# The Return on Tourism Organizations' Social Media Investments – Preliminary Evidence from Belgium, France, and Switzerland

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## 1   Introduction

Over the past decade, the phenomenon of social media has grown at a tremendous pace. Well established social media platforms such as Facebook or YouTube now count more than 1 billion users (Facebook, 2016; YouTube, 2016). New social media platforms have continued to emerge and reach hundreds of millions of users within only a few years – as the examples of Instagram and Pinterest demonstrate (Instagram, 2016; Pinterest, 2016). The massive use of social media for the creation and exchange of user-generated content, including word-of-mouth, offers great potential for marketing, but can also turn into organizations' nightmares (Kaplan & Haenlein, 2010, 2011b).

Nowadays, tourism organizations can choose from a rich arsenal of marketing instruments to reach, engage, and retain customers. Marketers can distinguish between paid (e.g. display or search advertising), owned (e.g. corporate website, email newsletters, or mobile apps), and earned media (e.g. word-of-mouth, buzz, or "viral" user-generated content) (Corcoran, 2009). Social media are platforms for earned media, but can also be used as owned media (Corcoran, 2009). As a result, social media platforms (e.g. Facebook, Twitter, YouTube, Google+, Instagram, or Pinterest) are marketing communication instruments or channels, respectively. Just like other instruments such as offline marketing efforts and traditional websites, social media need to be well integrated into the business strategy in order to be effective. In doing so, managers have to be aware of the different functions they fulfil and of the way people communicate on the various channels. The dialogue nature of social media enables and requires a paradigm shift in brand communication from patriarchy to participation (Peters, Chen, Kaplan, Ognibeni, & Pauwels, 2013). While traditional advertising is more about announcing products and services, social media are about interaction and engagement with the customer (Minazzi, 2015).

The successful management of any type of media and marketing instrument requires the measurement of its effectiveness in order to be able to evaluate the success of its usage and to further improve and develop its employment. With regards to measuring social media success, there are various approaches. Some measure the success of individual campaigns while others try to measure it from a more comprehensive business perspective (Hays, Page, & Buhalis, 2013; Kaske, Kügler, & Smolnik, 2011; Kumar & Mirchandani, 2012). Despite focusing on single campaigns opposed to a "widescreen approach", practitioners and researchers also have an ongoing discussion about which metrics are most appropriate to use (Weinberg & Pehlivan, 2011). Suggestions range from obvious numbers such as number of followers, likes, and comments to developments over time (e.g. growth) and a comparison with the financial input and manpower dedicated to social media (Buhalis & Mamalakis, 2015; Hoffman & Fodor, 2010; Kaske et al., 2011; Peters et al., 2013). However, up until now, there is not much research on measuring social media success in tourism (Leung, Law, van Hoof, & Buhalis, 2013). This lack of research on organizations' social media success measurement is in sharp contrast to the extensive use of social media by consumers and organizations' efforts to effectively leverage these channels. Fisher's (2009) statement "Return on Investment (ROI) has become the Holy Grail of social media" (p. 189) emphasizes the necessity of further insights concerning this topic. According to a recent survey, measuring the ROI of social media efforts is social media professionals' biggest challenge, followed by securing budget and resources (eMarketer, 2016).

Given the importance of social media for inspiring potential visitors and throughout the entire customer journey (Leung et al., 2013), tourism organizations respectively destination marketing organizations (DMOs)[1] need to understand how their social media efforts take effect. In fact, measuring the success of organized social activity has been identified as DMOs' biggest challenge with regard to managing social media (Phocuswright, 2014). As DMOs are typically unwilling to disclose the details of their social media budgets due to fierce competition in the industry (Hays et al., 2013), research on this topic faces the challenge of data availability. Against this background, this paper analyses the relationship between DMOs' marketing spending (i.e. the entire marketing budget, online marketing budget, and social media budget) and staffing and various social media key performance indicators (KPIs). In more detail, we look at six important social media platforms (i.e. Facebook, Twitter, YouTube, Instagram, Google+, and Pinterest) and social media KPIs (e.g. posts, followers, and page performance indices) of DMOs in three markets (namely: Belgium, France, and Switzerland).

## 2 Literature Review

### 2.1 Today's Social Media Landscape

Social media can be defined as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content" (Kaplan & Haenlein, 2010, p. 61). User-generated Content (UGC) comprises a variety of different types of content (e.g. text, pictures, audio, and video) that a) is published in some context, b) arises from a certain amount of creative effort, and c) is created outside professional routines and practices (OECD, 2007). Well known types of social media are social network sites, microblogs, and content communities (Boyd & Ellison, 2008; Kaplan & Haenlein, 2010, 2011a). Facebook, Twitter, and YouTube are the most prominent representatives of the respective types (Kaplan & Haenlein, 2010, 2011a).

Founded in 2004, the social network site Facebook currently counts around 1.1 billion daily active users and 1.65 billion monthly active users (Facebook, 2016). The microblogging service Twitter was founded in 2006 and currently counts 310 million monthly active users (Twitter, 2016); the content community YouTube, founded in 2005, has more than 1 billion users (YouTube, 2016).

In order to compete with established social media platforms such as Twitter and Facebook, Google launched its own social network site named Google+ in June 2011 (Gundotra, 2011; Magno, Comarela, Saez-Trumper, Cha, & Almeida, 2012). As part of the Google ecosystem, a Google+ profile had been created automatically for about four years when people signed up with any service of Google (Denning, 2015). A recent study found "90% of people who have created Google+ profiles have never posted *publicly* [emphasis added]" (Enge, 2015). However, other sources suggest Google+ currently has 343 million monthly active users (We Are Social, 2015) indicating the importance of the channel.

The how, when, and where people use the Internet and social media platforms has irreversibly changed with the increasing penetration of highly capable smartphones along with mobile broadband (e.g. 4G/LTE) and affordable data packages. The mobilization of the Internet (e.g. Dischler, 2015; Meeker, 2015) has motivated new players to enter the social media landscape, e.g. Instagram – a mobile app and online platform for capturing and manipulating photos and videos for subsequent sharing with other Instagram users or via other social media platforms (e.g. Twitter or Facebook). As of July 2016, Instagram reports to have 300 million daily active users (Instagram, 2016). This makes Instagram as widely used as Twitter. While Instagram focuses on the original creation of content, Pinterest is about the curation of content previously created by others (Hall & Zarro, 2012). Pinterest allows its users to organize photos and videos into topical themes; each piece of content is "pinned" to a virtual pin board (Gilbert, Bakhshi, Chang, & Terveen, 2013). Similar to other social media platforms, Pinterest users can follow each other, "re-pin", "like", and comment on other pieces of content (Gilbert et al., 2013; Hall & Zarro, 2012). As of September 2015, Pinterest reported to have more than 100 million monthly active users (Pinterest, 2016).

### 2.2 The Role of Social Media in Tourism as a Marketing Instrument

Social media is a highly researched topic (Leung et al., 2013; Pourfakhimi & Ying, 2015; Xiang & Gretzel, 2010; Zeng & Gerritsen, 2014). Demand-side studies on social media in tourism have analysed the role, use, and impact of social media for all travel phases, i.e. in the pre-travel, on-site, and post-travel phase (Leung et al., 2013; Zeng & Gerritsen, 2014). Most of that research focuses on the pre-travel phase, in particular on the information search process (Leung et al., 2013). Information search is perceived as key due to the potential of UGC to multiply the effect of traditional word-of-mouth (WOM) (Kaplan & Haenlein, 2011b; Leung et al., 2013; Zeng & Gerritsen, 2014). WOM is generally defined as "informal communications directed at other consumers about the ownership, usage, or characteristics of particular goods and services and/or their sellers" (Westbrook, 1987, p. 261). The non-

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[1] The expression DMO will be used for both types of organizations throughout the paper.

commercial and experiential nature of electronic WOM make social media a credible and rich information source for tourists (Leung et al., 2013; Litvin, Goldsmith, & Pan, 2008).

Supply-side studies in tourism have focussed on the use of social media for promotion, management, and research (Leung et al., 2013). For example, in a benchmark study on the level of implementation of ICT in destinations, Buhalis and Wagner (2013) compared to what extent DMOs use platforms such as Facebook, Twitter, YouTube, and Pinterest for engaging with (potential) visitors. Hays et al. (2013) explored the usage of social media by the national DMOs of the top 10 international tourism destinations through a combination of content analysis and semi-structured interviews. However, research has not yet sufficiently covered the measurement of the effectiveness of tourism suppliers' social media activities (Leung et al., 2013). Milwood et al. (2013) compared U.S. with Swiss DMOs and found that the latter lag behind in the adoption of Facebook, Twitter, YouTube, and other social media platforms. Indicative empirical evidence for the ROI of social media activities in the travel and tourism domain has been provided by Buhalis and Mamalakis (2015) based on a case study of one Greek hotel. By considering user activity on various social media platforms, data from Google Analytics for the hotel website, and data from the reservation and analytics platform WebHotelier, Buhalis and Mamalakis (2015) proved a positive relationship between the return and the investment of this one hotel into social media. The difficulty of accessing organizations' investment or budget figures used for social media results in a lack of research looking at this relationship for organizations in general and for DMOs in particular. As DMOs are "the main vehicle to compete and attract visitors to their distinctive place or visitor space" (Pike & Page, 2014, p. 202), empirical evidence on the effectiveness of social media activities at the destination level is highly desirable.

