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**译文题目： Will firm's marketing efforts on owned social media payoff?**

**A quasiexperimentalanalysis of tourism products**

**公司的营销努力将会赢得社交媒体的回报吗?一个准实验分析旅游产品**

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Will firm's marketing efforts on owned social media payoff? A quasi- experimental analysis of tourism products

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**Abstract:** A growing number of travel agencies use social media to promote their services and reach target customers de- spite some doubt regarding the effectiveness of these tools. Nevertheless, most prior studies adopt a customer- centric perspective to explore the usefulness of earned social media run by third parties. Few have examined a firm's active role in online social interactions. This paper distinguishes owned media from earned media by site ownerships and communication paths, and examines a firm's marketing efforts on its owned Facebook brand page. Working with a leading travel agency, we collected a matched sample of products with Facebook marketing (treatment group) and those without Facebook marketing (control group). Using a quasi-experimental design and difference-in-difference estimation, we evaluate the effect of a firm's efforts on Facebook marketing campaigns after controlling time-fixed selection bias and common time-series heterogeneity. The results show that Facebook campaign activities have a positive impact on sales of tourism products. Furthermore, based on the cognitive fit theory, sales are found to increase when a travel agency promotes tourism products that are highly structured, medium-priced, or medium-length, or that require more tourist involvement. Such effects are further examined across different quantiles of sales and in different time spans to see when product moderations are more prominent. The empirical findings facilitate decision-making of e-commerce managers in the tourism industry not only by justifying the effectiveness as well as budget allocation of owned social media marketing, but also by providing a rudimentary guidance on the product selection in Facebook marketing campaigns.

1.Introduction

Due to social media's great popularity among consumers, it has be- come a high corporate priority. However, there is a significant degree of uncertainty among managers with respect to allocating efforts and budgets to social media [[61]](#_bookmark27). According to the Social Media Marketing Industry Report in 2013, 97% of marketers indicate that they participate in social media marketing, but only approximately one in four marketers claim that they are able to measure the return from their social media activities. Additionally, regarding the effectiveness of Facebook marketing, 37% of marketers agree that their Facebook efforts are effective, whereas the remainder is uncertain or has opposite opinions [[70]](#_bookmark36).

The same phenomenon is found in the tourism industry. Social media has dramatically changed how consumers plan and buy travel- related products [[15]](#_bookmark27). A study conducted by the Opinion Research Corporation indicates that 82% of respondents expressed that they had checked online reviews, blogs, and other online customer feedback be- fore purchasing a travel-related product [[32]](#_bookmark32). Research from Funsherpa Company illustrates the inﬂuence of social media on U.S. travelers, with 52% of travelers having changed their plans after researching their trip on social media sites [[10]](#_bookmark27). This culture change presses tourism businesses to incorporate social media to enrich their multichannel marketing strategies, and many are among the most active companies in the commercial use of social media [[26]](#_bookmark27). The proliferation of social media use among tourism companies has raised questions as to how and what their social media efforts should be made, as well as the effect of their social media efforts, particularly with regard to the effect on sales. These questions require analytical and empirical answers from firms' perspectives.

However, a significant portion of the associated research is focused more on the customer than on the firm [[74]](#_bookmark40). Typical customer-centric studies are related to online product reviews in the form of user-gener- ated content (UGC) or WOM. Most of these studies are mainly devel- oped in the context of earned social media where customers are freely to create UGC. In this research, we are more interested in exploring tourism firms' efforts on social media, and thus we focus on owned social media. Specifically, we adopt the following typology to distinguish owned media from earned media – who owns the site [[23,31,54]](#_bookmark27) and who initiates the communication [[36]](#_bookmark38). Owned media refers to a firm-ini- tiated communication through its own site, such as Facebook fan page while earned media describes a customer-initiated communication through a third-party site, such as blog posts, conversations in online fo- rums and communities, and online ratings and reviews [[72]](#_bookmark38). We note that some other typologies are used to classify marketing-related social media activities (e.g., [[5,89]](#_bookmark20)), and we choose this typology because it highlights firms' roles in strategic decision making [[38]](#_bookmark41). Although building owned social media may require more commitment of time and re- sources, it is recognized by the current industry as the new battleground for differentiation and innovation [[13]](#_bookmark27).

Running an owned social media channel raises many managerial is- sues. For example, in our interview with a leading tourism agency in Taiwan, managers noted problems encountered in developing effective social media marketing campaigns in their Facebook brand page. First, the e-commerce managers lack direct evidence to justify the investments, which significantly affects the budget allocation of the e- commerce expense. Furthermore, without proper performance evaluations, the brand page administrator can only make ad hoc decisions on product selections for marketing campaigns and loses the chance to fully utilize social medial marketing in their owned channel. However, the impact of companies' owned social media on direct marketing out- comes (e.g., product sales) has received disproportionately less attention in the literature. Accordingly, due to the aggregate level of data, most extant studies are unable to uncover critical product-level differences that are essential for a firm's marketing strategy [[64]](#_bookmark28). Although some research has attempted to evaluate the influence of product characteristics, the focus is mostly customer-centric in earned social media. Less of a focus is on a firm's efforts (e.g., marketer-generated content) in owned social media[[39]](#_bookmark42).

To fill the research gap, we first examine the effectiveness of a firm's marketing campaigns targeted to all customers in an owned social media. In addition, we explore how firms should operate their social media campaigns from the idea of the ‘fit’ between a tourism product and social media owned marketing. Given the premise that the suitability of marketing channels depends to a large extent on the characteristics of the products being marketed [[62]](#_bookmark27), it is necessary to explicitly consider product characteristics when evaluating the impact of the social media marketing. Based on our field research,4 tourists usually evaluate tourism products with respect to four attributes, including structure of tourism (package tours versus independent tours), tourist involvement (stimulated versus tranquil journey), price, and length. Many tourism agencies (at least in east Asia) choose the combination of these attributes to position their products in the target market. In this study, we employ the theoretical perspective of the cognitive fit theory to explore how these four product dimensions affect the effectiveness of social media marketing via a firm's owned media.

Specifically, our research questions are as follows:

(1) What are the impacts of owned social media marketing on the sales of tourism products?

(2) How do these impacts vary across different product dimensions?

We collaborate with a leading tourism agency in Taiwan that mainly relies on Facebook fan page to perform owned social media marketing. targeted to all customers for product promotions. To examine the effect of marketing campaigns via Facebook, we use the difference-in-difference (DID) approach with a quasi-experimental research design [[87]](#_bookmark52). In particular, we collect sales data for two distinct groups of products:(1) a “treatment” group consisting of products that have run Facebook marketing campaigns and (2) a “control” group consisting of products that do not run any Facebook campaign. This estimation approach ad- dresses issues of time-fixed self-selection bias and common time-series heterogeneity across products [[90]](#_bookmark52). In other words, we are able to con- trol for factors other than Facebook campaigns which also lead to in- creases in sales and compromise the treatment effect, such as preferences for high-sales products on social media (time-fixed group difference) and tourism seasonality (common time-series heterogeneity). While the method is powerful and intuitive, its validity largely re- lies on the common trend assumption. We provide a careful discussion on caveats of the DID estimation in the [Discussions section](#_bookmark19), and examine our ﬁndings with cautions.

Using the DID estimation, our results indicate a positive effect of Facebook campaigns on purchases of travel products. We also take one step further to explore the types of products that are more favorable in a social media platform such as Facebook. The analysis indicates that trips with high structure, high involvement, medium prices, and medium length are associated with greater sales after Facebook marketing. In addition to testing the moderations of product characteristics, we explore whether such effects vary across sales distributions and change over time spans. Our results indicate that such conditional effects on product features are more prominent for products with the low quantile of sales. In addition, the impact of Facebook campaigns on sales appears in the ﬁrst month, and shows a decreasing trend over the following two months.

Our study contributes to the literature as well as the practice of social media marketing. To the extent of our knowledge, our study is the ﬁrst to empirically evaluate a firm's efforts on Facebook marketing at the product level in the tourism industry. While a stream of research focuses on the inﬂuences of social media, most studies are based on earned media and discuss how customer reviews impact customer behavior. Few have addressed the ﬁrm's perspective and explored a firm's marketing efforts in owned social media. Our study contributes to the literature by empirically examining the effectiveness of firms' market- ing campaigns on Facebook brand pages. Furthermore, among those few that have examined the ﬁrm's perspective (e.g., [[21,89]](#_bookmark27)), they either look at the performance at the customer level (e.g., customer's intention to purchase) or the aggregate sales at the ﬁrm level (e.g., stock market return). We complement to the literature by examining sales at the product level and exploring the products that ﬁrms should target in Facebook marketing. For practical implications, the empirical results of this study facilitate the decision making of e-commerce managers in the tourism industry. While social media is one of the smart tourism applications that enable opportunities for business operation revamping , firms have doubts on the effectiveness of such investments and look for tactical steps to manage the new operations. Our research findings justify the effectiveness of owned social media marketing and provide an empirical support for the use of owned social media as a sales and marketing channel. Our exploratory analysis of the characteristics of travel products provides rudimentary guidance on the design of marketing campaigns and helps e-commerce managers to allocate re- sources in a social media marketing campaign.

2.Literature review

2.1Social media from the ﬁrm's perspective: owned media strategy

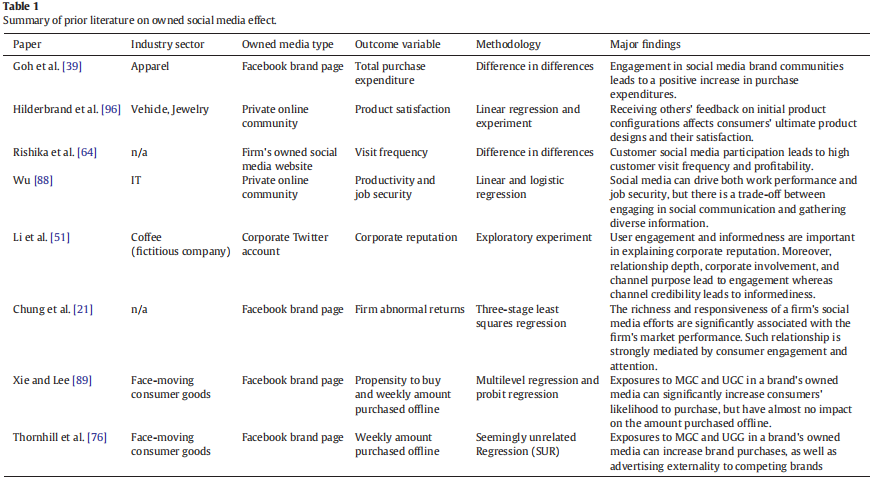
Literature that examines social media effects can be categorized by two perspectives: customer-centric and firm-centric. Typical results in customer-centric research are as follows: consumers would like to consult product reviews or WOM before product release [[53]](#_bookmark27), from reputable reviewers [[34]](#_bookmark36), featured with actual text rather than the summary statistics [[19,37]](#_bookmark27), posted in a large volume and valence[[29,53,59]](#_bookmark29), and focusing on the purchase of niche and less popular products [[25]](#_bookmark27). These studies are developed in the context of earned social media where customers are freely to create user-generated content. In order to explore a ﬁrm's social media marketing, we focus on owned social media which allows companies to create their own channels for delivering content to audiences directly, their own communities for building connections with customers, and a context that goes beyond a purely transactional relationship to engage customers through loyalty and re- ward programs.

