in length. Compared to the other retailers, texts by the REWE Group were by far the shortest and contained the least amount of information. Furthermore, it stood out that EDEKA did not use any emojis. While Lidl's and Kaufland's posts differed somewhat in other aspects, their similarity in style might be due to both belonging to the Schwarz Group. All food retailers personalized their communication by addressing the readers in the second person singular or plural, which is considered as informal in the German language. Older consumers might still rather expect to be addressed in a more formal manner. Therefore, a potential conclusion is that the all retailers' social media communication was targeted more towards younger customers the older generation. In some cases, the communication focused on emotional appeals. This type of communication was primarily used when retailers expressed appreciation and gratitude, demonstrated solidarity with those in need, or encouraged consumers to act philanthropically via donations or participating in benefit events.

Analyzing the distribution of posts across the different pillars of sustainability and the retail formats, some patterns could be identified. Surprisingly, the discount chains analyzed did not communicate any less extensively than the supermarket chains. Of the 283 posts identified, Kaufland, a supermarket, had the highest share of posts (34%), followed by Lidl (24%) and Aldi South (16%), both discount chains, then the REWE Group (14%), and EDEKA (12%). The analysis presented showed no indication that the assortment and price strategies of the food retail chains influenced the extent of social media communication.

With an average overlap rate among the topics of posts among the three pillars of sustainability of 1.29, individual posts focused on either ecological topics (42% of all posts), or social topics (29% of posts) by themselves. In addition, ecological and social topics were combined in 10% of all posts. Different from the other chains, Kaufland was the retail chain combining ecological and social topics most frequently by a large margin (14 posts). This is also the reason, Kaufland stood out with the highest overlap rate in the content of posts (1.375).

Economic topics were very rarely the sole topic of a post. It appears that all chains assumed consumer interest regarding sustainability would focus on ecological issues first, and social issues second. Regionality and the strengthening of Germany's agriculture were addressed frequently in this context. When economic topics were addressed at all, which is the case in 19% of all posts, they are primarily combined with ecological topics (13% of all posts). Regarding this combination, food retail chains mainly reported on the implementation of the circular economy concept and investments in more sustainable energy use. Kaufland and Lidl were the retailers with the highest number of posts combining ecological and economic topics (12 posts). Social and economic topics were rarely combined (3%) and less than 2% of all posts combined all three pillars of sustainability. Aldi South stood out with contributing the highest number of posts combining both social and economic topics. While the number of such posts was still very low in sum (6 posts), it was double the number of any of other combination for Aldi South and double the number of the two other retailers with that combination, Kaufland and Lidl, combined. These posts by Aldi South addressed mainly the promise of a fair price-performance ratio despite rising inflation.

In general, retail chains put the main focus of their sustainability communication on environmental topics. For instance, limiting the negative impact of their operations on the environment as a measure for increasing ecological sustainability was addressed frequently. In many cases, the food retail chains analyzed referred to their climate strategy and their goal to become climate neutral. The reduction of CO₂ emissions emerged as the

main measure, which every retailer mentioned several times in LinkedIn posts. However, EDEKA published relatively little on that subject.

The topic of resource conservation was another topic discussed frequently. The concept of the circular economy was mentioned often in this context. Despite the economic aspects of the circular economy, communication focused primarily on ecological aspects. Lidl and Kaufland communicated noticeably more often about this topic than the other retail chains. Furthermore, both chains frequently used posts on resource conservation to market their climate strategy and differentiate themselves from other food retailers.

All retailers analyzed often referred to their sustainable store brands; this was particularly true for Aldi South, Lidl, and Kaufland. All three retail chains emphasized that they oversee the entire manufacturing process of the store brands, allowing them to ensure that sustainability standards are met throughout. In this context, aspects of all three sustainability dimensions were addressed. Subjects discussed predominantly included packaging, vegan and organic products, regionality, climate protection, working conditions, and price-performance ratio. The food retail chains examined emphasized the increasing demand for organic and vegan products regarding their store brands. Several times they pointed to a need for action on their part in the form of expanding vegan and organic store brand offerings.

The focus on environmental topics becomes particularly clear when analyzing the share of each sustainability pillar in the LinkedIn posts of each retail chain. While EDEKA posted the lowest number of contributions overall (33 posts), the content strategy is similar to the other retailers. EDEKA's contributions addressed ecological topics in 70%¹ of all posts (Figure 1). Kaufland's focus on environmental topics was even stronger than EDEKA's with 74%. Lidl and Aldi South follow with a slightly lower emphasis on environmental topics with 68% and 62%, respectively. The REWE Group has a different emphasis with a higher share of posts addressing social topics (55%) than environmental topics (50%). Typically, the share of posts addressing social topics is around 40%, with Kaufland leading the other retail chains with 45%, followed by EDEKA and Aldi South with 42% each and Lidl lowest with 36%, which is somewhat unexpected given the many similarities between Lidl's and Kaufland's communication strategies uncovered. The share of economic topics was typically around 20%, with the exception of EDEKA. EDEKA's share of economic topics was comparatively low, with 12% (Figure 1).

