The relationship between the firm's social media strategy and the consumers' engagement behavior in aviation

Valdimar Sigurdsson [1] | Nils Magne Larsen [2] | Arna Dogg Sigfusdottir [1] | Asle Fagerstrøm [3] | Mohammed Hussen Alemu [1][4] | Michal Folwarczny [1] | Gordon Foxall [1][5]

Address correspondence to Valdimar Sigurdsson, Reykjavik University, Menntavegur 1, 101 Reykjavik, Iceland (e-mail: valdimars@ru.is; phone number: +354 599 6356).

---

[1] *School of Business, Reykjavik University, Reykjavik, Iceland*

[2] *UiT The Arctic University of Norway, Harstad, Norway*

[3] *Kristiania University College, Norway*

[4] *Department of Economics and Business Economics, Aarhus University, Aarhus, Denmark*

[5] *Cardiff Business School, Cardiff University, Cardiff, United Kingdom*

Abstract: Social media platforms constitute a new frontline for brands to build relationships with their customers. Nevertheless, the literature on social media engagement behavior is unidimensional, as it focuses on customer engagement while neglecting the customer's influence on managerial decisions. The current paper goes a step further by applying The Theory of the Marketing Firm. We investigated consumer-firm bilateral contingencies through three studies. The first study captures up to 60% of the variance in consumer responses given on Icelandair's Facebook page. The second study shows how customers engage with Icelandair's social media platforms. The third study illustrates the firm's social media strategy from a managerial perspective.

1. Introduction

Marketing is based on behavioral function, which is interested in the effects of incentives and penalties in the form of fulfillment of needs and wants. As such, it can be defined as "the study of the behavior of consumers and marketers, especially as they interact" (Foxall, 2001, p. 165) and the research of their bilateral workings on each other.

Social media platforms such as Facebook have changed these consumer-firm bilateral workings by altering the landscape of marketing communication. They continue to expand due to their convenience, increasing the number of users and the share of consumers' total time spent using media (Peters, Chen, Kaplan, Ognibeni, & Pauwels, 2013; Seo & Park, 2018). Social media studies tend to be unidirectional, as they focus on consumer engagement behavior without giving due consideration to the role of firms' marketing activities. Against this backdrop, we adopt an integrated approach to study not only consumer engagement behavior but also the role of marketing firms in influencing this behavior. This follows from the fact that firms and consumers do not live in isolation, and they exhibit interdependent behaviors that can be interpreted with the concept of bilateral contingency (Foxall, 1999; 2018). In this paper, we apply the *Theory of the Marketing Firm* (TMF) (Foxall, 1999) to study bilateral contingencies between a Nordic airline, Icelandair, and its' customers in the context of the regular-fare international airline industry.

We add to the limited literature on how consumers affect firm behavior by conducting a case study on one industry context as encouraged by Foxall (2018). Our focus is less on the archetypal consumer's engagement behavior on social media, an active area of research within marketing in which researchers examine ways to enhance

consumer engagement (e.g., Gaber & Wright, 2014; Kujur & Singh, 2017; Lee, Hosanagar, & Nair, 2018; Lin, Swarna, & Bruning 2017; Pletikosa Cvijikj & Michahelles, 2013; Shen & Bissell, 2013). We contribute to that literature but focus more on the strategy and tactics of the marketing firm itself, as an important gap in the literature. The aviation industry was chosen because firms of this sector adopt an active approach to social media marketing, many of which have large fan bases following their brand messages on social media (Grančay, 2014). We study engagement to a greater extent than previous studies of the airline sector. From qualitative interviews, we obtained a spectrum of behaviors not available when only the number of 'likes' and 'comments' was scrutinized (e.g., de Vries et al., 2012). Finally, we assess the managerial perspectives of transaction costs. According to Foxall (1999), firms gather marketing intelligence to lower transaction costs. They can achieve this by, for example, designing more effective social media communication, increasing the return on investment from every post (i.e., as customer engagement increases, so does brand equity).

1.1 The role of social media in aviation

As of July 2018, there were 3.3 billion social media users worldwide, and Facebook users accounted for more than two third of them (Statista, 2018). From 2007, Facebook has been connecting firms and users through 'fan pages', where consumers can interact with brands and with other consumers (Coelho, Rita, & Santos, 2018). This creates new opportunities for firms to reach and communicate with their customers more effectively (Culnan & McHugh, 2010; Kujur & Singh, 2017). By "liking" a fan page, consumers become "fans" of a brand/firm. A firm can post messages, photos and videos on its Facebook profile and upon adding a new brand post to its wall, all fans are

notified on their "news feeds" (Grančay, 2014). To extend their reach, firms can also promote their brand posts through paid services so that Facebook users who are not their fans see these posts. As such, social media plays an increasingly important role in airline communication strategies (Grančay, 2014), and passengers' use of airline social media is expected to continuously increase (Seo & Park, 2018). Research shows that airlines' social media marketing activities affect brand awareness, brand image, and the extent to which consumers speak positively about an airline on social media (Dijkmans, Kerkhof, & Beukeboom, 2015a; Dijkmans, Kerkhof, Buyukcan-Tetik, & Beukeboom, 2015b; Hudson & Thal, 2013; Seo & Park, 2018). Thus, the impressions that consumers form about an airline brand are increasingly based on exposure to airlines' social media content. Parveen, Jaafar, and Ainin (2015, pp. 73-74) cited a social media manager of Asia's leading airline stating that "*People now see that our organization is not just an airline, it is a brand, which is more fun, young and dynamic. It has improved our brand positioning... We use creative ways to introduce a new destination with the help of social media*". This shows that social media can add value to airlines a new way to market, inform and promote; to enhance brand visibility, and to interact more frequently with consumers.

1.2 Applying the Theory of the Marketing Firm in social media marketing

Over the past two decades, the aviation industry has evolved tremendously. Today, consumers are more price-sensitive, they have easy access to competing offers, and competition in the industry has intensified, especially from low-cost airlines, as the Internet has lowered their transaction costs. Therefore, a focus on online and measurable marketing activities is more imperative now than ever before. As a result, airlines use

social media tools such as Facebook brand pages to deliver promotional material, to attract new customers, to retain current customers, to distribute information and to facilitate user engagement (Leung, Schuckert & Yeung, 2013).

Foxall (1999) proposed the TMF to explain such relationships between customers and firms. According to Foxall (2018), firms should gather marketing intelligence to create a strategy that focuses on creating a long-term and sustainable relationship with their consumers and to attract new ones. However, the TMF has only been used to study such interrelationships in a few case studies (Foxall, 2015; Vella & Foxall, 2011; Vella, 2015). The present study thus adds to the literature on the TMF and its relevance to different research topics and industries with a focus on aviation, engagement behavior and social media interactions. The bigger picture, however, contributes to the analysis of social media marketing from an operant behavioral economic perspective (Foxall, 2016) by examining why airlines are intensifying their social media marketing efforts. We study the relationship between managers and consumers in relation to Icelandair. This airline is Iceland's flag carrier and is strategically centered on the country's geographical location, as the country is positioned midway between North America and Europe (Icelandair, 2019a). The airline offers a broad range of fare classes and a selection of economy and business seats on all of its international flights, specifying its middle positioning within the airline industry (Icelandair, 2019b). Our focus is on Facebook, the largest of all social media platforms in terms of the number of users and Icelandair's most important social media platform. This is the first study to use the TMF to explore social media engagement and will thus further contribute to the knowledge of the relevance of the TMF to research conducted on firm-customer interactions within this realm.

We conducted three studies. First, we analyzed Icelandair's brand posts and how fans react to such posts in terms of likes, reactions, comments, and shares. The present study provides insight into what types of content render consumers more likely to engage with brand posts made by Icelandair on Facebook. Second, we interviewed consumers on their social media usage, on the content that they like, on their relation to Icelandair, and on their views of their own engagement behavior. Third, we performed interviews with Icelandair marketing managers to obtain insight on their social media strategies and on the role that engagement metrics play in their market intelligence. The paper is organized as follows. First, we review the relevant literature. We then present the method and data/results of studies 1, 2, and 3, respectively. This is followed by a discussion of the main results with an emphasis on bilateral contingencies between Icelandair and its customers/fans. We conclude by addressing limitations and avenues for further research.

2. Review of the relevant literature

In this section, we review relevant literature on customer engagement with an emphasis on brand post engagement in social media and relevant engagement metrics. We also review relevant studies on factors that influence consumer brand post engagement with social media marketing.

