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Daniela Baum
Ludwig-Maximilians-Universität, Munich, Germany, baum@bwl.lmu.de

Martin Spann
Ludwig-Maximilians-University, Munich, Germany, spann@bwl.lmu.de

Johann Füller
University of Innsbruck, Innsbruck, Austria, johann.fueller@hyve.de

Torsten Pedit
Stiegl AG, Salzburg, Austria, torsten.pedit@stiegl.at

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Baum, Daniela, LMU Munich, Institute of Electronic Commerce and Digital Markets, Geschwister-Scholl-Platz 1, 80539 Munich, Germany, baum@bwl.lmu.de

Spann, Martin, LMU Munich, Institute of Electronic Commerce and Digital Markets, Geschwister-Scholl-Platz 1, 80539 Munich, Germany, spann@spann.de

Füller, Johann, University of Innsbruck, Universitätsstraße 15, 6020 Innsbruck, Austria, johann.fueller@uibk.ac.at

Pedit, Torsten, Stieglbrauerei zu Salzburg GmbH, Kendlerstraße 1, 5017 Salzburg, Austria, torsten.pedit@stiegl.at

Abstract

Social media campaigns are increasingly used for supporting the introduction of new products. However, little knowledge exists so far on how social media campaigns can effectively influence online word-of-mouth and referral behavior for new product introductions. The goal of our study is to analyze the success of a social media campaign for the market launch of a new product. We empirically analyze field data of an online community and accompanying social media campaign that was specifically developed to support the market launch of a new fast moving consumer good (FMCG). In this context, we test how the social media campaign was able to impact expectations toward the product as well as satisfaction with it. Further, we analyze the social media campaign's impact on the online word-of-mouth and referral behavior of customers. Based on our results, we discuss opportunities and limits of using social media campaigns to support the market launch of new products.

Keywords: Social Media, Word-of-Mouth, Electronic Referrals, Online Community.

1 Introduction

The Alfa Romeo Mito, the Volkswagen up! or the new fragrance for women by Axe, a brand belonging to Unilever, all of these products were launched with the help of social media campaigns and are just some examples that show that the use of social media as part of their marketing communication is becoming more and more important for firms. Kaplan and Haenlein (2010) refer to social media as applications on the Internet that allow creating and exchanging content by its users. With the implementation of social media for marketing purposes, firms deliberately initiate the exchange of information between Internet users and try to combine the power of online word-of-mouth with the strengths of social networks and peer influence, trying to use positive word-of-mouth to influence potential customers (e.g., Jansen et al., 2009). Especially for the market launch of new products, social media campaigns can be beneficial for firms since the dissemination of information via the Internet is more efficient, giving them the opportunity to reach more people in a shorter period of time compared to the offline diffusion of information (e.g., Cruz and Fill, 2008).

Previous research already investigated the impact of online word-of-mouth as well as the impact of social influence on consumer behavior (e.g., Chevalier and Mayzlin, 2006; Dholakia et al., 2004). However, little knowledge exists so far on how social media campaigns effectively influence online word-of-mouth and referral behavior. Since social media campaigns are increasingly used for supporting the introduction of new products, the goal of our study is to analyze the success of a social media campaign for the market launch of a new product. In this context, we test how the social media campaign was able to impact expectations toward the product as well as satisfaction with it. Further, we analyze the social media campaign's impact on the online word-of-mouth and referral behavior of customers. Based on our results, we discuss opportunities and limits of using social media campaigns to support the market launch of new products.

2 Theory and Hypotheses

Consumers are influenced by others, offline as well as online. In the offline world, friends and acquaintances do play an important part in searching for information or decision-making (e.g., Price and Feick, 1984) as well as in the diffusion of information about new products (e.g., Arndt, 1967). In the online environment, in most cases people do not even know the person where the information comes from (Hennig-Thurau et al., 2004). Nonetheless, recommendations of other customers are taken into consideration when making purchase decisions (Senecal and Nantel, 2004).