## 2.3 Social Media Success Measurement

Measuring the effectiveness or success of organizations' social media activities is of increasing importance to make sure that scarce resources are allocated in the most productive way. In fact the successful management of any marketing communication instrument requires the measurement of meaningful key performance indicators (KPIs) – what you cannot measure, you cannot manage. In contrast to more traditional media, social media resemble living, interrelated and interactive organisms, which are out of the control of organizations (Peters et al., 2013). Organizations therefore need specific metrics and analytics to measure success (Peters et al., 2013).

Return on investment is a widely used and accepted success metric in practice (Lenskold, 2003). For marketers, measuring the ROI of their social media efforts is undoubtedly a significant challenge (e.g. eMarketer, 2016; Phocuswright, 2014; Weinberg & Pehlivan, 2011). The application and usefulness of ROI for measuring the success of social media has been discussed by many scholars (e.g. Buhalis & Mamalakis, 2015; Hoffman & Fodor, 2010; Kaske et al., 2011; Kumar & Mirchandani, 2012; Weinberg & Pehlivan, 2011). Several aspects of basic ROI assessments have been declared inadequate for measuring the success of social media. For example, long-term effects are often ignored, the forecasting of returns is difficult, and purely financial measures are insufficient for quantifying and justifying marketing investments (Kaske et al., 2011). In addition, the specificities of social media prohibit to simply apply success metrics such as reach from traditional mainstream media (Hoffman & Fodor, 2010; Peters et al., 2013). As a result, several studies have suggested to adapt the traditional ROI approach and to redefine the 'return' in the social media ROI (e.g. Hoffman & Fodor, 2010; Kaske et al., 2011). In particular, Hoffman and Fodor (2010) suggested to turn the traditional ROI approach upside down "by considering consumer motivations to use social media and then measure the social media *investments* customers make as they engage with the marketers' brands" (p. 42). Weinberg and Pehlivan (2011) refer to this approach as 'social ROI'.

The basic ROI formula remains a relation between the cost of an organization's investments and the gain an organization obtains from these investments. Hence the ROI is the gain of an organization's social media investments relative to the costs of these funds. Securing budget and resources is among the biggest challenges for practitioners in social media marketing (eMarketer, 2016). In a study on national tourist organizations' social media usage, the challenge of small budgets was reinforced by almost all DMOs (Hays et al., 2013). Buhalis and Mamalakis (2015) detail the cost side of organizations' social media activities by distinguishing four basic categories of expenses, namely (1) staff costs, (2) external costs, (3) advertising, and (4) other costs. Another categorization of organizations' investments in social media comprises (1) social marketing budget, (2) people and resources, and (3) technology investments (Lewis, 2012). Budget for marketing and staff are recurring topics. Sufficiently qualified staff is needed to manage the immediate and multi-way nature of social media which a) may cause viral spreading of both positive and negative messages and b) may lead to consumers' expectations of virtually instant replies to their requests via social media (Kaplan & Haenlein, 2011b; Peters et al., 2013). Social media management demands proactive monitoring of relevant platforms and short-term reactions to (un-)wanted developments. All this requires commitment from organizations as it can only be implemented by assigning a certain amount of employees.

The importance of looking at the manpower assigned to social media as a success factor was emphasized in a case study that compares the airlines SWISS and KLM in their phase of starting social media activities. KLM was found to use significantly more manpower and therefore increased its Facebook fan base much faster than SWISS (Caliesch & Liebrich, 2012). In addition, because users become more passive the longer they are on social media

platforms, brands constantly have to find ways to keep their fans and followers active and engaged over time (MacMillan, 2012). This shows that social media require a lot of resources when it comes to both time and effort to maintain a successful platform (Agee, 2013). However, studies show that due to the absence of staff and funding in the social media marketing domain, there are only modest efforts in terms of interactivity and relationship building (Waters, Burke, Jackson, & Buning, 2011). Consequently, for many organizations, the long term success of maintaining platforms is limited (Briones, Kuch, Liu, & Jin, 2011). Hence, besides providing financial resources for social media marketing, allocating a reasonable number of employees to handle social media activities is paramount when looking at the cost side of organizations' social media investments.

Research concerning the resources DMOs allocate to social media is scarce. Barnes (2014) found that the majority of North American DMOs have a social media marketing budget of less than 25'000$ (i.e. EUR 22'700) a year. It was also found that regardless of the size of the total marketing budget, North American DMOs allocate less than 10% of their total marketing budgets to social media. Further, in a study on national DMOs' social media usage, Hays et al. (2013) found that VisitBritain dedicates only 2% of their marketing budget to social media.

Besides measuring success through financial input and allocated manpower and beyond metrics focusing mainly on quantity (e.g. mere number of fans or likes), engagement has become an important non-financial indicator for measuring the success of organizations' social media efforts (Buhalis & Mamalakis, 2015; Peters et al., 2013). For example, "a high number of 'dead likes' is counterproductive when building a loyal base of followers" (Peters et al., 2013, p. 292). Only recently, scholars have conceptualized customer engagement as a multidimensional psychological state that should be measured at an individual micro-level using a specifically developed scale instead of social media quantity metrics (Brodie, Hollebeek, Juric, & Ilic, 2011; Hollebeek, Glynn, & Brodie, 2014). The three dimensions of engagement are affective, cognitive, and behavioural engagement (Dessart, Veloutsou, & Morgan-Thomas, 2015). Social media monitoring tools typically measure engagement levels based on different types of social interactions (e.g. likes, shares, and comments) (Buhalis & Mamalakis, 2015; Hoffman & Fodor, 2010; Peters et al., 2013), which are behavioural manifestations of engagement (Gummerus, Liljander, Weman, & Pihlström, 2012). Depending on the specific social media platform, respective metrics materialize for instance as number of tweets, retweets, followers, and @replies on Twitter; number of fans, 'likes', comments, etc. on Facebook; and number of views, comments, subscribers, and others for content communities like YouTube (Hoffman & Fodor, 2010). Subsequent engagement levels are typically operationalized by considering a weighted combination of actions (e.g. likes, shares, and comments) related to a post or specific user bases (e.g. number of total fans for a Facebook page) (Buhalis & Mamalakis, 2015; Peters et al., 2013). Due to the dynamic of social media, metrics should also be related to a temporal dimension; the growth or decline of metrics may thus be more important than their actual states (Peters et al., 2013; Tirunillai & Gerard, 2012). Previous literature has also pointed out the need for qualitative measures in social media marketing (Fisher, 2009), which are needed to cover the affective and cognitive dimensions of engagement (Dessart et al., 2015).

A further metric for measuring the success of organizations' social media efforts is the website traffic generated through social media, in short social referral traffic. For certain types of websites, news and media specifically, Facebook has surpassed Google as the dominant traffic source (Ingram, 2015). In a case study in the hotel industry, Buhalis and Mamalakis (2015) found that more than 90% of the social referral traffic is from Facebook. In a large-scale international industry survey, page referrals to the website have been identified as DMOs' most important social media metric (Phocuswright, 2014). In a comparison of U.S. with Swiss DMOs, Milwood et al. (2013) identified success in the adoption of social media as a driver of web marketing success. Taken together, these developments and results demonstrate the relevance of social referral traffic as social media success metric.

**2.4 Hypotheses**

Even though a higher social media budget allows to realize more sophisticated campaigns that can lead to more posts, there is limited evidence for such positive relationship. Several studies analysing the social media usage national, regional, and city DMOs found that the frequency of posting on social media platforms varies (Hays et al., 2013; Mariani, Di Felice, & Mura, 2016; Yang & Wang, 2015). On the one hand, more posts mean more effort required to produce them; on the other, DMOs may purposely post only at low or moderate levels to rather engage than 'spam' their fans and followers (Hays et al., 2013; Mariani et al., 2016). We thus propose the following:

> H1: There is a relationship between the a) marketing budget, b) the online marketing budget, c) the social media budget, and the amount of posts on the various platforms (i.e. Facebook, Twitter, YouTube, Instagram, Google+).

As feeding owned media (such as a DMO's website) is a main purpose of paid media (Corcoran, 2009), budget and allocated resources can improve website success. Online marketing in particular often aims at generating website traffic, e.g. through different types of display and search advertising, or through effective content marketing (Newman, 2014). Generating website traffic can also be a goal of social media activities. For example,

page referrals to the website have been identified as DMOs' most important social media metric in a recent industry survey (Phocuswright, 2014). Further, DMOs' success in the adoption of social media has been identified as driver of web marketing success overall (Milwood et al., 2013). Regarding the Alexa Traffic Rank, a lower value corresponds to a higher rank (i.e. more successful).[2] For example, as of July 2016, the top three global websites are Google.com, YouTube.com, and Facebook.com (Alexa, 2016). A higher number of unique website visitors typically indicates more success. Thus, we propose the following hypothesis:

> H2: There is a relationship between the a) marketing budget, b) the online marketing budget, c) the social media budget, d) the weekly hours allocated to social media, e) the percentages of a full-time job position for social media and the website success as indicated by Alexa Traffic Rank (negative relationship) and unique website visitors (positive relationship).

