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ONLINE CUSTOMER ENGAGEMENT ON TWITTER:
THE CASE OF ICELANDAIR

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Reykjavik
May 2016
Declaration of Research Work Integrity

This work has not previously been accepted in substance for any degree and is not concurrently being submitted in candidature for any degree. This thesis is the result of my own investigations, except where otherwise stated. Other sources are acknowledged with explicit references. A bibliography is appended.

By signing the present document, I confirm and agree that I have read RU’s ethics code of conduct and fully understand the consequences of violating these rules in connection with my thesis.

Date and Place                     ID No.                     Signature
Abstract

Measuring the effectiveness of marketing on social media is becoming increasingly important because social media platforms constitute a significant and growing segment of marketing activities for many industries, including the airline industry. Little research exists on how airlines can develop tweets that increase online customer engagement. Therefore, the purpose of this study is to investigate the determinates of online customer engagement for an airline brand. The study extends the conceptual framework put forth by deVries, Gensler, and Leeflang (2012), which was initially intended to measure Facebook brand post popularity. In total, 143 brand tweets from Icelandair’s official Twitter account tweeted during the period from late 2012 until early 2016 were collected and categorized. A regression analysis was conducted to examine the impact of tweet and feature-type on online customer engagement tools such as “likes”, “replies” and “retweets”. The results indicate that different characteristics in terms of tweet and feature-type result in different online customer engagement outcomes for the brand. The content tweet types: “entertainment”, “information” and “promotion” were found have a positive impact on likes, replies and retweets. The feature type “vividness” was found to have a positive effect, while “interactivity” was not found to have a significant effect. This study contributes to the social media literature in the airline industry on how effectiveness of marketing on Twitter can be measured. Furthermore, it helps marketers within this same industry to understand what kind of brand-generated contents yield increased effectiveness on Twitter.

Keywords: social media marketing, social media metrics, twitter, brand-generated content, online customer engagement
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1 Introduction

The advent of Web 2.0 has revolutionized how users of the Internet interact online. Users share and review these contents on, among other places, social media platforms such as Facebook, Twitter and Linkedin. Consequently, the contents of the Internet are constantly growing. This has led to a radical democratization of content, with power movement from media to consumer (Ryan, 2015). Now, in 2016, there are 2.2 billion social media users worldwide, and 310 million active users of Twitter alone. Social media users spend around 25% of the time they spend on the Internet on social media sites and usage is growing globally (Statista, 2016). According to the Oxford English Dictionary social media are “websites and applications that enable users to create and share content or to participate in social networking” (“Social media,” n.d.).

A broader definition describes social media as a group of Internet-based applications allowing creation and exchange of user-generated contents. The core of both definitions is the user inter-activeness and multi-platform approach. A third view of what social media are includes both the communicative and the social dimensions; it defines social media as a communication system that allows the social actors to communicate along dyadic ties. If this definition is adopted, companies’ brand profiles should be viewed as yet another actor within the network, like personal profiles (Peters, Chen, Kaplan, Ognibenì, & Pauwels, 2013). Social media platforms are becoming increasingly important marketing channels, as brand managers can communicate directly with their target audience via this channel in an efficient manner, both in terms of lifestyle segmenting and cost efficiency (Zarrella, 2010). For most companies it has not been a problem to launch social media initiatives, but rather to make the content engaging and valuable for the customer (Schultz & Peltier, 2013). Social media networks, including Facebook, have been examined from various perspectives. When it comes to brands, mainly network effect and customer engagement have been examined (Cvijikj & Michahelles, 2011, 2013; de Vries, Gensler, & Leeflang, 2012; Sabate, Berbegal-Mirabent, Cañabate, & Lebherz, 2014; Shen & Bissell, 2013). Previous studies concerning network effect have focused on identifying the most influential target group (Li, 2007) or how networks within social media work (Dholakia, Bagozzi, & Pearo, 2004); others have focused more on managing brands in the social media environment with a focus on customer engagement or word-of-mouth (Gensler, Völeckner, Liu-
It is important for companies to measure the effectiveness of their social media marketing. Marketing metrics can be defined as a tool that helps organizations to quantify, compare and interpret the success of their marketing activities (Kotler & Keller, 2012). Marketing managers have had difficulty in assessing the outcome of their marketing efforts on social media as they are substantially different from traditional marketing media (Peters et al., 2013). According to Hoofman and Fodor (2010) effective social media measurement should start with turning the traditional return on investment (ROI) approach upside down. By doing this they suggest that brand managers should consider customers’ motivations for using social media and measure customer engagement. This approach can be supported by the fact that other researchers have found a positive correlation between social media brand following and marketing metrics such as increased brand equity and purchase intention, larger share-of-wallet, higher customer retention rate and proactive word-of-mouth (A. J. Kim & Ko, 2012; Naylor, Lamberton, & West, 2012; Vivek, Beatty, & Morgan, 2012).

However, there are sceptics who believe that social media marketing has not yet delivered benefits such as increased ROI (LaPointe, 2011). The main difference in point of view originates from how we actually measure effectiveness on social media. Short-term measures and key performance indicators (KPI’s) can be set up to measure a campaign’s conversion, whether it might be sales, landing page visits or brand awareness (Chaffey & Ellis-Chadwick, 2012; Ryan, 2015). However, the promoters of the customer engagement aspect consider social media measures as long-term metrics. Therefore, short-term measures such as traditional ROI or customer response to a single campaign should not determine the success of a social media marketing strategy. On social media, customers now have a large control of their own online experience. This is one of the reasons why promoters of long-term strategy encourage brand managers to look into customers’ motivations and put the brand to work for the customers by creating content that gratifies customers’ needs. Therefore, it is important to measure the social media investments from how customers engage with the brand (Cvijikj & Michahelles, 2013; de Vries et al., 2012; Haven, Bernoff, & Glass, 2007; Hoofman & Fodor, 2010; Interactive Advertising Bureau, n.d.). Today, there is still lack of a comprehensive financial measurement tool for social media (Schultz & Peltier, 2013). After viewing the literature, the author of this thesis assesses that at this point the best
way for brands to determine the effectiveness on social media is to measure online customer engagement.

Within the marketing literature there exist various definitions of customer engagement. Hollebeek (2011) defines customer brand engagement as “the level of a customer’s cognitive, emotional and behavioural investment in specific brand interactions” (p. 565). The birth of social media platforms has facilitated interactions between customers, and also between customers and companies. Experiences, information and feedbacks are among things that are being shared. All of these online activities can be described and referred to as online customer engagement on social media. The engagement tools that are common on social media platforms are: like, comment (reply) and, share (retweet). When customers engage on contents via Twitter or Facebook, it is more likely to appear in individuals users’ news feed, because social media platforms algorithms categorize the contents as trending or popular within a certain network and the networking effect results in a further distribution of the contents (Swani et al., 2013). Peter et al. (2013) developed a holistic framework for managing social media and named it the S-O-R framework. The framework takes departure in recent literature from the fields of: marketing, psychology and sociology. The capital letters in S-O-R stand for Stimulus (marketing input) the Organism (consisting of motives, content, social roles & interactions and network structure) and Response (the marketing output). Peter et al. (2013) further state that within the organism, companies are just an equal actor in the network, and that reach can not be bought in the same way as in traditional media. Therefore, the content needs to be linked to the actors within the company’s network otherwise it will not be engaged with. Further, Peter et al. (2013) underline that having a large follower base is not crucial: instead, brand managers should focus on engaged users within the target audience, as they will become influencers. The organism that Peter et al. (2013) describe is interactive; for brand managers the central marketing input is the content. Brand managers need to develop new forms of advertorial content that motives social media users to engage, modify and share. It is in this sense that companies nurture customer engagement within their network.

As a candidate for this case study, the airline industry was considered a good match because brands within this industry are in the forefront of social media marketing both on Facebook and on Twitter (SocialBakers, 2015). Moreover, this industry is characterized by energetic development (Buhalis & Law, 2008) and fierce
competition (“Why airlines make such meagre profits,” 2014). Further, the airline industry is focused on customer engagement and many airlines offer their customers rewards in form of loyalty cards, among other things. Icelandair was found to be in particular good match because it is an established international airline that has won multiple awards for its marketing campaigns (Icelandair Group, 2015). Last but not least, Icelandair is a good example of an airline brand that has successfully utilized social media marketing platforms, currently, Icelandair has an active Twitter account with over 90,000 followers world wide. Furthermore, Icelandair was willing to grant access to information that improved the quality of data obtained. The above facts provide justification for why the airline industry was an attractive case study and why Icelandair as an airline brand was a good case study on which to conduct social media marketing research.

The objective of this thesis is to investigate what factors drive online customer engagement such as “likes”, “replies” and “retweets” on Icelandair’s official Twitter site. Further, the aim is to develop new knowledge that can be utilized to increase online customer engagement on Twitter for Icelandair. Icelandair’s tweets will be analysed in the extended version of the conceptual framework put forth by de Vries, Gensler and Leeflang (2012). This was initially intended to measure Facebook brand-generated posts, but in this thesis it will be extended to fit the social media platform Twitter.

The results reveal that different characteristics in terms of tweet and feature type of tweets produce different online customer engagement outcomes for Icelandair. In terms of feature type, the characteristic “vividness” was found to drive online customer engagement for the variables “retweets” and “likes”. Furthermore, the characteristic “interactivity” was not a significant factor in determining online customer engagement. In terms of content, the tweet types “entertainment”, “information” and “promotion” were found to be positive significant factor in determining “likes”, “retweets” and “replies”, while “social” and “incentive” tweets were found to be a positive factor only to “likes” and “replies”.

This thesis contributes to the literature by extending the earlier framework of de Vries et al. (2012) intended for Facebook and altering it to fit the Twitter platform to measure what drives online customer engagement. In practice, digital managers at Icelandair can use this knowledge to decide which characterises to include in their tweets in order to increase their effectiveness on Twitter by developing preferred tweets
for their target audience. Additionally, because the independent variables are proposed for Icelandair, an airline utilizing Twitter marketing, the model could potentially be applied by other airlines. Even more, this research contributes to the much needed literature on social media marketing of brands within the airline industry.

The structure of the thesis is as follows: Chapter two contains a systematic review on brand-generated contents in the airline industry and on social media. The aim of this chapter is to understand what determinants produce engagement on Twitter. The third chapter is an analysis of Icelandair and Twitter, its aim being to understand how online customer engagement can be measured in an extended version of the framework of de Vries et al. (2012). Chapter four summarizes findings from chapters two and three and provides reasoning for the modified framework and hypothesis. The fifth chapter explains the methodology for the study and how the variables were categorised. The sixth chapter presents the results from the study. Last but not least, chapter seven discusses the results obtained and limitations, and presents conclusions on the research questions.
2 Literature Review

Firstly, this literature review examines what has been researched on social media focusing on airline brands. Secondly, the conceptual framework of de Vries et al. (2012) is introduced, including the variables. This review also includes a systematic review of variables that have been used to measure online customer engagement. Finally, at the end of this chapter research gaps are summarized and research questions stated.