Online word-of-mouth is any consumption-related statement that is published by former customers, accessible to a multitude of people, without any time constraints (Hennig-Thurau et al., 2004). Firms are interested in (online) word-of-mouth communication, because they directly link the success of their products to the communication about them (Godes and Mayzlin, 2004). The importance of online word-of-mouth for customer behavior is reflected by the numerous studies on this topic. Thus, potential customers' purchase decisions (Chatterjee, 2001) as well as the other stages of the decision-making process are influenced by the opinions and experiences of others published online (e.g., Hennig-Thurau and Walsh, 2003; Schindler and Bickart, 2005; Zhu and Zhang, 2010). What has to be taken into consideration is that there are various forms of online word-of-mouth communication. These include experiences, opinions and recommendations published online by customers, for example in the form of consumer reviews via opinion portals or content published in forums or blogs. An electronic referral is another form of online word-of-mouth communication, on which we focus in the context of this study.

Comparing electronic referrals (e.g., e-mails) and the other forms of online word-of-mouth, there are two main differences. On the one hand, referrals are sent to people one knows and therefore, the receivers of the referrals know where the information comes from. On the other hand, electronic

referrals are usually unsolicited. This means that the receivers of these referrals are not intentionally looking for information. Thus, it is possible that they are not further taking notice of the information sent to them (De Bruyn and Lilien, 2008). Despite this potential problem, electronic referrals do also have an influence on consumers' adoption behavior (Vilpponen et al., 2006) and the different stages of the decision-making process (De Bruyn and Lilien, 2008).

In the following, we focus on electronic referrals as special form of online word-of-mouth communication. Furthermore, information diffusion via electronic referrals (e.g., e-mail) can be intentional or unintentional (De Bruyn and Lilien, 2008) and we want to concentrate on the former. This means that we just focus on electronic referrals that are willingly sent to friends and acquaintances in order to pass on information and (in our case) recommend the new product.
The personalization of an electronic referral and its targeted sending is considered to increase its effectiveness in terms of (new) product adoption compared to other forms of information available online (Aral and Walker, 2011). With the help of electronic referrals, more people can be reached in a shorter period of time, leading to increased product awareness and purchase intention among their receivers (Phelps et al., 2004).

For a targeted sending of electronic referrals in order to (in our case) inform friends and acquaintances about a new product via e-mail, the sender of the referral must be somehow motivated to share the information. Reasons for this can be on the one hand that sending referrals is entertaining and joyful for many Internet users (Phelps et al., 2004). On the other hand senders may want to share positive experiences with a product (Hennig-Thurau et al., 2004; Phelps et al., 2004; Sundaram et al., 1998).
Using social media campaigns in order to promote the market launch of a new product, there are two potential influencing factors that, especially when concentrating on electronic referrals, might affect information diffusion and new product adoption, namely homophily and social contagion. Theoretically, electronic referrals can be sent to close friends (i.e., strong tie relationships) as well as to casual acquaintances (i.e., weak tie relationships) (Schindler and Bickart, 2005). If the motive mentioned before is the reason for sending an e-mail and thus for the willingness to share information about a new product with others, the sender has to know the receiver of the e-mail (i.e., his or her likes and dislikes). This will be more likely if the receiver of the e-mail is rather a friend than an acquaintance. Friendship, and therefore strong tie connections between individuals, can be explained by the construct of homophily. Homophily is related to but different from tie strength and reflects group formation according to the similarity of its members in terms of certain attributes like demographic variables (e.g., age and gender) as well as perceptual variables (e.g., values, preferences and lifestyle) (Brown et al., 2007; Gilly et al., 1998). Tie strength increases with group homophily (Granovetter, 1973; McPherson and Smith-Lovin, 1987). Thus, one can conclude that friends are rather similar (e.g., McPherson and Smith-Lovin, 1987). Homophily as well as similarity can lead to more trust and understanding between individuals compared to heterophilous and dissimilar connections (Ruef et al., 2003). In addition to that, homophily is said to facilitate the diffusion of product information (Price and Feick, 1984) since homophilous individuals might also share the same product needs (Feldman and Spencer, 1965).
Apart from homophily, another main influencing factor in the process of new product adoption is social contagion (e.g., Coleman et al., 1966; Hinz et al., 2012; Manchanda et al., 2008). Social contagion or social influence refers to the influence of one's peers, meaning that an individual's preferences and behavior is influenced by its contact to others (Susarla et al., 2012). Despite the ongoing debate on these two influencing factors (e.g., Shalizi and Thomas, 2011), Aral et al. (2009) were able to show that homophily can be used to explain in parts the behavior assumed to be 'caused' by social contagion. Thus, we refer to both as possible factors that might have an impact on the attitude and behavior of referral receivers.