Besides financial resources, actual staff is paramount for effectively managing social media. Several studies demonstrated the need for allocating a reasonable number of staff to social media (Caliesch & Liebrich, 2012; Waters et al., 2011). The immediate and multi-way nature of social media requires a certain number of staff that monitors the developments in social media and may instantly react to prevent so-called "shitstorms" (Peters et al., 2013), i.e. to prevent a high number of negative posts by users which may virally spread (Kaplan & Haenlein, 2011b). But also sustainably engaging users requires substantial time, effort, creativity (Agee, 2013; MacMillan, 2012; Waters et al., 2011), and thus a sufficient number of competent employees. While more human resources allocated to social do allow for a higher number of posted content, fully staffed social media teams may purposely post at low or moderate levels in order to ensure engagement (Hays et al., 2013; Mariani et al., 2016). In light of literature, we thus suggest the following hypothesis:

> H3: There is a positive relationship between a) the percentages of a full-time job position for social media, b) the hours allocated to social media, and the amount of posts on the various platforms (i.e. Facebook, Twitter, YouTube, Instagram, Google+).

Engagement is considered a key non-financial return of organizations' social media efforts and social media monitoring tools typically measure engagement levels based on different types of social interactions (e.g. likes, shares, and comments) (Buhalis & Mamalakis, 2015; Hoffman & Fodor, 2010; Peters et al., 2013). Moreover, engagement levels are typically operationalized by considering a weighted combination of actions (e.g. likes, shares, and comments) related to a post or specific user bases (e.g. number of total fans for a Facebook page) (Buhalis & Mamalakis, 2015; Peters et al., 2013). As social media are highly dynamic, metrics should not merely reflect states, but also relate to a temporal dimension (Peters et al., 2013; Tirunillai & Gerard, 2012). Thus, we consider an array of social media KPIs for several social media platforms provided by Fanpage Karma to sufficiently cover the return aspect. The question arises to what extent these KPIs are related to both the number of social media platforms used and the amount of content posted. DMOs can serve more than one social media platform (Hays et al., 2013; Mariani et al., 2016; Phocuswright, 2014), but it is open whether this affects success on individual platforms. Regarding the amount of posted content, DMOs seem to pursue different strategies (Hays et al., 2013; Mariani et al., 2016; Yang & Wang, 2015). We thus postulate:

> H4: There is a relationship between the a) amount of platforms used, b) the amount of posts on the various platforms, and the social media KPIs.

The following model summarizes the various hypotheses tested (Fig. 1).

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[2] The rank "is calculated using a combination of average daily visitors and page views over the past month" (Alexa, 2016).
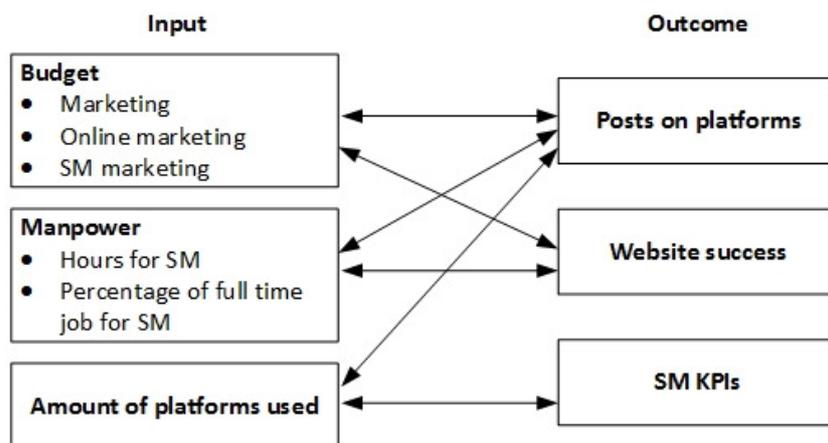
**Fig. 1.** Overview of tested input and outcome variables

## 3 Methodology

We used a two-step approach for collecting data. First, an online questionnaire was designed to collect data about social media usage and respective marketing budgets of DMOs. Second, the *Fanpage Karma* social media monitoring tool was used to gain insights into KPIs of five main social media platforms (i.e. Facebook, Twitter, Google+, YouTube, and Instagram; Pinterest was not covered by the tool) used by the DMOs.

The questionnaire first was developed for Switzerland and comprised 17 questions. Six questions were dedicated to social media platforms DMOs use. We asked for the URLs of the various channels. One question asked for the number of unique visitors on the DMO websites and another one for the percentage of website visitors generated through social media. In terms of budget, we asked for the overall marketing budget, the budget for online marketing, and the budget dedicated to social media (without costs for employees). All the budgets are yearly figures. An additional question covered the specific allocation of the online marketing budget (website, SEO, SEM, etc.). In order to cover the manpower costs, we asked how many hours a week the DMOs spend on social media and the percentage of employees responsible for social media (e.g. a half-time job would be 50%). The size of the DMOs was controlled for by the number of overnight stays in hotels and other accommodations.

The questionnaire was sent to 165 Swiss DMOs in March 2015 by email. The sample includes the members of the Association of Swiss Tourism Managers (www.vstm.ch), a trade organization covering all professional tourism organizations in Switzerland with an overall budget of over EUR 1.8 million and at least 4 full-time equivalents.

Based on the learning from Switzerland, the survey was slightly extended by adding questions concerning how many people DMOs employ in general and how many in marketing overall. This survey was distributed to 587 DMOs in two European countries, namely Belgium and France. The markets were chosen because leading players of the tourism sector (AdN "Agence du Numérique" in Belgium and MOPA "Mission des offices de tourisme et pays touristiques d'Aquitaine" in France) in these countries expressed their interest and provided support in terms of data collection. In order to account for different currencies, DMOs were asked to report in the currency of their country. In Belgium, the questionnaire was sent to 258 tourism organizations provided by AdN in November 2015. In France, the questionnaire was sent by MOPA to 329 tourism organizations in November 2015. The contacted DMOs in France are participants of the SNUT ("Stratégie Numérique de Territoire touristique") project, a national digital benchmark initiative.

The Alexa Rank (www.alexa.com) served as an independent external metric for website traffic. From *Fanpage Karma* (an online monitoring tool), KPIs were collected for Facebook, Google+, Instagram, Twitter, and YouTube. Among others, followers/fans/subscribers, posts/tweets/videos and likes, figures for engagement and page performance are captured. Indicator definitions are provided in Table 1.

**Table 1.** Definitions of key performance indicators (Source: http://www.fanpagekarma.com/help)

| KPI | Definition |
|---|---|
| Engagement | Average of daily engagements over time. Daily amount of likes, comments, and shares divided by the number of fans. |
| Growth rate | Average growth of the page over time to get to the current value. |
| Post interaction | Average amount of all interactions per fan per post (does not take into account days without interaction). |

| Page performance index | Fanpage Karma's estimates of the success of a page based on a combination of engagement and growth values (values between 0 and 100; 100 being the best). |
|---|---|

Considering the two-step approach applied to three markets (i.e. Belgium, France, and Switzerland), data analysis is based on six individual data sets (see Fig. 2).
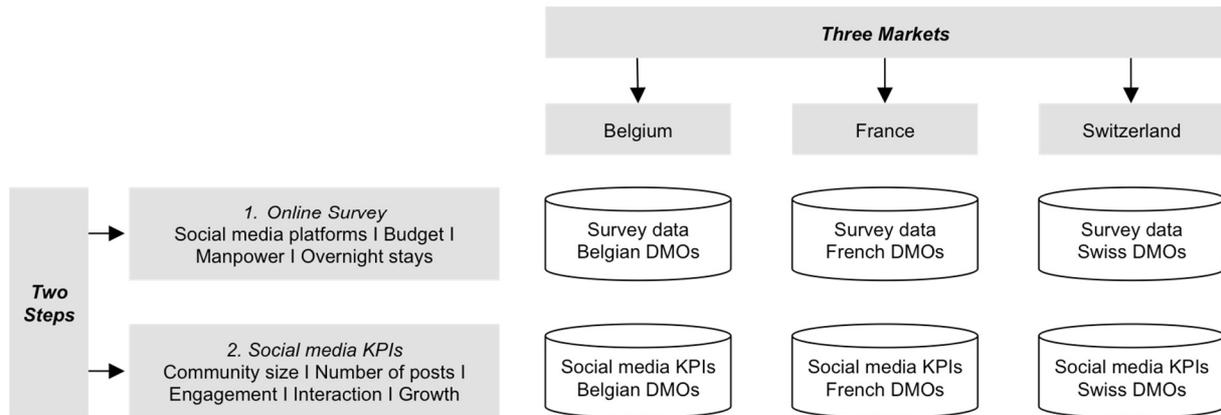


**Fig. 2.** Overview of six individual data sets

After analysing each data set individually (descriptive results), the combined analysis (using non-parametric tests) of the two data sets collected for each country allows to get a better understanding about the relationships between the effort DMOs make in terms of budget, manpower, and posts and the outcome or success measures (e.g. followers, likes, shares, comments, engagement, growth) on the social media platforms.

## 4 Results

### 4.1 Sample Description

In total, the survey resulted in 150 usable questionnaires of which 38% (n=57) were collected from DMOs in Belgium, 34% (n=51) in France, and 28% (n=42) in Switzerland. The country-specific response rates were 22% for Belgium, 16% for France, and 25% for Switzerland. The overall response rate was 20%. The size of DMOs in terms of overnights as well as marketing budgets is shown in table 3 below. The data indicate a wide range of organisational sizes from quite small (1'586 overnights) to big destinations (4'963'424 overnights) with a median size at 272'967 overnights.