2.1 Social Media and the Airline Industry

The liberalization of air travel in the 1980s led to new industry entrance of low-cost carriers, resulting in a fierce industry competition. Margins in the industry have been decreasing and the battle for the customer is becoming ever fiercer (“Why airlines make such meagre profits,” 2014). For the passenger, low-cost carriers offer a strong substitute to the full-service airline product (O’Connell & Williams, 2005). Over the years, online marketing has grown in importance in the tourism industry. Online media of fer companies within the tourism industry numerous marketing tools, some of the most recent being social media. Tourism is an information-intense industry where the customers actively seek and create information regarding their travelling; these customers can find both customer-generated and brand-generated content on social media. Twitter is an important platform for brands. Twitter users are loyal customers and many of them follow brands. Of those who do so, 67% indicate that they want to purchase from the brand that they follow on Twitter (Malhotra, Malhotra, & See, 2012).

According to Zeng and Gerritsen (2014) “research on social media in tourism is still in its infancy”(p. 34). Still, there exists some literature on social media in the tourism industry. Pudliner (2007) and Tussyadiah and Fesenmaier (2009) found that some customers re-experience their trips by sharing contents from their travels. Results from, Xiang and Gretze (2010) found that social media contents account for a large part of the references picked up by searches engines, which are likely to direct travellers to social media platforms. Then on social media platforms companies can attempt to direct traffic directly to their e-commerce. Based on a study of three airlines, Leung, Schuckert, and Yeung (2013) show that most people only engage with a Facebook post
on the first day. Previous academic studies of Twitter concerning brands in the airline industry have mainly focused on brand sentiment and emphasize the importance for airlines of engaging with their customers on Twitter to avoid negative sentiment; see Table 1 below.

Table 1
*Studies of Twitter and Airline Brands*

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Main Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wigley and Lewis</td>
<td>2012</td>
<td>The results showed that a highly engaged company received less negative mentions in tweets, but only if it also practised dialogical communication.</td>
</tr>
<tr>
<td>Sreenivasan, Lee, and Goh</td>
<td>2012</td>
<td>The results showed that users mainly share compliments, marketing related material, personal updates and information.</td>
</tr>
<tr>
<td>Gunarathne, Rui, and Seidmann,</td>
<td>2015</td>
<td>Airlines mainly used microblogs for marketing, socializing and information sharing.</td>
</tr>
</tbody>
</table>

Sreenivasan, Lee, and Goh (2012) found that airlines mainly tweeted marketing related contents, socializing contents, information and contests. To the author’s best knowledge, no other studies of Twitter concerning brand-generated content except for the study by Sreenivasan et al. (2012) exists. As mentioned in the introduction there does not exist a holistic financial measure for social media (Schultz & Peltier, 2013). Hoofman and Fodor (2010) encourage companies to look into customers’ motivations and put the brand to work for the customers by creating content that fulfils customers’ needs. Therefore, it is important to measure the social media investments from how customers engage with the brand-generated contents via the online engagement tool (Cvijikj & Michahelles, 2013; de Vries et al., 2012; Haven, Bernoff, & Glass, 2007; Hoofman & Fodor, 2010; Interactive Advertising Bureau, n.d.) Hence, there is need for further knowledge concerning what kind of brand-generated contents followers of airline brands seek to gratify their needs.
2.2 Measuring Facebook and Twitter

De Vries et al. (2012) developed a framework to measure brand post popularity. This was measured in terms of the number of likes and comments on Facebook brand posts, or what can be described as customer engagement tools on social media. As illustrated in Figure 1, the original framework developed by de Vries et al. (2012) included six determinants which could influence popularity of brand posts. These determinants, or independent variables, were: vividness, interactivity, informative and entertainment content, the position of the brand post and lastly the valence of the comments on the brand post. Further, the framework also included several control variables that de Vries et al. (2012) argued could have an effect on the dependent variables, namely comments and likes. In further research, de Vries et al. (2012) suggest that it would be intriguing to replicate this research on other social media platforms.

![Conceptual Framework on Popularity of Brand Posts on Brand Fan Pages](image)

Figure 1. Conceptual Framework on Popularity of Brand Posts on Brand Fan Pages. Adapted from: “Popularity of Brand Posts on Brand Fan Pages: An Investigation of the Effects of Social Media Marketing”, by de Vries et al., 2012, Journal of Interactive Marketing, 26, p. 84

In 2011, Kietzmann et al. concluded that the social media ecosystem is formed like a honeycomb, and that fundamentally, all social media platforms include the same
building blocks. There are six such blocks that are linked to the user’s identity. They are: presence, relationships, reputations, groups, conversations and sharing. Although these building blocks can be found within major social media platforms, e.g. Twitter and Facebook, there is a fundamental difference in how brand-generated and user-generated contents vary between these platforms. Firstly, the architecture differs, i.e. how the contents and features appears on social media platforms. Secondly, the culture and norms differ. Facebook is, in its essence, more self-promoting than Twitter, where self-promotion can even be considered as inappropriate. Fundamentally, Twitter is more focused on promoting conversation and information sharing (Smith, Fischer, & Yongjian, 2012). To summarize, it is suggested that there might be these differences between Twitter and Facebook in content and feature type that determines online customer engagement.

2.3 Feature Type in Social Media

Telepresence is the human experience of content in media. There are two major dimensions in communication technologies which are determinants of telepresence. Those are namely, vividness and interaction (Steuer, 1992). These are examined below.

2.3.1 Vividness.

Media richness is commonly referred to as vividness. Kaplan and Haenlein (2010) developed a matrix for social media platforms where platforms are categorized from low to high in media richness and low to high in self-presentation. The categories within the matrix are: “Blogs”, “Social networking”, “Virtual social worlds”, “Collaborative project”, “Content communities” and “Virtual games”. Both Twitter and Facebook fall within the category “Social networking” as the users can, in addition to text-based communication, share other forms of rich media such as pictures and videos.

Steuer (1992) defines vividness as “the representational richness of a mediated environment as defined by its formal features”, i.e., the way in which an environment presents information to the human senses. Further, Steuer (1992) divides vividness into sensory breadth and depth. Sensory depth refers to the resolution or the quality of the contents. Breadth refers to the number of sensory dimensions simultaneously presented, e.g. a picture is less vivid, because it has less breadth, than a video, which stimulates more senses as you can both see and hear the content. Previous studies have found the existence of positive effects of vividness in the effectiveness of online advertisements,
measured by the level of interaction with an online ad (Fortin & Dholakia, 2005; Lohtia, Donthu, Naveen, & Hershberger, 2004).

2.3.2 Interactivity.

Steuer (1992) defines interactivity as “the extent to which users can participate in modifying the form and content of a mediated environment in real time”. Interactivity has become largely associated with new communication technologies such as Web 2.0. Fundamentally, social media platforms are interactive, as they facilitate interactions between users. Social media users can have two-way communication in real-time, while traditional media is static and one-way communication. Hence, social media users are not only information receivers but also message creators (Liu & Shrum, 2002).

Interactivity is widely regarded as an essential factor in determining affective and behavioural outcomes such as attitude, decision making and involvement concerning web usage (Coyle & Thorson, 2001; Fortin & Dholakia, 2005). On Facebook brand pages, administrators employ features involving various types of interactivity to disseminate content, e.g. text, links, voting, call-to-action, contests, questions and quizzes (de Vries et al., 2012). These types of interactive features can be divided into levels, e.g. a text or statement would be less interactive than a link, because the user can click on it and obtain further information (Fortin & Dholakia, 2005). Moreover, Fortin and Dholakia (2005) state that many people misunderstand the difference between vividness and interactivity. Communication can, for example, be vivid but not interactive, e.g. in a magazine users see a vivid picture but cannot interact with it directly. Likewise, content can be interactive and low in vividness, e.g. an e-mail with a question.

2.4 eWOM & Motivations

Social media marketing is a form of word-of-mouth marketing (WOM), enabling customers to talk to one another. However, it is an extension of traditional word-of-mouth communication because instead of telling something to a few friends, customers can now tell it to hundreds or thousands of other people with a few keystrokes (Mangold & Faulds, 2009).

eWOM is defined as
any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to multitude of people and intuitions via the Internet (Hennig-Thurau et al., 2004, p.39).

Recent research on WOM focuses on motives that are likely to instigate WOM behaviour. These consists of motivations such as: self-presentation, self-enhancement, expressing uniqueness and reducing risk (Hennig-Thurau et al., 2004; Lovett, Peres, & Shachar, 2013).

Uses and gratifications (U&G) theory (Katz, 1959), which originated from communication studies of media and technology effects, will be applied to interpret user motivations. U&G theory is an audience-centred approach which is frequently applied by media researchers to understand the goals and motivations of individuals in their engagements with various kinds of content (as cited in, Cvijikj & Michahelles, 2013). The theory assumes that an individual’s media choice is based on a combination of sociological and psychological factors. Because the audience are active consumers, individuals may utilize the media differently, according to the needs they are seeking to gratify. Unlike other theoretical perspectives, U&G theory holds that audiences are responsible for choosing media to meet their desires and needs in order to achieve gratification. This theory would then imply that different media compete against one other to supply viewers’ gratification (Katz, Blumler, & Gurevitch, 1974). U&G theory was originally intended to understand the use of static mass media, but because of its approach in understanding communication on a user level, it is also appropriate to utilize it to understand consumer Internet usage.

Starting in the mid-1980’s, scholars utilized the U&G theory to understand the use of the Internet (Ruggerio, 2000). Furthermore, Ruggerio (2000) suggests that because the theory assumes an active user, it can help researchers to understand a goal-orientated, gratification-seeking audience. Additionally, the methodological openness of the theory allows researchers to apply it to new platforms in understanding users’ motivations. Further, U&G theory is even more relevant for Internet-based communications because, compared to traditional mass media channels, it allows the user to be a highly active participant.

Ko (2000) applied U&G theory to investigate an e-commerce retailer and the relationship between consumer motives and interactivity. The results showed that respondents reported motives in terms of information, entertainment, and social
interaction. The limitation of that study was that it was measuring interactivity on a product webpage and the objective this particular e-commerce retailer was to display merchandise in order to sell it.

Another study of Facebook usage by students demonstrated that the main gratifications derived from spending time on Facebook were socializing, self-status seeking and information. The relative importance of these gratifications differed depending on users’ demographics (Park, Kee, & Valenzuela, 2009). Other previous application of U&G theory to brand pages and communities revealed that entertaining and informative content was an important factor in participation (Dholakia et al., 2004; Raacke & Bonds-Raacke, 2008).

### 2.5 Engagement with Brand-generated Content on Social Media

This section provides an overview of academic research concerning engagement with brand-generated content on social media platforms. The studies are summarized in Table 2 in the end of this section.

Hong (2011) studied the motives for using and engaging with Facebook brand page by applying U&G theory. According to Hong (2011) the motive entertainment content scored highest, followed by information. Hong (2011) findings furthermore suggested that brands should minimize promotional contents. Shen and Bissell (2013) found on the contrary that promotional information was significant as a determinant for eliciting comments, but not for shares and likes.