2.1 Customer engagement

Customer engagement reflects cognition and behaviors that are favorable for brands (Jahn & Kunz, 2012). Due to the growing importance of consumer engagement,

brands must allocate more of their marketing resources to fan engagement (Verhoef et al., 2010). Identifying consumer engagement behaviors; developing relevant metrics; and responding to consumer engagement behaviors by adjusting products, services and marketing approaches is therefore important for any brand (van Doorn et al., 2010). Despite the widespread use and interest in consumer engagement, there is no consensus on its definition (Lin, Swarna, & Bruning, 2017; Viglia, Pera, & Bigné, 2018). A review of the literature indicates that customer engagement in most cases is defined as a multidimensional concept involving a combination of cognitive, behavioral, and/or emotional aspects (Brodie, Hollebeek, Juric, & Ilic, 2011). Brodie et al. (2011) found that the expression of specific cognitive, emotional, and/or behavioral aspects varies considerably across contexts. In this study, customer engagement is defined as a consumer being interested in a brand's social media activities (cognitive aspects), participating in the brand's social media activities (behavioral aspects), and/or harboring positive feelings about a brand's social media activities (emotional aspects). Despite the prominence of multidimensional perspectives given in the literature, over 40% of definitions reviewed by Brodie et al. (2011) express customer engagement as a unidimensional concept where the behavioral dimension appears particularly dominant. For study 1, we focused on the behavioral dimension of customer engagement by examining how consumers (fans) respond to (by liking, reacting to, commenting on, and sharing) brand posts with different designs and content. This enabled us to observe the behavioral manifestations of engagement (Verhoef, Reinartz, & Krafft, 2010). For Study 2, we interviewed consumers to examine cognitive and emotional aspects of engagement (e.g., their relationships to Icelandair, the brand content that they like, and thoughts on their own behavior).

2.2 Factors influencing consumer brand post engagement

Understanding the factors that influence consumer brand post engagement is important for marketers because it can enable them to design consumer-oriented brand posts and to devise marketing strategies that enhance their brands' popularity. Research shows that the characteristics and content of brand posts play a significant role in driving consumer engagement (e.g., de Vries et al., 2012; Hettler, 2010; Heymann-Reder, 2011; Luarn & Chiu, 2015; Sabate et al., 2014). The characteristics of brand posts can refer to their vividness and interactivity, whereas content can be informative, entertaining, promotional, and social (de Vries et al., 2012; Cvijikj and Michahelles, 2012). See *Figure 1* for a prototypical representation of mainstream social media marketing research conducted in academia (de Vries et al., 2012; Menon et al., 2019).
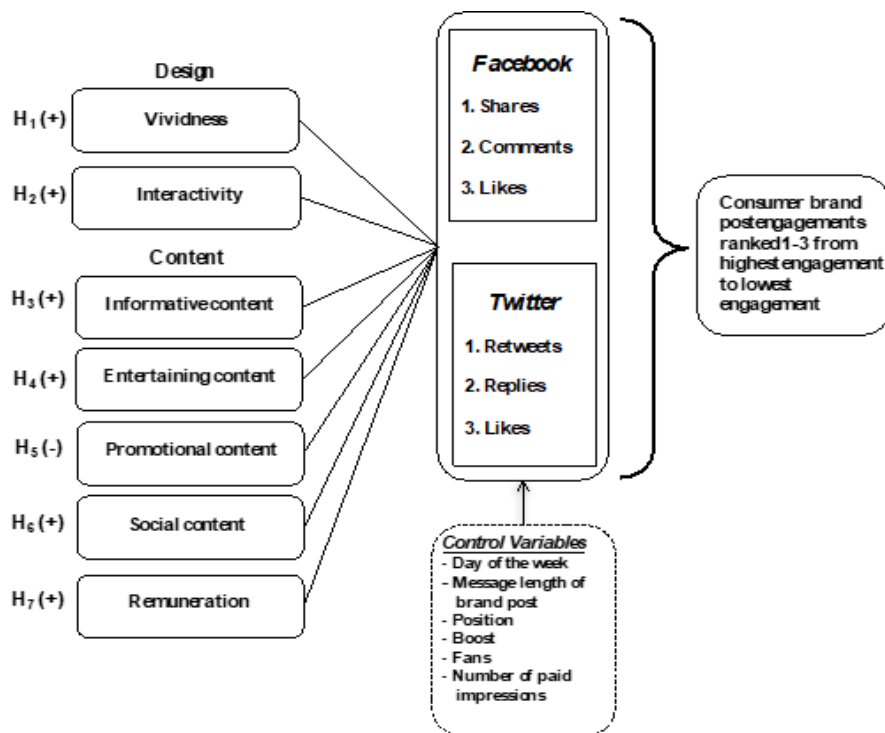

Figure 1. A conceptual model for brand post engagement on social media. Re-published from Menon et al. (2019) with permission. See also de Vries et al. (2012).

Vividness is related to the breadth and depth of content (Steuer, 1992). Breadth reflects the number of sensory dimensions stimulated by content. In this regard, features such as sound, video, and color enhance the vividness of a post. Depth refers to the resolution and quality of content. Lin et al. (2017) described vividness as the way in which a brand post appeals to an individual's senses. Posts can achieve vividness by including dynamic animations, colors and pictures. A video is more vivid than a picture, as a video can stimulate both the visual and auditory senses (Lee et al., 2018). Studies have found that vivid content with videos and images posted on Facebook attracts more engagement than posts with only text. De Vries et al. (2012) and Sabate et al. (2014) found that highly vivid posts increase the number of likes on Facebook. However, others, including Cvijikj and Michahelles (2012) and Luarn and Chiu (2015), found weak evidence of this result.

Interactivity is a complex term which has been defined inconsistently in the literature. As indicated by de Vries et al. (2012), the definition provided by Liu and Shrum (2002) is suitable in explaining consumer brand post engagement. Accordingly, interactivity can be defined as "the degree to which two or more communication parties can act on each other, on the communication medium, and on the message and the degree to which such influences are synchronized" (Liu & Shrum, 2002, p. 54). In social media marketing, interactivity can be conceptualized as consumers interacting with brand posts by clicking on links and by answering questions posted by brands. Question-answer dialogue, contests, and links to websites are likely to be more interactive than simple texts, as consumers are required to take action (de Vries et al., 2012; Fortin & Dholakia, 2005). Some studies show that interactivity can be associated with positive attitudes towards websites and firms (Coyle & Thorson, 2001; Fortin &

Dholakia, 2005). Other studies, such as de Vries et al. (2012) and Luarn and Chiu (2015), report that interactivity influences consumer brand post engagement on Facebook.

Regarding types of brand posts made in terms of content, several authors have focused on the influence of informative and entertaining brand posts (e.g., Berger & Iyengar, 2013; Cvijikj & Michahelles, 2012; de Vries et al., 2012; Koch & Benlian, 2015; Liu-Thompkins & Rogerson, 2012; Luarn & Chiu, 2015; Tsai & Men, 2017). Despite varying reporting degrees of influence, most of these studies have found that both informative and entertaining posts are important in influencing consumer brand post engagement.

In addition to content, other factors, such as brand, product, consumer and social media factors, can mediate consumer brand post engagement (see Barger et al., 2016 for review). The posting time has been found to be a key determinant of consumers' levels of brand post engagement. For instance, Cvijikj and Michahelles, (2012) found that posting on weekdays is likely to increase consumer engagement in terms of commenting on Facebook brand pages. Other studies have explored the antecedents of consumers' engagement behavior considering social relationship-oriented factors. ON this issue, Tsai and Men (2013) investigated the effects of social media dependence, parasocial interaction, the perceived credibility of brand pages, and social and community identification on consumer engagement with Facebook brand pages. They found most of these factors to be important in driving consumer engagement. A study by de Vries and Carlson (2014) also found that social interaction value can foster consumer brand post engagement on Facebook. In studying the effects of cultural differences on consumers' engagement with brands on social media sites, Tsai and Men

(2017) found that unlike American consumers, who are interested in economic benefits such as coupons, Chinese consumer engagement with brand pages is driven by socially related factors. The latter consumers rather visit brand pages to strengthen their social interactions with like-minded peers. Drawing on the importance of socially related factors, we investigate the influence of brand posts reflecting social relationships on consumers' levels of brand post engagement.

Studies examining the relationships between brand posts and consumer engagement in the context of the airline industry are limited with the exception of Seo and Park (2018) and Leung et al. (2013). Seo and Park (2018) found that *trendiness,* i.e., providing the newest information on products and services, is an important component of social media marketing. The authors also report that providing reliable information that matches consumers' preferences can have a positive influence on consumers' levels of engagement with a particular airline. Leung et al. (2013) studied the use of social media within the low-cost airline sector. They found that low-cost airlines adopt a different approach to social media. AirAsia uses the majority of its posts to promote tickets, which were found to be the most popular posts in terms of shares, likes, and comments. On the other hand, EasyJet mostly encourages users to post on its wall, where the most popular posts were found to be polls, informing the company of preferred summer vacation destinations. The authors also report that low-cost airlines post different types of content for different purposes. This can be related to the above discussion on the influence of characteristics and of the type of brand post content on consumers' levels of engagement. With the current study, the literature is expanded by examining the case of Icelandair. This study adds to the existing literature in that it utilizes data collected from not only Icelandair's fan page but also through interviews

with consumers and managers. This work thus offers a broader perspective of consumers' brand post engagement behavior than that reported in the existing literature.

2.3 Metrics of customer social media brand post engagement

Brand posts constitute an important component of airlines' social media activities (Grančay, 2014), and "*fan engagement*" is an important attribute of airlines' social media usage (see, e.g., Parveen et al. 2015). Travelers who are fans of an airline can see brand posts and engage with them by liking, commenting and sharing. Facebook has also recently incorporated reactions, which communicate new types of emotions (love, angry, sad, haha and wow) that appear when the consumer hovers his or her cursor over the 'Like' button. Reactions can reflect how content makes fans feel emotionally.