In all three countries, the DMOs had 267'525 unique website visitors on average – more than 40% had below 100'000, less than 10% between 100'000 and 500'000, nearly 23% between 500'000 and 1'000'000, and only about 5% more than 1'000'000. For more than half of the DMOs (50.7%), social media platforms generate a quite low number of website visitors (below 10%). Only a minority of 4% of the DMOs is able to trigger more than 20% of the website traffic by social media. The website traffic metrics for the DMOs based on data from Alexa.com show an average Alexa Traffic Rank of 4'389'236 (median=3'192'751, max=24'450'247, min=88'023). On a country level, results show (Table 2) that Switzerland has the most unique website visitors. Switzerland also generates website visitors by their social media channels. However, the amount of visitors generated is mainly below the 10% mark while Belgium (7.0%) and France (7.8%) generate more than 15%. Concerning the Alexa traffic rank, Switzerland is least successful. Table 2 summarizes the results and shows country specific figures.

**Table 2.** DMOs' website related metrics overall and by country

|  | Overall | Belgium | France | Switzerland |
|---|---|---|---|---|
| Unique website visitors | 267'525 | 65'261 | 180'512 | 586'683 |
| below 100'000 | 41.3% | 45.6% | 56.9% | 20% |
| 100'000 to 500'000 | 8.0% | 12.3% | 29.4% | 33% |
| 500'001 to 1'000'000 | 22.7% | 0% | 5.9% | 25% |
| >1'000'000 | 4.7% | 0% | 2.0% | 17% |
| Website visitors generated by Social Media |  |  |  |  |
| <10% | 50.7% | 45.6% | 47.1% | 61.9% |
| 10 to 14.9% | 4.7% | 3.5% | 5.9% | 4.8% |

| 15 to 19.9% | 1.3% | 3.5% | 0% | 0% |
|---|---|---|---|---|
| >20% | 4% | 3.5% | 7.8% | 0% |
| Alexa traffic rank | | | | |
| average | 4'389'236 | 5'821'692 | 4'750'102 | 1'963'704 |
| median | 3'192'751 | 4'438'167 | 3'093'819 | 883'443 |
| max | 24'450'247 | 24'450'247 | 23'060'507 | 6'303'538 |
| min | 88'023 | 911'480 | 378'862 | 88'023 |

Note: The values missing to 100% are DMOs who did not report on the specific variable

**4.2 Marketing Budgets and Social Media Use**

Table 3 lists the marketing budget results for the various countries. It shows that the overall yearly marketing budget of DMOs in our survey ranged from EUR 100 (mainly for DMOs in Belgium who focus on the visitor centre) to a maximum of EUR 8'100'000 (average=EUR 490'034). From this budget, about one third of the DMOs (35.3%) use less than EUR 20'000 for online marketing; another 14.0% use between EUR 20'000 and 50'000, 8.0% between EUR 50'000 and 100'000, and another 8.0% use more than EUR 100'000. On average, DMOs use 19.1% (STD=0.24) of their marketing budget for online marketing purposes and 0.4% (STD= 0.15) for social media. Findings of the three countries show that DMOs in Belgium and France have a very low marketing budgets compared to Switzerland. The online and social media budgets are much lower than in Switzerland too. However, interestingly, the share for online marketing is lowest in Switzerland.

**Table 3.** Summary of DMOs' marketing budgets (in EUR)

| | | Mean | Median | STD | Min | Max |
|---|---|---|---|---|---|---|
| **Overall** | Overnight stays | 719'170 | 272'967 | 991'923 | 1'586 | 4'963'424 |
| | Marketing budget | 490'034 | 65'250 | 1'281'588 | 100 | 8'100'000 |
| | Online marketing budget | 61'545 | 14'500 | 189'041 | 50 | 1'440'000 |
| | Social media budget | 2'927 | 360 | 6'398 | 0 | 45'000 |
| | Share for online marketing | 19.1% | 10.0% | 0.2 | 0.0% | 100% |
| | Share for social media marketing | 0.4% | 0.1% | 0.2 | 0.0% | 100% |
| | Marketing budget / overnight stays* | 1.3 | 0.9 | - | 0.01 | 6.3 |
| | Online Marketing / overnight stays* | 0.3 | 0.1 | - | 0.0 | 6.3 |
| **Belgium** | Overnight stays | n/a | n/a | n/a | n/a | n/a |
| | Marketing budget | 60'489 | 21'308 | 90'530 | 100 | 361'147 |
| | Online marketing budget | 9'736 | 2'000 | 18'333 | 100 | 70'000 |
| | Social media budget | 1'126 | 0 | 2'780 | 0 | 10'000 |
| | Share for online marketing | 23.7% | 8.2% | 0.3 | 1.2% | 100% |
| | Share for social media marketing | 0.1% | 0.0% | 0.3 | 0.0% | 1.0% |
| | Marketing budget / overnight stays | n/a | n/a. | n/a. | n/a | n/a |
| | Online Marketing / overnight stays | n/a | n/a. | n/a. | n/a | n/a |
| **France** | Overnight stays | 581'927 | 204'164 | 788'491 | 1'586 | 2'635'884 |
| | Marketing budget | 48'574 | 25'000 | 62'159 | 600 | 280'000 |
| | Online marketing budget | 13'131 | 7'750 | 14'621 | 50 | 55'000 |
| | Social media budget | 1'907 | 0 | 3'611 | 0 | 16'678 |
| | Share for online marketing | 29% | 21% | 0.3 | 0.7% | 100% |
| | Share for social media marketing | 0.03% | 0.0% | 0.1 | 0.0% | 0.2% |
| | Marketing budget / overnight stays | 0.8 | 0.3 | - | 0.0 | 6.3 |
| | Online Marketing / overnight stays | 0.6 | 0.1 | - | 0.0 | 6.3 |
| **Switzerland** | Overnight stays | 789'551 | 437'000 | 1'084'390 | 13'929 | 4'963'424 |
| | Marketing budget | 1'161'104 | 396'000 | 1'862'941 | 9'000 | 8'100'000 |
| | Online marketing budget | 119'737 | 45'000 | 267'641 | 900 | 1'440'000 |
| | Social media budget | 5'207 | 1'800 | 8'866 | 0 | 45'000 |
| | Share for online marketing | 11% | 7% | 0.1 | 0% | 50% |
| | Share for social media marketing | 1.1% | 0.3% | 0.02 | 0% | 10% |
| | Marketing budget / overnight stays | 1.4 | 1.1 | - | 0.01 | 5.7 |
| | Online Marketing / overnight stays | 0.25 | 0.08 | - | 0.0 | 4.7 |

*Figures present two countries namely France and Switzerland - data for Belgium is not available.

All three countries put the majority of the online budget to the DMO website (66.1%), followed by 9.4% for search engine marketing (SEM) and optimization (SEO). The country results (Table 4) are quite similar. However, Switzerland puts more money into SEO/SEM and online banners and less into the website. Excluding costs for manpower, 40.7% of the DMOs spend less than EUR 1'000 for social media, 13.3% spend between EUR 1'000 and 5'000, 4.7% EUR 5'000 to 10'000, and 4.7% more than EUR 10'000. Based on these figures, on average only 0.4% of the marketing budget is allocated to social media. See Table 3 for an overview of the social media marketing budget allocation on a country level.

**Table 4.** Allocation of the online marketing budget to the various online channels (in %)

|  | Website | SEO/SEM | Social Media | Online banner | Email marketing | Others |
|---|---|---|---|---|---|---|
| Belgium | 78.3 | 2.4 | 7.1 | 4.0 | 2.6 | 5.6 |
| France | 67.8 | 9.2 | 6.6 | 4.5 | 2.5 | 9.4 |
| Switzerland | 57.1 | 14.1 | 6.1 | 8.6 | 5.6 | 8.7 |
| Overall | 66.1 | 9.4 | 6.5 | 6.2 | 3.9 | 7.9 |

In terms of manpower, DMOs in Belgium and France on average employ 6.2 staff. 1.4 employees (max=5, min=0 employees) of a full-time job position are dedicated to marketing, 0.9 (max=3, min=0) to online marketing, and 0.8 (max=3, min=0) to social media. With an average of 0.2, Switzerland dedicates a much lower percentage of their workforce to social media. The amount of people responsible for social media translates to an average of 6.8 hours per week (median=4.0, max=60, min=0 hours). According to PayScale (2016), in Switzerland, an employee in marketing without team leading responsibilities on average earns about EUR 72'000 per year. In Belgium, they earn about EUR 53'864 and in France about EUR 51'298. This means Swiss DMOs on average spend EUR 15'960 on social media manpower per year. Adding the average social media budget of EUR 5'207, we can estimate an overall annual investment of EUR 21'167 for the Swiss DMOS which is still a very modest amount when compared to the total average marketing budget of EUR 1'161'104. On average, DMOs use 3.3 (STD=1.88) different social media platforms. Ten DMOs (6.7%) do not use social media at all while 28 (18.7%) use six popular platforms (i.e. Facebook, Twitter, YouTube, Google+, Instagram, Pinterest). See Figure 3 for a country comparison.
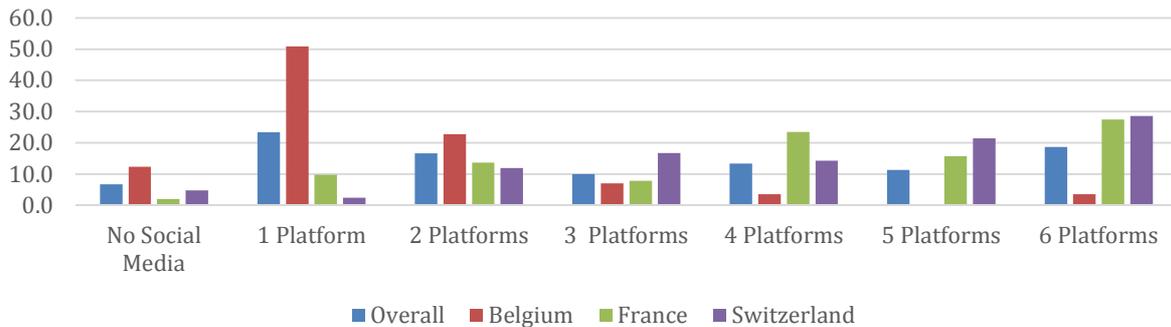


**Fig. 3**. Number of social media platforms used by DMOs

All DMOs using social media have a Facebook page; 58.6% use YouTube, 52.9% Twitter, 52.9% Google+, 35.7% Instagram, and 30.7% Pinterest. On a country level, it is interesting to see that Belgium's DMOs generally use less of the most common social media platforms and they hardly use any of the two picture platforms (Table 5).