In their case study, Cvijikj and Michahelles (2011) examined features such as post type, post category and posting day as determinants of user engagement on brand posts. User engagement was measured in terms of ratio for the number of likes and comments, and interaction duration. The results indicated that the post type and post category had significant effect on likes and comments, and also on interaction duration. Pictures triggered the greatest level of engagement, followed by statuses and links. In terms of post types, competitions and questionnaires got the lowest ratio of likes.

Cvijikj, Spiegler, and Michahelles (2011) extended the study by Cvijikj and Michahelles (2011) later the same year by analysing data from 14 different global brands, that had Facebook brand pages. The aim of their study was to confirm their previous findings and possibly generalize previous obtained results, which had only been tested on one brand. The results reinforced the conclusion that different post characteristics elicited different levels of engagement. But no final conclusion was
reached as to which posting type and media type had the greatest influence on the level of engagement.

As mentioned earlier, de Vries et al. (2012) developed a conceptual framework for measuring engagement on brand-generated contents. They applied their own framework and measured what explains brand post popularity, using data from 11 different international brands. The framework included the independent variables vividness and interactivity, which had been derived from previous studies on banner-ads. These variables were categorized from low to high. The researchers based their post type categories on previous research on social media and advertising on web-sites, as they reasoned that there was resemblance. Their findings indicated that posts that were vivid and interactive enhanced the number of likes and that interactive brand posts enhanced the number of comments. The studies by Cvijikj et al. (2011) and de Vries et al. (2012) both found that there was a negative correlation between interactivity in the form of questions had and the number of likes, but a positive correlation between it and the number of comments.

Cvijikj, Spiegler, and Michahelles (2012) published a new study on customer engagement on Facebook in 2012. This time the consumer brand “ok” was used as a case study. This Facebook brand page study was based on their 2011 publication Cvijikj and Michahelles (2011). Post type and post category were again found to have an effect on likes and comments. Chauhan and Pillai (2013) and Sabate et al. (2014) produced similar findings; these indicated that posting type has a significant effect on online customer engagement. Further, Cvijikj et al. (2012) found that the post types advertisements and announcements elicited the greatest level of engagement. From these results they concluded that fans of brand pages were interested in receiving information regarding the brand and its products. These findings contradict those of de Vries et al. (2012), which were that informative brand posts were not significantly related to the number of comments nor likes. Additionally, Cvijikj et al. (2012) found a significant difference in posting on weekdays on the number of likes and comments and suggested that this needed further investigation.

Cvijikj and Michahelles (2013) analysed data obtained from over 100 Facebook brand pages to study online engagement factors. In this study they put forth a conceptual framework similar to that of de Vries et al. (2012), modifying it by separating the independent variables into three categories: “Content type” constructed on U&G theory, “media type” derived from communication theory and “posting time”
(see Appendix A). As in their previous studies, they calculated engagement ratios for their dependent variables by dividing the number of likes/comments by the number of fans at posting time. Their results showed that providing entertaining and informative content significantly increased the level of engagement in terms of commenting and liking. Furthermore, entertaining content was found to have a significant effect on sharing. They also found that brand fans reacted positively to content regarding remuneration but only in terms of commenting. Furthermore, the results showed that higher levels of vividness increased the level of engagement, while interactivity reduced the level of engagement. However, Luarn, Lin, and Chiu (2015) revealed that medium vividness influenced online engagement most and Sabate et al. (2014) suggested that vividness increased likes. Finally, Cvijikj and Michahelles (2013) found that posting time in the weekdays increased the level of comments, while posting in peak hours reduced the level of engagement in the form of likes and shares.

The difference in results between de Vries et al. (2012) and Cvijikj and Michahelles (2013) can in part be explained by the fact that they have different definitions of entertainment, where the first study’s definition does not included content that is not related to the brand directly, but the later includes brand-related contents in their definition of entertainment. The difference in results concerning interactivity can possibly be explained by the different approach taken on operationalization of variables, where the later study used two levels of interactivity while de Vries et al. (2012) had three levels of interactivity. Luarn et al. (2015) arrived at conclusions similar to those of de Vries et al. (2012), suggesting that a high level of interactivity may entice users to engage with brand post with likes, comments and shares. Additionally, Luarn et al. (2015) found that social posts, i.e. posts that are designed to encourage user participation, increase the number of comments, but not the number of likes and shares.

In general other studies of brand-generated posts have found that posts entailing entertaining contents (Gaber & Wright, 2014; Hong, 2011; Luarn et al., 2015; Shen & Bissell, 2013) and incentive contents often in form of contests had a significant effect on users’ engagement (Al-Mu’ani, Saydam, & Cemal, 2014; Gaber & Wright, 2014; Shen & Bissell, 2013). However post type definitions differed slightly between these studies. Swani et al. (2013) found that emotional contents had a positive effect on eWOM measured in terms of customer engagement on Facebook brand pages.

The difference in results between the researches might be due to the fact that
different research methods were used, both as regards samples and statistical methods.
It is believed that the target audience for the various brands (samples) might differ, thus
having effect on the outcome.

Table 2
Engagement on Brand-generated Contents on Social Media

<table>
<thead>
<tr>
<th>Content type IV's</th>
<th>Feature type IV's</th>
<th>Other IV's</th>
<th>Engagement DV's</th>
<th>Platform</th>
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</thead>
<tbody>
<tr>
<td>Cvijikj and Michahelles (2011)</td>
<td>Information</td>
<td>Vividness</td>
<td>Posting day</td>
<td>Like ratio</td>
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<tr>
<td>Designed Question</td>
<td>Interactivity</td>
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<td>Comment ratio</td>
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<td>Statements</td>
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<td>Advertisements</td>
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<td>Competitions</td>
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<td>Questionnaires</td>
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<td>Announcements</td>
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<tr>
<td>Hong (2011)</td>
<td>Entertainment</td>
<td>Multimedia</td>
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<td>Facebook</td>
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<tr>
<td>Information</td>
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<td>Promotion</td>
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<tr>
<td>de Vries et al. (2012)</td>
<td>Entertainment</td>
<td>Vividness</td>
<td>Weekday</td>
<td>Like</td>
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<tr>
<td>Information</td>
<td>Interactivity</td>
<td>Position</td>
<td>Comment</td>
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<td></td>
<td></td>
<td>Valance of comment</td>
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<tr>
<td>Cvijikj, Spiegler and Michahelles (2012)</td>
<td>Same variables as in Cvijikj &amp; Michahelles (2011) study</td>
<td>Facebook</td>
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<tr>
<td>Cvijikj and Michahelles (2013)</td>
<td>Entertainment</td>
<td>Vividness</td>
<td>Posting time</td>
<td>Like ratio</td>
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<tr>
<td>Information</td>
<td>Interactivity</td>
<td>Followers</td>
<td>Comment ratio</td>
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<tr>
<td>Remuneration</td>
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<td></td>
<td>Share ratio</td>
<td>ID*</td>
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<tr>
<td>Chuhan and Phillai (2013)</td>
<td>About</td>
<td>Vividness</td>
<td>Weekday</td>
<td>Like</td>
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<td>News</td>
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<td>Hour of day</td>
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<td>Content type IV’s</td>
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<td>Shen and Bistell (2013)</td>
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<td>Interactivity</td>
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<td>Product</td>
<td>Incentive</td>
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<td>Swani et al. (2013)</td>
<td>Emotional content</td>
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<td>Like</td>
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<td>Corporate brand name</td>
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<td>Al-Mu’ani et al. (2014)</td>
<td>Giveaways</td>
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<td>Like</td>
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<td>National Holiday</td>
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<td>Societal</td>
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<td>Product Relation</td>
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<td>Gaber and Wright (2014)</td>
<td>Information</td>
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<td>Like</td>
<td>Facebook</td>
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<td></td>
<td>Engagement</td>
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<td>Incentive content</td>
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<td>Sabate et al. (2014)</td>
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<td>Vividness</td>
<td>Like</td>
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<td>Timeframe</td>
<td>Comment</td>
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<td>Followers</td>
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<td>Length of post</td>
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<td>Luarn et al. (2015)</td>
<td>Information</td>
<td>Vividness</td>
<td>Like</td>
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<td></td>
<td>Entertainment</td>
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<td>Social</td>
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Note. IV’s are independent variables and DV’s are dependent variables, *means interaction duration.

All the studies cited in Table 2 were conducted on Facebook. Thus, the author believes that there still exists a research gap on brand post popularity, or what is also referred to as customer engagement, on other social-media platforms, e.g. Twitter, as mentioned earlier in this chapter. There also exists a research gap in the airline industry literature regarding brand-generated contents on Twitter. In the light of the previous literature, the following research questions (R1-R3) are stated:
R1: How can airline brands measure online customer engagement on Twitter in a conceptual framework?

R2: How can airline brands increase online customer engagement with the brand-generated contents which it tweets on its official Twitter page?

R3: When benchmarked with earlier findings on customer engagement on Facebook, what are the main differences and similarities between online customer engagement drivers on Twitter and Facebook?
3 Analysis of Icelandair & Twitter

This chapter defines and analyses the features of Twitter as a social media marketing tool for the airline brand Icelandair. This chapter also includes analysis of Icelandair, because the airline’s goals and objectives translate into its actions on Twitter. The aim of this chapter is ultimately to provide reasoning for how the conceptual framework of de Vries et al. (2012) can be extended from Facebook and applied to Twitter for an airline brand.

3.1 Introduction to Icelandair

Icelandair is a daughter company of Icelandair Group and its home hub is based in Keflavík. The location of the home hub is one of the company’s main strengths, because it connects transfer passengers travelling between Europe and North America via the Keflavík hub. The hub is on a twenty-four-hour rotation with aircraft departing from Iceland early in the morning for Europe, returning in the late afternoon and then departing to Canada and the US in the early evening. The aircraft then arrive back in Iceland early the following morning and the process is repeated. This particular positioning, centred on Trans-Atlantic traffic, allows Icelandair to maximize the utilization of its air fleet. Icelandair differentiates by adding to the core service, transportation from point A to point B, the option of an Icelandic travel experience. It offers three different classes on its aircraft: Saga class, Comfort class and Economy class (Icelandair Group, 2015). The company’s latest in-flight service is Wi-Fi for a small fee in Economy and Comfort class. This allows customers to connect with their social network with only few key strokes while in flight (Icelandair, n.d.-c). This underlines the importance for Icelandair of engaging with and responding to its customers through Twitter.