Likes, reactions, comments, and shares are behavioral manifestations of consumer engagement (van Doorn et al., 2010) that go beyond transactions (Verhoef et al., 2010). Becoming a fan and following a brand on Facebook reflects engagement at its most basic level (Dijkmans et al., 2015a). Engagement increases when fans start to express interest and emotions by commenting on and sharing brand posts. As the consumer is required to press and hold the 'Like' button and select the desired reaction, it is possible to argue that this better represents engagement than the number of likes. Similarly, commenting and sharing represent higher levels of involvement than both likes and reactions, as these behaviors involve even more effort (Kim & Yang, 2017; van Dijck, 2013). Sharing is the preferred behavior when the aim is to increase brand visibility on Facebook. When sharing, a brand post will appear not only on users' news

feeds but on their friend's news feeds as well. The number of likes, comments and shares determine the influence of a brand post (Leung et al., 2013), and the more fans like, comment, share, and view brand posts, the more of the firm's posts will appear on their timeline.

Achieving a high level of post engagement is desirable for airlines, as it can improve their visibility and brand awareness (Parveen et al., 2015; Seo & Park, 2018), enhance their brand image (Seo & Park, 2018) and positively affect their reputations (Dijkmans et al., 2015a; Dijkmans et al., 2015b). A challenge that airlines face is to attract fans' attention to their brand posts and to make sure that they engage with such posts (Luarn, Lin, & Chiu, 2015). This can be accomplished by developing posts that are more closely aligned with fans' interests and preferences (Seo & Park, 2018), which requires market intelligence.

2.4 The Theory of the Marketing Firm

Coase (1937) argued that price-based market system can lead to high transaction costs when firms negotiate and make contracts with others and that a firm can reduce such transaction costs by internalizing tasks rather than relying on an external market. One can argue that the theory of transaction costs was useful in explaining the emergence of firms in Coase's time, as firms were mostly focused on lowering the cost of production and achieving mass production. With the rise of affluent societies with high disposable incomes and with increasing competition among firms, responding to consumers' behaviors have become firms' first priority (Foxall, 1999). Modern consumers have different sets of needs and preferences. Therefore, it is vital for firms to

shift their focus from internal activities such as production management (Coase, 1937) to external activities such as consumer-oriented marketing management (Foxall, 1999, 2018).

Firms that adopt consumer-oriented marketing management are, according to Foxall (1999, 2018), marketing firms. Such firms interact with their customers by creating marketing mixes (price, product, promotion, and place) and by modifying them according to consumers' responses. This implies that marketing firms are involved in dynamic relationships with their customers, which can be conceptualized using operant behavioral contingencies (Foxall, 1999). Marketing mixes can serve as discriminative stimuli (S^D) for consumers, which can lead to positive or aversive responses (R). These responses in turn act as discriminative stimuli for marketing firms. The resultant effect of such behavioral contingencies can have either rewarding or punishing consequences. Rewarding consequences are those related to positive utilitarian (functional benefits of using products) and informational (indications of social status as a result of using products) reinforcement. For consumers, this refers to purchases and consumption and indicates status while translating into revenue, profits and a strong reputation for the marketing firm. Such marketing relationships guided by the behavioral reactions of consumers and marketing firms can be conceptualized as bilateral contingencies (Foxall, 1999) (see *Figure 2*).

Figure 2

Bilateral Contingencies as portrayed by Foxall (2018, p. 386).
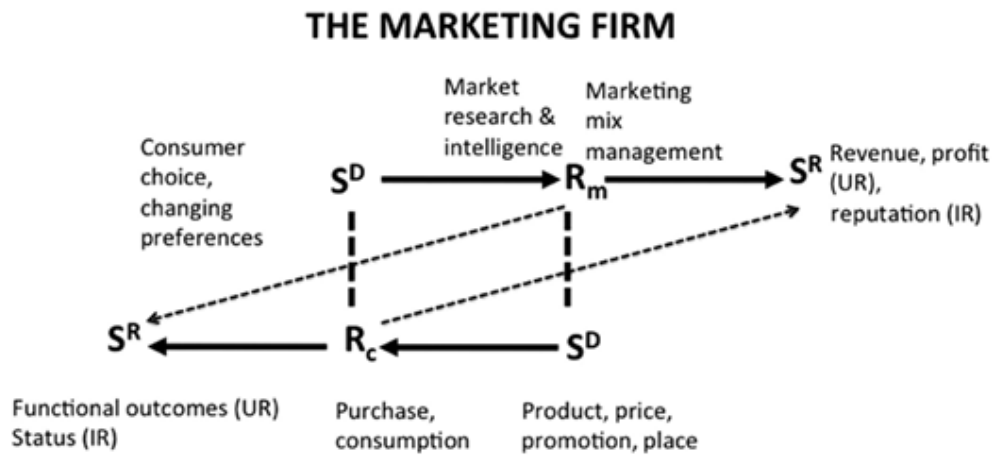
The role of the marketing firm is, thus, to maximize rewarding consequences by performing marketing operations that involve gathering marketing intelligence and managing marketing mixes. In the current paper, we use the TMF and the bilateral contingencies model (Foxall, 1999, 2018) to examine marketing relationships between Icelandair and its fans as illustrated on the airline's Facebook fan page. We focus on Icelandair as a case for two main reasons. First, the Nordic airline has a large fan base that is active on its social networking sites. Second, Icelandair engages with travelers and fans by actively posting different brand messages on social media platforms.

3. Study 1

For Study 1 we collected brand posts from Icelandair's Facebook fan page to examine the effects of post design and content on engagement metrics (likes, reactions, comments, and shares).

3.1 Method

Data from a total of 181 brand posts were gathered between November 7, 2018, and January 1, 2019, of which 158 were included in the analysis. We removed 23 observations, as they were related to a geographically bound Facebook game, which we considered to be a confounding variable in the context of our study. Icelandair, as an international airline carrier, uploads posts on its Facebook fan page in different languages. For the current study, we limited our focus to brand posts made in the languages of Icelandic and English, accounting for 77 and 81 brand posts, respectively. In the following, these will be referred to as 'Icelandic posts' and 'Global posts'.

In this study, brand post engagement was operationalized as the number of 'likes', 'reactions', 'comments' and 'shares'. Reactions include 'love', 'sad', 'angry', 'wow' and 'haha', and for each brand post these were combined into an aggregate measure called 'reaction'. We identified relevant predictors of consumers' brand post engagement based on the previous literature (e.g., de Vries et al., 2012; Luarn et al., 2015; Pletikosa et al., 2013; Swani & Milne, 2017). Each brand post was examined and categorized as 'informative', 'entertaining', 'promotional', and/or 'social' and further categorized by its level of vividness and interactivity. *Vividness* is defined in this study as the extent to which a brand post stimulates the senses was measured on four levels: *absent*, *low* (picture), *moderate* (picture with text), and *high* (video). 'Absent means that a post includes neither of these objects. *Interactivity* is defined in this study as the degree to which a post motivates the consumer to act as measured on four levels: *absent*, *low* (a link to a website other than Icelandair's), *moderate* (a call to action, e.g.,

'tag a friend in this post'), and *high* (including a question). *Informative posts* are posts that contain information on Icelandair's flight destinations, flight updates, loyalty program (Saga Club), etc. *Entertaining posts* are posts presenting interesting photos, pictures or videos and Facebook games. *Promotional po*sts are those that promote sales and that increase customer awareness of the airline's services. Finally, *social posts* are those that notify fans of events or social activities, that provide information on Icelandair's various sponsorships, that pose questions and statements that encourage interaction and that afford fans the opportunity to respond, and that take a stand on social issues.

3.2 Results and analysis

As is shown in Table 1, most brand posts were found to be vivid with levels ranging from low to high. Only 2% of the posts are not vivid. Over half of the posts are highly interactive and one third are not interactive. However, less than a quarter of the Icelandic posts do not contain interactive elements as opposed to nearly half of the Global posts.

Table 1 also shows that 26.7% of all posts are informational, 13.3% are entertaining, 42.4% are promotional, and 15.2% are social. Promotional posts are the most frequent among the Icelandic posts (51.1%) followed by entertaining (22.1%), social (14.3%), and informational posts (11.7%). Informational posts are the most frequent among the Global posts (45.7%) followed by promotional (24.7%), social (16%), and entertaining posts (13.6%).