**Table 5.** Usage of social media platforms in different countries (in %)

|  | Overall | Belgium | France | Switzerland |
|---|---|---|---|---|
| Facebook | 100 | 100 | 100 | 100 |
| Twitter | 52.9 | 18.0 | 62.0 | 85.0 |
| YouTube | 58.6 | 24.0 | 70.0 | 87.5 |
| Google+ | 52.9 | 20.0 | 74.0 | 67.5 |
| Instagram | 35.7 | 6.0 | 50.0 | 55.0 |
| Pinterest | 30.7 | 6.0 | 50.0 | 37.5 |

**4.3 Social Media Key Performance Indicators**

As 7 DMOs in Belgium, 1 in France, and 2 DMOs in Switzerland do not use social media, the following results are based on samples of 50, 50, and 40 DMOs, respectively. Also, as not all DMOs are present on all social media platforms, the sample size varies depending on the social media platform. Fanpage Karma did not provide usable data for Instagram and Google+; thus, these platforms are excluded from the subsequent analysis. The KPIs in Table 6 show the findings for Facebook overall and for the three countries. Generally, the results reveal that the success of the various DMOs is actually quite limited. In fact, especially engagement and post interaction seem to be low.

**Table 6.** KPIs overall and for the three countries for Facebook

| | Overall (n=140) | | | Belgium (n=50) | | |
|---|---|---|---|---|---|---|
| | **Mean** | **Median** | **Max** | **Mean** | **Median** | **Max** |
| **# posts** | **19.02** | **16.00** | **75.00** | **20.12** | **15'00** | **46.00** |
| **# posts by fans** | **4.42** | **1.00** | **48.00** | **1.31** | **2.00** | **48.00** |
| Followers/fans | 7'923.31 | 2'336 | 121'927 | 1'931.69 | 2'966 | 75'601 |
| # Likes | 1'552.16 | 278 | 42'326.00 | 204.07 | 532.00 | 18.087 |
| # comments | 46.42 | 11.00 | 602.00 | 15.31 | 16.00 | 602.00 |
| # fan comments | 3.85 | 0.00 | 86.00 | 1.38 | 0.00 | 14.00 |
| # shares | 254.06 | 59.00 | 5'788.00 | 134.71 | 75.00 | 5'788.00 |
| Engagement | 0.01 | 0.01 | 0.18 | 0.01 | 0.01 | 0.05 |
| Growth rate | n/a | n/a | n/a | n/a | n/a | n/a |
| Absolute growth | n/a | n/a | n/a | n/a | n/a | n/a |
| Post interaction | 0.02 | 0.01 | 0.33 | 0.02 | 0.02 | 0.08 |
| Page perf. index | 0.30 | 0.22 | 1.00 | 0.30 | 0.24 | 1.00 |

| | France (n=50) | | | Switzerland (n=40) | | |
|---|---|---|---|---|---|---|
| | **Mean** | **Median** | **Max** | **Mean** | **Median** | **Max** |
| **# posts** | **17.45** | **15'00** | **46.00** | **19.76** | **16.50** | **48** |
| **# posts by fans** | **3.96** | **2.00** | **48.00** | 8.42 | 4.50 | 45.00 |
| Followers/fans | 7'784.30 | 2'966 | 75'601 | 14'717.56 | 5'284.5 | 121'927 |
| # Likes | 1'351.21 | 532.00 | 18.087 | 3'615.29 | 1'174.50 | 44'634 |
| # comments | 52.87 | 16.00 | 602.00 | 72.81 | 33.50 | 538 |
| # fan comments | 2.50 | 0.00 | 14.00 | 8.24 | 1.00 | 86 |
| # shares | 362.55 | 75.00 | 5'788.00 | 251.79 | 67.5 | 2'551 |
| Engagement | 0.01 | 0.01 | 0.05 | 0.01 | 0.01 | 0.04 |
| Growth rate | n/a | n/a | n/a | 0.82% | 0.49% | 3% |
| Absolute growth | n/a | n/a | n/a | 5.86 | 1.05 | 101.32 |
| Post interaction | 0.02 | 0.02 | 0.08 | 0.02 | 0.01 | 0.05 |
| Page perf. index | 0.35 | 0.24 | 1.00 | 0.23 | 0.19 | 0.70 |

Note: Posts and posts by fans are input variables while the rest of the variables are success measures.

Table 7 presents insights about Twitter and YouTube. On Twitter, overall, some DMOs are doing quite well with regards to followers. However, when it comes to engagement, the efforts of the DMOs result in very limited outcome. Overall, on average DMOs have 28.4 videos on YouTube (median=17.5, max=190). In terms of channel views, on average Switzerland is most successful.[3]

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[3] Channel views, a YouTube KPI provided by Fanpage Karma, are defined as „the number of times the channel has been viewed" (http://www.fanpagekarma.com/help).

**Table 7.** KPIs overall and for the three countries for Twitter and YouTube

| | | Overall (n=73) | | | Belgium (n=9) | | |
|---|---|---|---|---|---|---|---|
| | | Mean | Median | Max | Mean | Median | Max |
| Twitter | # tweets | 34.84 | 17.50 | 190.00 | 15.71 | 15.00 | 38.00 |
| | Followers | 1'232.12 | 560.00 | 9'540.00 | 300.71 | 216.00 | 1'071.00 |
| | Engagement | 0.002 | 0.00 | 0.02 | 0.001 | 0.001 | 0.003 |
| | Page perf. index | 0.39 | 0.28 | 1.00 | 0.25 | 0.12 | 0.73 |
| YouTub | # videos | 28.41 | 15.00 | 161.00 | 14.14 | 6.00 | 54.00 |
| | # views | n/a | n/a | n/a | n/a | n/a | n/a |
| | # channel views | 66'655.81 | 12'293.00 | 718'775.00 | 2'573.57 | 1'617.00 | 5'637.00 |
| | # views per video | n/a | n/a | n/a | n/a | n/a | n/a |

| | | France (n=31) | | | Switzerland (n=33) | | |
|---|---|---|---|---|---|---|---|
| | | Mean | Median | Max | Mean | Median | Max |
| Twitter | # tweets | 23.75 | 8.00 | 190.00 | 46.97 | 33.00 | 168.00 |
| | Followers | 1'066.96 | 421.00 | 9'540 | 1'540.47 | 810.50 | 7'797 |
| | Engagement | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.02 |
| | Page perf. index | 0.11 | 0.01 | 1.00 | 0.48 | 0.48 | 1.00 |
| YouTub | # videos | 23.00 | 15.50 | 139.00 | 34.94 | 17.00 | 161.00 |
| | # views | n/a | n/a | n/a | 109'421.14 | 22'537.50 | 719'416 |
| | # channel views | 30'309.90 | 13'730.50 | 139'625 | 109'404.50 | 24'364.00 | 718'775 |
| | # views per video | n/a | n/a | n/a | 2'452.34 | 1'599 | 13'941 |

Note: # tweets and # videos are input variables while the rest of the variables are success measures.

## 4.4 Hypotheses Testing

A Spearman correlation analysis shows that there is no relationship between budget and the number of posts on the various platforms (H1). The only significant relationship revealed is overall concerning YouTube videos (marketing budget: r=0.29, p=0.028; online marketing budget: r=0.36, p=0.006; social media budget: r=0.40, p=0.002). However, looking at the country level, it turns out that this relationship is only true for Switzerland (marketing budget: r=0.41, p=0.017; online marketing budget: r=0.35, p=0.046; social media budget: r=0.54, p=0.001). There are not significant results for the other two countries.

Results for hypothesis 2 (H2, presented in Table 8) show that overall there is a negative correlation between the marketing budget (r=-0.61, p<0.001), the online marketing budget (r=-0.61, p<0.001), the social media budget (r=-0.52, p<0.001) and the website success as indicated by the Alexa Traffic Rank. A negative effect was actually expected as the lower the Alexa rank, the higher the website traffic. On a country level, the negative effect is supported in all three countries. However, not all of the results are significant.

Similar patterns are also observed for the hours allocated to social media (r=-0.35, p<0.001). However, overall, in Belgium, and in France, the correlation with the percentage of full-time job position is not significant while in Switzerland it is.

The correlations between unique website visits and marketing budget (r=0.69, p<0.001), online marketing budget (r=0.68, p<0.001), social media marketing budget (r=0.58, p=0.001), and the hours allocated to social media (r=0.35, p=0.001) all show positive results supporting the idea that online marketing and social media efforts result in website success. The coefficients of the various countries confirm a quite strong correlation.