As most prior customer-centric studies are in earned social media, few have examined owned social media published by ﬁrms. Research is now emerging to help ﬁrms understand if their expenditure on this speciﬁc media channel can receive payoff. [Table 1](#_bookmark1) provides a summary of existing literature on owned social media marketing. However, the current literature still lags in the following aspects that motivate our study.

First, prior studies that examine the effectiveness of owned social media can be classified by the outcome effects: influences on customer purchasing behavior, on overall firms' ﬁnancial performance (e.g., a ﬁrm's stock price), and on direct marketing outcomes (e.g., retail sales of products). Most of these studies focus on the customer purchasing behavior, and some look at a firm's overall ﬁnancial performance. For example, Rishikaeal. [[64]](#_bookmark28)examine the effect of customers' participation in a ﬁrm's owned social media efforts on customer visit frequency and proﬁtability. Goh et al. [[39]](#_bookmark42) study the relative impact of UGC and marketer-generated content (MGC) on consumers' purchase behavior in a ﬁrm's owned social media. Chung et al. [[21]](#_bookmark27) explore how consumer behavior (consumer engagement and attention) inﬂuences a ﬁrm's stock market returns in a ﬁrm's owned social media. Xie and Lee [[89]](#_bookmark52) and Thornhill et al. [[76]](#_bookmark44) conduct a series of studies to explore user generated and marketer-generated content in a ﬁrm's owned social media, and examine the relative impacts of the two types of information on consumer purchase intention, actual ofﬂine purchase behavior, and externalities to competing brands. However, rarely focus on direct marketing outcomes (e.g., product sales). Without considering direct marketing consequences (e.g., product sales), firms lose the opportunities to test the appeal of their products or services. Neither can they tell which marketing campaigns can reach customers more effectively, nor do they provide customers with compelling content that can increases sales. Adding to prior literature, our study focuses on the association be- tween companies' owned social media marketing campaigns and product sales, uncovering critical product-level differences in sales that are essential for a firm's marketing strategy.

Second, prior research has not extensively studied the role of product characteristics in owned social media activities. Although some research has attempted to evaluate the influence of product characteristics, the focus is mostly on customers, rather on ﬁrms. For example, Senecal and Nantel [[67]](#_bookmark33) suggest that online recommendations for experience products are more influential to consumers' choices than search products. Zhu and Zhang [[95]](#_bookmark52) indicate that online consumer re- views result in higher incremental sales for less popular products. Dewan and Ramaprasad [[25]](#_bookmark27) show that song buzz is negatively associated with sales, especially for niche music and less popular songs within albums. Although the results of these customer-centric studies in earned media may give a hint for marketers to manage their content in owned media, the estimated effects may be biased. The contribution in UGC is voluntary, and no attempt is made to create a representative sample of the population [[55]](#_bookmark27). Thus, product preference may be biased by who contributes the content and factors causing people to contribute content (e.g., different motivations). In addition, UGC in earned media only capture the opinions of users who write a review. These reviews usually focus on extreme product experience (good or bad)[[42]](#_bookmark48). Overlooking silent users' opinions and “average” product reviews pre- vent companies to get a complete picture of product effects.

In contrast to the afore-mentioned studies that are related to customer-centric earned media, our studies provides firm-centric product analysis by examining the moderating role of product characteristics in the relationship between product sales and a firm's owned social media marketing. In the interview with four executives from leading tourism agencies in Taiwan, they discuss how they use product characteristics to classify their products in the target market. Thus, the examination of those product characteristics can help managers locate proper products for marketing campaigns. Especially, firms can easily manipulate such marketing campaigns on a firm's owned social media. Accordingly, the finding can contribute to the literature by addressing the product analysis from the firm's perspective.

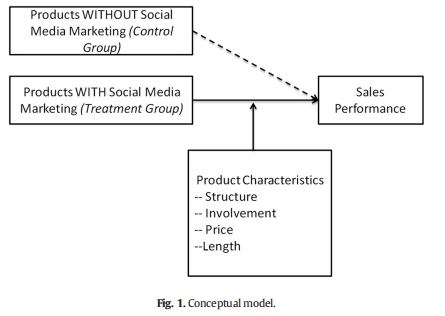


**2.2 Tourism products through owned social media**

Corporate owned social media is widely applied in smart tourism practices to maintain a tourist's emotional connection to a product [[83]](#_bookmark51). Marketers can use owned social media as a source of customer voice and market information to learn about their experiences about the tourism products, identify new tourism destinations, or receive early warnings regarding certain tourism products [[73]](#_bookmark39). Gaining in- sights from customers can also help marketers engage customers to co-create tourism products or to simply improve existing ones (e.g., using questions, polls, co-creation). For example, Gettysburg National Military Park uses its Facebook brand page to connect followers to some of the battleﬁeld's lesser-known sites. Moreover, the park launched the “52 Footsteps” Facebook Challenge in their brand page, which outlines a weekly story that can lead visitors to speciﬁc spots on the battleﬁeld. Upon ﬁnding a spot, visitors are encouraged to take a photo and upload it to the park's Facebook brand page [[66]](#_bookmark31). The campaign was a success mainly because it helped establish a more powerful connection with the park and initiate communication with visitors.

STA Travel, the world's largest travel company for young adults, used their owned social media sites to enable customers to help one another solve product-related problems. The company launched an “Unexpected Europe” campaign by sending the company's most socially active customers under 30 years old on a six-city tour in Europe. These customers act as an STA Travel insider, providing unique travel tips and tour guidance and sharing their experience on STA Travel's YouTube channel, blog, and the insider's websites and social channels [[63]](#_bookmark27). Finnair's “Quality Hunters” campaign provides an example for product co-creation. In this campaign, seven people were selected as Quality Hunters whose mission was to travel around the world for 48 days and share their ideas and insights on how Finnair and Helsinki Airport could improve the flight and airport experience through the Finnair blog and Twitter. Visitors to the Quality Hunters website and its owned social media sites could set tasks for them, make comments and share their ideas, while passengers at Helsinki Airport could drop by at the Hunter's Lounge to exchange their opinions. This campaign collected N250 ideas and was recognized as one of the most innovative crowdsourcing initiatives [[93]](#_bookmark52).

The above-mentioned examples show that travel providers conduct various owned social media activities to market products. Tourism is one industry with a very close relationship with the new ICTs and is among the most “socially devoted” industries [[15,26]](#_bookmark27). However, research on social media in tourism is still in its infancy [[94]](#_bookmark52). Among the few studies that examine the effects of social media in tourism, their focus is on the effects of UGC on consumers (e.g.,[[12,78,80,97]](#_bookmark27)), shedding little light on firms' strategy in owned social media. Some researchers have acknowledged the need for more firm-centric research in tourism (e.g., [[17,](#_bookmark27)[26,45]](#_bookmark27)). They find firms' social media initiatives are positively related with consumer engagement, emotional appeal, brand attitude, and corporate reputation. However, to our knowledge, there is no study that directly quantifying the effects of a tourism firm's social media campaigns in relation to number of purchases (sales) and targeted products. Complementing to the literature, our study takes into account the moderation effects of various tourism product attributes on the relationship between product sales and a firm's owned social media campaigns. Thus, the results of our study are expected to have significant implications for tourism firms on social media management.



**3.Hypothesis development**

Our conceptual model is shown in [Fig.1](#_bookmark2). We aim to explore the effect of companies' owned social media marketing on sales performance. Specifically, we study the impact of social media marketing campaigns conducted in the tourism firm's Facebook brand page. As firms make marketing campaigns via their own Facebook brand pages, product se- lection is one way that firms can control/manipulate information pro- vided to fit with consumers' information needs. We thus examine the moderating effects of various product characteristics. Cognitive fit theory [[16,81]](#_bookmark27)suggests when customers face a decision-making problem,

e.g. buying a product, the performances depend on the fit between how information is presented/provided, and consumers' information needs by the nature of a problem. Prior literatures (e.g.,[[44,79,81]](#_bookmark49)) have applied the theory to explain the fit between forms of information presentation (e.g., tables and graphs) and consumers' information needs for different types of tasks (e.g., get specific price information and evaluate different models of computers). In this study, we extend the theory to examine the relationship between product characteristics and the use of a channel. For one thing, product characteristics (e.g., experience and search goods) are associated different consumers' information needs (e.g., touch and feel versus get prices and product features), which can be fulfilled via information provided by different channels (e.g., physical and online stores). For the other, channels may attract customers with different motives, such as information seeking/ planning and economic incentive (e.g., [[47,65]](#_bookmark27)). Thus, if channels can provide products with characteristics that fit with customers' motives using the channels, we would expect effectiveness of such channels.

Following the logic, we examine how the four tour characteristics fit with consumers' information needs in a firm's owned Facebook brand page. According to the interviews with the executives from leading tourism agencies in Taiwan, the four tour characteristics: tourism structure, tourist involvement, trip price, and trip length are how they position their products in a target market, and hence are variables of interest. The four product characteristics can be divided as: (1) characteristics that drive consumers' information needs, and in turn fit with in- formation provided by a firm's owed Facebook brand page (2) characteristics that fit with consumers' motives using a firm's owned Facebook brand page. Trip price and length are fall into the first classification. Price and length are usually associated with consumers' information seeking and planning efforts, which can be full filled via information capability of a firm's owned social media. Since these two characteristics are associated with channel capabilities, we call them as channel-oriented product characteristics. Tourism literature has highlighted their explanatory power of the tourist segmentation and of market demand (e.g., [[1,2,6,14,30,57,60]](#_bookmark21)). Tourism structure and tourist involvement are then in the second classiﬁcation. Consumers who use Facebook on tour search are prone to detailed information. In addition, those active users of Facebook have preferences on interactive and involved travel experiences [[98]](#_bookmark52). Thus, a firm should provide structured tours with de- tailed information, and tours with adventure activities to fit with consumers' motives using Facebook brand page. Because the two characteristics are related to consumers' motives using Facebook brand page, we call them as consumer-oriented product characteristics. These characteristics are widely used in the tourism literature as the basis of classifying tourists and understanding tourist behavior (e.g., [[8,22,27,](#_bookmark22)[28,35,43,48,91]](#_bookmark22)).