Table 1 *Frequency by brand post design and content*

Post design/ content		Level	All Posts		Icelandic Posts		Global Posts	
			Freq.	%	Freq.	%	Freq.	%
Vividness		Absent	3	1,9%	1	1,30%	2	2,47%
	Photo	Low	50	31,6%	17	22,07%	33	40,7%
	Photo w/t[6]	Moderate	42	26,6%	29	37,7%	13	16,0%
	Video	High	63	39,9%	30	39,0%	33	40,7%
		Total:	**158**	**100%**	**77**	**100%**	**81**	**100%**

Post design/ content		Level	All Posts		Icelandic Posts		Global posts	
			Freq[7].	%	Freq.	%	Freq.	%
Interactivity		Absent	56	35,4%	18	23,4%	38	46,9%
	Link	Low	7	4,4%	0	0%	7	8,6%
	Call to act	Moderate	12	7,6%	9	11,7%	3	3,7%
	Question	High	83	52,5%	50	64,9%	33	40,7%
		Total:	**158**	**100%**	**77**	**100%**	**81**	**100%**
Information		No Inform.	112	70,9%	68	88,3%	44	54,3%
		Information	46	26,6%	9	11,7%	37	45,7%
		Total:	**158**	**100%**	**77**	**100%**	**81**	**100%**

---

[6] Photo w/t = photo with text   (continues)
[7] Freq. = frequency

Entertainment	No Entert.	137	86,7%	60	77,9%	70	86,4%
	Entert.	21	13,3%	17	22,1%	11	13,6
	Total:	**158**	**100%**	**77**	**100%**	**81**	**100%**
Promotion	No Promo.	91	57,6%	37	48,05%	61	75,3%
	Promotion	67	42,4%	40	51,9%	20	24,7%
	Total:	**158**	**100%**	**77**	**100%**	**81**	**100%**
Social	No Social	134	84,8%	66	85,7%	68	84,0%
	Social	24	15,2%	11	14,3%	13	16,0%
	Total:	**158**	**100%**	**77**	**100%**	**81**	**100%**

Overall, the brand posts have generated a total 186157 likes, 14257 comments, 13364 shares, and 18865 reactions. Pictorial content has generated the highest percentage of likes (74%), shares (53.8%), and comments (60.3%) while video content has generated the most shares (46,6%). More details are provided in Appendix 1, including the effect of interactivity on brand post engagement and differences between Icelandic and Global posts. Appendix 2 shows the number of likes, reactions, comments, and shares based on the type of content posted. A total of 27% posts are informational, 13% are entertaining, 42% are promotional, and 15% are social. As Table 2 shows, the social posts trigger 28.5% of all likes, 34.5% of all reactions, and 37% of all shares. We analyzed the data through multiple regression analysis. The model used for the regression analysis is expressed as:

$$y_{ij} = \alpha + exp(\sum_{f=1}^{3} + \beta_f vivid_{fj} + \sum_{g=1}^{3} + \beta_g ia_{gj} + \beta_i info_j + \beta_e entertain_j + \beta_p promotion_j + \beta_s social_j) + \varepsilon_{ij}$$

where the number of 'likes' (y_1), 'comments' (y_2), 'shares' (y_3), and 'reactions' (y_4) are the dependent variables. The independent variables are dummy variables. The dependent variables are based on count data with strictly positive values. They were, therefore, converted into logarithmic form and assumed to follow a Poisson distribution (Wooldridge, 2010).

Table 2

Description of variables used for Poisson regression

Factor	Scale	Explanation
y_{ij}	Count	Y_{1j}, y_{2j}, y_{3j} or y_{4j}: The number of 'likes', 'comments', 'shares' and 'reactions' given per brand post j
$vivid_{fj}$	Dummy	Indicates whether the vividness characteristic f is present in a brand post j or not (the baseline category is no vividness)
ia_{gj}	Dummy	Indicates whether characteristics of interactivity of g are present in a brand post (the baseline category is no interactivity)
$info_j$	Dummy	Indicates whether a post is informational (the baseline category is no information)
$entertain_j$	Dummy	Indicates whether a post is entertaining (the baseline category is no entertainment)
$promotion_j$	Dummy	Indicates whether a post is promotional (the baseline category is no promotion)
$social_j$	Dummy	Indicates whether a post is social (the baseline category is no social)
e_{ij}		e_{1j}, e_{2j}, e_{3j} or e_{4j}: Normally distributed error terms for the dependent variables

Table 2 describes all variables used in the analysis. Tests of multicollinearity (Poling et al., 1995) between the independent variables reveal no multicollinearity problems. The results of the multiple regression analysis of all posts are shown in Table 3. The results show that the model's overall results are significant for likes (F-value = 14.766, p-value <0.001), reactions (F-value = 10.937 p-value <0.001), comments (F-value 11.353, p-value <0.001), and shares (F-value = 5.377, p-value <0.001),

Table 3

Multiple regression analysis (all brand posts)[a]

Variables	Level	Operationalization	Log Likes β	Log Comments β	Log Shares β	Log Reactions β
		Informative	0.269	0.328	0.159	0.413
Informative		(not informative, baseline)	---	---	---	---
		Entertaining	-0.341	0.079	-0.341	-0.246
Entertaining		(not entertaining, baseline)	---	---	---	---
		Promotional	-0.638	-0.706*	-0.577	-1.072**
Promotional		(not promotional, baseline)	---	---	---	---
		Social	0.827**	0.453	0.922*	1.167**
Social		(not social, baseline)	---	---	---	---
Vividness	Low	Picture	1.609**	0.978**	0.629	1.524**
	Med	Picture W text	0.790**	0.947**	0.494	0.366
	High	Video (baseline)	---	---	---	---
Interactivity	Low	Absent (baseline)	---	---	---	---
	Med	Call to act	-0.421	2.266**	0.072	-0.742
	High	Question	-0.659**	-0.120	-0.803*	-0.921*

		Log Likes	Log Comments	Log Shares	Log Reactions
Constant	N	158	158	158	158
	F-Value	14.766**	11.353**	5.377**	10.937**
	R2	0.408	0.348	0.203	0.342
	Adj. R2	0.380	0.317	0.165	0.311

* p-value < 0.05, ** p-value < 0.001.
[a] We report unstandardized coefficients.

The estimated coefficients presented in Table 3 show that while pictures (i.e., a low degree of vividness) are significantly related to the number of likes, comments, and reactions, pictures with text (i.e., a moderate level of vividness) are only significantly related to the number of likes and comments. Calls to action, which indicate a moderate level of interactivity, are positively related to the number of comments whereas a question, indicating a high level of interactivity, is negatively related to all dependent variables except for the number of comments. The results further show that social posts are significantly related to the number of likes, reactions, and shares. Further, promotional posts are negatively related to reactions and comments, while entertainment is not significantly related to any of the dependent variables.

Table 4

Multiple regression analysis (Icelandic posts)[a]

Variables	Level	Operationalization	Log Likes β	Log Comments β	Log Shares β	Log Reactions β
Informative		Informative	0.362	-0.150	0.468	0.473
		(no information baseline)	---	---	---	---
Entertaining		Entertaining	-0196	0.517	-0.587	-0.113
		(no entertainment baseline)	---	---	---	---
Promotional		Promotional	-0.741	-0.739*	-0.583	-1.186**
		(no promotional baseline)	---	---	---	---
Social		Social	0.895**	0.701	1.057*	1.424**
		(no social baseline)	---	---	---	---
Vividness	Low	Picture	1.390**	0.890*	0.332	1.137*
	Med	Picture W text	1.183**	1.653**	0.880*	1.078**
	High	Video (baseline)	---	---	---	---
Interactivity	Low	Absent (baseline)	---	---	---	---
	Med	Call to act	0.266	3.094**	1.366*	0.489
	High	Question	0.140	0.638	0.342	0.150
			Log Likes	**Log Comments**	**Log Shares**	**Log Reactions**
Constant		N	77	77	77	77
		F-Value	9.123**	16.431**	4.013**	4.331**
		R2	0.488	0.635	0.299	0.321
		Adj. R2	0.435	0.597	0.224	0.247

* p-value < 0.05, **: p-value < 0.001.
[a]We report unstandardized coefficients.

The regression results for Icelandic posts are reported in Table 4. The model's overall results are significant for likes (F-value = 9.123, p-value <0.001), reactions (F-value = 4.331 p-value <0.001), comments (F-value = 16.431, p-value <0.001), and shares (F-value = 4.013 p-value <0.00). According to the results, pictures are significantly related to the number of likes, comments, and shares. For interactive posts, calls to action are only significantly related to the number of comments while a question is significantly related to the number of likes, shares, and reactions. Social posts are positively related to the number of likes, shares, and reactions as opposed to promotional posts, which are negatively related to the number of comments and reactions.

Table 5

Multiple regression analysis (Global Posts)[a]

Variables	Level	Operationalization	Log Likes β	Log Comments β	Log Shares β	Log Reactions β
Informative		Informative	-0.326	-0.109	-0.399	-0.511
		(no information baseline)	---	---	---	---
Entertaining		Entertaining	-0.071	0.255	0.278	0.159
		(no entertainment baseline)	---	---	---	---
Promotional		Promotional	-0.219	-0.443	-0.361	-0.324
		(no promotional baseline)	---	---	---	---
Social		Social	0.945*	0.566	0.965*	1.225*
		(no social baseline)	---	---	---	---
Vividness	Low	Picture	1.202**	0.401	0.257	0.936*
	Moderate	Picture W text	0.554	0.262	0.144	0.024
	High	Video (baseline)	---	---	---	---
Interactivity	Low	Absent (baseline)	---	---	---	---
	Moderate	Call to act	0.531	2.250*	0.954	-0.483
	High	Question	-0.812*	-0.346	-1.116*	-1.006*
Constant			**Log Likes**	**Log Comments**	**Log Shares**	**Log Reactions**
		N	81	81	81	81
		F-Value	6.062**	3.199*	3.294*	4.567**
		R2	0.368	0.235	0.243	0.305
		Adj. R2	0.307	0.161	0.169	0.238

* p-value < 0.05, **: p-value < 0.001.
[a] We report unstandardized coefficients.