According to O’Connell and Williams (2005) in their study of “Passengers’ perceptions of low cost airlines and full service carriers: A case study involving Ryanair, Aer Lingus, Air Asia and Malaysia Airlines”, the ideal scenario for passengers would be to have a combination of low fares (no-frills airlines) and full-service airlines. It would therefore seem that passengers would like to see those two business models become ever closer. Icelandair’s offers fair prices on Economy class, competitive with those of low-cost carriers (Icelandair, n.d.-a). On Economy class, Icelandair provides customers with a higher service level, including a free baggage allowance, a free hand-
baggage allowance, increased foot space and the in-flight Icelandic experience. The in-flight Icelandic experience is visible in the company’s safety video, the merchandise they sell and even in the aircrafts exterior and interior. It can be argued that Icelandair utilizes a business model that brings the low-cost and full-service carriers’ business models closer, because Icelandair incudes building blocks both from full-service carriers, e.g. brand extension, and low-cost carriers, e.g. paying for amenities (Icelandair, n.d.-b). It is also arguable that Icelandair’s target audience on Twitter belong to both the full-service carrier and low-cost carrier segments.

Icelandair is a proactive company in terms of social media, and it has clear goals and objectives (Ágústsson, personal communication, March 1, 2016). Due to fierce competition within the industry, Icelandair has to have a proactive social media strategy in order to retain its current customers and attract new customers with valuable two-way communication on social media platforms such as Twitter.

3.2 Twitter: A Historical Review

Twitter was founded in March 2006 by Jack Dorsey, Evan Williams, Biz Stone and Noah Glass. At that time, they were undergraduate students at New York University working on a group project. Their initial idea revolved around using the SMS service to communicate with a small group. In 2006, the social media network Myspace was already at its peak and Facebook was growing at a fast pace (Boyd & Ellison, 2007). Twitter was launched in July 2006 and became an online social networking platform that enables its users to send and read short messages of up to 140 characters called tweets. The limit of 140 characters makes Twitter different from other social media platform (Twitter, n.d.-d). Twitter began as an all-text platform where users could tweet plain text and links. As rich media have become more essential to the experience of contents, Twitter has made changes so that the content can now appear in several forms: as a text, picture, video, url-links or ads (Kumar, 2015). The most recent upgrade is Auto-play video, enriching the experience for the customer (Regan, 2015). These changes are similar to the changes that the social media market-leader Facebook has gone through during the past years.

The following statistics illustrate the impact and size of Twitter. In 2012, the platform had over 100 million active users and by 2015 this number was up to 320 million, and with over 2.1 billion search queries every day (Ryan, 2015). The number of Twitter users is growing extremely fast. According to Alexa.com (2015), which is a
competitive intelligence analysis service owned by Amazon, Twitter.com is the ninth-most-visited website worldwide. These facts underline why Twitter is such an important communication tool for companies, including Icelandair, to reach their target audience.

### 3.3 Twitter Brand Pages

In 2011 Twitter stepped into Facebook’s shoes and launched Twitter brand pages, which are similar to Facebook brand pages. The brand page, or brand profile, of the companies features all of its tweets and retweets. When brands have many followers, this means they are potentially reaching a wider audience. However, companies should rather focus on building a community of followers who are interested in what the brand is doing and the content it is producing, because in that way the followers it acquires will be more likely to engage. As Twitter grows, the platform becomes noisier, which means that Icelandair will have to buy more promoted content to get its message through. Subsequently, this also means that having many followers outside its target audience will become costly as they will not likely to buy its products (Ryan, 2015).

Some brands collaborate with influencers to gain access to large amount of followers that fit into their target groups. Influencers are people who have built sizable following base and produce enticing content in several niches, e.g. fashion, healthy living or travel. They become social media influencers and are seen as trendsetters or key influencers, because their audience consists of loyal fans who trust the information source (Mediakix, 2015; Sterne, 2010). Social influencers, however, are everyday people who pick up brand-generated contents and make them their own. What both groups (key influencers and social influencers) have in common is that they influence brand affinity and purchasing decisions on social platforms. H. Ágústsson (personal communication, April 16, 2016) implies that it is important for a brand to have the right followers and that these are engaged. By developing the relevant content for these followers, the follower base needs only to be reasonably big in order for a brand to have influence. Currently, Icelandair’s follower base consists of approximately 90,000 followers, but the company’s tweets have also gone viral and been picked up by media across the world.

On brand pages, marketers are provided with an *audience insights dashboard*. This provides the marketer with background information regarding its target audience.
and how well its tweets are performing (Bragdon, 2015). Furthermore, this background information provides with details of its followers’ consumer buying style or lifestyle, helping the brand manager to tailor the communication towards contents that the follower base finds interesting. For example, the #MyStopoverBuddy campaign, which is presumed to be a brand awareness campaign designed to inform the target audience about stopover possibilities in Iceland, very likely takes these lifestyle factors into consideration as Icelandair offers, for example, Food buddies, Health buddies and Nature buddies as part of the promotional contents that the company tweets.

3.4 Promoted Tweets and Twitter Ads

Having a Twitter account is free of charge. In Twitter’s business model the revenue streams derive from, among other things, organizations that buy Promoted tweets, Twitter ads and Analytics (Twitter, n.d.-c). One of the advantages of using paid media on Twitter as Icelandair does is that the brand is provided with metrics via Twitter’s activity dashboard. The dashboard provides easy access to metrics such as: clicks, click-throughs, audience insights and engagement- and impressions metrics. Having access to these metrics allows Icelandair to optimize its campaigns while they are running.

When Icelandair creates a Twitter ad, the ad does not appear on its official Twitter brand page and it can not be engaged with in the same way as a regular tweet. The ads can be developed in multiple languages and be set to attract a certain group of people (target audience) via their timelines. If an ad campaign’s objective has a clear call-to-action, Icelandair can add call-to-action button, e.g. buy now or get more info (Twitter, n.d.-b).

Once Icelandair has tweeted, it can choose to promote a tweet to get even more impression. These impressions are called paid impressions, they distribute companies tweets beyond organic impressions. Promoted tweets act just like a regular tweets in the sense that other users can retweet, like and reply; the only notable difference is that they are labelled as promoted. The insights dashboard (mentioned earlier) provides Icelandair with information on how well particular tweets are performing. For example, if a tweet is performing well in organic distribution Icelandair sometimes decides to pay for additional paid impressions (Ágústsson, personal communication, March 1, 2016). But when companies pay for paid impressions the hope is to receive additional
engagement and that the message gets distributed to more followers and Twitter accounts that fall within its target audience criteria.

3.5 The Twitter Timeline and Engagements Tools

The Twitter Timeline displays a stream of contents from accounts that are being followed. This is referred to as organic impressions. The timeline also displays paid contents, such as Twitter ads and promoted tweets (Twitter, n.d.-a). Essentially, the Twitter timeline is a hub for user interactions. Users can react on the contents by replying, retweeting and liking. Initially, the content appeared in reverse chronological order on the timeline, but in February 2016 Twitter introduced improved timeline for consumers and brands. The aim of this new timeline was to decrease the noise by showing the best contents on the top, followed by the rest of contents in reverse chronological order. According to Farkas (2016) this change is beneficial for both consumers and brands as the best contents are rewarded by a greater likelihood of further engagement, i.e., social media platforms update their algorithms to serve up content to those who may be interested in it (Ryan, 2015). Twitter also finds trending tweets and accounts within user’s networks and adds it to their timelines and/or sends e-mails with suggestion without the user being follower of that other particular brand or person. (Lowensohn, 2014). Therefore, Icelandair has a better chance of reaching a new audience if it tweets quality content relevant to its target group. The engagement tools on Twitter likes, replies and retweets will be covered in the following subsections.

3.5.1 Likes

In 2006, in the early days of Twitter, the favourites button (referred to by the ★ symbol) was introduced. This was initially intended to bookmark tweets the user liked, but instead it grew to become a way for users to signal agreement, acknowledgement or dislike. This is the reason why the favourites button got changed to a like button. Facebook introduced introduced a similar like button in 2009 and since then it has become a common interaction feature of various other social media platforms (Newton, 2015). According to Sterne (2010) practitioners of social media sometimes talk about an ‘engagement pyramid’. This pyramid is based on how much work the customer has to do on in terms of engaging with the brand. Thus, in Twitter’s case, likes are at the bottom, followed by replies and then re-tweets. Purchase is on top of the pyramid as it involves the highest level of engagement.
3.5.2 Replies

*Mentioning* can occur for example when a customer tweets and mentions a @brand in his or her tweets in, e.g. “Thank you @Icelandair for a wonderful trip! We highly recommend you! Everyone was friendly and the flight was flawless #Iceland”. This feature is widely used by users to give positive or negative feedback on a service. Users are also increasingly using mentioning’s as a way of contacting a service centre. Instead of calling the service centre and asking why there is, for example, a delay, users can tweet directly to the brand/company and hope to receive a speedy response. This kind of mentioning will not appear on the direct brand page, unless the brand decides to re-tweet it. The mentioning will, however, appear on the timelines of the person who posted it and within his or her network and on the “Tweet & Answer” page on the brand’s official account. This feature is similar to commenting and posting, as it is here that users and companies can have a conversation on Twitter by replaying others mentioning (Twitter, n.d.-f). Companies and followers can also create a mentioning on companies’ tweet, these mentioning are often written expressions of feelings regarding what that tweet entailed.

3.5.3 Retweets

A retweet is re-posting of someone else's tweet, or in other words sharing someone else’s contents with one’s followers. In this sense, retweets work in a similar way as the sharing feature on Facebook. This feature works as a word-of-mouth promotion for companies, as the retweets appear on the timelines of the followers of followers, and also on the user’s profile. In social media, if people share a brand’s contents, this indicates that the content is good, or interesting; hence people are willing to spread it through peer-to-peer interaction. In their study of retweets, Suh, Hong, Pirolli, and Chi (2010) found that, amongst content features, URLs and hashtags have strong relationships with retweetability. The hashtag (the # symbol) was introduced in August 2007 as a way of marking a keywords or topics in a tweet (Twitter, n.d.-e). Tweets with the same hashtags are bundled together for easy subject-specific browsing, accessible by clicking the hyperlinked text, e.g. #MyStopOver. Therefore, the hashtag has a function similar to that of a link, as it connects the user with further related material.
3.6 Summary

This chapter has provided the fundamental reasoning for how the conceptual model of de Vries et al. (2012) can be modified. The analysis has shown that the spread between Facebook’s and Twitter’s features has been growing smaller. Firstly, the timeline works in a similar manner, with an algorithm that favours quality contents that followers engage on. This means that if a company wants to be successful on social media without paying too much for it, it must produce content that followers will like, reply to or retweet as this will increase the organic impressions. Secondly, both Facebook and Twitter offer their users similar degrees of interactive and vivid features. The next chapter, on Modified Conceptual Framework & Hypothesis, will partly be based on this analysis.
Online Customer Engagement on Twitter

4 Modified Conceptual Framework & Hypothesis

The framework by de Vries et al. (2012) was modified, taking into account the latest findings on social media online engagement and brand-generated contents. The framework will also be modified to make it applicable to Twitter, thus departing from the Analysis of Icelandair and Twitter in the previous chapter. The aim is to find out what effects online customer engagement on Twitter for Icelandair, measured in likes, replies and retweets.