**3.1Effectiveness of owned social media marketing**

Traditional e-commerce is enabled by Web 1.0, featuring one-way communication. Social commerce is enabled by Web 2.0, a platform that allows bidirectional communication, informing consumers better than ever before [[92]](#_bookmark52). According to Stephen and Toubia [[71]](#_bookmark37), social media allows people to actively participate in the marketing and selling of products and services in online communities. Moreover, Kim and Hawamdeh[[50]](#_bookmark27) state that social media help companies improve their marketing strategies and increase website trafﬁc and sales. Dell, for ex- ample, states that its use of Twitter has generated $1 million in incre- mental revenue resulting from sales alerts[[49]](#_bookmark27). The Royal Opera House in London makes 30% of its sales through its Facebook fan page [[3]](#_bookmark23). Old Spice, an American brand of male grooming products, success- fully increases its sales through posting on YouTube with millions of downloads, humorous tweets on Twitter, and the creation of a massively popular fan page on Facebook [[11]](#_bookmark27).

For the tourism industry, owned social media allows a firm to con- duct various marketing campaigns to trigger sales. For instance, in the context of Facebook, marketers can use spellbinding landscape pictures, beautiful words, sweet quotes, questions or contests to engage customers in their brand page. They can also post special offers and links to drive impulse purchase. Literature has found that successful marketing campaigns in social media can attract much more visitors to the company's website because the information delivered through social media has far greater levels of range, richness, reliability, and timeliness than through conventional means [[40]](#_bookmark45). Tourism has been recognized as an ‘information-intensive industry’ [[85]](#_bookmark52). Information richness is the key to engage customers, build loyalty, and advocacy, which in turn strengthens reputation and drives revenue. In addition, because of in- formation asymmetry, information delivered through a ﬁrm's owned channel can better address consumers' needs and reducing uncertainties than through other channels [[58]](#_bookmark27). When uncertainties reduced, consumers will be more likely to purchase a product that fits their needs. Therefore, we expect that tourism agencies can increase the sales of tourism products through creating social media campaigns in their owned social media channel. Our hypothesis is as follows:

H1. Tourism products with marketing campaigns in a ﬁrm's owned social media are likely to achieve better sales performance than those are not.

* 1. **Effect of social media marketing on tourism products**

**3.2.1 Structure of tourism**

The structure of tourism indicates the level of planning that is per- formed by travel agencies. Highly structured travel refers to package tours that are to a large extent arranged by travel agencies. This type of tour generally contains transportation, food, accommodation, and entertainment, which are advertised and sold together at an inclusive price. In contrast, independent travel is less structured because it does not include a set of scheduled sightseeing activities, and hence, tourists have more flexibility in making their own travel arrangements.

Past literature has indicated that purchasers of package tours are likely to be elderly, be intent on visiting several destinations, and be first-time visitors to the destination[[68]](#_bookmark34). These travelers usually request more detailed vacation information for decision-making and spend more time planning [[69]](#_bookmark35). As customers research products, they usually take advantage of two information sources. One is from brand owner's product newsfeeds, and the other is from peer consumers' word-of- mouth[[89]](#_bookmark52). Studies imply that reliance on either information source is suboptimal [[39]](#_bookmark42). Marketer's content offers informative messages that can increase customers' knowledge of product features and beneﬁts while peer-generated content describes usage experience from a consumer's perspective. A ﬁrm's owned social media offers customers a right combination of both information sources. In the context of Facebook brand page, for instance, a marketer can design campaigns to encourage peer discussions and directly communicate in the “comment” entries to address speciﬁc customers. Such UGC under MGC model enhances product learning and awareness. Because people who choose package tours are more active in seeking information than those who choose independent travel, we can expect that these travelers are more likely to rely on owned social media for planning purposes. Thus, social media marketing can be more effective while targeting this segment. Our hypothesis is as follows:

H2. Incorporating social media into the marketing of package tours is more likely to increase the sales than incorporating it into the marketing of independent travel.

* + 1. **Involvement of tourists**

A high-involvement tourist refers to an individual's need for active stimulation from his/her surrounding vacation environment. Their de- sires can be satistied by participating in adventure activities, water sports (e.g., sailing, scuba diving, whitewater rafting) or winter activities (e.g., skiing, snowboarding). In contrast, a low-involvement tourist prefers a more tranquil journey that involves little interaction with the local environment. These tourists merely want to relax and escape to a vacation destination. They enjoy the change of places and want to take it easy during their stay [[28]](#_bookmark28).

One of the main characteristics of social media is that it gathers engaged and active participants of a given company [[49]](#_bookmark27). Additionally, those who primarily use social media to share their trips appear to want a deeper, more interactive, and more authentic travel experience (Lo et al., 2011). To fulfill those customers' preferences, Bartram [[7]](#_bookmark24)has stated that increased exposure of adventure activities in the media may indeed stimulate involvement in an activity. Therefore, using social media to promote tourism products that include more interactive activities may attract active users and increase their intention to engage in these activities and to subsequently purchase the products. Thus, our hypothesis is as follows:

H3. Incorporating social media into marketing products that require greater tourist involvement is more likely to increase sales than marketing products that require less tourist involvement.

* + 1. **Price of products**

The cost of tourism to visitors includes the cost of transportation to and from the destination and the cost of ground content, such as accommodation, tour services, food and beverages, and entertainment[[30]](#_bookmark30). When the price of a product is relatively high, customers tend to search for more information[[9]](#_bookmark27). Because product price is a stimulus for customer thinking, high-priced products lead customers to devote more thought to their purchase intentions [[86]](#_bookmark52). Additionally, product price is related to perceived risk[[84]](#_bookmark52). That is, higher risk is involved when selecting products with higher prices. According to the ﬁndings of Wang and Chang [[84]](#_bookmark52), if a product's price is relatively high, the information and recommendations provided by strong-tie contacts from Facebook have a more significant effect on purchase intentions than the information and recommendations provided by weak-tie sources from Facebook. However, this effect is not found for low-priced products. Accordingly, we expect that interpersonal influence and communication on social media are more important when consumers consider buying relatively high-priced tourism products. Thus, we develop the following hypothesis:

H4. Incorporating social media into the marketing of higher-priced tour- ism products is more likely to increase sales than in the marketing of lower-priced tourism products.

* + 1. **Length of tour**

Length of stay is one of the key elements in a tourist's decision-making process, and promotional campaigns must therefore be adjusted to the tourist's decisions with regard to the length of time spent at destinations [[56]](#_bookmark27). In general, the risk of travel increases with the length of stay. Consequently, the anticipation of a longer trip stimulates more information searching [[33]](#_bookmark35). According to Tsiotsou and Ratten [[77]](#_bookmark46), Web 2.0 technologies can foster the sharing of information and lower product uncertainty. Additionally, Litvinetal. [[52]](#_bookmark27)described online interpersonal inﬂuence or eWOM as a potentially cost-effective means of marketing tourism, especially for high-risk tourism products. Therefore, we believe that social media supported by Web 2.0 technologies can be an effective tool to reduce the perceived risk of a longer trip and thus to promote better marketing effects. Our hypothesis is as follows:

H5. Incorporating social media into the marketing of longer trips is more likely to increase sales than in the marketing of shorter trips.

**4. Data**

To explore the impact of social media on travel sales, we collect our empirical data from the case company: Company A. Company A was founded in 1978 and is one of the most well-known travel agencies in Taiwan. Company A has three subsidiary companies, one of which is responsible for managing e-commerce and online marketing. The company sells various tourism products on the ofﬁcial website, including domestic travel, international travel, personal travel, corporate travel, and inbound tourism. When business would most likely beneﬁt from the advantages of Web 2.0 applications, Company A began to exploit them for interactions with consumers. Company A built its own Facebook brand page as a marketing platform to interact with its consumers in September 2009, and the page currently has N 250,000 Facebook fans.

While various social interactions can be performed on a social media platform [[99,100]](#_bookmark52), we focus on Company A's Facebook marketing campaigns that are directly related to product sales. On the brand page, the company posts fascinating landscape pictures and inspirational quotes regarding the attractions, as well as special offers about tours to engage customers. Most importantly, links to sales pages of related products are usually included in those posts. In addition, we focus on products of inter- national travels, as most travelers rely on travel agencies (like Company A) for traveling abroad. According to the ofﬁcial tourism bureau, 85% of travelers in Taiwan seek assistance from travel agencies for international tours, whereas b 5% would utilize travel agencies for domestic trips [[75]](#_bookmark43). We obtain data on international trips from February 1, 2012, to November 30, 2013. The dataset contains both trips with and without Facebook campaigns as the treatment and control groups. Details comparing the two groups are described in the section of model estimation.

We use travel sales as the performance metric. The case company indicates that the price of each product changes over time, and hence, the company uses the number of customers/orders to evaluate annual sales performance. Accordingly, we use the number of customers to measure travel sales in the study. In addition, we examine whether the effect of Facebook campaigns varies by product characteristics, including the structure of tourism, the involvement of tourists, the price of products, and the length of tour. [Table 2](#_bookmark7) provides summary statistics and detailed deﬁnitions of travel sales, comparison groups of products for estimation, the four production characteristics, and additional variables controlling for product variations other than the inﬂuence of Facebook campaigns.

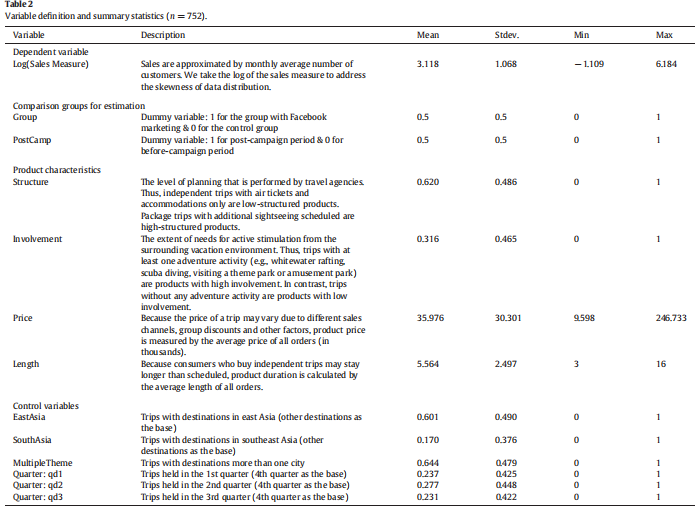
**5. Model estimation and results**

* 1. **Difference-in-difference estimation**

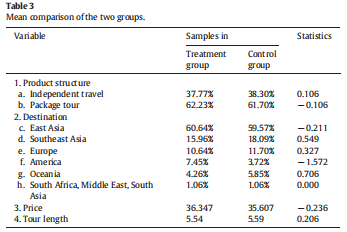
We employ a DID approach to estimate the impact of Facebook campaign activities on travel sales. We adopt the DID method because it controls for time-fixed self-selection (e.g., products with higher sales are more likely to be chosen for Facebook campaigns) as well as com- mon time-series heterogeneity (e.g., seasonality that affect travel sales over time in a manner common across travel products). According to DID, we first compares trips with the aid of Facebook campaigns (treatment group) to a matched sample of trips without Facebook marketing (control group). The treatment group is exposed to Facebook marketing in the second period but not in the first period. The control group is not exposed to the treatment during either period. This method first calculates the average gain in sales of the treatment (control) group before and after the event of Facebook campaigns to remove any time-fixed heterogeneity resulting in different usages of Facebook activities. The second differencing is applied on the average gains between the treatment and the control group to eliminate other factors leading to common increases in sales over time[[46]](#_bookmark27).