Previous research also shows that word-of-mouth and thus electronic referrals are important factors in shaping a customer's expectations (e.g., Parasuraman et al., 1985). And even a customer's satisfaction can be influenced by the pre-purchase information he or she receives (Westbrook et al., 1978).

Building upon this research, obtaining information about a new product from a friend that shares similar interests and attitudes is regarded as more trustworthy than information generated by the firm. Furthermore, the friend that had already tried the new product does have to invest time to spread the word to his or her friends (i.e., to create the electronic referral). The receivers of the referral might probably think that the sender would not do that if he or she had not liked the product him- or herself and if he or she had not thought that the receiver of the e-mail could also like the product (e.g., Phelps et al., 2004). Furthermore, the more effort had been invested to create the referral (e.g., written text or illustration), the higher the quality of the message. In our case, the quality of the referral can be assessed by its rating given by the other members of the online community. Previous research already showed that a higher rating of an online recommendation leads to higher message credibility (Cheung et al., 2009). Thus, we assume that the higher the quality of the referral, the more positive this is taken into consideration by the receiver. In addition to that, the sender and the receiver of the e-mail most likely share interests or tastes. Thus, receiving information from a friend that already knows a product that is new to the market should have an influence on expectations toward as well as on satisfaction with the product. Influencing a potential customer's expectations toward and a customer's satisfaction with a new product is important for firms and the possibility to influence potential customers is considered to be essential for the success of a social media campaign, which is the focus of our study. Therefore, we hypothesize:

H1a: A potential customer's expectations toward a new product are positively influenced by the expectations of the friend or acquaintance he or she gets the electronic referral from.

H1b: A potential customer's expectations toward a new product are positively influenced by the quality of the electronic referral that he or she receives from his or her friend or acquaintance.

H2a: A customer's satisfaction with a new product is positively influenced by the satisfaction of the friend or acquaintance he or she gets the electronic referral from.

H2b: A customer's satisfaction with a new product is positively influenced by the quality of the electronic referral that he or she receives from his or her friend or acquaintance.

For firms, reach is one of the major objectives why they implement a social media campaign in order to support the market launch of a new product (Cruz and Fill, 2008). Therefore, it is necessary that consumers who received an electronic referral from a friend containing the information about the new product, in turn, inform their friends as well. As Dellarocas and Narayan (2006) were able to show, only very satisfied or very dissatisfied customers are publishing their experiences online. We do not consider online word-of-mouth in general but the special form of electronic referrals. Therefore, we assume that the reasons for sharing negative experiences (for an overview see Hennig-Thurau et al., 2004) do not hold here. Due to the need for investing time to create the electronic referral (e.g., text and illustration) and due to the concern for one's friends and the knowledge one has of the likes and dislikes of one's friends, only people who like the new product are referring it. As stated above, the sender of the referral must be somehow motivated to share the information and with regard to the market launch of a new product, motivation arises out of a positive attitude toward the product. A positive experience increases the likelihood of investing time for creating an electronic referral and sending it to friends who might be interested in this new product as well. Therefore, we hypothesize:

H3:   A customer's high (low) satisfaction with a new product increases (decreases) the probability to further recommend the new product.

3   Empirical Study

3.1   Sample and Procedure

For our study, we analyze the data of an online community that developed within the scope of the market launch of a new fast moving consumer good (FMCG), i.e., a new non-alcoholic beverage, in a