**Table 8.** Correlations between budgets, staffing and website success

| | | Marketing budget | Online marketing budget | Social media budget | Weekly staff hours for SM | % full-time SM job position |
|---|---|---|---|---|---|---|
| **Overall** | Website success Alexa | **-0.61 (p<0.001)** | **-0.61 (p<0.001)** | **-0.52 (p<0.001)** | **-0.35 (p=<0.001)** | 0.11 (p=0.272) |
| | Unique website visitors | **0.69 (p<0.001)** | **0.68 (p<0.001)** | **0.58 (p<0.001)** | **0.35 (p<0.001)** | -0.06 (p=0.606) |
| **Belgium** | Website success Alexa | -0.35 (p=0.088) | **-0.46 (p=0.037)** | -0.32 (p=0.146) | -0.30 p=0.067) | -0.15 (p=0.437) |
| | Unique website visitors | **0.78 (p<0.001)** | **0.56 (p=0.020)** | 0.30 (p=0.220) | 0.19 (p=0.323) | **0.44 (p=0.030)** |
| **France** | Website success Alexa | -0.34 (p=0.071) | -0.29 (p=0.198) | -0.20 (p=0.297) | -0.22 (p=0.147) | 0.06 (p=0.741) |
| | Unique website visitors | **0.57 (p=0.001)** | **0.43 (p=0.048)** | 0.29 (p=0.126) | **0.30 (p=0.042)** | 0.08 (p=0.627) |
| **Switzerland** | Website success Alexa | **-0.71 (p<0.001)** | **-0.54 (p=0.001)** | **-0.65 (p<0.001)** | -0.31 (p=0.064) | **-0.49 (p=0.004)** |
| | Unique website visitors | **0.71 (p<0.001)** | **0.60 (p<0.001)** | **0.54 (p=0.002)** | **0.38 (p=0.029)** | 0.36 (p=0.058) |

Note: Significant results are presented in bold.

Testing of hypothesis 3 (H3) suggests that manpower does only matter in some countries. Actually none of the results are significant in Belgium and France. Concerning the percentage of a full-time job position allocated to social media, the Spearman correlation coefficient is significant in Switzerland for the amount of videos posted (r=0.39, p=0.029). An examination with regards to the hours spent on social media platforms shows only significant results for Swiss DMOs' efforts on Facebook (r=0.36, p=0.027).

The relationship between the amount of platforms used and social media KPIs (H4) shows only significant results for Facebook fans (r=0.35, p=0.029), likes (r=0.36, p=0.027), and shares (r=0.31, p=0.057). Further, H4 reveals that KPIs are significantly correlated with the amount of posts, tweets, and videos (see Table 9). For Facebook, most of the correlations between the success factors and number of posts are significant overall and for each single country. Post interaction is the only variable which is negative and only significant in France. The correlation coefficients range from 0.30 to 0.80. The correlation for all KPIs is highest in Belgium. Table 9 also presents the results for Twitter and highlights that there is a significant correlation with the analysed KPIs.

For YouTube, there is a strong correlation between the amount of channel views and the amount of videos a DMO posts. This is true for France and Switzerland, but not for Belgium (overall: r=0.88, p<0.001; Belgium: r=0.14, p=0.760; France: r=0.63, p<0.001; Switzerland: 0.88, p<0.001).

**Table 9.** Correlation between amount of posts on various platforms and KPIs

| Platform | Metric | Overall (n=140) | Belgium (n=50) | France (n=50) | Switzerland (n=40) |
|---|---|---|---|---|---|
| Facebook | # posts by fans | 0.32, p<0.001 | 0.33, p=0.034 | 0.23, p=0.121 | 0.48, p=0.003 |
| | Followers/fans | 0.30, p=0.001 | 0.40, p=0.008 | 0.24, p=0.103 | 0.28, p=0.095 |
| | # Likes | 0.49, p<0.001 | 0.80, p<0.001 | 0.37, p=0.011 | 0.62, p<0.001 |
| | # comments | 0.47, p<0.001 | 0.78, p<0.001 | 0.29, p=0.048 | 0.58, p<0.001 |
| | # fan comments | 0.24, p=0.006 | 0.38, p=0.013 | 0.07, p=0.645 | 0.44, p=0.006 |
| | # shares | 0.51, p<0.001 | 0.78, p<0.001 | 0.48, p=0.001 | 0.37, p=0.022 |
| | Engagement | 0.55, p<0.001 | 0.64, p<0.001 | 0.50, p=0.001 | 0.52, p=0.001 |
| | Post interaction | -0.14, p=0.118 | 0.03, p=0.858 | -0.34, p=0.019 | -0.01, p=0.948 |
| | Page perf. index | 0.37, p<0.001 | 0.50, p=0.001 | 0.28, p=0.060 | 0.35, p=0.031 |
| Twitter | Followers | 0.45, p<0.001 | 0.23, p=0.613 | 0.62, p=0.001 | 0.38, p=0.031 |
| | Engagement | 0.33, p=0.007 | 0.33, p=0.007 | 0.92, p<0.001 | 0.32, p=0.066 |
| | Page perf. index | 0.82, p<0.001 | 0.82, p<0.001 | 0.92, p<0.001 | 0.63, p<0.001 |
| YouTube | # channel views | 0.88 p<0.001 | 0.14, p=0.760 | 0.63, p<0.001 | 0.88, p<0.001 |

## 5  Discussion and Conclusions

### 5.1 Theoretical Discussion

With regards to budgets, we only found empirical support for a positive relationship between budgets and the amount of posted content on YouTube for Swiss DMOs (H1). Data shows that Swiss DMOs compared to DMOs in France and Belgium have significantly larger budgets for marketing, online marketing, and social media marketing (Table 3) and are consequently able to produce and post more videos on YouTube. As the creative and technical effort and thus respective resources needed for producing quality video content is high, funding is essential.

According to a recent industry survey, page referrals to website is the most important social media metric used by DMOs (Phocuswright, 2014). Overall, our survey data suggest that social media is not a substantial driver for website traffic in Swiss DMOs. Yet, for Swiss DMOs in particular and for DMOs in general (overall results in our study), we found empirical support for a positive relationship between all budget categories and website success based on Alexa Traffic Rank and unique website visitors (H2). This supports the idea that investing in marketing, online marketing, and also social media marketing pays off to a certain extent with regard to generating website traffic. While for Belgium and France, a significant positive relationship between overall marketing and online marketing budgets and website success, respectively, is present for at least one type of success indicator (Alexa Page Ranke or unique website visitors), there are no significant relationships between social media marketing budget and either type of website success indicator. This may be explained by the higher average social media marketing budgets of Swiss DMOs, being between 2.7 to 4.6 times higher than those of French and Belgian DMOs, respectively. Our results also provide indicative empirical evidence for a positive relationship between manpower allocated to social media and website success (Table 8).

We also tested for the relationship between manpower and the amount of content posted to various platforms (H3). We could only find support for this (positive) relationship for Swiss DMOs in the cases of a) the percentages of a full-time social media job position and the amount of videos posted to YouTube and b) hours dedicated to social media and amount of Facebook posts. Success on social media is in many cases significantly correlated with the amount of posts (see discussion H4 below), and creating posts needs manpower. As manpower seems not to be the only success factor, further research could focus on other aspects such as quality of posts or creativity of social media managers in DMOs. Regarding YouTube, this result seems counterintuitive as Swiss DMOs only dedicate an average of 0.2 staff to social media, which is much lower than their counterparts in Belgium and France (see section 4.2). However, this relationship may be moderated by the large budgets of Swiss DMOs potentially used for producing the highest number of YouTube videos on average.

Regarding the relationship between the amount of platforms used and various social media KPIs (H4), we only found empirical support for Facebook, specifically fans, likes, and shares. Facebook is used by all surveyed DMOs (see Table 5); it may thus be deemed as 'social media hub' for DMOs. Thus, certain DMOs may serve different platforms as part of a multi-platform content strategy and there could be a loop feeding back from other platforms to this mostly used social media platform (or 'hub') that increases the number of fans, likes, and shares. This may further be explained by a potential integration of content posted to platforms other than Facebook in a DMO's Facebook page. For example, videos posted to YouTube are also posted on the DMO Facebook page; likewise for Instagram photos. Further, content integration may not be limited to content originating from the DMOs itself, but it may also be original user-generated content from the various social media platforms. Such content is

especially credible which may trigger additional fans, likes, and shares. Lastly, as DMOs use more social media platforms, respective staff may become more experienced and thus effective in engaging with social media users.

Our results also show that the amount of Facebook posts, Tweets, and videos is positively related to most KPIs (H4) – simply supporting the notion that more social media activity of DMOs triggers more engagement. DMOs should interpret these findings with care because 'the more, the better' is not always true. In fact, the negative correlation for the amount of Facebook posts with post interaction in the case of the surveyed French DMOs means that as the amount of posts increases, post interaction actually decreases. As Fanpage Karma defines post interaction as the average amount of all interactions per fan per post (see Table 1), the negative relationship may be due a) an increasing fanbase or b) a decreasing number of interactions. In the former case, it would mean that DMOs with larger fanbases (and more posts overall) face difficulties to engage all of their fans to same extent as DMOs with smaller fanbases. Some of the fans may actually be 'dead' meaning they do follow the Facebook page of a DMO as a fan, but they are not engaged (e.g. Peters et al., 2013). In the latter case, it would mean that the engagement level decreases with the number of posts. This would support the results of a recent study on Italian regional DMOs which found that high posting frequency negatively affects engagement (Mariani et al., 2016). Thus, DMOs should rather focus on quality (i.e. on truly engaging content) than on quantity.