We first identify international tours that have been marketed using the Facebook campaigns from February 1, 2012, to November 30, 2013. Because we want to inspect the changes in the sales of tourism products before and after Facebook campaigns, we exclude products that might have few or no purchases before or after Facebook campaigns (i.e., departure dates of trips are just a few days before the marketing campaigns are posted; travel products would be removed from the online store soon after the campaigns). For each Facebook campaign, we focus on sales within three months before/after a campaign [[90]](#_bookmark52). In other words, sales before a Facebook campaign are measured by those orders within three months before the campaign. Sales after a Facebook campaign are calculated by those orders within three months after the campaign. Because sales durations of products vary, some have one month after a Facebook campaign, while others have two months after a campaign. We thus measure performance before and after a Facebook campaign by average monthly sales. Consistent with the ﬁrm's custom, average monthly sales are approximated by the average monthly number of customers (see [Section 4](#_bookmark6) for details). Finally, some products are marketed in more than one campaign. For those products, we calculate sales in the three months before and after the ﬁrst campaign. The subsequent campaign whose duration exceeds four months from the ﬁrst one would be viewed as a separate event. Overall, total (monthly average) sales of all products are 28,774, and that for the pre-camp period and post-camp period are 13,343 and 15,431 respectively.

Based on the selection criteria above, we end up with 188 travel products with the aid of Facebook campaigns. For each product with a Facebook campaign (treatment group), we match it with a product without a Facebook campaign (control group). When choosing the control group, we select products that are similar to the matched samples in the treatment group. By doing so, we are able to control for factors other than Facebook campaigns that cause changes in sales between the treatment and the control groups. We match products by sales duration, geography of destination, and product structure (i.e., independent or packaged travels). For each product in the treatment group, we first find a set of products with similar sales durations. Among those products, we further identify the product with a similar geography of destination and/or product structure as the paired sample in the control group. When there are more than one candidates, we consult the company to pick the most similar product.6 Sales duration controls for seasonality and geography of destination, and product structure ensures consistency of product content. Consistent with the treatment group, we have 188 samples in the control group.



[Table 3](#_bookmark9) presents the mean comparison of the treatment group and the control group before the event of Facebook marketing. We measure the means of products by product structure, geography of destination, price, and length. Accordingly, we examine those means by a t-test for continuous numbers and a test for proportions under the null hypothesis that the means are equal in the two groups. The results suggest no significant difference between the two groups. In other words, we show our due diligence by having a pair of similar samples to fulfill the common trend assumption as much as we could. Aside from sample matching, the critical assumption is carefully examined in the [Discussions section](#_bookmark19) to validate our ﬁndings and interpret our results with limitations specified.

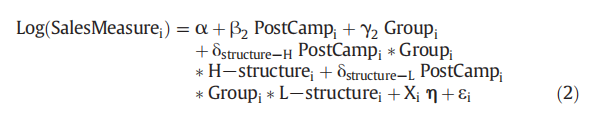


Using the DID method, we estimate the effect of Facebook marketing on travel sales by the following model speciﬁcation:



The variable of *sales measure* represents the monthly average sales of a product approximated by the average number of customers. *Group* and post Camp are the indicator variables to represent control/treatment groups and before/after-campaign stages, respectively. The interaction term of post Camp and group captures the effects between the differences in groups after the campaign and the differences in groups before the campaign. This difference-in-difference estimation allows us to control for time-series heterogeneity and self-selection bias and measure the effects of social media marketing on sales more accurately. We also include the geography of the destination (i.e., east Asia, south Asia and others), number of destinations (i.e., a multiple-theme tour is arranged to more than one city), and seasonality (i.e., a year is in four quarters: qd1–qd4) as the control variables to reﬂect other factors that may lead to variations in sales between products with Facebook marketing and those without it. Xi represents these control variables.

In addition to the average effect of Facebook marketing on sales, we are interested in whether the effect varies by product characteristics. To incorporate effects of product characteristics in DID estimation, we follow the analysis approach by Campbell and Frei[[18]](#_bookmark27)and Chuang et al. [[20]](#_bookmark27) to divide one DID estimator (δ) into two parts: the part of DID for a high level of a product characteristic (δH), and the part of DID for a low level of a product characteristic (δL). For example, trips can be classiﬁed by product structure as those with basic planning (i.e., independent trips with ﬂight tickets and accommodations only) and those with additional sightseeing activities arranged. The former are defined as products with low structure (n = 286), and the latter are products with high structure (n = 466). Accordingly, to examine whether the effect of Facebook marketing varies by level of product structure, we use the model below for estimation:



公司的营销努力将会赢得的社交媒体回报吗?一个准实验分析旅游产品  
Hsin-Lu Chang Yen-Chun Chou,Dai-Yu Wu,Sou-Chein Wu 3  
国立政治大学,管理信息系统,116年台北,台湾

**摘要：**越来越多的旅行社使用社交媒体来推销他们的服务,达到目标客户尽管一些疑问关于这些工具的有效性。然而,之前的研究大部分采用以客户为中心角度探讨了社交媒体的有效性由第三方。很少有研究了公司在在线社交互动的积极作用。本文部分分所有媒体从媒体获得网站所有权和通信路径,检查公司的营销努力在其拥有Facebook品牌页面。与领先的旅行社合作,我们收集了与Facebook的产品匹配的样本市场营销(治疗组)和那些没有Facebook营销(对照组)。采用准实验设计和法估计,我们评估的影响一个公司的努力在Facebook上的营销活动在控制会期时间选择性偏差和普通时间序列异质性。结果表明,Facebook竞选活动产生积极影响旅游产品的销售。此外,基于认知符合理论,发现销售增加时旅行社促进旅游产品高度结构化,中等价位的,或者中等长度,或者需要更多的游客参与。这种效应进一步检查在不同分位数的销售和产品审核时看到所需的时间不同更加突出。实证研究结果促进电商在旅游业的决策不仅被证明的有效性以及预算分配拥有社交媒体营销,也提供一个基本的指导在产品选择上Facebook营销活动。

1. **介绍**

由于社交媒体大受消费者,它已成为高企业优先。然而,有一个很大程度上如此不确定性的经理分配工作和预算社交媒体[61]。据社交媒体营销行业报告,2013年,97% 的市场营销者表明他们参与在社交媒体营销,但只有大约四分之一的营销人员声称他们可以测量从他们的社会回报媒体活动。另外,关于Facebook的有效性营销、37%的市场营销者同意他们的Facebook的努力是有效的,而其余部分是不确定的或相反的意见[70]。

同样的现象在旅游产业中找到。社会媒体已经戏剧性地改变了消费者计划和购买旅游相关产品[15]。一项由民意研究公司表明,82%的受访者表示,他们已经检查在线评论、博客和其他在线客户反馈购买旅游产品[32]。研究来自Funsherpa公司展示了社交媒体对美国游客的影响,52%的旅行者在研究行程后改变了他们的计划社会媒体网站[10]。这种文化改变按旅游业务将社会媒体来丰富他们多样的市场策略,许多是最活跃的企业之一商业使用的社会媒体[26]。社交媒体的扩散使用在旅游公司,如何提出疑问他们的社会媒体应该努力,以及效果的社交媒体的努力,特别是对影响销售。这些问题需要分析和实证的答案公司的观点。

然而,很大一部分相关的研究重点更多的客户比公司[74]。典型的以客户为中心的研究相关的在线产品评论的形式生成内容(UGC)或蠕虫。大多数这些研究主要是发达国家的上下文中获得社交媒体客户自由的地方创建用户原创内容。在这项研究中,我们探索更感兴趣传媒tourismfirms的努力,thuswe关注社会媒体。具体来说,我们采用以下类型区分拥有媒体赢得媒体——谁拥有该网站[54]23日31日和那些提升者沟通[36]。媒体是指firm-initiated拥有沟通通过自己的网站,如Facebook粉丝页面而获得媒体描述customer-initiated沟通通过第三方网站,比如博客文章、谈话在网络论坛上和社区,在线评分和评论[72]。我们注意到一些其他类型用于市场营销的相关社会进行分类媒体活动(例如,[89]),我们选择这类型,因为它强调公司的角色在战略决策[38]。尽管他拥有社会媒体，也许需要承诺的时间和资源,它是被新产生的当前的行业差异化和创新[13]。

运行一个拥有社会媒体频道提出许多管理问题。例如,在我们的采访中一个主要的旅游机构台湾,经理指出问题在发展中有效社交媒体营销活动品牌在他们的Facebook页面。首先,电子商务经理缺乏直接证据来证明投资,这极大地影响了电子商务的预算分配费用。此外,如果没有适当的绩效评估,品牌页面管理员只能临时做决定产品选择营销活动和失去的机会充分利用社会内侧营销在他们拥有的频道。然而,公司拥有社会媒体的影响直接营销的结果(例如,产品销售)已经收到了不成比例的关注更少在文献中。因此,由于数据的总体水平,大多数现存的研究不能揭示关键产品的差异至关重要的公司的营销策略[64]。虽然一些研究试图评估产品特征的影响,重点是主要以获得社交媒体。的重点是一个公司的工作(例如，市场整合内容)拥有社会媒体[39]。

为了填补研究空白,我们首先检查公司的有效性营销活动针对所有客户在一个拥有社会媒体。此外,我们探讨企业应该如何经营他们的社会媒体宣传的旅游产品之间的“健康”的想法和社交媒体的自有市场。考虑到适用性的前提营销渠道在很大程度上取决于特征正在销售的产品[62],有必要明确考虑产品特性在评估社会的影响媒体市场。根据我们的实地研究,游客通常评估旅游产品对四个属性,其中包括结构的旅游(旅游与独立旅游)、旅游参与(刺激与宁静之旅),价格,和长度。许多旅游机构(至少在东亚)选择组合这些属性在目标市场定位产品。在这项研究中,我们采用的理论视角认知健康理论探讨这四个产品维度影响效率社交媒体营销通过一个公司的所有媒体。

具体地说,我们的研究问题如下:  
(1)什么是拥有社会媒体营销的影响旅游产品的销售?  
(2)这些影响是如何不同在不同的产品尺寸?