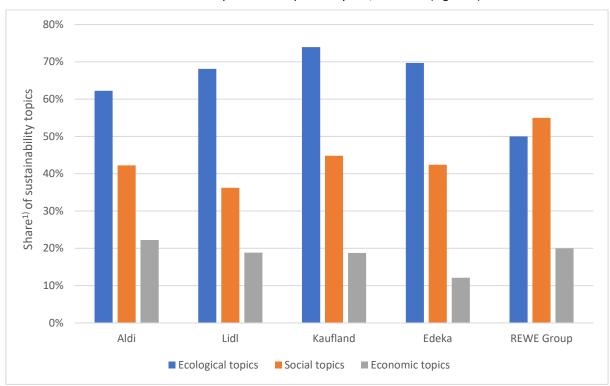


Figure 1: Distribution of sustainability topics in LinkedIn posts by major German food retail chains

-

¹ Please note that a post can address several topics. Accordingly, the percentages of topics by each chain will add up to more than 100%.

Analyzing the content of the communication on social media in more depth, provided additional information on the strategies employed. Communication focused on appeals to different stakeholder groups, mainly consumers to increase sustainable consumption, policy makers to provide a stronger regulatory framework, and suppliers to increase sustainable production.

When communicating with consumers, all retail chains addressed them directly. This included inviting consumers to take part in a campaign, make thoughtful purchasing decisions, or adopt a sustainable lifestyle. Additionally, retail chains attempted to improve the credibility of their communication in various ways. For example, they presented their projects with a lot of details, referred to expert opinions, or emphasized their willingness to engage in dialogue. Only Kaufland, Lidl, and Aldi South, however, emphasized the possibility of dialogue. Lidl, for example, offered an online dialogue board, whereas Aldi South consistently highlighted the possibility of interchange between different stakeholders. EDEKA and the REWE Group did not offer any dialogue options.

A common way to address other supply chain actors or policy makers was to publicly identify problematic issues and urge specific stakeholder groups to take action. For instance, the dependence on other supply chain actors or politicians to enact change towards more sustainability was often emphasized. In general, there was little communication on challenges, but all retailers, except for EDEKA, publicly addressed aspects they struggle with. Examples included the absence of industry-wide mandatory and universally applicable sustainability standards, sustainable production along the entire supply chain, and a lack of consumer trust in the sustainability of products. Aspects identified as challenges were often associated with the entire industry, and blame was assigned to various supply chain actors.

Discussion and conclusions

Similar to Naidoo and Gasparatos' (2018) findings, the analysis showed that food retail chains actively promoted sustainability in their LinkedIn posts. In addition, Bonini & Oppenheim (2008) had emphasized that communication has to be credible in order for it to make a difference. Similarly, the retail chains analyzed tried to increase the credibility of their communication in various ways. Common examples were presenting their processes in a transparent way or emphasizing their willingness to engage in dialogue.

In addition, Castronovo and Huang (2012) had suggested that social media can bring new opportunities for maintaining positive relationships with customer. The analysis of the present study uncovered that retailers took communication to a personal and emotional level. This style of communication was primarily documented when retailers expressed appreciation and gratitude, demonstrated solidarity with those in need, or appealed to consumers to act philanthropically. By using more personal and emotional communication styles, retailers aimed to create a sense of connection and strengthen customer relationships.

The results presented were also similar to Saber and Weber's (2019b) findings that food retailers communicated rather vaguely, if at all, about negative aspects concerning sustainability. In the current analysis, few posts dealt with challenges and publicly engaged with them. In most cases, negative aspects were framed as pertaining to the entire industry, and the responsibility for these issues was assigned to various industry participants.

Saber and Weber (2019a) had also compared the communication of traditional supermarket chains and discount chains, and found that in-store sustainability communication was noticeably lower in discounters than in traditional supermarkets, but communication was similar in sustainability reports. The present study did not identify any specific differences between both retail formats in the number of sustainability posts on LinkedIn. The most notable differences in the sustainability communication of supermarket chains and discount chains in the present study were in the style of the posts and communication on pricing and store brands. Kaufland, a supermarket chain, communicated similarly to the discount chains examined, in many ways. In particular, many similarities between Lidl's, a discount chain, and Kaufland's style of sustainability communication were observed. This is most likely due to the fact that both food retailers belong to the Schwarz Group. Further research is needed to identify whether the lack of difference in sustainability communication between supermarket and discount chains is caused mainly by the anomaly of the similarity in communication of the two Schwarz Group chains. However, the latter is unlikely, because other differences were observed between both chains' communication strategies.