Engagement is considered a key non-financial return of organizations' social media efforts and social media monitoring tools typically measure engagement levels based on different types of social interactions (e.g. likes, shares, and comments) (Buhalis & Mamalakis, 2015; Hoffman & Fodor, 2010; Peters et al., 2013). For this reason, we included such quantitative engagement metrics in our study. However, when organizations aim for customer engagement, they should not merely aim for boosting respective social media metrics because customer engagement is more than that. According to Dessart et al. (2015), customer engagement consists of an affective, a cognitive, and a behavioural dimension. Actions such as likes, comments, and shares are behavioural manifestations of engagement (Gummerus et al., 2012). Even though the behavioural dimension is a strong indicator of engagement (Gummerus et al., 2012), respective quantitatively oriented social media metrics do not adequately cover the affective and cognitive dimensions. This is in line with Fisher (2009) who stressed the need for qualitative measurements in social media marketing. For further research, we thus suggest to link qualitative measurements to more recent conceptualizations of customer engagement applied to social media (Dessart et al., 2015). Future studies could then relate DMOs' social media efforts to all three dimensions of engagement.

### 5.2 Managerial Implications

While social media are considered important for DMOs (see e.g. Leung et al., 2013), observations and research about resource allocations (budget and manpower) remain marginal. In a highly competitive environment such as tourism marketing, DMOs are typically unwilling to disclose the details of their social media budgets (Hays et al., 2013). Thus, this study is among the very few contributions providing actual figures on how much financial and human resources DMOs allocate to social media activities. This study not only describes budgets, but also tests its correlation with KPIs relevant for the various platforms and compares efforts and success of different countries. This kind of benchmark is not only a theoretical contribution, but is also valuable for practitioners.

Our data indicates that despite an ever increasing importance of online services for the customer journey (e.g. for travel planning and booking, sharing etc.), the resources allocated to online marketing and social media is modest for most DMOs of the three surveyed countries. Overall, less than 20% of the marketing budget is dedicated to online marketing and an average of only 0.4% is allocated to social media activities. Our results confirm results from a study conducted in 2014 by Development Counsellors International, surveying 101 individuals responsible for social media marketing in DMOs across North America (Barnes, 2014). 71% of destinations surveyed in North America had a social media marketing budget of less than EUR 22'700 and three out of four destinations allocated less than 10% of their total marketing budgets to social media, regardless of the size of the digital marketing budget (Barnes, 2014). The present study is in line with findings of Hays et al. (2013) stating that among tourism organizations, social media are still not widely recognised as a vital tool in marketing strategies. Thus, tourism organizations often underfund or neglect this channel and thereby miss to fully exploit social media's potential to effectively interact and engage with customers (Hays et al., 2013). In addition, effective management of social media requires sufficiently qualified staff. So even if tourism organizations acknowledge the importance of social media, they may still lack the staff with the right competencies and skills. If tourism organizations invest in training of their employees, it is not a given fact that this training is effective as social media managers need to embrace technology and be creative at the same time in order to engage the creative consumer (Berthon, Pitt, Plangger, & Shapiro, 2012) – both abilities are hard to train. DMOs have invested in websites and purchased online advertising for the last 20 years, but the Web has evolved with the arrival of Web 2.0 and the rise of social media (Hays et al., 2013). Our results reflect this observation as the online marketing budgets are nearly exclusively dedicated to the "classical" online activities such as website (two thirds of online marketing budget) and to promotion measures (SEO/SEM, banners) for this online presence (15%). The focus on known and established marketing activities is probably associated with governance aspects. Tourism destinations are described as multi-faceted organizations that are challenged by the interdependence of the multiple stakeholders, the fragmented resources, and lack of

hierarchy and authority (Mistilis, Buhalis, & Gretzel, 2014). Consequently, the implementation of a digital marketing strategy in this context is a big challenge for DMOs.

Our study has also analysed the relationship between DMOs' resources invested in social media activities and several metrics indicating the return from these activities. Although ROI is a key performance indicator in most organizations, it remains rather intangible for social media in DMOs, where direct sales are not the core focus. So it comes at no surprise that a large-scale international industry survey identified measuring the ROI as DMOs' biggest challenge with regard to managing social media (Phocuswright, 2014). This is in line with results of a survey among social marketers in North America (eMarketer, 2016) saying they had a hard time figuring out how much return they were getting on their social efforts (61%), how to secure budgets (38%), and tying social media efforts to business goals (34%).

### 5.3 Limitations and Future Research

This study's aim was to find preliminary evidence on the ROI of DMOs' social media efforts. To do so, we collected data from three markets using a two-step approach including a questionnaire and an analysis of Fanpage Karma to analyse content of relevant social media channels. Thanks to this approach, it is possible to measure the ROI of DMOs' social media efforts in a simple way. However, this methodology is at its early stage. Our analysis has neither taken into account that DMOs might have one specific objective per social media channel, nor that DMOs might feed postings in all social media channels, potentially neglecting the channels' specific characteristics. In a future research, these two aspects should be considered. The ROI could then be measured more specifically per channel or per objective. A benchmark per objective derived from a more detailed analysis would be more valid and therefore better accepted by the industry. Future research could also benefit from refining the analysis of the content, e.g. by analysing the various emojis used by Facebook in detail.

Moreover, for many DMOs, the path of becoming 'social' poses an array of challenges. From keeping up with emerging social platforms, to building engaged followers, to measuring success, implementing a social media strategy is a complex undertaking. Our analysis indicates a strong relationship between staffing and certain social media KPIs. Further research might explore the causality between time spent on social media by DMO staff and number of posts on social media platforms. Do DMOs successfully engage social media users and trigger reactions, or do they rather react to posts by social media users triggered by other events – positive or negative? Answering this question may require more sophisticated methods considering the valence, source, and chronology of posts.

The generalizability of our results is subject to certain limitations related to sample size, sample structure, and organizational characteristics of the DMOs. First, the *size* of our sample is rather small. This is due to a) the naturally limited size of the statistical population, b) the generally limited response rate in surveys, and c) specifically the reluctance of DMOs to disclose details about their social media marketing due to fierce competition in the industry (Hays et al., 2013). Future studies should thus widen the scope of the sample by considering more countries and more DMOs per country. Secondly, the *structure* of the sample is heterogeneous across the three countries. The size of the Swiss DMOs in the sample (expressed in budget figures or overnights) is much higher than those observed for DMOs in Belgium and France. This can be explained by the administration of the online survey in the three countries. Whereas all relevant DMOs in Switzerland could be contacted through a national industry organization, the scope of diffusion in Belgium and France was restricted. For these latter countries, the sample does therefore only partially reflect the industry structure and is biased towards the small, rural organizations. The hypothesis testing in these countries has been affected to some extent by this structural sample bias. Future studies should therefore try to cover all sizes and types of organizations and describe in more detail the organizational characteristics of the DMOs (governance type, geographic area covered, etc.) to better grasp the variability of metrics in the population. This would also allow to reveal actual cause-and-effect relationships.

Finally, the present study collected data on DMOs' social media efforts and a set of KPIs reflecting the non-monetary returns of these efforts. However, our study did not consider the underlying objectives driving DMOs' social media efforts. Customer engagement, branding, customer loyalty and service, in-trip customer assistance, and customer insights/feedback are social media usage priorities of DMOs (Phocuswright, 2014). To draw a more complete picture, future studies should investigate DMOs' social media objectives, relate these objectives to the efforts taken to achieve them, and ultimately assess the achievement of the objectives with adequate metrics.

# References

Agee, A. (2013). Public Relations and Community: An Old Perspective in a New Forum. In Y. G. Ji & Z. C. Li (Eds.), *Exploring the strategic use of new media's impact on change management and risk in theory and practice, 16th International Public Relations Research Conference* (pp. 14–42). Coral Gables, Florida.

Alexa. (2016). The top 500 sites on the web. Retrieved July 26, 2016, from http://www.alexa.com/topsites

Barnes, K. L. (2014). The Big Reveal: Budgets, Staffing and The Future of Social Media At DMOs. Retrieved July 22, 2016, from http://www.destinationmarketing.org/blog/big-reveal-budgets-staffing-and-future-social-media-dmos

Berthon, P. R., Pitt, L. F., Plangger, K., & Shapiro, D. (2012). Marketing meets Web 2.0, social media, and creative consumers: Implications for international marketing strategy. *Business Horizons*, *55*(3), 261–271.

Boyd, D. M., & Ellison, N. B. (2008). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, *13*(1), 210–230.

Briones, R. L., Kuch, B., Liu, B. F., & Jin, Y. (2011). Keeping up with the digital age: How the American Red Cross uses social media to build relationships. *Public Relations Review*, *37*(1), 37–43. http://doi.org/10.1016/j.pubrev.2010.12.006

Brodie, R. J., Hollebeek, L. D., Juric, B., & Ilic, A. (2011). Customer Engagement: Conceptual Domain, Fundamental Propositions, and Implications for Research. *Journal of Service Research*, *14*(3), 252–271. http://doi.org/10.1177/1094670511411703

Buhalis, D., & Mamalakis, E. (2015). Social Media Return on Investment and Performance Evaluation in the Hotel Industry Context. In I. Tussyadiah & A. Inversini (Eds.), *Information and Communication Technologies in Tourism 2015* (pp. 241–253). Cham: Springer.