我们和台湾的领先旅游产业的会议日程主依赖Facebook粉丝页面执行社会媒体市场拥有针对所有客户的产品促销活动。检查效果营销活动通过Facebook,我们使用差异方法与准实验研究设计[87]。特别是,我们收集销售数据对两种不同种类的产品:(1)组成的“待遇”集团产品运行Facebook营销活动和(2)一个“控制”小组组成的产品不运行任何Facebook活动。这种评估方法的地址的问题限期自我选择偏差和常见的时间序列各产品的异质性[90]。换句话说,我们能够控制Facebook活动以外的因素也导致增加在销售和妥协的治疗效果,如偏好高销售产品在社会媒体(会期时间组区别)和旅游季节性(普通时间序列异质性)。虽然是强大的和直观的方法,其有效性在很大程度上依赖在共同趋势的假设。我们提供一个小心讨论事项的估计在讨论部分,并检查我们的发现与警告。

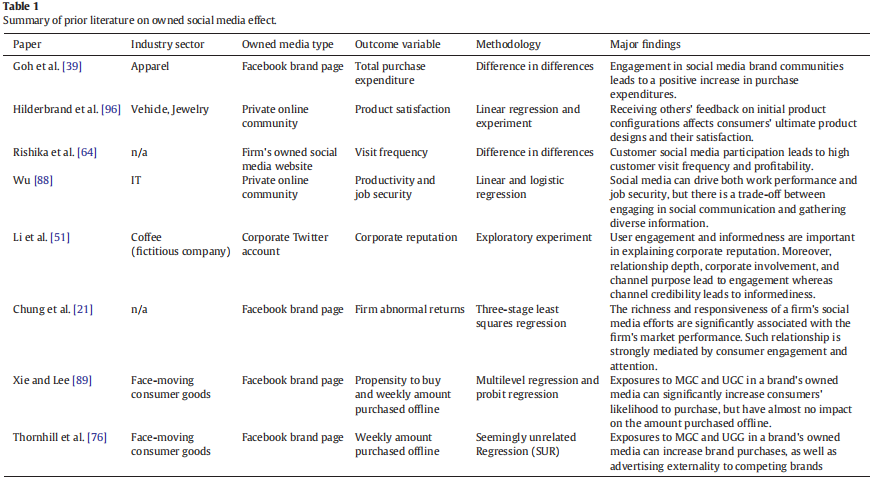
使用所做的估计,我们的结果表明积极的影响Facebook活动购买旅游产品。我们也需要一步探索类型的产品更为有利Facebook等社交媒体平台。分析表明,旅行高结构、高介入中价格,和媒介Facebook市场后长度与更大的销售。除了测试产品特征的节制,我们探索这样的效果是否不同销售分布和变化的时间跨度。我们的结果表明,这种有条件的影响产品功能更加突出低质量产品的销售。此外,Facebook活动对销售的影响逾期,显示下降趋势在接下来的两个月。

我们的研究有助于文学以及社会的实践媒体营销。在某种程度上我们所知,我们的研究是第一次经验评估一个公司的努力在Facebook营销旅游业产品水平。而流的研究重点在社会媒体的影响,大多数研究都是基于赢得了媒体和讨论顾客评论如何影响客户的行为。很少从解决公司的角度,探索了公司在所有社交媒体营销努力。我们的研究有助于文学通过实证检验公司的营销的有效性运动品牌在Facebook上的页面。此外,在那些很少检验公司的角度(例如,[89]),他们要么看客户的性能级别(例如,客户的意图购买)或总销售在公司级别(例如,股票市场返回)。我们补充文献通过检查销售的产品水平,探索公司的产品目标Facebook营销。实际意义的实证结果本研究促进电子商务经理的决策旅游业。虽然社交媒体是智能旅游产业应用之一使业务操作改进的机会,公司怀疑此类投资的有效性和看战术措施管理新业务。我们的研究发现证明拥有社交媒体营销和提供的有效性实证支持的使用社交媒体作为一个销售和拥有营销渠道。我们探索性分析的特点旅游产品的设计提供了基本的指导销售活动和帮助电子商务经理分配资源在一个社交媒体营销活动。

**2. 文献综述**  
2.1社交媒体从公司的角度来看:拥有媒体策略  
 文学研究社交媒体可以分类的影响两个视角:以客户为中心和确认为中心。典型的结果以客户为中心的研究如下:消费者想咨询产品评论不回产品发布[53]之前,从信誉良好的评审员那，以实际文本为特色，而不是摘要统计数字[19,37]，以大量和价格发布[29,53,59]，重点采购利基和不太受欢迎的产品。这些研究是在赢得社会媒体的背景下进行的，客户可以自由地创建用户生成的内容。为了探索一家公司的社交媒体营销，我们专注于拥有的社交媒体，它允许公司创建自己的渠道，直接向受众交付内容，建立与客户的联系，以及一种超越纯交易关系、通过忠诚度吸引客户的环境。奖励计划。为了探索一家公司的社交媒体营销，我们专注于拥有的社交媒体，它允许公司创建自己的渠道，直接向受众交付内容，建立与客户的联系，以及一种超越纯交易关系、通过忠诚度吸引客户的环境。奖励计划。

由于以往大多数以客户为中心的研究都是在挣来的社交媒体上进行的，很少有人研究过公司出版的自有社交媒体。研究正在兴起，以帮助企业了解他们在这一特定媒体渠道上的支出是否能获得回报。表1提供了关于自有社交媒体营销的现有文献摘要。然而，目前的文献在以下几个方面仍然滞后，这些方面激励了我们的研究。

首先，研究自有社交媒体有效性的前期研究可以通过结果效应进行分类：对客户购买行为的影响、对整体公司财务绩效（如公司股票价格）的影响以及对直接营销结果（如产品零售）的影响。这些研究大多集中在顾客购买行为上，有些研究关注的是公司的整体财务表现。例如，RISHIKA等。[64]检查客户参与公司自有社交媒体活动对客户访问频率和盈利能力的影响。戈赫等。[39]研究UGC和营销人员生成内容（MGC）对企业自有社交媒体中消费者购买行为的相对影响。钟等。[21]探索消费者行为（消费者参与和关注）如何影响公司自有社交媒体中的股票市场回报。Xie and Lee[89]和Thornhill等人[76]进行一系列研究，探索企业自有社交媒体中的用户生成和营销生成内容，并考察这两类信息对消费者购买意愿、实际线下购买行为和竞争品牌外部性的相对影响。然而，很少关注直接营销结果（如产品销售）。不考虑直接营销后果（如产品销售），企业失去了测试其产品或服务吸引力的机会。他们既不知道哪些营销活动能够更有效地吸引客户，也不向客户提供能够增加销售的引人注目的内容。除了先前的文献外，我们的研究重点是公司拥有的社交媒体营销活动与产品销售之间的关联，揭示了对公司营销策略至关重要的销售中的关键产品级别差异。其次，以往的研究并没有广泛研究产品特征在自有社交媒体活动中的作用。虽然一些研究试图评估产品特性的影响，但关注的焦点主要是客户，而不是公司。例如，Senecal和Nantel[67]认为，在线推荐体验产品比搜索产品更能影响消费者的选择。朱和张[95]指出，在线消费者评论导致较不受欢迎产品的增量销售增加。Dewan和Ramaprasad[25]表示，歌曲的流行与销量呈负相关，尤其是对于小众音乐和专辑中不太受欢迎的歌曲。虽然这些以顾客为中心的研究结果可能会提示营销人员在自有媒体中管理他们的内容，但估计的效果可能有偏差。在教资会的捐款是自愿的，没有试图创建一个代表性的人口样本[55]。因此，产品偏好可能会受到谁贡献内容和导致人们贡献内容的因素（例如，不同的动机）的偏见。此外，UGC在赢得的媒体只捕获评论用户的意见。这些评论通常集中在极端的产品体验（好的或坏的）上[42]。忽视沉默用户的意见和“一般”的产品评论会阻碍公司全面了解产品效果。与上述与以客户为中心的挣媒体相关的研究相比，我们的研究通过检验产品特性在产品销售和公司自有社交媒体营销关系中的调节作用，提供了以公司为中心的产品分析。在对台湾主要旅游机构的四位高管的采访中，他们讨论了如何利用产品特性对目标市场中的产品进行分类。因此，对这些产品特性的检查可以帮助管理者找到合适的用于市场营销活动的产品。尤其是，企业可以很容易地在自己的社交媒体上操纵这种营销活动。因此，这一发现从公司的角度进行可以通过解决产品分析。

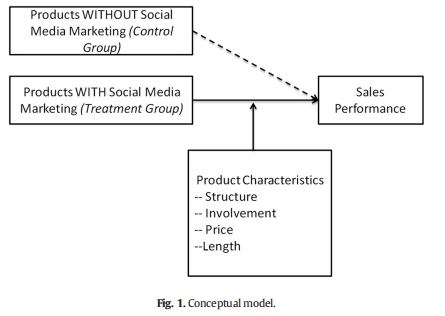


2.2利用自有社交媒体开发旅游产品

企业拥有的社交媒体广泛应用于智能旅游实践中，以保持游客与产品的情感联系[83]。营销人员可以使用自有的社交媒体作为客户声音和市场信息的来源，了解他们对旅游产品的体验，确定新的旅游目的地，或接收有关某些旅游产品的早期警告[73]。从客户那里获得洞察力也可以帮助营销人员吸引客户共同创建旅游产品或简单地改进现有产品（例如，使用问题、投票、共同创建）。例如，葛底斯堡国家军事公园（Gettysburg National Military Park）使用其Facebook品牌页面将追随者与一些不太知名的战场网站联系起来。此外，公园在其品牌页面上发起了“52步”Facebook挑战，概述了每周的故事，可以引导游客到战场上的特定地点。一旦找到一个地点，鼓励游客拍照并上传到公园的Facebook品牌页面[66]。这次活动之所以成功，主要是因为它有助于与公园建立更强大的联系，并与游客进行交流。世界上最大的青年旅游公司斯塔旅游公司利用自己的社交媒体网站帮助客户解决与产品相关的问题。公司发起了一场“意料之外的欧洲”运动，将公司最活跃的30岁以下的客户派往欧洲进行6个城市的旅行。这些客户充当STA旅游内部人，提供独特的旅游提示和旅游指导，并在STA旅游的YouTube频道、博客以及内部人的网站和社交频道上分享他们的经验[63]。芬兰航空的“质量猎手”活动为产品的共同创造提供了一个例子。在这次活动中，七个人被选为高质量的猎手，他们的任务是在世界各地旅行48天，并通过芬兰航空博客和Twitter分享他们对芬兰航空和赫尔辛基机场如何改善飞行和机场体验的想法和见解。质量猎手网站及其社交媒体网站的访问者可以为他们设定任务、发表评论和分享他们的想法，而赫尔辛基机场的乘客可以到猎手休息室来交换意见。该活动收集了N250的想法，并被认为是最具创新性的众包活动之一[93]。以上例子表明，旅游者通过举办各种自有的社交媒体活动来推销产品。旅游业是一个与新的信息通信技术有着密切关系的行业，是最“社会奉献”的行业之一[15,26]。然而，对旅游社会媒体的研究还处于起步阶段[94]。在研究社交媒体在旅游业中的影响的少数研究中，他们的重点是UGC对消费者的影响（例如[12,78,80,97]），对企业在自有社交媒体中的战略几乎没有任何影响。一些研究人员已经认识到在旅游业中需要更多以公司为中心的研究（例如[17,26,45]）。他们发现，企业的社交媒体活动与消费者参与度、情感吸引力、品牌态度和企业声誉正相关。然而，据我们所知，还没有研究能够直接量化旅游公司的社交媒体活动的影响。与采购（销售）数量和目标产品相关。作为对文献的补充，我们的研究考虑了各种旅游产品属性对产品销售和公司自有社交媒体活动之间关系的调节作用。因此，我们的研究结果有望对旅游公司的社会媒体管理产生重大影响。