Different from Jones et al.'s (2011a) findings that the three pillars of sustainability were rather reported on separately than together, in the present study, some overlap of topics among the three pillars was observed. Though posts rarely addressed all three pillars, economic topics were often communicated simultaneously with ecological or, albeit to a much lesser extent, social topics and only, in very few cases, the sole topic of a post.

All food retail chains analyzed used LinkedIn to communicate on sustainability. Topics from all three sustainability pillars were addressed, although the focus was on the ecological pillar. It can be concluded that all retailers showed a commitment to SDG 12 "Ensure sustainable consumption and production patterns" by actively encouraging consumers to act in a more sustainable manner and publicly demanding that stakeholders become conscious of their actions' effect on the environment, society, and the economy. Thus, food retail chains promoted sustainable consumption and production through increased education and direct appeals. Furthermore, social media, namely LinkedIn, can be evaluated as suitable for communication on sustainability and for promoting sustainability, as many different stakeholders can be reached simultaneously. Moreover, the professional environment of LinkedIn serves to emphasize that sustainability is taken seriously be food retailers.

The analysis presented did not investigate the correctness of posts and the relationships between communication and the quality of engagement of each retail chain for sustainability issues. Accordingly, aspects of greenwashing and using sustainability solely for marketing purposes or in a nefarious way were not analyzed. Future research could include an analysis of the correctness and empirical content of sustainability communication and the actual commitment to sustainability shown by each chain's actions regarding all three pillars of sustainability.

As another venue of future research, it may be worthwhile to include sustainability communication on other social networks and of other retail formats, such as organic supermarket chains, in the analysis. In addition, the analysis presented did analyze videos, photos, and graphics only on the metalevel, future research could analyze the visuals in more detail with the goal of providing additional insights into communication styles.

References

- Bonini, S., Oppenheim, J. (2008). Cultivating the green consumer. Stanford Social Innovation Review, **6**(4): 56-61.
- Braun, V., Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, **3**(2): 77-101. https://doi.org/10.1191/1478088706qp063oa.
- Braun, V., Clarke, V. (2021). Thematic Analysis: A Practical Guide. London, Sage.
- Castronovo, C., Huang, L. (2012). Social media in an alternative marketing communication model. Journal of Marketing Development and Competitiveness, **6**(1): 117-134.
- Grunert, K. G. (2011). Sustainability in the food sector: A consumer behaviour perspective. International Journal on Food System Dynamics, **2**(3): 207-218. https://doi.org/10.18461/ijfsd.v2i3.232.
- Jones, P., Comfort, D., Hillier, D. (2011a). Sustainability in the global shop window. International Journal of Retail & Distribution Management, **39**(4): 256-271. https://doi.org/10.1108/09590551111117536.
- Jones, P., Hillier, D., Comfort, D. (2011b). Shopping for tomorrow: promoting sustainable consumption within food stores. British Food Journal, **113**(7): 935-948. https://doi.org/10.1108/00070701111148441.
- Naidoo, M., Gasparatos, A. (2018). Corporate environmental sustainability in the retail sector: Drivers, strategies and performance measurement. Journal of Cleaner Production, **203**: 125-142. https://doi.org/10.1016/j.jclepro.2018.08.253.
- Peterson, H.C. (2009). Transformational supply chains and the 'wicked problem' of sustainability: aligning knowledge, innovation, entrepreneurship, and leadership. Journal on Chain and Network Science, **9**(2): 71-82. https://doi.org/10.3920/JCNS2009.x178.
- Saber, M., Weber, A. (2019a). How do supermarkets and discounters communicate about sustainability? A comparative analysis of sustainability reports and in-store communication. International Journal of Retail & Distribution Management, 47(11):1182-1202. https://doi.org/10.1108/IJRDM-08-2018-0156.
- Saber, M., Weber, A. (2019b). Sustainable grocery retailing: Myth or reality? A content analysis. Business and Society Review, **124**(4): 479-496. https://doi.org/10.1111/basr.12187.
- Samoggia, A., Bertazzoli, A., Ruggeri, A. (2019). Food retailing marketing management: social media communication for healthy food. International Journal of Retail & Distribution Management, **47**(9): 928-956. https://doi.org/10.1108/IJRDM-08-2018-0178.