The regression results for Global posts are reported in Table 5. The model's overall results are significant for likes (F-value = 6.062, p-value <0.001), reactions (F-value = 4.567 p-value <0.001), comments (F-value = 3.199, p-value <0.05), and shares (F-value = 3.294 p-value <0.05). The results show that unlike pictures with texts, which are not related to any of the dependent variables, pictures are significantly related to the number of likes and reactions. Considering the interactivity of the posts, calls to action are only significantly and positively related to the number of comments while a question is negatively related to the number of likes, shares, and reactions. Social posts are positively related to the number of likes, comments, and reactions.

4. Study 2

Study 1 did not provide insights into customer's preferences towards Icelandair's marketing campaign, as only simple social metrics were analyzed. Therefore, study 2 involved interviews with real customers. Its purpose was to analyze consumer-level engagement behaviors within the context of bilateral contingencies.

4.1 Method

Ten participants were selected based on the fact that they use Facebook and had traveled with Icelandair (purposive sampling). Interviews were conducted in November 2018. Each participant was first asked to complete an online survey with questions on his or her age, gender, education, social media usage, social media engagement behaviors, and experience with Icelandair's services. This was followed by semi-structured interviews posing open-ended questions on general and Icelandair-specific

social media engagement behaviors (likes, comments, etc.) and on the interviewees'

opinions about Icelandair and preferences with respect to its fan page. Each participant

was also asked to imagine using Icelandair's Facebook fan page and seeing four specific

posts. The four Global posts, each representing one of the four types of post content

examined in Study 1, adopted similar levels of vividness. The posts were presented to

the participants on a sheet of paper, and the participants were then asked to select the

post that they would be most likely to engage with. All interviews were recorded with a

sound recording app on a smartphone and then transcribed and coded.

The participants included six females and four males of 21 to 53 years of age.

Four of the participants had completed compulsory education, three had completed

upper secondary education, and three had studied at the university level. Nine

participants had traveled with Icelandair for leisure purposes, and one had traveled for

business and leisure purposes. All of the participants were Icelandic citizens, and hence

interviews were conducted in Icelandic. For further information, see Appendix 3.

4.2 Results and analysis

There were no differences between male and female participants in terms of

their social media behavior. Nonetheless, the younger participants seem to engage with

social media more than the older participants. Three participants stated they had

purchased flights from Icelandair through Facebook. All except one said that price is

important when purchasing a flight, but most indicated that this is not the most

significant factor.

All of the participants liked Icelandair's Facebook page and stated that they often engage by, for instance, participating in games. As Participant 3 stated: "*I like Facebook games, you get something out of liking, commenting or tagging a person in it, and then you have a chance of winning something*". A similar response was given by Participant 4 who said that "*I like posts; I don't comment unless there is a game, then I might comment to tag somebody*". When Participant 5 was asked if he had engaged with Icelandair's Facebook page, he responded that he thinks that he has commented to win a trip. Facebook games were also stated as motivators for engaging with an organization's Facebook page by Participants 8 and 10. Participants 4, 5, 8, and 10 rated themselves relatively high with respect to how active they are on Facebook. These participants mentioned Facebook games repeatedly throughout the interviews. In Iceland, it is very popular for companies on Facebook to ask consumers for engagement in return for a chance to win something, such as a product that the company sells.

When asked why they had liked an organization's Facebook page, Participants 5 and 9 answered that they wished to be informed about new products and updates. The data also indicate that the participants engage with a fan page when the resonates with them, such as through their interests and hobbies (Participants 1 and 6) or when posts are funny or present content that they like (Participants 2, 4 and 7).

All of the participants exhibited fairly positive views of Icelandair, and some even associated the brand with *"coming home"* (Participants 1 and 8). Two of the participants claimed that it was their favorite airline (Participants 2 and 10) while others mentioned trusting the airline and that their experiences flying with Icelandair had been positive. Four out of ten participants had not visited Icelandair's Facebook page. Of the participants claiming to have visited Icelandair's fan page, the following reasons were

cited: Participant 2 said that Icelandair is her favorite airline, Participant 4 said that she had recently flown with Icelandair and as a result visited its Facebook page, and Participants 5 and 9 said that they had visited the website to find travel deals. All participants who had visited Icelandair's Facebook page said that they had engaged with the content posted on the page.

When asked about the type of content they would like to see from Icelandair, most participants either preferred good deals on flights (Participants 4, 5, 6, 7, 9, and 10) or destination photos (Participants 2, 3, and 4). The following statements illustrate their views of photos: "*I like seeing photos from other countries*" (Participant 2) and "*The picture captures the audience, so you have to have a good picture for people to want to read the text*" (Participant 3). Of the four Global posts presented to the participants, five selected promotional posts as the ones that they are most likely to engage with while three selected entertaining posts, one selected informative posts, and one selected social posts.

Three participants said that they had purchased flights from Icelandair through Facebook. All except one indicated that price is important when purchasing a flight, but most indicated that it is not the most significant factor. They also expressed a willingness to pay for extra services such as more legroom or entertainment.

5. Study 3

Study 2 qualitatively investigated consumers' engagement behaviors. However, bilateral contingencies are formed between marketing firms and their customers. Therefore, study 3 involved interviews with Icelandair marketing managers to better

understand their social media strategies. We focused on the role of engagement metrics and on ways of gathering marketing intelligence.

5.1 Method

We performed two interviews involving three Icelandair marketing managers, one interview with the company's director of digital marketing, and one interview with the company's brand manager and social media manager present. For the latter interview, the managers frequently discussed the questions between them. We used a semi-structured interview guide that was made available to the managers prior to the interview. Topics explored in this study included how Icelandair measures the success of a brand post or social media campaign, to which extent Icelandair monitors feedback from its consumers, and which social media content managers think best resonates with their fans. The interviews were recorded with a smartphone. Both interviews lasted approximately 40 minutes, and the managers were briefed afterward. The data were transcribed and then coded.

5.2 Results and analysis

From the interviews, we found evidence of marketing research, segmentation, and targeted marketing at Icelandair regarding social media practices. One manager made the following comment on the company's target group: *"They are travelers that want a comfortable and convenient airline that offers them value for their money … they have completed more education and have higher incomes, and we have recently conducted strategic research about our customers and most of them don't have children"*. Regarding social media, on the other hand, both interviews revealed that

Icelandair mostly targets younger travelers, who are more digitally driven. As such, marketing communication on its Facebook fan page seems to be tailored to the interests and needs of its younger consumers. The managers state that they post different campaigns with different goals on Facebook. Sometimes these are sales driven and sometimes they are intended to create awareness.

From the interviews, we find evidence of Icelandair continuously evaluating consumer responses and of the fact that engagement metrics are an integral part of how Icelandair plans and measures the success of its social media campaigns. For instance, it conducts experiments with individual posts to ensure they perform well. As one manager stated: *"We don't always know beforehand if a post is going to perform well or poorly so... we try to post three different versions of a post to start and then we see which post is performing best. Then we turn off the other ones and promote the post that is performing better with more paid investment because then it is more likely to drive engagement and the reach we want"*. Further, the managers expressed that they frequently evaluate brand posts by studying metrics such as reach, impressions, engagement rates, sales, and ad spending and by calculating the cost per post and revenues generated per post. They also stated that they had recently managed to lower transaction costs by reducing the cost per transaction for brand posts.

Both interviews gave us the impression that Icelandair involves third parties in a wide range of its market intelligence activities. The relationship Icelandair has with one specific external partner was described by one of the managers as follows: *"they are kind of like an extension of our marketing team, and they do a lot of execution and they're actually kind of like a consultant on our social media strategy, so they are really a big part of everything that we do and kind of give us advice"*.

According to one of the managers, Icelandair uses posts on its Facebook fan page to create awareness (e.g., posts that show that Icelandair is sponsoring a music festival) or to generate immediate sales (e.g., flash offers). One of the managers noted that content related to Iceland (e.g., the Northern Lights) or to social issues (e.g., a special children's travel fund) is their customers' favorite. He also makes the following statement on why consumers use the company's Facebook fan page: *"We think that it is mostly because they see that there is something relevant to them there and they also just see the benefit of being a follower there because we are posting things that they can relate to, like or resonate with; it could be travel deals, it could be something about Iceland or something more general. They want to follow the company to know about new updates or new destinations, and some of them also just want to be in relationship or associate with the brand"*.

6. Discussion and conclusions

This study examines customer-firm marketing relationships between Icelandair and its customers within the context of the TMF (Foxall, 1999, 2018). It focuses on bilateral contingencies between Icelandair and its customers, understood as an interplay between a marketing firm's actions (Icelandair's social media campaigns) and customers' post engagement behaviors (liking, reacting to, commenting on, and sharing brand posts from Icelandair). Three studies were conducted to achieve the above objectives. While the first study analyzed 158 brand posts taken from Icelandair's Facebook fan page, the second and third studies involved interviewing Icelandair consumers and managers, respectively.