**3.假设发展**

我们的概念模型如图1所示。我们旨在探讨企业自有社交媒体营销对销售绩效的影响。具体来说，我们研究的是旅游公司Facebook品牌页面上社交媒体营销活动的影响。当公司通过自己的Facebook品牌页面进行营销活动时，产品选择是公司控制/操纵所提供信息以满足消费者信息需求的一种方式。因此，我们研究了各种产品特性的缓和效应。认知拟合理论[16,81]表明，当客户面临决策问题（例如购买产品）时，绩效取决于信息呈现/提供方式与消费者的信息需求（问题性质）之间的匹配度。以前的文献（例如[44,79,81]）运用这一理论解释了信息呈现形式（如表格和图表）与消费者对不同类型任务（如获取特定价格信息和评估不同型号的计算机）的信息需求之间的匹配性。在这项研究中，我们扩展了理论来检验产品特性和渠道使用之间的关系。首先，产品特征（例如，经验和搜索商品）与不同消费者的信息需求（例如，触摸和感觉与获取价格和产品特征）相关，可以通过不同渠道（例如，实体和在线商店）提供的信息来实现。另一方面，渠道可能会吸引具有不同动机的客户，如信息寻求计划和经济激励（如[47,65]）。因此，如果渠道能够为产品提供符合客户使用渠道动机的特性，我们就期望这种渠道的有效性。根据这一逻辑，我们在一家公司旗下的Facebook品牌页面上研究了四种旅游特征如何符合消费者的信息需求。根据对台湾主要旅游机构高管的采访，旅游结构、游客参与度、旅游价格和行程长度四个旅游特征是他们如何在目标市场中定位产品，因此是感兴趣的变量。这四个产品特征可以分为：（1）驱动消费者信息需求的特征，反过来又符合公司所欠Facebook品牌页面提供的信息（2）符合消费者使用自有企业动机的特征Facebook品牌页面。行程价格和长度属于第一类。价格和长度通常与消费者的信息寻求和规划工作有关，这可以通过公司拥有的社交媒体的信息能力来实现。由于这两个特性与渠道能力相关，我们称它们为面向渠道的产品特性。旅游文献强调了它们对旅游细分和市场需求的解释力（例如[1,2,6,14,30,57,60]）。旅游结构和旅游参与然后是第二类。使用Facebook的消费者旅游搜索容易得到详细信息。此外，Facebook的活跃用户对互动和参与旅游体验有偏好[98]。因此，一家公司应为结构化旅游提供详细信息，并为其提供符合图1的冒险活动。概念模型.16 H.-L.Chang等人/Decision Support Systems 107（2018）13–25消费者使用Facebook品牌页面的动机。由于这两个特征与消费者使用Facebook品牌页面的动机有关，我们称之为面向消费者的产品特征。这些特征在旅游文献中被广泛应用，作为对旅游者进行分类和了解旅游行为的基础（例如：[8、22、27、28、35、43、48、91]）。



3.1．自有社交媒体营销的有效性

传统的电子商务由Web1.0实现，具有单向性交流。社会商务由Web 2.0（一个平台）启用允许双向通信，更好地通知消费者比以往任何时候都要多[92]。根据斯蒂芬和图比亚[71]，社会媒体允许人们积极参与在线社区中产品和服务的营销和销售。此外，Kim和Hawamdeh[50]指出，社交媒体有助于公司改进营销策略，增加网站流量和销售额。例如，戴尔表示，它使用Twitter已经产生了100万美元的增量收入，这些收入来自销售警报[49]。伦敦皇家歌剧院的30%的销售额来自其Facebook粉丝页面[3]。Old Spice，一个美国男性美容产品品牌，通过在YouTube上发布数以百万计的下载、在Twitter上发布幽默的推特以及在Facebook上创建一个广受欢迎的粉丝页面，成功地增加了其销售额[11]。对于旅游业而言，自有的社交媒体允许公司开展各种营销活动，以触发销售。例如，在Facebook的背景下，营销人员可以使用引人入胜的风景图片、漂亮的文字、甜言蜜语、问题或竞赛来吸引客户参与他们的品牌页面。他们还可以发布特别优惠和链接来推动冲动购买。文献发现，社交媒体中成功的营销活动能够吸引更多的访问者访问公司的网站，因为通过社交媒体传递的信息比通过传统方式传递的信息具有更大的范围、丰富性、可靠性和及时性[40]。旅游业被公认为“信息密集型产业”[85]。信息的丰富性是吸引客户、建立忠诚度和宣传的关键，而这反过来又增强了声誉并增加了收入。此外，由于信息不对称，通过公司自有渠道提供的信息比通过其他渠道更好地满足消费者的需求，减少不确定性[58]。当不确定性降低时，消费者将更有可能购买符合其需求的产品。因此，我们希望旅游机构能够通过在自己的社交媒体渠道开展社交媒体活动来增加旅游产品的销售。我们的假设如下：在一家公司自有的社交媒体上进行营销活动的旅游产品，其销售业绩可能比没有的要好。

3.2．社会媒体营销对旅游产品的影响

3.2.1旅游结构

旅游业的结构反映了旅行社的规划水平。高度结构化的旅游是指旅行社在很大程度上安排的一揽子旅游。这种类型的旅游通常包括交通、食物、住宿和娱乐，这些都是以包容性价格进行广告宣传和销售的。相比之下，由于独立旅游不包括一系列预定的观光活动，因此其结构不太合理，因此，游客在自行安排旅游安排方面具有更大的灵活性。过去的文献表明，一揽子旅游的购买者很可能是老年人，打算去几个目的地旅游，并且是第一次去目的地旅游[68]。这些旅行者通常需要更详细的假期信息来做决策，并花费更多的时间来计划。当客户研究产品时，他们通常利用两个信息源。一个是品牌所有者的另一个来自同行消费者的口碑[89]。研究表明，对任何一种信息源的依赖都是次优的[39]。营销人员的内容提供了信息性信息，可以增加客户对产品特性和好处的了解，而对等生成的内容则从消费者的角度描述了使用体验。公司拥有的社交媒体为客户提供了两种信息源的正确组合。例如，在Facebook品牌页面的背景下，营销人员可以设计活动来鼓励同行讨论，并直接在“评论”条目中进行交流，以满足特定客户的需求。这样的UGC在MGC模式下提高了产品学习和意识。因为选择套餐旅游的人比选择独立旅游的人更积极地寻求信息，我们可以预期这些旅行者更可能依赖自有的社交媒体进行规划。因此，社会媒体营销可以更有效地针对这一细分市场。我们的假设如下：

H2。将社交媒体纳入一揽子旅游的营销中比将其纳入独立旅游的营销中更有可能增加销售额。

3.2.2 .旅游的改善

一个高速度的旅游反射，为一个个体需要积极的活动。从他/她的超常真空环境中的刺激。他们的愿望可以通过参加冒险活动、水上运动（如帆船、潜水、激流漂流）或冬季活动（如滑雪、滑雪）来满足。在相反的情况下，一个低廉的旅行者更宁静的旅途更加平静地与当地的环境进行了微小的互动。这些游客想放松，走到一个度假地。他们加入了座位的改变，想让它轻松地保持他们的生活。社会媒体的主要特征之一是，这是一家吉文公司的积极参与者和积极参与者。此外，那些主要使用社交媒体分享旅行的人似乎希望获得更深入、更互动、更真实的旅行体验（Lo等人，2011年）。为了满足这些客户的偏好，Bartram[7]指出，媒体中增加冒险活动的曝光可能确实会刺激参与某项活动。因此，利用社交媒体推广包含更多互动活动的旅游产品，可能会吸引活跃用户，增加他们参与这些活动的意愿，并随后购买这些产品。因此，我们的假设如下：

H3。将社会媒体纳入市场营销产品大幅度增加的旅游业是一个更容易吸引市场的产品，而不仅仅是市场营销。

3.2.3.产品价格

游客的旅游成本包括从目的地和地面内容的成本，如住宿、旅游服务、餐饮和娱乐[30]。当产品的价格相对较高时，客户倾向于寻找更多的信息[9]。由于产品价格是一种刺激消费者思考的因素，所以高价产品会让消费者更多地思考他们的购买意图[86]。此外，产品价格与感知风险有关[84]。也就是说，在选择价格更高的产品时，风险更大。根据王和张[84]的调查结果，如果一个产品的价格相对较高，那么来自Facebook的强关系联系人提供的信息和建议对购买意向的影响比来自Facebook的弱关系来源提供的信息和建议更大。然而，对于低价产品，这种效果并不明显。因此，我们期望，当消费者考虑到社交媒体时，人际影响和沟通更为重要。购买价格相对较高的旅游产品。因此，我们提出了以下假设：

H4。与低价旅游产品营销相比，将社交媒体纳入高价旅游产品营销更有可能增加销售额。

3.2.4。旅游时间

停留时间是旅游者决策过程中的关键因素之一，因此，必须根据旅游者在目的地停留时间的决定调整促销活动[56]。一般来说，旅行的风险随着停留时间的延长而增加。因此，对长途旅行的预期会刺激更多的信息搜索[33]。根据Tsiotsou和Ratten[77]，Web2.0技术可以促进信息共享，降低产品不确定性。此外，Litvin等人[52]将在线人际影响或EWOM描述为一种潜在的经济有效的旅游营销手段，尤其是高风险旅游产品。因此，我们认为，由Web2.0技术支持的社交媒体是一种有效的工具，可以降低长途旅行的感知风险，从而促进更好的营销效果。我们的假设如下：将社交媒体整合到长途旅行的营销中可能会比短途旅行的营销增加销售额。