mid-sized European country. For supporting the promotion of this new beverage, the brewing company implemented a social media campaign. The goal of the social media campaign was the fast diffusion of information about the new product in this market. The online community that emerged in this context was especially created for this market launch and no existing social networking sites were used to build the community. The creation of the community proceeded as follows: Consumers were able to try the new product at a point-of-sale (POS) and afterwards were asked to register as a member on an online platform. There, they should actively promote the new beverage by designing invitations (potentially including pictures, images and text) and sending these electronic referrals to their friends in order to achieve new registrations on the platform and to enlarge the community. Thus, this social media campaign fostered the creation of user generated content (UGC) in the form of invitations designed by the community members. If a community member was able to recruit three new members (i.e., three friends registered on the platform because of the invitation they received), the community member was sent a sample of four bottles (a so called "tasting kit") of the new beverage. This was done to give the community member the chance to test the product at home with his or her friends. Once registered on the platform, every community member got the chance to obtain such a product sample because of having recruited three new members, no matter whether he or she had come on the platform because of the promotion at a POS or whether he or she had been recruited by another community member him- or herself. As an incentive to promote the product, community members were able to collect points for every activity on the platform (e.g., designing invitations, writing comments on invitations or rating invitations) and of course, for recruiting new members. The community member who collected the most points was able to win a prize.

At the end of the campaign, the online community had 1263 members. These members designed 672 different invitations of which 413 different designs were sent to friends. There are 1012 comments on the designed invitations and 4357 ratings of invitations of others. Furthermore, 96 members of the community were able to recruit 667 new members.

3.2   Measurement

For our study, we use the socio-metric data of the community members since we know who recruited whom. We combine this data with observational data of the community. In this context, we are primarily interested in the number of invitations sent per user and in the rating of an invitation. Community members were able to rate the invitations of others on a 5-point scale anchored by "I don't like it at all" (1) to "I like it very much" (5). Thus, we are able to estimate the quality of an invitation by calculating the mean rating across all ratings submitted by the community members for each invitation. Users who had not tried the product yet were asked at the point of registration to indicate their expectations toward the design, the taste and the bottle of the new beverage on a 5-point scale anchored by very low (1) to very high (5). Further, users were asked if they had already heard of the new beverage. If they had already tried the new beverage, they were asked to indicate their satisfaction with the design, the taste and the bottle on a 5-point scale anchored by not satisfied at all (1) to very satisfied (5). Expectations toward as well as satisfaction with the product were calculated by using the mean across the three dimensions design, taste and bottle per customer.

At the end of the campaign, we were able to get additional information from the community members by conducting an online survey, asking respondents to report user characteristics, their consumption and purchase behavior as well as their satisfaction with the product. As part of the user characteristics, we measured opinion leadership and opinion seeking according to the adapted scale of Flynn et al. (1996). In addition to that, we measured positive word-of-mouth using the scale of Arnett et al. (2003) (see appendix for details). Consumption behavior was assessed by a single item, asking community members whether they tried the product again after the end of the campaign. Purchase behavior was operationalized by a single item, asking community members if they purchased the product after the end of the campaign. We also asked all respondents about their satisfaction with the design, the taste and the bottle. We again used a 5-point scale anchored by not satisfied at all (1) to very satisfied (5).

3.3 Results

In order to test our first hypothesis, we performed a regression analysis using the expectations of the referral receiver as dependent variable. Since we possess the community's network information, in the case of a successful recruitment, we are able to match the referral receiver's characteristics with the characteristics of the referral sender. Thus, the independent variables are the following: in order to control for the influence of the referral sender, we use the expectations of the referral sender. Furthermore, we use the rating of the invitation which led to the registration in order to control for the quality of the referral. And we use the number of invitations sent by the sender in order to control for a target-oriented sending of referrals. In addition to that, we use a dummy variable indicating whether the referral receiver had already heard of the product before. We estimate the following linear model:

$$Expectations_{Receiver} = \beta_0 + \beta_1 * Expectations_{Sender} + \beta_2 * Rating\ of\ the\ invitation +$$
$$\beta_3 * Number\ of\ invitations\ sent + \beta_4 * Heard\ before + \varepsilon$$

The results depicted in table 1 indicate a significant positive influence of the sender's expectations, the rating of the invitation that led to the registration and the pre-purchase information on the receiver's expectations toward the new product. The number of invitations sent has a negative influence, but is not significant. The results of this regression analysis provide support for H1a and H1b. A potential customer's expectations toward a new product are positively influenced by the expectations of the sender of the electronic referral as well as by the quality of the referral that was estimated by the community members.