Study 1 shows that more than 70% of all Icelandair Facebook posts include a picture or video and that posts with pictures attract the most engagement in terms of likes and comments whereas those with videos generate the most shares. The results of the regression analysis further demonstrate that pictures are significantly and positively related to the number of likes, reactions, and comments. This result corroborates the results of Sabate et al. (2014) and Cvijikj and Michahelles (2012), who found that pictures are associated with the increased vividness of branded content in terms of likes and comments. By contrast, de Vries et al. (2012) reported that pictures do not have a significant impact on the number of likes and comments. Concerning the interactivity of brand posts, moderately interactive brand posts, i.e., 'calls to action', are the most important in generating the highest levels of consumer engagement especially in terms of comments on brand posts. This result again stands in contrast with the results of de Vries et al. (2012), who found 'call to action' brand posts to be ineffective at impacting consumer engagement. Regarding types of brand posts, while most of the posts examined are promotional (42.4%), entertaining and social posts account for only 13.3% and 15.2% of the posts, respectively. Furthermore, promotional posts received 58.1% of all comments while social posts triggered 28.5% of all likes, 34.5% of all reactions, and 37% of all shares. The results of the regression analysis show that social posts are particularly important in increasing consumer engagement with one or more engagement behaviors, which include likes, reactions, and shares. The results from previous studies also illustrate the importance of socially oriented brand posts. For instance, Tsai and Men (2013) and de Vries and Carlson (2014) found such types of posts to be important in driving consumer engagement on Facebook. Social posts can also be a crucial factor in consumer engagement with brand posts in developing

countries (Tsai & Men, 2017), where brand pages are visited to strengthen social interactions with like-minded peers.

The other types of brand posts, i.e., informative and entertaining, are not significantly related to consumer engagement with brand posts. These results are in line with those of de Vries et al. (2012), but they differ from those reported by Cvijikj and Michahelles (2012), according to whom informative and entertaining posts impact consumers' levels of brand post engagement. However, it is important to note that unlike in the above studies, brand posts are distinguished into four types in our study, and therefore, a direct comparison of results may not be appropriate. This is also true when considering the number of brand pages used. While we focus on only one brand page, i.e., Icelandair, the above studies focus on multiple brand pages across countries and product categories. The consumer interviews held for Study 2 show that all of the participants liked Icelandair's Facebook page and that they engaged, for instance, by participating in games. Many of the participants expressed that they engage with a fan page, in general, when the content presented resonates with them (when it is aligned with their interests and hobbies or presents something that they like). Content that the participants would like to see on Icelandair Facebook page include deals on flights (promotional posts) and destination photos (pictorial content).

Understanding engagement behaviors on social media through the lens of the TMF has advantages over approaches adopted in the studies above as traditionally presented in the literature. It forces researchers to focus not only on customers' behaviors but also on firms' marketing activities (Study 3). These insights would not have emerged from our research if bilateral contingencies were not considered. Such an approach can provide a broader perspective that accounts for how and why particular

marketing tools are devised. Such an approach provides antecedents for subsequent customers' choices, as managerial decisions will finally increase or decrease customer engagement with firms. The interviews held with managers in Study 3 show that post content related to Iceland and social issues is what Icelandair managers think is their customers' favorite (what resonates with them). This goes in line with the results of Study 1, according to which social posts perform extraordinarily well. Further, the managers expressed that they frequently evaluate brand posts by studying metrics such as reach, impressions, engagement rates, sales, ad spending and by calculating the cost per post and revenues generated per post. Overall, the findings suggest that Icelandair is customer-oriented when designing and executing social media campaigns. Findings from Leung et al. (2013) suggest that low-cost airlines also align their brand posts with what their fans would like to see. Leung et al. (2013) found promotional posts to be the most popular among AirAsia's Facebook fans and found that AirAsia uses the majority of its posts to promote tickets. Further, they found that EasyJet's brand posts mostly encourage users to post on its wall and that posts including polling activities (e.g., encouraging users to state where they wish to travel) constitute its most popular posts. This points to a need for airlines and other firms to empirically test their own contingencies of brand post engagement.

The interviews held with Icelandair's managers (Study 3) suggest that monitoring and responding to customers' patterns of brand post engagement can result in reduced transaction costs. This can be described in terms of bilateral contingencies (Foxall, 1999, Figure 2) between Icelandair and its customers. Icelandair produces a discriminative stimulus for its customers by its social media marketing actions (a Facebook post as part of the marketing mix management). Customers then react to that

promotional stimulus (behavioral response: exhibiting engagement or a lack thereof), in line with the relevance of the consequences delivered in the post (analyzed here in terms of its design and content) creating a positive or aversive actions, which functions as a discriminative stimulus for Icelandair (e.g., the cost per transaction). Icelandair then responds to this stimulus (keeping the present Facebook post, redesigning it or changing future posts) and creates future promotional stimuli on Facebook that becomes a discriminative stimulus for the customer (the new Facebook post). Such transfer of information leads to reduced transaction costs for Icelandair, as it becomes aware of what customers want and offers them social media content accordingly. This approach renders their posts more effective and prevents Icelandair from spending unnecessary resources on developing brand posts that are less effective. In this way, bilateral contingency is continually reproduced while the interplay between the consequences of the marketing firm's actions and customer engagement sustains these patterns of behavior.

The current study shows that the case study methodology can be used to study bilateral contingencies between a marketing firm and consumers. Case studies offer the advantage of investigating "how" and "why" questions about relatively complex settings (Yin, 2014). By collecting a variety of information from documents, through interviews with key informants, through observations, etc., it is possible to contribute to our understanding of how bilateral contingencies work and of why they are strengthened or weakened over time.

7. Limitations and future research

We intended to study behavioral engagement and we conveniently operationalized it as 'likes', 'reactions', 'comments' and 'shares' on Facebook. We acknowledge that this is a limitation as we did not split the reactions in line with modern Facebook practices, into emojis such as 'cry', 'sad', 'angry' become more prominent. Furthermore, we did not analyze the content of the comments. Engagement can be positive or negative. We only dealt with it as positive engagement. Future studies should address this gap and focus on different forms of engagement. For instance, studies could focus on 'angry' and/or 'sad' customers while utilizing the methodology adopted here: multiple regression. Other works could further our understanding of comments and shares by studying them qualitatively. This paper focuses exclusively on engagement metrics on Facebook. However, airlines use different social media in marketing communication. For instance, Menon and colleagues (2019) have recently investigated airlines' post engagement on Twitter also and compared it to Facebook. We recommend a continued focus on consumer-firm interaction, where researchers dig even deeper into the bilateral contingencies.

References

Barger, V., Peltier, J. W., & Schultz, D., E. (2016). Social media and consumer

engagement: a review and research agenda. *Journal of Research in Interactive Marketing*, *10*(4), 268–287. https://doi.org/10.1108/JRIM-06-2016-0065

Berger, J., & Iyengar, R. (2013). Communication Channels and Word of Mouth: How

the Medium Shapes the Message. *Journal of Consumer Research*, *40*(3), 567-579. https://doi.org/10.1086/671345

BBC (2016, February 24). Facebook rolls out five new Reactions buttons including angry, wow and sad. Accessible at https://bbc.in/2IVxgsb (accessed February 20, 2019).

Bijmolt, T., Leeflang, P., Block, F., Eisenbeiss, M., Hardie, B., Lemmens, A., & Saffert, P. (2010). Analytics for Customer Engagement. *Journal Of Service Research*, *13*(3), 341-356. doi: 10.1177/1094670510375603

Brodie, R., J, Hollebeek, L., Juric, B., & Ilic, A. (2011). Customer engagement: conceptual domain, fundamental propositions and implications for research. *Journal of Service Research*, 14(3), 1-20. https://doi.org/10.1177/1094670511411703

Coase, R. (1937). The Nature of the Firm. *Economica*, *4*(16), 386-405. doi: 10.1111/j.1468-0335. 1937.tb00002.x

Coelho, P., Rita, P., & Santos, Z. (2018). On the relationship between consumer-brand identification, brand community, and brand loyalty. *Journal Of Retailing And Consumer Services*, *43*, 101-110. doi: 10.1016/j.jretconser.2018.03.011

Coyle, J., R., & Thorson, E. (2001). The Effects of Progressive Levels of Interactivity and Vividness in Web Marketing Sites. *Journal of Advertising*, *30*(3), 65–77. https://doi.org/10.1080/00913367.2001.10673646

Culnan, M., J., & McHugh, P., J. (2010). How Large U.S. Companies Can Use Twitter and Other Social Media to Gain Business Value. *MIS Quarterly Executive*, 9(4), 243–259