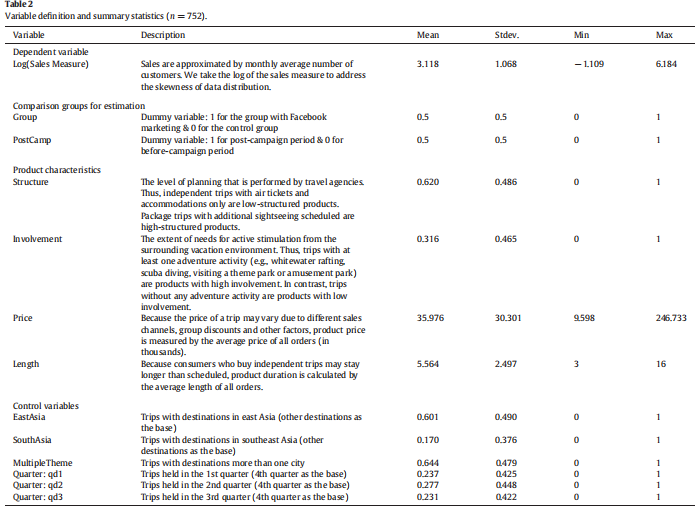
**4．数据**

为了探讨社交媒体对旅游销售的影响，我们收集了案例公司的实证数据：A公司成立于1978年，是台湾最知名的旅行社之一。A公司有三个子公司，其中一个子公司负责管理电子商务和在线营销。公司在官方网站上销售各种旅游产品，包括国内旅游、国际旅游、个人旅游、公司旅游和入境旅游。当企业很可能从Web2.0应用程序的优势中获益时，A公司开始利用它们与消费者进行交互。2009年9月，A公司建立了自己的Facebook品牌页面，作为与消费者互动的营销平台，目前该页面拥有25000名Facebook粉丝。虽然可以在社交媒体平台[99,100]上进行各种社交互动，但我们专注于A公司与产品销售直接相关的Facebook营销活动。在品牌页面上，该公司发布了引人入胜的风景图片和有关景点的鼓舞人心的引述，以及有关吸引客户的旅游的特别优惠。最重要的是，相关产品的销售页面链接通常包含在这些帖子中。此外，我们专注于国际旅行的产品，因为大多数游客都依赖旅行社（如A公司）出国旅行。根据官方旅游局的数据，85%的台湾游客寻求旅行社的国际旅行援助，而b5%的游客将利用旅行社进行国内旅行[75]。我们获得了2012年2月1日至2013年11月30日的国际旅行数据。数据集包含了作为治疗组和对照组的有Facebook活动和无Facebook活动的旅行。详细比较两者在模型估计一节中描述了组。我们使用旅行销售作为绩效指标。案例公司指出每种产品的价格随时间变化，因此，公司使用客户/订单数量来评估年度销售业绩。因此，我们在研究中使用客户数量来衡量旅行销售。此外，我们还研究了Facebook营销活动的效果是否因产品特征而变化，包括旅游结构、游客参与度、产品价格和旅游时间。表2提供了旅游销售的汇总统计和详细定义、用于估计的产品比较组、四个生产特征以及控制产品变化的附加变量（Facebook活动的影响除外）。

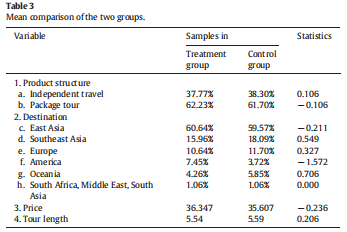
**5．模型估计与结果**

5.1。差异估计差异

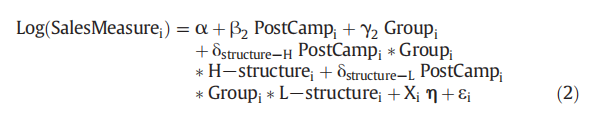
我们采用了一种DID方法来估计Facebook竞选活动对旅行销售的影响。我们采用什么方法因为它控制时间固定的自我选择（例如，产品具有更高的销售更可能选择Facebook活动）以及常见的时间序列的异质性（例如，季节性影响旅游在旅游产品销售普遍地时间）。根据所做的，我们首先比较了旅行与Facebook活动的援助（治疗组）来匹配样本的旅行没有Facebook营销（对照组）。治疗组于Facebook营销第二期但不是在第一期。对照组不在任何时期暴露治疗。该方法首先计算在处理销售的平均增益（对照）组在Facebook的活动事件来删除任何时间固定导致Facebook活动的不同用法的异质性。第二差分应用于治疗和对照组之间的平均收益来消除导致随着时间的推移，[ 46 ]销售普遍增加的其他因素。我们首先确定已使用销售从2012年2月1日Facebook活动的国际旅行社，十一月302013。因为我们想之前和之后的Facebook运动检查在旅游产品销售的变化，我们不可能有很少或没有之前或之后购买Facebook产品的活动（即，旅行出发日期前几天刚刚发布的营销活动；旅游产品将从在线商店删除战役后不久）。对于每个Facebook的活动，我们关注于活动前后三个月内的销售[90]。换句话说，Facebook活动前的销售额是由活动前三个月内的订单来衡量的。Facebook活动后的销售额是根据活动后三个月内的订单来计算的。由于产品的销售期限各不相同，一些产品在Facebook活动后一个月销售，而另一些产品在活动后两个月销售。因此，我们以月平均销售额来衡量Facebook活动前后的表现。符合公司惯例，月平均销售额基于上述选择标准，我们结束了188的旅游产品与Facebook活动的援助。每个产品与Facebook的运动（治疗组），并配以一个没有Facebook广告产品（对照组）。当选择对照组，我们选择的是类似于配对样本组在治疗产品。通过这样做，我们能够控制的其他因素比Facebook的活动，导致治疗组和对照组之间在销售变化。我们的比赛时间由销售产品、地理目的地和产品结构（即独立包装的游记）。治疗组在每一个产品，我们首先找到一组相似产品销售的持续时间。在这些产品中，我们进一步确定该产品具有类似的地理目标和/或产品结构作为配对样本的对照组。当有一个以上的候选人，我们征询公司挑选最相似的产品，6的销售时间控制季节性和地理目的地和产品结构保证。



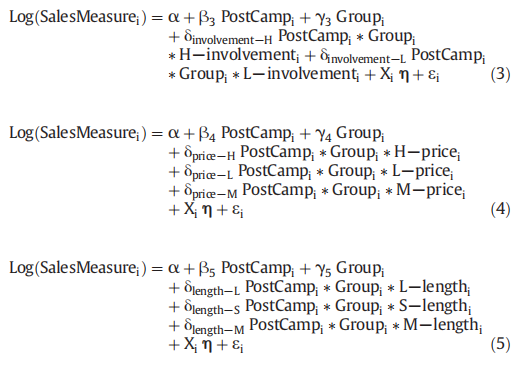
产品内容的一致性。与治疗组一致，对照组188个样本，治疗组与对照组在Facebook营销活动前的平均比较见表3。我们通过产品结构、目的地地理、价格和长度来衡量产品的平均值，相应地，我们通过连续数的t检验和零假设下两组平均值相等的比例的z检验来检验这些平均值。结果显示两组之间没有显著差异。换句话说，我们通过一对相似的样本尽可能多地满足共同的趋势假设来展示我们的尽职调查。除了样本匹配，讨论部分还仔细检查了关键假设，以验证我们的调查结果，并在规定的限制条件下解释我们的结果。使用DID方法，我们通过以下模型规范估计Facebook营销对旅游销售的影响：销售度量变量代表月份一种产品的平均销售额，近似于平均客户数。group和postcamp是分别表示控制/治疗组和活动前/后阶段的指标变量。postcamp和group的交互项捕获了差异之间的影响。在活动后分组，在活动前分组的差异。这种差异估计使得我们能够更准确地控制时间序列的异质性和自我选择偏差，并测量社交媒体营销对销售的影响。



我们还将目的地的地理位置（即东亚、南亚和其他地区）、目的地的数量（即多个城市安排了多个主题旅游）和季节性（即一年分为四个季度：QD1–QD4）作为控制变量，以反映可能导致F产品之间销售变化的其他因素。Acebook营销和那些没有它的。XI代表了这些控制变量。除了Facebook营销对销售的平均影响之外，我们对产品特性是否影响有所不同。为了将产品特性的影响纳入DID评估中，我们按照Campbell和Frei（18和Chung etal（20）的分析方法，将一个DID估计量（6）分为两部分：一部分DID表示产品特征的高水平（6P），另一部分DID表示产品特征的低水平（6P）。例如，旅行可以按产品结构分类为那些有基本规划的（即只有机票和住宿的独立旅行）和那些安排了额外观光活动的旅行。前者定义为低结构产品（n=286），后者定义为高结构产品（n=466）。因此，为了检验Facebook营销的效果是否因产品结构的不同而不同，我们使用下面的模型进行评估。



我们对DID估计量进行分解，并对高结构产品（后采样组\*H-结构）和低结构产品（后采样组结构）的Acebook营销效果进行检验，我们将另外三个产品特征纳入分析。包括至少一项冒险活动的旅行是高参与度的产品（n=238），不包括任何冒险活动的旅行是低参与度的产品（n=514）。我们还可以按产品价格对差旅进行分类：平均价格高于平均价格0.5的差旅被视为高价格（n=130）的产品，平均价格低于平均价格0.5的差旅被视为低价格（n=246）的产品，平均价格高于平均价格的差旅被视为低价格的产品。在价格高低之间被视为阿米的产品（n=376）。最后一个产品特征是平均长度为0.5标准偏差的产品持续时间产品比平均行程天数高的产品定义为长长度（n=154）的产品，平均长度为0.5标准偏差低于平均行程天数的产品被定义为短距离产品。T长度（n=256），平均长度介于长和短之间的产品被视为中等长度（n=342）的产品。为了避免多重共线性问题，我们为每个产品特性指定了一个单独的方程。以下三个模型探讨了Facebook营销的效果是否因参与程度、产品价格和产品持续时间的不同而不同：