4.1 Tweet Type

According to U&G theory, brands compete to supply users with gratification, thus the brands have to meet their requirements (Katz, 1959). Therefore, tweet types should be chosen on the basis of why the users follow a Twitter brand page. A previous study within the airline industry revealed that airlines mainly tweet contents associated with marketing promotions, information, contests and contents that aim for user engagement by socialising with them (Sreenivasan et al., 2012). The literature review also revealed that little is known about what kind of contents followers of airline brands seek in order to gratify their needs. A Nielsen survey on why people follow brands on Twitter revealed the following ranking in importance of motives, from the highest to the lowest: Incentive, Promotion, Information, Entertainment and Social (MacMillan, 2014). These findings are similar to those of Sreenivasan et al. (2012). Contests can be viewed as incentives but the tweet type category entertainment was not mentioned in this study. The following hypotheses are formulated for tweet types:

**H1a:** Brand tweets with incentive content elicit a higher level of online customer engagement than those without incentive contents.

**H1b:** Brand tweets with promotion content elicit a higher level of online customer engagement than those without promotion contents.

**H1c:** Brand tweets containing information elicit a higher level of online customer engagement than those without information contents.

**H1d:** Brand tweets with entertaining content elicit a higher level of online customer engagement than those without entertainment contents.
**H1e**: Brand tweets with social content elicit a higher level of online customer engagement than those without social contents.

### 4.2. Feature Type

Feature type includes the variables interactivity and vividness. In the chapter Analysis of Icelandair and Twitter it was concluded that Twitter, like Facebook, includes features that allow communication with different levels of interactivity and vividness (Kumar, 2015; Regan, 2015). Further, the analysis concluded that hashtags should be perceived as an interactive feature. Because tweets can be both interactive and vivid simultaneously, two hypotheses will be formulated.

The findings of de Vries et al. (2012) show that a high level of vividness has positive effects on the number of likes and negative effects on the number of comments. However, Cvijikj and Michahelles (2013) show that vividness has a positive effect on the ratio of likes and shares. Thus it assessed that branded posts generally receive more engagement if they are vivid.

**H2a**: The higher the level of vividness in a brand tweet, the higher the online customer engagement level.

De Vries et al. (2012) found that the feature interactivity was both a positive and negative determinant for the number of likes and comments. Cvijikj and Michahelles (2013) found that interactivity had a negative effect on brand-generated contents in terms of the like ratio and the comment ratio.

**H2b**: The higher the level of interactivity in a brand tweet, the lower the online customer engagement level.

### 4.3 Control Variables

The control variables for this study are derived from the chapters Literature Review and Analysis of Icelandair and Twitter. Because Icelandair is an international air carrier and its follower base on Twitter consists of people living all over the world in different time zones, its target audience will receive its tweets at different local hours. For instance, if Icelandair tweets during early Monday evening at their
headquarters in Iceland, it would be morning in the US and already Tuesday in some places in Asia. According to Cvijikj and Michahelles (2013) interaction patterns revealed that users’ activities on Facebook mostly take place on workdays, Mondays to Fridays. Therefore, the working day will become a control variable, measured from the Icelandic time zone because it is placed approximately in the middle between most of Icelandair’s followers on Twitter.

De Vries et al. (2012) had the message length of brand posts as a control variable their study. However, as was mentioned in the Twitter: A Historical Review section, tweets only contain 140 characters. Because tweets are short, it is considered irrelevant to include this control variable in the modified model. Furthermore, product category was also a control variable in the framework used by de Vries et al. (2012) but Icelandair has only one product category and therefore this control variable is also irrelevant for this study. The following control variables will be added: top position, paid impressions and number of followers. De Vries et al. (2012) concluded that position, or how long a particular brand post was on top of the brand page, had a positive effect on the post’s popularity. This finding is in accordance with advertising research on banner ads where position is found to positive effect on the attention paid to the banner ad (Drèze & Hushherr, 2003). As mentioned before in the Analysis of Icelandair and Twitter chapter, the number of followers and the number of paid impressions have an effect on how many timelines the tweet appears on (E. Kim, Sung, & Kang, 2014; Twitter, n.d.-a). Consequently, it is argued that this should have a positive effect on number of likes, replies andretweets. The number of paid impressions is a count variable because there might be substantial difference in how many people view the tweet depending on how much money was spent on promoting it, thus having it as a dummy variable would less precise. Some of the Facebook studies of online customer engagement applied engagement ratio as a dependant variable. This was done by taking the number of followers at posting time into account by diving it by the total number of likes, comments (Cvijikj & Michahelles, 2011; Cvijikj et al., 2011) and shares (Cvijikj & Michahelles, 2013). Using the engagement ratio is therefore an alternative way of controlling for the number of followers. In this study, the number of followers will be a control variable.
4.4 Conceptual Framework for Twitter

The framework in Figure 2 is a proposed framework for online customer engagement on Twitter.

*Figure 2. Conceptual Framework of Customer Engagement for Branded Tweets*
5 Method

5.1 Data

This study examines Icelandair’s official Twitter account as a case study. Hence, the dataset used for the content analysis consists of tweets from Icelandair. Icelandair was found to be a good candidate for a case study as it is an international brand within an industry that utilizes the latest technologies for marketing. Data regarding the number of followers was not available for periods earlier than August 2014. In order to determine the number of followers before August 2014, the average number of monthly new followers was calculated. This number was then subtracted from the previous month’s throughout the period from August 2014 until October 2012.

Data collection was completed on March 29th 2016. In total, 143 brand tweets from the period from October 2012 until March 29th 2016 were examined. Only localized posts, i.e. local scavenger hunts and error posts, were excluded.

5.2 Operationalization of Independent Variables

This section explains how the independent variables were operationalized for the content analysis. Content analysis is a frequently used method for systematically comparing the contents of communications (Aaker, Kumar, Leone, & Day, 2013; Kolbe & Burnett, 1991).

5.2.1 Tweet Categorisation

The first category is “incentive”. In their study, Cvijikj and Michahelles (2011) included content featuring: sales promotions, trials, coupons, special offers and other offers intended to attract attention in the post type category “remuneration”. Followers of Icelandair could both receive financial and non-financial incentive for reacting to a tweet. Thus, it seems more suitable to name this category “incentive” instead of “remuneration” in this study because the interpretation of the word is broader. The Oxford English dictionary defines incentive as “a thing that motivates or encourages one to do something” (“Incentive,” n.d.). It should be noted that offline games are not a part of this category as they do not entail incentives for engaging with the tweet.

The next category is “promotion”. According to the Oxford English dictionary the word entertainment means “relating to the publicizing of a product, organization or
venture to increase sales or public awareness” (“Promotion,” n.d.). This category has not been tested widely within the literature. It differs from information as it is the more promotional side of information, e.g. informing customers about unique selling points of Icelandair, telling them about new products or services in marketing campaign style, other than the basic service on a flight from A to B. Thus, it also differs from the “incentive” category as it does not contain sales promotion, e.g. discounts.

The third category is “information”, or “fact provided or learned about something or someone” according to the Oxford English dictionary (“Information,” n.d.). Earlier studies defined this category as information concerning the brand, organization or products (Cvijikj & Michahelles, 2013; de Vries et al., 2012). This will be defined in the same way here; however, it should be noted that informational tweets including an element of marketing promotion, e.g. selling points of the brand, are categorized as promotion.

The “entertainment” category contains tweets in which the primary purpose of the contents is to amuse or provide enjoyment to people (“Entertainment,” n.d.). It can contain tweets concerning the brand directly, this means that entertainment tweets are not only non-brand related. This categorization therefore differs from the definition used by de Vries et al. (2012) because it only entailed non-brand related contents, but is in accordance with the one used by Cvijikj et al. (2013). It should be noted that promotion tweets may be entertaining. However, only tweets with the primarily aim of amusing people fall within this category.

The last category is “social”; this contains tweets relating to society or its organizations. This definition was found to be in an accordance with meaning of the word “social” in the Oxford English dictionary (“Social,” n.d.). Hence, this category includes events taking place within society. It also contains tweets that have the primary purpose of socializing or with people and encourage user participation.

In Table 3, on the next page, examples are provided on how Icelandair’s tweets were categorized. See Appendix B to view pictures of the tweets.
Table 3  
*Tweet Categorization*

<table>
<thead>
<tr>
<th>Tweet Type</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Incentive</td>
<td>Tweets that include incentive for the customers. This category entails, e.g. marketing offers, discounts and online competitions.</td>
<td>Nominate someone to win an Icelandair Stopover. Yes, even yourself! Nominate here: <a href="http://goo.gl/x2L8Th">http://goo.gl/x2L8Th</a></td>
</tr>
<tr>
<td>2. Promotion</td>
<td>This category includes marketing campaigns, e.g. the MyStopover buddy campaign.</td>
<td>Stopover in Iceland and experience nature and geology with your Stopover buddy! #MyStopover <a href="http://bit.ly/1My8WrP">http://bit.ly/1My8WrP</a></td>
</tr>
<tr>
<td>3. Information</td>
<td>Informative tweets from Icelandair and announcements.</td>
<td>We’re excited to add Paris Orly. We now offer up to 23 flights per week between Paris, Iceland &amp; North America.</td>
</tr>
<tr>
<td>4. Entertainment</td>
<td>Tweets that include content that aims to entertain followers, such as amusing pictures and videos.</td>
<td>How does Icelandair Captain Rafn find his way to Iceland? He follows the northern lights! <a href="http://bit.ly/1Qhys2t">http://bit.ly/1Qhys2t</a></td>
</tr>
</tbody>
</table>

**5.2.2 Feature Type Categorization**

The feature type categorisation in this research derives from the original categorisation by de Vries et al. (2012). The following modifications have been made to suit Icelandair and the Twitter platform. Firstly, when categorizing vividness, it is important that the categorization derives from how the vivid feature affects the human senses in the media environment. Before August 2015 videos did not go directly on auto-play in tweets (Regan, 2015), thus only videos tweeted August 2015 or later would appear vivid to the user of the tweet. Before August 2015, a link would be inserted, e.g., a YouTube video in bit. format that the users would have to click on in order to see the video. The links do not appear vivid to the user in the tweet and therefore did not stimulate other senses unless they are clicked on. The link to the video however, is interactive, because the user clicks on it to see more material. Table 4 illustrates the operationalization of feature type categorisations.
Table 4

*Brand Tweet Vividness and Interactivity Categorization*

<table>
<thead>
<tr>
<th>Level</th>
<th>Vividness</th>
<th>Interactivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>Text</td>
<td>Non interactive text</td>
</tr>
<tr>
<td>Low</td>
<td>Pictorial</td>
<td>Link / #hashtag</td>
</tr>
<tr>
<td>Medium</td>
<td>-</td>
<td>Call-to-action</td>
</tr>
<tr>
<td>High</td>
<td>Video</td>
<td>Open Question</td>
</tr>
</tbody>
</table>

In the chapter Analysis of Icelandair and Twitter, it was concluded that hashtags work as links in terms of interactivity, leading to the obvious fact that they receive the same categorization. When a user clicks on a link, she or he is provided with further information; thus, a link would be more interactive than plain text. Call-to-action is a higher level of interactivity because after clicking on the link, the user can also take action on the site, e.g. purchase a ticket. Finally, an open question has the highest level of interactivity because there the user has the highest level freedom to have two-way communication in words with the brand. Quiz and contests, which formed part of the original categorisation by de Vries et al. (2012), have been excluded from this study as they are not seen as interactive by feature, i.e. a contest or quiz could either be call-to-action or an open question and should therefore not have its own category.