Dessart, L., Veloutsou, C., & Morgan-Thomas, A. (2015). Consumer engagement in online brand communities: a social media perspective. *Journal Of Product & Brand Management*, *24*(1), 28-42. doi: 10.1108/jpbm-06-2014-0635

de Vries, N., J., & Carlson, J. (2014). Examining the drivers and brand performance implications of customer engagement with brands in the social media environment. *Journal of Brand Management*, *21*(6), 495-515. doi: https://doi.org/10.1057/bm.2014.18

de Vries, L., Gensler, S., & Leeflang, P., S. (2012). Popularity of Brand Posts on Brand Fan Pages: An Investigation of the Effects of Social Media Marketing. *Journal of Interactive Marketing*, *26*(2), 83–91. https://doi.org/10.1016/j.intmar.2012.01.003

Dijkmans, C., Kerkhof, P., & Beukeboom, C. (2015a). A stage to engage: Social media use and corporate reputation. *Tourism Management*, 47, 58-67. doi: 10.1016/j.tourman.2014.09.005

Dijkmans, C., Kerkhof, P., Buyukcan-Tetik, A., & Beukeboom, C. (2015b). Online Conversation and Corporate Reputation: A Two-Wave Longitudinal Study on

the Effects of Exposure to the Social Media Activities of a Highly Interactive

Company. *Journal of Computer Mediated Communication*, 20(6), 632-648. doi:

10.1111/jcc4.12132

Fortin, D., R., & Dholakia, R., R. (2005). Interactivity and vividness effects on social

presence and Involvement with a web-based advertisement. *Journal of Business*

Research, *58*(3), 387–396. https://doi.org/10.1016/S0148-2963(03)00106-1

Foxall, G. R. (2001). Foundations of consumer behaviour analysis. *Marketing theory,*

1, 165-199.

Foxall, G., R. (2018). An economic psychology of the marketing firm. In: Lewis, A.

(Ed.) *The Cambridge Handbook of Psychology and Economic Behaviour* (pp.

365-402). Cambridge: Cambridge University Press.

Foxall, G., R. (2016). Operant Behavioral Economics. *Managerial and Decision*

Economics, *37*(4–5), 215–223. https://doi.org/10.1002/mde.2712

Foxall, G., R. (2015). Consumer Behavior Analysis and the Marketing Firm: Bilateral

Contingency in the Context of Environmental Concern. *Journal of*

Organizational Behavior Management, 35(1–2), 44–69.

https://doi.org/10.1080/01608061.2015.1031426

Foxall, G., R. (1999). The marketing firm. *Journal of Economic Psychology*, 20, 207

234. doi: 10.1016/S0167-4870(99)00005-7

Gaber, H., R., & Wright, L., T. (2014). Fast-food advertising in social media. A case

study on Facebook in Egypt, Journal of Business and Retail Management

Research *9*(1), 52-63.

Gambetti, R., & Graffigna, G. (2010). The Concept of Engagement: A Systematic

Analysis of the Ongoing Marketing Debate. *International Journal Of Market

Research*, *52*(6), 801-826. doi: 10.2501/s147078531020166

Grančay, M. (2013). Airline Facebook pages – a content analysis. *European Transport

Research Review*, *6*(3), 213-223. doi: 10.1007/s12544-013-0126-9

Hettler, U. (2010) Social Media Marketing: Marketing mit Blogs, sozialen Netzwerken

und weiteren, Anwendungen des Web 2.0. *Oldenbourg Verlag*, München.

Heymann-Reder, D. (2011). *Social Media Marketing: Erfolgreiche Strategien für Sie

und Ihr Unternehmen*. Pearson Deutschland GmbH.

Hollebeek, L., Glynn, M., & Brodie, R. (2014). Consumer Brand Engagement in Social

Media: Conceptualization, Scale Development and Validation. *Journal Of

Interactive Marketing*, *28*(2), 149-165. doi: 10.1016/j.intmar.2013.12.002

Hudson, S., & Thal, K. (2013). The Impact of Social Media on the Consumer Decision

Process: Implications for Tourism Marketing. *Journal Of Travel & Tourism

Marketing*, *30*(1-2), 156-160. doi: 10.1080/10548408.2013.751276

Jahn, B., & Kunz, W. (2012). How to transform consumers into fans of your brand.

Journal of Service Management, 23(3), 344–361

https://doi.org/10.1108/09564231211248444

Kim, C., & Yang, S.-U. (2017). Like, comment, and share on Facebook: How each

behavior differs from the other. *Public Relations Review*, 43(2), 441–449.

https://doi.org/10.1016/j.pubrev.2017.02.006

Koch, O., F., & Benlian, A. (2015). Promotional Tactics for Online Viral Marketing

Campaigns: How Scarcity and Personalization Affect Seed Stage Referrals.

Journal of Interactive Marketing, *32*, 37–52.

https://doi.org/10.1016/j.intmar.2015.09.005

Kujur, F., & Singh, S. (2017). Engaging customers through online participation in social

networking sites. *Asia Pacific Management Review*, 22(1), 16–24.

https://doi.org/10.1016/j.apmrv.2016.10.006

Icelandair, (2019a). About Icelandair. Retrieved from

https://www.icelandair.com/en-gb/about/

Icelandair, (2019b). Media. Retrieved from

https://www.icelandair.com/about/media/

Lee, D., Hosanagar, K., & Nair, H. (2018). Advertising Content and Consumer

Engagement on Social Media: Evidence from Facebook. *Management Science*,

64(11), 5105-5131. doi: 10.1287/mnsc.2017.2902

Leung, R., Schuckert, M., & Yeung, E. (2013). Attracting User Social Media

      Engagement: A Study of Three Budget Airlines Facebook Pages. *Information*

      And Communication Technologies In Tourism 2013, 195-206. doi:

      10.1007/9783-642-36309-2_17

Lin, H.-C., Swarna, H., & Bruning, P., F. (2017). Taking a global view on brand post

      popularity: Six social media brand post practices for global markets. *Business*

      Horizons, 60(5), 621–633. https://doi.org/10.1016/j.bushor.2017.05.006

Liu, Y., & Shrum, L., J. (2002). What is Interactivity and is it Always Such a Good

      Thing? Implications of Definition, Person, and Situation for the Influence of

      Interactivity on Advertising Effectiveness. *Journal of Advertising*, *31*(4), 53–64.

      https://doi.org/10.1080/00913367.2002.10673685

Liu-Thompkins, Y., & Rogerson, M. (2012). Rising to Stardom: An Empirical

      Investigation of the Diffusion of User-generated Content. *Journal of Interactive*

      Marketing, *26*(2), 71–82. https://doi.org/10.1016/j.intmar.2011.11.003

Luarn, P., Lin, Y.-F., & Chiu, Y.-P. (2015). Influence of Facebook brand-page posts on

      online engagement. *Online Information Review*, 39(4), 505–519.

      https://doi.org/10.1108/OIR-01-20150029

Menon, V., Sigurdsson, V., Larsen, N., M., Fagerstrøm, A., Sørensen, H.,

      Marteinsdottir, H., G., Foxall., G., R (2019). Facebook and Twitter for airlines?

An empirical investigation of design and content factors. Journal of Air

Transport Management, 79, 1-9.

https://doi.org/10.1016/j.jairtraman.2019.05.002

Parveen, F., Jaafar, N., I., & Ainin, S. (2015). Social media usage and organizational

performance: Reflections of Malaysian social media managers. *Telematics and*

Informatics, 32(1), 67-78. https://doi.org/10.1016/j.tele.2014.03.001

Peters, K., Chen, Y., Kaplan, A. M., Ognibeni, B., & Pauwels, K. (2013). Social Media

Metrics - A Framework and Guidelines for Managing Social Media. *Journal of*

Interactive Marketing, 27(4), 281–298.

https://doi.org/10.1016/j.intmar.2013.09.007

Pletikosa Cvijikj, I., & Michahelles, F. (2013). Online engagement factors on Facebook

brand pages. *Social Network Analysis And Mining*, *3*(4), 843-861. doi:

10.1007/s13278-013-0098-8

Poling, A., Methot, L., L., & LeSage, M. G. (1995). *Fundamentals of Behavior Analytic*

Research. Springer Science & Business Media.