Buhalis, D., & Wagner, R. (2013). E-destinations: Global Best Practice in Tourism Technologies and Applications. In L. Cantoni & Z. Xiang (Eds.), *Information and Communication Technologies in Tourism 2013* (pp. 119–130). Berlin Heidelberg: Springer.

Caliesch, D., & Liebrich, A. (2012). Organisational Challenges of Using Social Media Marketing: The case of two Network Carriers. In P. Keller & C. Laesser (Eds.), *New Challenges for Tourism Promotion: Tackling High Competition and Multimedia Changes* (pp. 71–84). Berlin: Erich Schmidt Verlag.

Corcoran, S. (2009). Sean Corcoran ' s Blog Defining Earned , Owned And Paid Media. Retrieved May 1, 2015, from http://blogs.forrester.com/interactive_marketing/2009/12/defining-earned-owned-and-paid-media.html

Denning, S. (2015). Has Google+ Really Died? Retrieved July 16, 2015, from http://www.forbes.com/sites/stevedenning/2015/04/23/has-google-really-died/

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

Dischler, J. (2015). Building for the next moment. Retrieved July 5, 2015, from http://adwords.blogspot.ch/2015/05/building-for-next-moment.html

eMarketer. (2016). Measuring ROI Still the Top Struggle for Social Marketers. Retrieved July 12, 2016, from http://www.emarketer.com/Article/Measuring-ROI-Still-Top-Struggle-Social-Marketers/1014196

Enge, E. (2015). Hard Numbers for Public Posting Activity on Google Plus. Retrieved July 16, 2015, from https://www.stonetemple.com/real-numbers-for-the-activity-on-google-plus/

Facebook. (2016). News Room. Retrieved July 24, 2016, from newsroom.fb.com/company-info/

Fisher, T. (2009). ROI in social media: A look at the arguments. *Journal of Database Marketing & Customer Strategy Management*, *16*(3), 189–195.

Gilbert, E., Bakhshi, S., Chang, S., & Terveen, L. (2013). "I Need to Try This"?: A Statistical Overview of Pinterest. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems - CHI '13* (pp. 2427–2436).

Gummerus, J., Liljander, V., Weman, E., & Pihlström, M. (2012). Customer engagement in a Facebook brand community. *Management Research Review*, *35*(9), 857–877. http://doi.org/10.1108/01409171211256578

Gundotra, V. (2011). Introducing the google+ project: Real-life sharing, rethought for the web. Retrieved July 16, 2015, from http://bit.ly/gp_released

Hall, C., & Zarro, M. (2012). Social curation on the website Pinterest.com. In *Proceedings of the ASIST Annual Meeting* (Vol. 49).

Hays, S., Page, S. J., & Buhalis, D. (2013). Social media as a destination marketing tool: its use by national tourism organisations. *Current Issues in Tourism*, *16*(3), 211–239. http://doi.org/10.1080/13683500.2012.662215

Hoffman, D. L., & Fodor, M. (2010). Can You Measure the ROI of Your Social Media Marketing? *MIT Sloan Management Review*, *52*(1), 41–49.

Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer Brand Engagement in Social Media: Conceptualization, Scale Development and Validation. *Journal of Interactive Marketing*, *28*(2), 149–165.

Ingram, M. (2015). Facebook has taken over from Google as a traffic source for news. Retrieved July 26, 2016, from http://fortune.com/2015/08/18/facebook-google/

Instagram. (2016). Instagram Today: 500 Million Windows to the World. Retrieved July 24, 2016, from http://blog.instagram.com/post/146255204757/160621-news

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, *53*(1), 59–68.

Kaplan, A. M., & Haenlein, M. (2011a). The early bird catches the news: Nine things you should know about micro-blogging. *Business Horizons*, *54*(2), 105–113.

Kaplan, A. M., & Haenlein, M. (2011b). Two hearts in three-quarter time: How to waltz the social media/viral marketing dance. *Business Horizons*, *54*(3), 253–263.

Kaske, F., Kügler, M., & Smolnik, S. (2011). Return on investment in social media - Does the hype pay off? Towards an assessment of the profitability of social media in organizations. In *Proceedings of the Annual Hawaii International Conference on System Sciences* (pp. 3898–3907).

Kumar, V., & Mirchandani, R. (2012). Increasing the ROI of Social Media Marketing. *MIT Sloan Management Review*, *54*(1), 55–61.

Lenskold, J. (2003). *Marketing ROI: The path to campaign, customer, and corporate profitability*. New York, NY: McGraw-Hill.

Leung, D., Law, R., van Hoof, H., & Buhalis, D. (2013). Social Media in Tourism and Hospitality: A Literature Review. *Journal of Travel & Tourism Marketing*, *30*(1–2), 3–22.

Lewis, M. (2012). A New Social ROI Framework (Infographic). Retrieved October 22, 2015, from http://www.socialnomics.net/2012/09/20/a-new-social-roi-framework-infographic/

Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality and tourism management. *Tourism Management*, *29*(3), 458–468.

MacMillan, G. (2012). What is the future of sharing? Study [infographic]. Retrieved July 24, 2016, from http://wallblog.co.uk/2012/02/16/what-is-the-future-of-sharing-study-infographic/

Magno, G., Comarela, G., Saez-Trumper, D., Cha, M., & Almeida, V. (2012). New Kid on the Block: Exploring the Google+ Social Graph. In *Proceedings of the 2012 ACM Conference on Internet Measurement Conference* (pp. 159–170). inproceedings, New York, NY, USA: ACM.

Mariani, M. M., Di Felice, M., & Mura, M. (2016). Facebook as a destination marketing tool: Evidence from Italian regional Destination Management Organizations. *Tourism Management*, *54*, 321–343. http://doi.org/10.1016/j.tourman.2015.12.008

Meeker, M. (2015). *2015 Internet Trends*. Retrieved from http://www.kpcb.com/internet-trends

Milwood, P., Marchiori, E., & Zach, F. (2013). A Comparison of Social Media Adoption and Use in Different Countries: The Case of the United States and Switzerland. *Journal of Travel & Tourism Marketing*, *30*(1–2), 165–168.

Minazzi, R. (2015). *Social Media Marketing in Tourism and Hospitality*. Cham: Springer International Publishing.

Mistilis, N., Buhalis, D., & Gretzel, U. (2014). Future eDestination Marketing: Perspective of an Australian Tourism Stakeholder Network. *Journal of Travel Research*, *53*(6), 778–790.

http://doi.org/10.1177/0047287514522874

Newman, D. (2014). The Role Of Paid, Owned And Earned Media In Your Marketing Strategy. Retrieved from http://www.forbes.com/sites/danielnewman/2014/12/03/the-role-of-paid-owned-and-earned-media-in-your-marketing-strategy/

OECD. (2007). *Participative Web and User-Created Content: Web 2.0, Wikis and Social Networking*.

PayScale. (2016). PayScale. Retrieved July 20, 2016, from http://www.payscale.com

Peters, K., Chen, Y., Kaplan, A. M., Ognibeni, B., & Pauwels, K. (2013). Social Media Metrics - A Framework and Guidelines for Managing Social media. *Journal of Interactive Marketing*, *27*(4), 281–298.

Phocuswright. (2014). *Social Media In Travel: Mayhem, Myths, Mobile & Money*.

Pike, S., & Page, S. J. (2014). Destination Marketing Organizations and destination marketing: A narrative analysis of the literature. *Tourism Management*, *41*, 202–227.

Pinterest. (2016). Reach 100 million interested people. Retrieved July 24, 2016, from business.pinterest.com/en/blog/reach-100-million-interested-people

Pourfakhimi, S., & Ying, T. (2015). The Evolution of eTourism Research: A Case of ENTER Conference. In I. Tussyadiah & A. Inversini (Eds.), *Information and Communication Technologies in Tourism 2015* (pp. 859–871). Cham: Springer.

Tirunillai, S., & Gerard, J. T. (2012). Does Chatter Really Matter? Dynamics of User-generated Content and Stock Performance. *Marketing Science*, *31*(2), 198–215.

Twitter. (2016). What's Happening. Retrieved July 24, 2016, from about.twitter.com/company

Waters, R. D., Burke, K. A., Jackson, Z. H., & Buning, J. D. (2011). Using stewardship to cultivate fandom online: Comparing how National Football League teams use their web sites and Facebook to engage their fans. *Journal of Sport Communication*, *4*(2), 163–177.

We Are Social. (2015). *DIGITAL, SOCIAL & MOBILE IN 2015*. Retrieved from slideshare.net/wearesocialsg/digital-social-mobile-in-2015

Weinberg, B. D., & Pehlivan, E. (2011). Social spending: Managing the social media mix. *Business Horizons*, *54*(3), 275–282. http://doi.org/10.1016/j.bushor.2011.01.008

Westbrook, R. A. (1987). Product/consumption-based affective responses and postpurchase processes. *Journal of Marketing Research*, *24*(3), 258–270.

Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism Management*, *31*(2), 179–188.

Yang, X., & Wang, D. (2015). The Exploration of Social Media Marketing Strategies of Destination Marketing Organizations in China. *Journal of China Tourism Research*, *11*(2), 166–185. http://doi.org/10.1080/19388160.2015.1017071

YouTube. (2016). Statistics. Retrieved July 24, 2016, from https://www.youtube.com/yt/press/statistics.html

Zeng, B., & Gerritsen, R. (2014). What do we know about social media in tourism? A review. *Tourism Management Perspectives*, *10*, 27–36.