Variables	Parameter
Expectations$_{Sender}$	0.155** (0.067)
Rating of the invitation	0.147** (0.740)
Number of invitations sent	-0.00009 (0.00005)
Heard before	0.283** (0.127)
Constant	2.791*** (0.308)
No. of observations	299
R-Squared	0.054
F-Value (p-Value)	4.211 (0.002)
Notes: Standard errors in parentheses *** p<0.01, ** p<0.05, *p<0.1; VIF < 2	

Table 1. Regression Results - Expectations$_{Receiver}$

We performed a second regression analysis using the satisfaction of the referral receiver as dependent variable. Now, the independent variables are the following: we use the expectations the referral receiver already has toward the new product. Furthermore, we use the satisfaction of the referral sender in order to control for the influence of the sender. Additionally, we use the rating of the invitation that was sent to the referral receiver and led to the registration in order to control for the quality of the referral, and we use the number of invitations sent by the sender in order to control for a target-oriented sending of referrals. Our linear model is estimated as follows:

$$Satisfaction_{Receiver} = \beta_0 + \beta_1 * Expectations_{Receiver} + \beta_2 * Satisfaction_{Sender} +$$
$$\beta_3 * Rating\ of\ the\ invitation + \beta_4 * Number\ of\ invitations\ sent + \varepsilon$$

Unfortunately, only a minority of 30 community members indicated both, expectations before trying the product and satisfaction after actually having tried it. As table 2 indicates, only the expectations the receiver already has toward the new product and the rating of the invitation that led to the registration have a significant impact on the receiver's satisfaction with the product.

The results of this analysis provide support for H2b. H2a cannot be supported since the influence of the satisfaction of the friend or acquaintance a customer gets the electronic referral from is not significant. This might be explained by the fact that with regard to product satisfaction, other factors (e.g., the own tasting experience) are more important.

Variables	Parameter
Expectations$_{Receiver}$	0.344** (0.162)
Satisfaction$_{Sender}$	-0.195 (0.624)
Rating of the invitation	0.528** (0.211)
Number of invitations sent	0.00024 (0.00018)
Constant	1.666 (2.575)
No. of observations	30
R-Squared	0.337
F-Value (p-Value)	3.176 (0.031)
Notes: Standard errors in parentheses *** $p<0.01$, ** $p<0.05$, *$p<0.1$; VIF < 2	

Table 2. Regression Results - Satisfaction$_{Receiver}$

In the following, we analyze the recommendation behavior of community members. Therefore, we performed two analyses. Using the survey data, we first analyze customers' word-of-mouth behavior. The construct positive word-of-mouth serves as dependent variable while the constructs opinion leadership and opinion seeking are independent variables. In addition to that, the satisfaction of the community members as well as the two dummy variables indicating whether people tried the product again or whether they purchased the product are also used as independent variables. We estimate the following model:

$$Positive\ WOM = \beta_0 + \beta_1 * Satisfaction + \beta_2 * Opinion\ Leader + \beta_3 * Opinion\ Seeker +$$
$$\beta_4 * Product\ tasted\ again + \beta_5 * Product\ bought + \varepsilon$$

In total, 97 community members participated in the online survey. As the results in table 3 indicate, satisfaction with the product has a highly significant influence on positive word-of-mouth behavior.

Variables	Parameter
Satisfaction	0.737*** (0.140)
Opinion Leader	0.151 (0.093)
Opinion Seeker	-0.124 (0.101)
Product tasted again	0.319 (0.242)
Product bought	0.351 (0.258)
Constant	-0.143 (0.645)
No. of observations	97
R-Squared	0.403
F-Value (p-Value)	12.291 (0.001)
Notes: Standard errors in parentheses *** $p<0.01$, ** $p<0.05$, *$p<0.1$; VIF < 2	

Table 3. Regression Results - Positive WOM

The direction of the influence of the remaining independent variables is as expected, but is not significant. From these results, we can conclude that spreading the word about a new product is primarily influenced by the satisfaction with it. This finding is rather intuitive, furthermore there are various studies that also showed the importance of satisfaction for word-of-mouth behavior (e.g., Anderson, 1998; Dellarocas and Narayan, 2006).