Rosenthal, R. (1973). The Pygmalion Effect Lives. *Psychology Today*. Retrieved from

https://eric.ed.gov/?id=EJ092071

Sabate, F., Berbegal-Mirabent, J., Cañabate, A., & Lebherz, P., R. (2014). Factors

influencing popularity

of branded content in Facebook fan pages. *European Management Journal*,

32(6), 1001–1011. https://doi.org/10.1016/j.emj.2014.05.001

Seo, E., & Park, J. (2018). A study on the effects of social media marketing activities on

brand equity and customer response in the airline industry. *Journal Of Air*

Transport Management, *66*, 36-41. doi: 10.1016/j.jairtraman.2017.09.014

Shen, B., & Bissell, K. (2013). Social Media, Social Me: A Content Analysis of Beauty

Companies' Use of Facebook in Marketing and Branding. *Journal Of Promotion*

Management, *19*(5), 629-651. doi: 10.1080/10496491.2013.829160

Statista (2018, July). Most famous social network sites worldwide as of July 2018,

ranked by number of active users (in millions). Retrieved from

https://bit.ly/2IHIYGG

Swani, K., & Milne, G. (2017). Evaluating Facebook brand content popularity for

service versus goods offerings. *Journal Of Business Research*, *79*, 123-133. doi:

10.1016/j.jbusres.2017.06.003

Tsai, W.-H. S., & Men, L., R. (2017). Consumer engagement with brands on social

network sites: A cross-cultural comparison of China and the USA. *Journal of*

Marketing Communications, *23*(1), 2–21.
https://doi.org/10.1080/13527266.2014.942678

Tsai, W.-H. S., & Men, L. R. (2013). Motivations and Antecedents of Consumer

Engagement With Brand Pages on Social Networking Sites. *Journal of Interactive Advertising*, *13*(2), 76-87. https://doi.org/10.1080/15252019.2013.826549

Van Dijck, J. (2013). 'You have one identity': performing the self on Facebook and LinkedIn. *Media, Culture & Society*, 35(2), 199–215. https://doi.org/10.1177/0163443712468605

Van Doorn, J., Lemon, K., Mittal, V., Nass, S., Pick, D., Pirner, P., & Verhoef, P. (2010). Customer Engagement Behavior: Theoretical Foundations and Research Directions. *Journal Of Service Research*, *13*(3), 253-266. doi: 10.1177/1094670510375599

Vella, K., J. (2015). *Selection by Consequences and the Marketing Firm*. PhD Thesis, Cardiff University.

Vella, K., J., & Foxall, G. R. (2011). *The Marketing Firm: Economic Psychology of Corporate Behaviour*. Cheltenham, Glouchester, and Northampton, MA: Edward Elgar.

Verhoef, P., C., Reinartz, W., & Krafft, M. (2010). Customer engagement as a new perspective in customer management, *Journal of Service Research*, 13(3), 247 252. doi: https://doi.org/10.1177/1094670510375461

Viglia, G., Pera, R., & Bigné, E. (2018). The determinants of stakeholder engagement in

digital platforms. *Journal of Business Research*, 89, 404–410.

https://doi.org/10.1016/j.jbusres.2017.12.029

Wooldridge, J., M. (2010). *Econometric Analysis of Cross Section and Panel Data*

(2nd ed): Mit Press: Cambridge and London.

Yin, R., K. (2014). *Case study research: Design and Methods* (5 ed.). Thousand Oaks,

London: Sage Publications, Inc.

Appendix 1 Frequencies of dependent variables for levels of vividness and interactivity

Posts	Media Type	Level	Operationalization	Likes Freq	Likes %	Comments Freq	Comments %	Shares Freq	Shares %	Reactions Freq	Reactions %
All Posts	Vividness	Absent		3.877	2.08%	213	2.24%	120	0.89%	294	1.56%
		Low	Picture	106.783	57.36%	8.710	60.34%	5132	38,4%	10.153	53.82%
		Moderate	Picture with text	30.912	16.61%	2.240	15.71%	1884	14.10%	2.228	11.81%
		High	Video	44.585	23.95%	3.094	21.70%	6228	46.60%	6.190	32.81%
		Total		186.157	100%	14.257	100.00%	13.364	100.00%	18.865	100.00%
	Interactivity	Absent		122.103	65.59%	4.120	28.90%	9.455	70.75%	13.772	73.00%
		Low	Link	3914	2.10%	194	1.36%	325	2.43%	359	1.90%
		Moderate	Call to action	15.776	8.47%	6.879	48.25%	1.178	8.81%	1.410	7.47%
		High	Quest	44.364	23.83%	3.064	21.49%	2.406	18.00%	3.324	17.62%
		Total		186.157	100%	14.257	100.00%	13.364	100.00%	18.865	100.00%
Icelandic Posts	Vividness	Absent		77	0.28%	17	0.34%	3	0.16%	2	0.13%
		Low	Picture	10.480	38.64%	3.072	61.26%	407	22.19%	629	40.29%
		Moderate	Picture with text	8.503	31.35%	1.334	26.60%	517	28.19%	362	23.19%
		High	Video	8.061	29.72%	592	11.80%	907	49.45%	568	36.39%
		Total		27.121	100.00%	5.015	100.00%	1.834	100.00%	1.561	100.00%
	Interactivity	Absent		8.322	30.68%	220	4.39%	505	27.54%	659	42.22%
		Low	Link	-	-	-	-	-	-	-	-
		Moderate	Call to action	4.376	16.14%	3.437	68.53%	320	17.45%	217	13.90%
		High	Question	14.423	53.18%	1.358	27.08%	1.009	55.02%	685	43.88%
		Total		27.121	100%	5.015	100.00%	1.834	100.00%	1.561	100.00%

Posts	Media Type	Level	Operationalization	Likes Freq	Likes %	Comments Freq	Comments %	Shares Freq	Shares %	Reactions Freq	Reactions %
Global Posts	Vividness	Absent		3.800	2.39%	196	2.12%	117	1.01%	292	1.69%
		Low	Picture	96.303	60.55%	5.638	61.00%	4.725	40,98%	9.524	55.04%
		Moderate	Picture with text	22.409	14.09%	906	9.80%	1.367	11.86%	1.866	10.78%
		High	Video	36.524	22.97%	2.502	27.07%	5.321	46.15%	5.622	32.49%
		Total		159.036	100.00%	9.242	100.00%	11.530	100.00%	17.304	100.00%
	Interactivity	Absent		113.781	71.54%	3.900	42.20%	8.950	77.62%	13.113	75.78%
		Low	Link	3.914	2.46%	194	2.10%	325	2.82%	359	2.07%
		Moderate	Call to action	11.400	7.17%	3.442	37.24%	858	7.44%	1.193	6.89%
		High	Question	29.941	18.83%	1.706	18.46%	1.397	12.12%	2.639	15.25%
		Total		159.036	100.00%	9.242	100.00%	11.530	100.00%	17.304	100.00%

Appendix 2

Frequency of dependent variables by post content type

Posts	Relative	Likes		Comments		Shares		Reactions	
All	**Freq.**	**Freq.**	**%**	**Freq.**	**%**	**Freq.**	**%**	**Freq**	**%**
Information	26,66%	56.107	30.14%	2.644	18.5%	3.143	23.52%	4.843	25.67%
Total		186.157	100%	14.257	100%	13.364	100%	18.865	100%
Entertaining	13,29%	17.956	9.65%	1.119	7.85%	1.385	10.36%	2.536	13.44%
Total		186.157	100%	14.257	100%	13.364	100%	18.865	100%
Promotional	42,4%	58.934	31.66%	8.286	58.1%	3.879	29.03%	4.977	26.38%
Total		186.157	100%	14.257	100%	13.364	100%	18.865	100%
Social	15,2%	53.160	28.56%	2.208	15.5%	4.957	37.01%	6.509	34.50%
Total		186.157	100%	14.257	100%	13.364	100%	18.865	100%
Icelandic									
Information	11,69%	2.667	9.83%	239	4.77%	178	9.71%	146	9.35%
		27.121	100%	5.015	100%	1.834	100%	1.561	100%
Entertaining	22,07%	1.871	6.90%	88	1.75%	114	6.22%	104	6.66%
		27.121	100%	5.015	100%	1.834	100%	1.561	100%
Promotional	51,95%	12744	46.99%	4.294	85.6%	764	41.66%	488	31.26%
		27.121	100%	5.015	100%	1.834	100%	1.561	100%
Social	14,28%	9.839	36.28%	394	7.86%	764	41.66%	823	52.72%
		27.121	100%	5.015	100%	1.834	100%	1.561	100%

Global

Information	45,68%	53.256	33.49%	2.399	25.96%	2.938	25.48%	4.676	27.02%
		159.036	100%	9.242	100%	11.530	100%	17.304	100%
Entertaining	13,59%	16.023	10.08%	637	6.89%	1.283	11.13%	2.444	14.12%
		159.036	100%	9.242	100%	11.530	100%	17.304	100%
Promotional	24,69%	46.436	29.20%	4.403	47.64%	3.116	27.03%	4.498	25.99%
		159.036	100%	9.242	100%	11.530	100%	17.304	100%
Social	16,04%	43.321	27.24%	1.814	19.63%	4.193	36.37%	5.686	32.86%
		159.036	100%	9.242	100%	11.530	100%	17.304	100%

Appendix 3

Summary of data collected from the online consumer survey

Participant	Gender	Age	Highest Level of Education	Travel Purpose	Activity Level	Engagement Behavior
1	Male	29	Master's degree	Leisure	1	Reactions
2	Female	21	Compulsory education	Leisure	3	Reactions, private msg[8].
3	Female	24	Bachelor's degree	Leisure	5	Reactions
4	Female	39	Upper secondary education	Leisure	4	Commenting, reactions, sharing, private msg.
5	Male	21	Compulsory education	Leisure	3	Commenting, reactions, private msg.
6	Female	50	Upper secondary education	Leisure	2	Commenting, reactions
7	Male	53	Upper secondary education	Leisure and business	2	Reactions
8	Female	21	Compulsory education	Leisure	3	Reactions, sharing
9	Male	23	Master's degree	Leisure	2	Private msg.
10	Female	26	Compulsory education	Leisure	2	Private msg., reactions

---

[8] Msg = message