### 5.3 Data Coding & Inter-coder Reliability Test

An independent inter-coder reliability test was conducted to test the extent to which different content analysts would assign tweets to different categories. This is important for the reliability of the data (Kolbe & Burnett, 1991), as low reliability could lead to bad future managerial decisions (Rust & Cooil, 1994). The person that performed the inter-code test was provided with the description from Table 4. Additionally, she was provided with examples of tweets of each category illustrated on next page in Table 5. The coder was requested to determine the primary category for each tweet, because some tweets can fall within two or three categories.
Table 5
Icelandair’s Brand Tweet Categorization

<table>
<thead>
<tr>
<th>Incentive</th>
<th>Promotion</th>
<th>Information</th>
<th>Entertainment</th>
<th>Social</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offers</td>
<td>Unique selling points</td>
<td>Flight updates</td>
<td>Amusing pictures</td>
<td>Public events</td>
</tr>
<tr>
<td>Non-Finical Gains</td>
<td>Marketing campaigns</td>
<td>Announcements</td>
<td>Amusing videos</td>
<td>Sports</td>
</tr>
<tr>
<td>Online competitions</td>
<td>New products or Services</td>
<td></td>
<td></td>
<td>Holiday regards</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Socializing and</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>engaging tweets</td>
</tr>
</tbody>
</table>

Cohen’s Kappa test was run to determine whether there was agreement between the judgment of the two coders (the tester and the author), on what category should be the primary category for the 143 tweets. There was an almost perfect agreement between the two coders’ kappa or k = .810 (Viera & Garrett, 2005), and the coefficient was statistically significant $p < .0005$.

### 5.4 Procedure

The three dependant variables for brand tweet online customer engagement are $y_1 =$ number of likes, $y_2 =$ number of replies and $y_3 =$ number of retweets. The model to explain likes, replies and retweets can be expressed as:

$$y_{ij} = \alpha + \exp ( \sum_{t=1}^{2} \beta_t \text{vivid}_{ij} + \sum_{g=1}^{3} \beta_g \text{ia}_{gj} + \beta_{r\text{incent}} + \beta_{p\text{promotion}} + \beta_{i\text{info}} + \beta_{e\text{entertain}} + \beta_{s\text{social}} + \beta_{f\text{followers}} + \beta_{m\text{paidimpre}} + \beta_{w\text{workday}} + \beta_{o\text{pos}} + e_{ij})$$

Table 6 explains the model variables. The dependent variables are count variables and all the control variables besides the variable “workday”. The control variable “workday” is, like all the independent variables, a dummy variable.
### Model Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Scale</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>$y_{ij}$</td>
<td>count</td>
<td>$y_{1j}$, $y_{2j}$ and $y_{3j}$ are the number of likes per brand tweet $j$, number of replies $j$ and number of retweets per brand tweet $j$, respectively</td>
</tr>
<tr>
<td>vivid$_{ij}$</td>
<td>dummy</td>
<td>indicates whether the characteristic &quot;vividness&quot; of a tweet at a brand tweet $j$ is present or not (baseline category is without vividness)</td>
</tr>
<tr>
<td>ia$_{ij}$</td>
<td>dummy</td>
<td>indicates whether the characteristic &quot;interactivity&quot; of a tweet at a brand tweet $j$ is present or not (baseline category is without interactivity)</td>
</tr>
<tr>
<td>incentiv$_{ij}$</td>
<td>dummy</td>
<td>indicates whether brand tweet $j$ is “incentive” (base category is without incentive)</td>
</tr>
<tr>
<td>promo$_{ij}$</td>
<td>dummy</td>
<td>indicates whether brand tweet $j$ is “promotion” (base category is without promotion)</td>
</tr>
<tr>
<td>info$_{ij}$</td>
<td>dummy</td>
<td>indicates whether brand tweet $j$ is “information” (base category is without information)</td>
</tr>
<tr>
<td>entertain$_{ij}$</td>
<td>dummy</td>
<td>indicates whether brand tweet $j$ is “entertainment” (base category is without entertainment)</td>
</tr>
<tr>
<td>social$_{ij}$</td>
<td>dummy</td>
<td>indicates whether brand Tweet $j$ is “social” (base category is without social)</td>
</tr>
<tr>
<td>followers$_{ij}$</td>
<td>count</td>
<td>indicates the number of “followers” at the time a brand tweet $j$ was tweeted</td>
</tr>
<tr>
<td>workd$_{ij}$</td>
<td>dummy</td>
<td>indicates whether brand tweet $j$ is “workday” (base category is not workday)</td>
</tr>
<tr>
<td>position$_{ij}$</td>
<td>count</td>
<td>indicates the top &quot;position&quot; of the brand tweet by the number of days the brand tweet $j$ is at the top of the brand page</td>
</tr>
<tr>
<td>PaidImpress$_{ij}$</td>
<td>count</td>
<td>indicates the number of &quot;paid impressions&quot; that the brand tweet $j$ received</td>
</tr>
<tr>
<td>$\varepsilon_{ij}$</td>
<td></td>
<td>$\varepsilon_{1j}$ or $\varepsilon_{2j}$ or $\varepsilon_{3j}$: normally distributed error terms for dependent variable $y_{ij}$ or $y_{2j}$ or $y_{3j}$ respectively</td>
</tr>
</tbody>
</table>

The dependent variables of this study are assumed to follow a Poisson distribution, or highly skewed to the right. This is not uncommon for this type of research (Cameron & Trivedi, 2005). All dependent and independent variables with count data received the number 0.0001 instead of 0, as the natural logarithm was taken of both sides before conducting multiple regression, because not doing so would weaken the model (Tabachnick & Fidell, 2014).
6 Results

This chapter includes the descriptive statistics, and the results from the multiple regression models for the three different dependent variables respectively: likes, replies and retweets.

6.1 Descriptive Statistics

The main features of the data will be analysed in terms of frequency, percentage, mean and standard deviation.

Frequency and Percentages of Online Customer Engagement by Tweet Type

In Table 7 below, the relative frequency and relative percentage of each category is displayed. Icelandair mostly tweets contents with “information” to its followers (34.97%), with “promotion” contents accounting for 24.48%. In general, “information” tweets elicited the highest level of engagement, percentage-wise, followed by “entertainment” tweets, with “promotion” tweets affecting the tweet engagement the third most. The tweet category “incentive” elicited the least engagement; this is also in line with how infrequent they were. For graphic illustration see Appendix C.

Table 7
Frequency and Percentages of Online Customer Engagement by Tweet Type

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Incentive</td>
<td>13</td>
<td>9.09%</td>
<td>394</td>
<td>3.04%</td>
<td>113</td>
<td>6.43%</td>
<td>342</td>
<td>3.86%</td>
</tr>
<tr>
<td>Promotional</td>
<td>35</td>
<td>24.48%</td>
<td>3031</td>
<td>23.42%</td>
<td>330</td>
<td>18.78%</td>
<td>1633</td>
<td>18.44%</td>
</tr>
<tr>
<td>Information</td>
<td>50</td>
<td>34.97%</td>
<td>4469</td>
<td>34.54%</td>
<td>593</td>
<td>33.75%</td>
<td>2675</td>
<td>30.20%</td>
</tr>
<tr>
<td>Entertainment</td>
<td>18</td>
<td>12.59%</td>
<td>4097</td>
<td>31.66%</td>
<td>376</td>
<td>21.40%</td>
<td>3679</td>
<td>41.54%</td>
</tr>
<tr>
<td>Social</td>
<td>27</td>
<td>18.88%</td>
<td>949</td>
<td>7.33%</td>
<td>345</td>
<td>19.64%</td>
<td>528</td>
<td>5.96%</td>
</tr>
</tbody>
</table>

Mean and Standard Deviation of Online Customer Engagement by Tweet Type

The mean and standard deviation of the dependent variable can be seen in Table 8 below. Tweets with “entertainment” content produce, on average, the highest level of
online customer engagement, as well as the highest standard deviation; likes on average 227.61 (SD=325.19), replies 20.89 (SD = 27.78) and retweets 204.9 (397.64). “Information” and “promotion” tweets produce the second highest average number of likes: respectively on average 87.63 (SD=123.62) and 86.60 (SD=119.42). Social tweets produce, on average, the highest number of replies 13.27; this can partly be explained by the fact that social tweets are often made to engage with customers e.g. by asking them where they want to travel during the next year. “Information” and “promotion” tweets produce the second highest average number of retweets: respectively, on average, 52.45 (SD=123.62) and 86.60 (SD=119.42). For graphic illustration see Appendix C.

Table 8

<table>
<thead>
<tr>
<th>Tweet type</th>
<th>Likes M</th>
<th>Likes SD</th>
<th>Replies M</th>
<th>Replies SD</th>
<th>Retweets M</th>
<th>Retweets SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incentive</td>
<td>30.31</td>
<td>26.88</td>
<td>8.69</td>
<td>5.74</td>
<td>26.31</td>
<td>18.13</td>
</tr>
<tr>
<td>Promotional</td>
<td>86.60</td>
<td>119.42</td>
<td>9.43</td>
<td>9.13</td>
<td>46.66</td>
<td>52.45</td>
</tr>
<tr>
<td>Information</td>
<td>87.63</td>
<td>123.62</td>
<td>11.63</td>
<td>11.80</td>
<td>52.45</td>
<td>58.17</td>
</tr>
<tr>
<td>Entertainment</td>
<td>227.61</td>
<td>325.19</td>
<td>20.89</td>
<td>27.78</td>
<td>204.39</td>
<td>397.64</td>
</tr>
<tr>
<td>Social</td>
<td>36.50</td>
<td>28.41</td>
<td>13.27</td>
<td>19.49</td>
<td>20.31</td>
<td>15.17</td>
</tr>
</tbody>
</table>

Frequency and Percentages of Online Customer Engagement by Feature Type

Table 9 below displays the frequency and percentage of customer engagement by Feature type. Most (60.10%) of Icelandair’s tweets contain a picture (“low vividness”) or only text (“no vividness”; 32.90%). Videos account for only 7%; however, this only includes videos that appear vivid on the Twitter page, excluding all videos in link format. Pictures (“low vividness”) were found to have the highest percentage-wise influence on the number of likes, replies and retweets.