In testing H3, we are interested in the referral behavior of (newly recruited) community members since fast information dissemination is one of the main reasons for firms to implement social media campaigns. Therefore, we performed a logistic regression analysis. The dependent variable here is a dummy variable that indicates whether the community members did send electronic referrals or not. This variable implies whether the community member engaged in spreading the word about the new product and therefore, informed his or her friends. As independent variables we use the satisfaction with the product and a dummy variable indicating whether the community member had been recruited him- or herself. This is our estimated model:

$$Sending\ invitations = \beta_0 + \beta_1 * Satisfaction + \beta_2 * Having\ been\ recruited + \varepsilon$$

In total, 205 community members indicated their satisfaction with the product and were included in the analysis. The results provided in table 4 indicate that satisfaction has a positive influence, but this influence is not significant. Further, the results show that community members that had been recruited themselves do have a significantly lower probability to send invitations to friends or acquaintances. Thus, H3 cannot be supported.

Already Goel et al. (2012) were able to show that diffusion in networks stops within one degree of the originator. They found this to be true for different kinds of online platforms. This result is consistent with our finding. What is interesting in our analysis is that we do not only consider the (further) referral behavior within an online network, but that we do also take into account the offline component. In our case, we include the product satisfaction to be of importance for online referral behavior.

Even by including satisfaction with a new product and thus combining offline and online behavior, we see that satisfaction with a new product does not increase the probability to further spread the word about the new product.

Variables	Parameter
Satisfaction	0.141 (0.241)
Having been recruited	-0.891** (0.421)
Constant	-1.746 (1.021)
No. of observations	205
-2 log likelihood	190.442
Chi-Square	6.126
Note: Standard errors in parentheses *** p<0.01, ** p<0.05, *p<0.1	

Table 4. Logistic regression results - Sending invitations

To get additional insights into these results, we analyze the cross table dependencies (table 5). On the vertical axis, we provide the information if the community member had been recruited him- or herself and on the horizontal axis, we provide information about the sending of electronic referrals. Table 5 shows the number of community members and additionally includes their mean satisfaction with the product. We see that out of the 205 community members that indicated their satisfaction with the product, only 38 sent invitations themselves. If we only look at those that had been recruited by a friend, only 9 community members created electronic referrals and sent them. The results of a Fisher's

exact test show that there is a significant dependence between whether community members have been recruited or not and whether they send electronic referrals (p = 0.019). Besides, the mean satisfaction of those community members that have not been recruited is significantly higher than of those that have been recruited (M_{No} = 4.107; M_{Yes} = 3.731; p < 0.001). These results indicate that newly recruited community members were apparently not really convinced by the new product. This result might be explained by the disconfirmation paradigm (e.g., Oliver, 1980). With regard to satisfaction, the expectations before actually having tried (in our case) the product are important since satisfaction is related to expectancy disconfirmation. A customer is satisfied if expectations are confirmed or positively disconfirmed by the perceptions of the product. Thus, community members that were recruited by a friend might have had higher expectations toward the product because of the friend's recommendation. Therefore, confirming or positively disconfirming expectations might have been more difficult in these cases.

		Sending invitations		
		No	Yes	Total
Having been recruited	No	N = 93 Satisfaction = 4.079	N = 29 Satisfaction = 4.195	N = 122 Satisfaction = 4.107
	Yes	N = 74 Satisfaction = 3.732	N = 9 Satisfaction = 3.722	N = 83 Satisfaction = 3.731
	Total	N = 167 Satisfaction = 3.925	N = 38 Satisfaction = 4.083	N = 205 Satisfaction = 3.954
Note: Satisfaction refers to the mean satisfaction				

Table 5. Cross table dependencies

4 General Discussion

This study analyzed field data of a social media campaign that was implemented to support the market launch of a new beverage. Our study shows that with the help of electronic referrals, a receiver's expectations toward a new product can be influenced on the one hand by the sender's expectations as well as by the quality of the referral. The more appealing an electronic referral is, the higher the receiver's expectations are toward the product. This can be explained by the construct of homophily and its consequences (e.g., trust and understanding) as well as by social contagion. Electronic referrals are sent to friends of who one knows the likes and dislikes. Furthermore, friends often share likes or interests. The receiver of the referral is aware of that and might think that if his or her friend has a favorable opinion of the new product and recommends it, the receiver itself might also like the new product. Furthermore, the receiver's satisfaction with the product is impacted as well. Even after having tried the product, there is a positive influence of the quality of the referral on the receiver's satisfaction with the product. The impact of the social media campaign on both, expectations toward and satisfaction with the product that is new to the market, can be regarded as opportunities that these campaigns provide and can be considered to be essential for the success of a social media campaign. Even before actually having tried the product, the recommendation of a friend can positively influence one's expectations. After having tried the product, there is still an influence of the quality of the referral received.