When it comes to interactivity, a link or hashtag (“low interactivity”) is the most frequent level of interactivity (54.50%), followed by an open question (“high interactivity”; 21.70%), call-to-action (“medium interactivity”; 13.30%) and finally plain text (“no interactivity”;10.50%). A link/hashtag produces the largest percentage share of likes, replies and retweets, while an open question has the second largest percentagewise influence on all three categories. Plain text produced the lowest
Online customer engagement on Twitter percentage share on all three factors influencing total online customer engagement.

Table 9
Frequency and Percentage of Online Customer Engagement by Feature Type

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td></td>
<td>47</td>
<td>32.90%</td>
<td>1329</td>
<td>10.27%</td>
<td>373</td>
<td>21.23%</td>
<td>1418</td>
<td>16.01%</td>
</tr>
<tr>
<td>Vividness</td>
<td>Low (Picture)</td>
<td>86</td>
<td>60.10%</td>
<td>9692</td>
<td>74.90%</td>
<td>1271</td>
<td>72.34%</td>
<td>6615</td>
<td>74.69%</td>
</tr>
<tr>
<td></td>
<td>High (Video)</td>
<td>10</td>
<td>7.00%</td>
<td>1919</td>
<td>14.83%</td>
<td>110</td>
<td>6.26%</td>
<td>824</td>
<td>9.30%</td>
</tr>
<tr>
<td>Interactivity</td>
<td>None</td>
<td>15</td>
<td>10.50%</td>
<td>1172</td>
<td>9.06%</td>
<td>112</td>
<td>6.37%</td>
<td>580</td>
<td>6.54%</td>
</tr>
<tr>
<td></td>
<td>Low (Link/#)</td>
<td>78</td>
<td>54.50%</td>
<td>6150</td>
<td>47.53%</td>
<td>861</td>
<td>49.00%</td>
<td>5100</td>
<td>57.46%</td>
</tr>
<tr>
<td></td>
<td>Medium (C-T-A)</td>
<td>19</td>
<td>13.30%</td>
<td>2683</td>
<td>20.73%</td>
<td>232</td>
<td>13.20%</td>
<td>401</td>
<td>15.79%</td>
</tr>
<tr>
<td></td>
<td>High (Question)</td>
<td>31</td>
<td>21.70%</td>
<td>2935</td>
<td>22.68%</td>
<td>552</td>
<td>31.42%</td>
<td>1794</td>
<td>20.21%</td>
</tr>
</tbody>
</table>

Note. Only the highest level of interactivity and vividness is recorded.

Mean and Standard Deviation of Customer Engagement by Feature Type

The means and standard deviation of feature type and the dependent variables can be seen in Table 10 on the next page. Plain text (“no Vividness”) was associated, on average, with the lowest number of all three categories: likes, replies and retweets, while a video (“high vividness”) was associated with the highest average number of likes 192 (SD=175.73) and retweets 82 (SD=80.10). Picture (“low vividness”) was associated with an average number of 15 replies (SD=17.03). Video (“high vividness”) tweets elicited, on average, 11 replies (SD=15.17).
Table 10
Mean and Standard Deviation of Online Customer Engagement by Feature Type

<table>
<thead>
<tr>
<th>Feature type</th>
<th>Level</th>
<th>Operationalization</th>
<th>Likes</th>
<th>Replies</th>
<th>Retweets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td></td>
<td>None</td>
<td></td>
<td>28.28</td>
<td>81.53</td>
<td>8.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>12.44</td>
<td></td>
<td>30.00</td>
</tr>
<tr>
<td></td>
<td>147</td>
<td></td>
<td></td>
<td>78.79</td>
<td></td>
</tr>
<tr>
<td>Vividness</td>
<td>Low</td>
<td>Picture</td>
<td>112.70</td>
<td>178.05</td>
<td>15.00</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>Video</td>
<td>192.00</td>
<td>175.73</td>
<td>11.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>15.17</td>
<td></td>
<td>82.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>80.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interactivity</td>
<td>None</td>
<td></td>
<td>78.13</td>
<td>106.10</td>
<td>7.00</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>Link/ #</td>
<td>78.85</td>
<td>149.23</td>
<td>14.00</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>C-T-A</td>
<td>149.06</td>
<td>240.39</td>
<td>11.43</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>Question</td>
<td>92.00</td>
<td>142.95</td>
<td>17.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>18.53</td>
<td></td>
<td>56.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>99.92</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Only the highest level of interactivity and vividness is recorded.

The average for “no interactivity” was lowest in all three categories. Open questions (“high interactivity”) was associated, on average, with the highest number of replies 17 (SD= 18.53) and generated, on average, the second most likes or on average 92 likes (SD=142.95). “Medium interactivity” generated, on average, the highest number of likes or on average 149.06 (SD=240.39) and the second highest averages of replies and retweets, respectively: 13 (SD=11.43) and 78 (SD=114.77). “Low interactivity” tweets generated, on average, 195.02 retweets (SD=78.00).

Descriptive Statistics for the Control Variables

As is illustrated in Table 11 on the next page, tweets are mainly tweeted on workdays and 28 of the 143 are promoted tweets, i.e. tweets that have been further distributed to the target audience via paid impressions. For the most part, Icelandair’s latest tweets were promoted. The average number of days for a tweets to be in top position was 5.85 days (SD=7.155).
Table 11  
*Frequency and Percentage for Days and Impressions*

<table>
<thead>
<tr>
<th>Control variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekend</td>
<td>21</td>
<td>14.69%</td>
</tr>
<tr>
<td>Workday</td>
<td>122</td>
<td>85.31%</td>
</tr>
<tr>
<td>Paid Impressions</td>
<td>28</td>
<td>19.58%</td>
</tr>
<tr>
<td>Organic Impressions</td>
<td>115</td>
<td>80.42%</td>
</tr>
</tbody>
</table>

6.2. Regression Analysis

The average number (M) of likes per brand tweet was 90.48 (SD=160.816), the average number of replies per brand tweet was 12.31 (SD=15.918) and average number of retweets was 61.93 (SD=158.449). These numbers are reported before the natural logarithm was removed. Table 12 provides an overview of results for components of online customer brand engagement, consisting of likes, replies and retweets. The table illustrates that different tweet characteristics yield different results. These differences will be discussed in the coming chapters: Regression for Likes, Regression for Replies and Regression of Retweets.
Table 12

*Estimation Results for Online Customer Engagement*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Level</th>
<th>Operationalization</th>
<th>Log Likes&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Log Reply&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Log Retweet&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>β</td>
<td>β</td>
<td>β</td>
</tr>
<tr>
<td>Incentive</td>
<td>Incentive</td>
<td></td>
<td>3.404***</td>
<td>2.787***</td>
<td>.299</td>
</tr>
<tr>
<td></td>
<td>(baseline)</td>
<td></td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Promotional</td>
<td>Promotional</td>
<td></td>
<td>3.691***</td>
<td>2.859***</td>
<td>.442*</td>
</tr>
<tr>
<td></td>
<td>(baseline)</td>
<td></td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Information</td>
<td>Information</td>
<td></td>
<td>3.327***</td>
<td>2.923***</td>
<td>.487*</td>
</tr>
<tr>
<td></td>
<td>(baseline)</td>
<td></td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Entertainment</td>
<td>Entertainment</td>
<td></td>
<td>3.728***</td>
<td>2.882***</td>
<td>.644***</td>
</tr>
<tr>
<td></td>
<td>(baseline)</td>
<td></td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Social</td>
<td>Social</td>
<td></td>
<td>3.270***</td>
<td>2.544***</td>
<td>.227</td>
</tr>
<tr>
<td></td>
<td>(baseline)</td>
<td></td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Vividness</td>
<td>Low</td>
<td>Picture</td>
<td>.888***</td>
<td>.356</td>
<td>.370***</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>Video</td>
<td>-0.04</td>
<td>-.361</td>
<td>.028</td>
</tr>
<tr>
<td>Interactivity</td>
<td>Low</td>
<td>Link / # hashtag</td>
<td>-5.15</td>
<td>-.148</td>
<td>.045</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
<td>Call-to-action</td>
<td></td>
<td>.279</td>
<td>.115</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>Question</td>
<td>-.464</td>
<td>.366</td>
<td>.071</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td>Workday</td>
<td>.219</td>
<td>.222</td>
<td>.051</td>
</tr>
<tr>
<td></td>
<td>(baseline)</td>
<td></td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Followers</td>
<td></td>
<td>1.861***</td>
<td>.375</td>
<td>.255**</td>
</tr>
<tr>
<td></td>
<td>Paid Impressions</td>
<td></td>
<td>.041</td>
<td>.038</td>
<td>.052***</td>
</tr>
<tr>
<td></td>
<td>Position</td>
<td></td>
<td>.105*</td>
<td>.006</td>
<td>.023</td>
</tr>
<tr>
<td>Constant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td>143</td>
<td>143</td>
<td>143</td>
<td></td>
</tr>
<tr>
<td>F-Value</td>
<td></td>
<td>14.976***</td>
<td>5.836***</td>
<td>12.282***</td>
<td></td>
</tr>
<tr>
<td>R&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td>.621</td>
<td>.390</td>
<td>.577</td>
<td></td>
</tr>
<tr>
<td>Adj. R&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td>.579</td>
<td>.323</td>
<td>.530</td>
<td></td>
</tr>
</tbody>
</table>

Note. Reported are unstandardized coefficients<sup>a</sup>. P-values<0.05*, p-values<0.01** and p-values<0.001***
6.2.1 Regression for Number of Likes

Multiple regression was used to assess the ability of the hypothesis to predict what influences the number of likes on the social media platform Twitter, after controlling for the number of followers, top position, paid impressions and workday. Preliminary analysis was conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity.

The results of the multiple regression analysis, for number of likes in tweets, show that the total variance of the model, as whole, was 62.1%, $F(14,128) = 14.976$, $p < .001$.

All Tweet types, in support of hypothesis 1, were found to have a significant positive relation to the number of likes ($\beta_{\text{Incent}} = 3.404$, $p < .001$, ($\beta_{\text{Info}} = 3.327$, $p < .001$), ($\beta_{\text{Promo}} = 3.691$, $p < .001$), ($\beta_{\text{Entain}} = 3.728$, $p < .001$) and ($\beta_{\text{Social}} = 3.270$, $p < .001$).

The “low level of vividness” (i.e. picture) is significantly and positively related to the number of likes ($\beta_{\text{Pic}} = .888$, $p < .001$), but the “high degree of vividness” is not significantly related to the number of likes. Thus, hypothesis 2a is only partly supported, as the baseline is no vividness.

All three levels of interactivity from low to high, i.e. link/hashtag, call-to-action and an open question were not significantly related to the number of likes. All in all, Hypothesis 2b is not supported.

6.2.2 Regression for Number of Replies

Multiple regression was used to assess the ability of the hypothesis to predict what influences the number of replies on the social media platform Twitter, after controlling for the number of followers, top position, paid impressions and workday. Preliminary analysis was conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity.

The results of the multiple regression analysis, for number of replies in tweets, show that the total variance of the model, as whole, was 39.0%, $F(14,128) = 5.838$, $p < .001$.