But our study further shows that, although supporting the market launch of a new product with a social media campaign, a fast dissemination of the information about the new product cannot be taken for granted. The results of our empirical study indicate that although product satisfaction plays an important role for positive word-of-mouth behavior, within the scope of the campaign, the probability that the new product is recommended further is significantly lower for newly recruited community members. This finding represents one limitation of social media campaigns since the goal of a fast diffusion of information will not be reached if those who tested the product do not spread the word

themselves. In our case, this result can be explained in part by the fact that the product did rather not convince consumers. Therefore, firms should take into account that when using social media campaigns as part of their marketing communication, especially in the case of new product introductions, these campaigns can provide opportunities but can also have limits. With these campaigns, the expectations before having tried the new product can be influenced. Furthermore, even the satisfaction after having tried the product is impacted by the social media campaign. Influencing both, expectations and product satisfaction, are important objectives for firms and by implementing a social media campaign, firms can positively influence these two factors. In addition to that, firms should also be aware that, if the product itself does not convince consumers, even implementing a social media campaign does not help.

The positive impact of the social media campaign on the market launch of the new FMCG is also reflected in the significant positive correlation between the number of community members in a geographic area (i.e. county) and the sales of the new product in this geographic area ($r = 0.66$; $p < 0.01$). For this analysis we used 620 members of the online community that indicated their postal code during the registration process. This result shows that the online social media campaign has a significant positive impact on sales and that this impact is reflected in the spatial distribution of new product sales related to the spatial distribution of community members. However, based on our previous analyses, we believe that the campaign stayed well below its potential. If newly recruited community members had also engaged in stronger word-of-mouth behavior, far greater market success of the new product would have been possible.

In this context, it has to be mentioned that the design of social media campaigns is of great importance. In certain cases, implementing a campaign using an already existing social network (e.g., Facebook) might be more effective in spreading the word about a new product. While personalized referrals might be more effective because the receiver knows where the information comes from, automated notifications about actions of one's direct friends on a social networking site might be more effective in terms of fast information diffusion and product adoption within the network (e.g., Aral and Walker, 2011). Thus, analyzing the impact of online referral behavior and of different design aspects of social media campaigns on sales might be two interesting subjects for future research.

Though our study extends knowledge on the impact of online word-of-mouth and electronic referrals as special form of it, we have to acknowledge several limitations. First, we only analyze field data of the market launch of one product which is a FMCG. Analyzing data of new product introductions of other product categories would also be interesting and could be subject of future research. Second, the data of the social media campaign we analyzed is limited to the market launch of a new product in a mid-sized European country. Analyzing the impact of a social media campaign on the success of a product that is introduced to several markets provides avenues for future research as well.

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Appendix

Measurement items and scale reliabilities			
Construct and items	Cronbach's alpha	AVE	CR
Opinion leadership (adapted from Flynn et al., 1996)	0.854	0.663	0.855
1) People that I know pick new products based on what I have told them.			
2) I often persuade others to buy the new product that I like.			
3) I often influence people's opinions about new products.			
Opinion seeking (adapted from Flynn et al., 1996)	0.800	0.590	0.811
1) When I consider buying a new product, I ask other people for advice.			
2) I like to get others' opinions before I buy a new product.			
3) I feel more comfortable buying a new product when I have gotten other people's opinions on it.			
Positive word-of-mouth (Arnett et al., 2003)	0.884	0.720	0.885
1) I "talk up" [the specific product] to people I know. 2) I bring up [the specific product] in a positive way in conversations I have with friends and acquaintances.			
3) In social situations, I often speak favorably about [the specific product].			
Notes: AVE: average variance extracted; CR: composite reliability. We deleted several items of the original OL and OS scale due to reliability reasons.			