All Tweet types, in support of hypothesis 1, were found to have significant positively related to the number of likes ($\beta_{\text{Incent}} = 2.787$, $p < .001$, ($\beta_{\text{Info}} = 2.923$, $p < .001$), ($\beta_{\text{Promo}} = 2.859$, $p < .001$), ($\beta_{\text{Entain}} = 2.882$, $p < .001$) and ($\beta_{\text{Social}} = 2.544$, $p < .001$).
Picture (“low level of vividness”) is not significant ($\beta_{\text{pic}} = .354, p < .054$), though it is positively related to the number of likes. Nonetheless, “high degree of vividness” is not significantly related to the number of likes. Hypothesis 2a is not supported.

All three levels of interactivity, i.e. link/hashtag, call-to-action and an open question were not significantly related to the number of replies. All in all, Hypothesis 2b is not supported.

### 6.2.3 Regression for Number of Retweets

Multiple regression was used to assess the ability of the hypothesis to predict what influences the number of retweets on the social media platform Twitter, after controlling for the number of followers, top position, paid impressions and workday. Preliminary analysis was conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity.

The results of the multiple regression analysis, for the number of retweets, show that the total variance of the model, as whole, was 57.7%, $F(14,128) = 12.282, p < .001$.

Some of the Tweet types, namely ($\beta_{\text{info}} = .487, p < .05$), ($\beta_{\text{promo}} = .442, p < .05$), ($\beta_{\text{entain}} = .644, p < .01$), were found to be significantly and positively related to the number of retweets, which supports hypothesis 1b, hypothesis 1c and hypothesis 1d. The Tweet types “incentive” and “social” were not found to be significantly related to the number of retweets. Hence, different tweet types have different effects on whether a tweet is retweeted or not.

Picture (“low level of vividness”) is significantly and positively related to the number of retweets ($\beta_{\text{pic}} = .370, p < .001$), but “high degree of vividness” is not significantly related to number of retweets. Thus, hypothesis 2a is only partly supported; the baseline is “without vividness”.

Tweets with link and hashtags (“Low level of interactivity”) are not significantly related to the number of retweets. Additionally, tweets which included call-to-action feature (“medium level of interactivity”) and an open question (“high level of interactivity”) were not significantly related to the number of retweets. All in all, Hypothesis 2b is not supported.
### 6.2.5 Summary for Regression Models

An overview of the hypothesis results is provided in Table 13 on the next page. The numbers of likes, replies and retweets refers to the overall online customer engagement. Therefore, the strongest predictors would be tweets including promotional, informative and entertaining contents with a picture.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Expected</th>
<th>Number of Likes</th>
<th>Number of Replies</th>
<th>Number of Retweets</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a: Incentive</td>
<td>(+)</td>
<td>Supported</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>H1b: Promotional</td>
<td>(+)</td>
<td>Supported</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>H1c: Information</td>
<td>(+)</td>
<td>Supported</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>H1d: Entertainment</td>
<td>(+)</td>
<td>Supported</td>
<td>Supported</td>
<td>Supported</td>
</tr>
<tr>
<td>H1e: Social</td>
<td>(+)</td>
<td>Supported</td>
<td>Supported</td>
<td>Not supported</td>
</tr>
<tr>
<td>H2a: Vividness</td>
<td>(+)</td>
<td>Partly supported</td>
<td>Not supported</td>
<td>Partly supported</td>
</tr>
<tr>
<td>H2b: Interactivity</td>
<td>(-)</td>
<td>Not supported</td>
<td>Not supported</td>
<td>Not supported</td>
</tr>
</tbody>
</table>
7 Discussion & Conclusion

The airline industry has faced growing competition during the last few decades ("Why airlines make such meagre profits," 2014), yet the industry is characterized by energetic development. One of the latest industry developments has been the utilization of social media marketing (SocialBakers, 2015); airline brands can achieve greater success on social media, which in return should contribute to the bottom-line results (A. J. Kim & Ko, 2012; Naylor et al., 2012; Vivek et al., 2012). The problem is that currently there does not exist a holistic financial metric to measure marketing effectiveness on social media (Schultz & Peltier, 2013). Instead, it is recommended that brands focus on measuring how customers engage with brand-generated contents (Hoofman & Fodor, 2010). This can be done by measuring what kind of brand-generated contents is valuable for their customers. To the author’s best knowledge this is the first study of brand-generated contents which measures online customer engagement within the airline industry on Twitter as a social media platform. The reason why online customer engagement on Twitter has not be studied before, might be that Twitter only changed the users’ timeline in such a way as to make it possible to serve up popular contents in early 2016 (Twitter, n.d.-a). The findings should help marketing managers within the airline industry to choose determinants to include in a tweet in order to increase online customer engagement. Furthermore, the theoretical contribution is a conceptual model that other industries can modify and utilize for understanding what determines Twitter engagement in their industry. This is important because different determinants will produce different results in terms of likes, replies and re-tweets, or what is referred to as online customer engagement.

7.1 Measuring & Increasing Online Customer Engagement on Twitter

Different tweet and factor types were found to have an effect on online customer engagement. It is therefore advised that these determinates are included when measuring online customer engagement on the Twitter platform in a conceptual model for an international airline brand. Followers of international airline brands are most likely to engage on contents concerning “promotion”, “information” and “entertainment”. As in the study by Sreenivasen et al. (2012) findings on what airlines tweet on, it was found that Icelandair also mainly tweeted contents related to marketing promotion and information. The reason why “incentive” and “social” contents were not
significant was probably that followers lacked the motivation to share them. Further, including a picture “low vividness” is likely to results in higher engagement level, therefore, it is found to be a crucial factor to include in a tweet. The independent variable workday was not found to have significant effect; this might be because Twitter users can easily access their Twitter accounts from their smartphones. However, the number of followers was found to be significant for likes and retweets. It is found to important for controlling for number of followers depending on the time that the tweet is tweeted, because number of online engagements that the tweet receives is correlated with number of followers. The most surprising outcome was the paid impression was only positively significant in terms of retweets. This implies that marketing managers of airline brands should promote tweets that they want users to retweet.

7.2 Main Similarities and Differences between Facebook & Twitter

**Online Customer Engagement**

In the study by de Vries et al. (2012), “entertainment” was not found to be a significant positive factor. However, in this study and similar previous studies of Facebook, “entertaining” content was found to be the strongest factor influencing online customer engagement (Cvijikj & Michahelles, 2013; Hong, 2011; Luarn et al., 2015). The reason behind this could be that the later studies included brand-related contents in the definition of “entertaining”. “Promotion” was also found to be a significant factor affecting online customer engagement; this contradicts the findings of Hong (2011), who suggests that brands should minimize this sort of communication. Hence, followers of airline brands might be interested in hearing what the companies are doing in terms of servicing the customer.

In their studies of consumer brands, Al-Mu’ani et al. (2014) and Gaber & Wright (2014) suggested that “incentive” contents had the greatest effect on likes, comments and shares. However, the results of the present study show that “incentive” contents did not have significant positive effect on retweets. The reason might be that the Icelandair did not motivate its followers to retweet this particular content type in order to receive the incentive. It has been observed by the author that brands sometimes ask Facebook fans to share incentive contents in order to receive the reward. Luarn et al. (2015) found that “social” posts elicited higher numbers of comments as these posts often encouraged users to act on them. In this study “social” tweets often also
encouraged users to interact with the tweets and there was found to be a positive correlation between social tweets and the numbers of likes and replies. This suggests that social posts work in a similar manner across platforms.

It came as a surprise that interactivity was not a significantly positive or negative factor in online customer engagement. De Vries et al. (2012) found that “interactivity” raised the number of likes and comments. Sabate et al. (2014) showed a negative correlation between links and customer engagement and Cvijikj and Michahelles (2013) found that “interactivity” was negatively related to likes and comments. It seems that Twitter users are more neutral when it comes to interactivity. This may perhaps have something to do with a different culture on Twitter or because people interact differently via hashtags.

On Facebook, “vivid” features were found to be positively related to likes (de Vries et al., 2012) and shares (Cvijikj & Michahelles, 2013), but not to comments. This study showed the same results. This suggests that “vividness” is an important factor for both Facebook and Twitter for users.

7.3 Limitations & Further Research

This study is subject to some limitations which may provide opportunities for future research. Twitter pages from industries other than the airline industry might elicit different outcomes due to different user motivations, and therefore it might be interesting to see future studies covering other industries. Moreover, it would be interesting to repeat this study with more a comprehensive and dynamic dataset in order to generalize results.

For measuring online consumer engagement with airline brands various social media platforms, e.g. Instagram and Snapchat, need to be investigated. Twitter is commonly used by companies to interact with users on live events and the users mark the conversation with a hashtag: this is possible because hashtag is an interactive feature. This subject would merit further attention in future research on social media in the airline industry.

In summary, this study responds to the need for research within the field of social media in the airline industry and online engagement with brands on Twitter. It is important in practise because it can help marketing managers in the airline industry to choose the right determinates to include in a tweet in order to increase the effectiveness of their tweets.
8 References


Swani, K., Milne, G., & P. Brown, B. (2013). Spreading the word through likes on Facebook: Evaluating the message strategy effectiveness of Fortune 500


http://doi.org/10.1016/j.tmp.2014.01.001
Appendix A – Online Engagement Factors on Facebook Brand Pages

Figure 3. Online Engagements Factors on Facebook Brand Pages
Appendix B – Tweet Type Categorization

1. Incentive

Nominate someone to win an Icelandair Stopover. Yes, even yourself! Nominate here: goo.gl/x2L8Th #MyStopover
1. Promotional

Icelandair
@Icelandair

Stopover in Iceland and experience nature and geology with your Stopover buddy!
#MyStopover bit.ly/1My8WrP

7:20 AM - 29 Mar 2016
2. Information

We're excited to add Paris Orly. We now offer up to 23 flights per week between Paris, Iceland & North America.
3. Entertainment

Icelandair

@icelandair

How does Icelandair Captain Rán find his way to Iceland? He follows the northern lights!

bit.ly/1Qhys2t
4. Social

Icelandair 📩
@Icelandair

Happy New Year! Where would you like to travel in 2016?
bit.ly/1RV9wky
Appendix C - Descriptive Statistics

Relative Frequency and Percentage of Tweet Type

- Remuneration
- Promotional
- Information
- Entertainment
- Social
- Total

Relative Frequency and Percentage

Effect of Tweet Type on Online Customer Engagement%

- Remuneration
- Promotional
- Information
- Entertainment
- Social

Relative Pct. Likes Replies ReTweets
Effect of Tweet Type on Online Customer Engagement M & SD

Relative Frequency and Percentage of "Vividness" in Tweets
Effect of the Feature Type "Vividness" on Online Customer Engagement %

- None  Picture  Video

Effect of the Feature Type "Vividness" on Online Customer Engagement M & SD

- No vivid  Picture  Video
Effect of the Feature Type "Interactivity" on Online Customer Engagement

Effect of the Feature Type "Interactivity" on Online Customer Engagement  M & SD