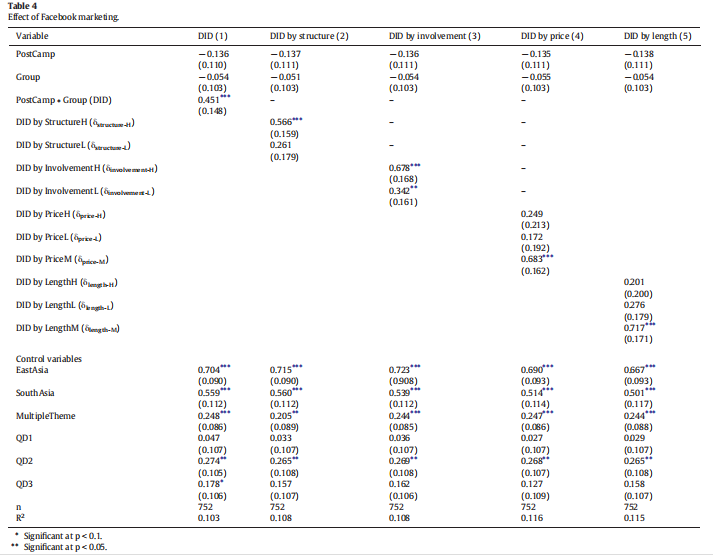


5.2．结果

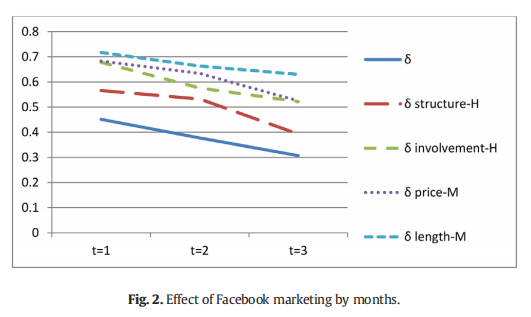
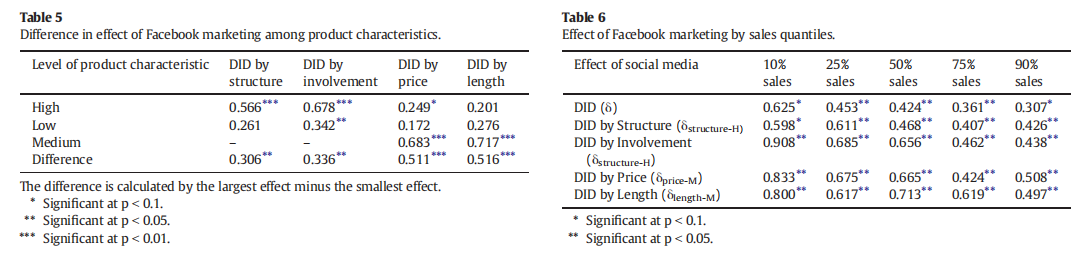
采用DID方法对Facebook营销效果进行了评价，在治疗组收集188份样本，并在Facebook营销前后（188.=376）对样本进行跟踪，对照组收集188份样本，用于无Facebook营销的旅游。Mπ介子同样，每一次巡演都记录了Facebook活动前后的Samemons表演（1882=376）。这些752个观察结果（来自治疗和com-tro的376个观察结果）随后适用于上述五种型号规格。第一列对应等式（1）。根据did estimator（），Facebook营销的使用与旅游销售的45次增长有关（p<0.01）。支持HL。请注意，由于我们在不同的估计量中使用了差分法，因此结果不太可能是由于在有或没有Facebook营销栏2到5的产品之间进行自我选择，而这些产品用于检查社交媒体营销vaneby产品特征的效果。四个产品特性对应的TOEGS。（2）到（5）进行了探索。对于每种产品特性，DIEstiMator分解为Oy O（高/低水平组）或O/VO（高/中/低水平组）。在第2栏中，我们发现Facebook营销的效果与高结构产品（即PackageTours）的旅行销售增长57%有关（Astmucmure-h，p<0.01），而低结构产品（即独立旅游）的旅行销售增长26%（6smumme-l不显著）。这一结果与第3栏中的h2相一致，Facebook营销的效果与高参与度产品（即有冒险活动的旅行）的68次销售增长（6mwvemem-h，p<0.01）相关，而低参与度产品（即没有冒险活动的旅行）的345次销售增长（vemma，p<0.05）相关。这一发现与H3一致。

同样，我们在第4栏中发现了与产品价格相关的结果：对于中等价格的产品，Facebook营销的效果与销售额增长68%有关；而对于高、低价格的产品，效果与销售额增长25%和17%有关。在第5栏中，Facebook营销的效果与中长期产品（P<0.01）的销售额增长72%有关，而长短期产品的销售额增长20%和27%。根据这两栏的结果，我们找不到对h4和h5的支持。然而，有一个有趣的发现：社交媒体营销对中等价格和持续时间的旅游产品尤其有效，我们进一步统计分析了不同特征产品之间的营销效果差异，我们使用了零假设下的瓦尔德检验，即分解ddid估计量相等。从表5可以看出，高结构产品采用非处方营销后的销售额比低结构产品增长了31%（P<0.05），同样，我们对高参与产品的其他三个产品特征进行了测试，使用Facebook营销后的销售额比低参与产品高34%。W参与（P<0.05），对于中等价格范围内的产品，使用非处方药营销后的销售额比低价格范围内的产品增加51倍（P<0.05）。01）。对于中等持续时间范围内的产品，使用Facebook营销后的销售额比低持续时间范围内的产品增长52%（P<0.01）。

5.3.另外分析



除了对预期销售进行普通最小二乘分析外，我们还进一步探讨了企业拥有的社交媒体在整个销售分布中的作用。换句话说，我们对评估Facebook营销活动对销售额高的产品（如75%分位数）与销售额低的产品（如25%分位数）的影响是否不同。我们将分位数回归应用于简单的DID模型（等式（1））以及带有产品修正方程的模型。（2）-（5）。我们主要报告持续不显著的影响（见表6）。与表4的结果一致，自有社交媒体营销在高结构、高参与、中等价格和中等长度的销售产品的所有范围内都具有显著的效果，能够有效应对自有社交媒体营销。此外，我们发现Facebook的效果对于销售量低（如610x>0502）的产品，营销更为突出，除了区分不同销售量的影响外，我们还从下图2进一步探讨了后一个月Facebook营销的影响是否会随着后一个月的变化而变化，我们可以看到Facebook营销月平均销售额对后一个月的影响。重新发布活动月份（T=1表示至少一个月的活动效果，T=2表示2个月或以上的活动效果，T=3表示3个月的活动效果）。我们注意到，对于适度的模型，我们主要关注持续显著的产品特征。我们发现Facebook的影响销售活动在第一个月很突出，并且在接下来的两个月内呈现下降趋势。这一发现不仅适用于简单的DID模型，而且适用于具有四个产品特性的模型。此外，四条虚线位于实线（基本情况）上方，没有交叉点，表明四个产品特征的缓和在三个月内都是积极和显著的。这一发现加强了表4中的平均效应。此外，其他分析也证实了对重要产品调停者的调查结果，并提供了潜在的有用见解，说明了在不同的销售数量和营销活动期间，影响是如何变化的。



**6.讨论**

作为社交媒体代表双向交流，Godes等人38和Chung等人21.评论说，很少有人研究企业在社会交往中的主动性。Aral等人（4）进一步提出，“企业应如何通过社交媒体与客户和员工进行沟通”是一个新兴的研究领域，通过强调公司拥有的社交媒体的作用及其影响，我们强调确认扫描实际上将其角色转变为更积极主动的角色。我们的研究通过调查一家公司在其Facebook品牌页面上的市场营销活动，与台湾一家领先的旅行社合作，重新支持了这一呼吁，本研究评估了纸质图书营销的有效性。使用案例公司提供的国际旅行数据，我们发现Facebook营销的产品平均销售额比不借助Facebook营销的产品多45%。结果表明，公司拥有的社交媒体是推动产品销售的有效渠道。

除了营销活动的整体影响之外，一家公司可能会问的一个相关问题是，哪些类型的产品能够刺激最大的销售。因此，我们的研究检验了产品类型的缓和效果。在评价企业品牌页面对社交媒体的影响时，通过考虑产品特点，强调社交媒体营销中的“契合”问题，从而补充和丰富过去的作品。与我们假设的证明相一致，我们的研究结果表明，当公司推广打包旅游的产品时，社交媒体营销更有效。这些产品是在预定的观光活动（高结构）中进行的，其中包括引人入胜的冒险活动（高参与度），以吸引与客户的互动。结果还表明，价格适中、持续时间较长的产品可以刺激更多的销售。直觉产品具有较高的感知风险，通常与进一步的信息寻求有关。与低价产品相比，消费者对中价产品的购买决策门槛更高，因此，社交媒体平台的互动有助于购买，因此，中价产品的销售涉及到价格高、持续时间长的产品，以及销售人员收到的信息。从公司的角度来看，社交媒体营销活动可能不足以让消费者进行购买。总之，我们的调查结果表明，在企业所有的社交媒体上营销活动可能有不同的针对不同产品时的结果。此外，营销活动的设计必须考虑到正在销售的产品特性，而其他分析表明，这种缓和效应在不同数量的销售中具有很强的稳定性。特别是，实证结果表明，对于销售水平较低的产品，缓和效应更为显著。因此，在选择与Facebook营销活动相适应的产品功能时，管理者可以分配更多的精力，但也可以通过Facebook营销活动更好地改进这些功能。销路不好的产品。不仅这些产品需要对不同数量的销售进行促销，而且还将在不同的时间段内进一步检查产品的适度效应。结果表明，现代化效应在三个月内持续高于基本情况，在三个月的第一个月和第三个月的影响更为有效。随着时间的推移，活动的影响是合理的。一个企业通常只有一个社会媒体管理者，有效的时间管理至关重要。这项发现建议广告部部长将他/她的工作时间与最近的市场营销活动一起分配。

他的研究也为旅行社的电子商务经理提供了实际的启示。由于我们的分析为使用企业拥有的社交媒体作为有效的销售和营销渠道提供了实证支持，因此我们建议企业积极启动企业拥有的页面或账户（如Twitter账户、Facebook品牌页面），以推广产品、建立品牌知名度，并促进同行支持和服务。此外，管理者因此有理由证明自己的社交媒体上的电子商务预算分配是合理的。我们对旅游产品特性的调查也为电子商务经理提供了资源分配的基本指导，因为经理总是面对有限的资源，我们对产品优先级的发现有助于经理做出明智的决定，将他们有限的工作分配给社会媒体营销活动。

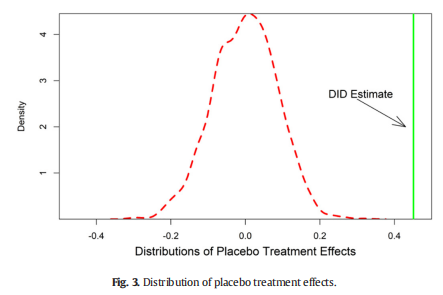
由于缺乏对公司行为的研究，戈德斯等38人提出了企业在社会交往中可能发挥的作用的研究框架。在四种可能的策略中，包括观察者、主持人、中介者和参与者，我们的研究背景落在中介者的类型中，其中一个公司起着积极的作用，并且可以决定传播什么信息。因此，建立Facebook品牌页面，并通过营销活动提供产品信息，以涉及与客户的社会互动。响应研究框架，我们的研究检查中介作用的有效性使用销售的张贴营销活动。此外，随着旅游产品的销售，我们研究ARM作为中介者应该如何确定产品信息的选择。未来的研究者被鼓励去探索其他的角色，丰富了在线社交互动中的企业行为研究领域。

从旅游业的角度来看，旅游组织在产品和服务设计、营销和客户支持等方面越来越灵活。企业拥有的社交媒体社区是旅游公司为了增强竞争力而利用的一种智慧。然而，以往旅游界的争论主要集中在社会媒体对旅游业影响的一般性讨论上。虽然一些研究对旅游者规划过程中社交媒体的使用和影响进行了探讨，但讨论的重点主要集中在旅游系统的消费者视角上。当社交媒体为旅游公司提供了新的方式来重新设计和实施其商业模式和运营时，有人呼吁进行更多与企业相关的研究，尤其是在战略和战术两个层面上的社交媒体战略，以确保新出现的应用程序转向旅游公司的优势，以增强EIR创新与竞争力15本研究通过分析旅游公司应如何在其社交媒体品牌页面上管理营销活动来填补文献空白。

尽管我们已经进行了尽职调查，但本研究仍有一些不同之处。首先，准实验设计和评估使我们能够评估Facebook营销对协会以外的销售是在一个重要前提下进行的：共同趋势假设。换言之，治疗组和对照组呈现平行趋势，因此未治疗组的平均变化与对照组相同。在此假设下，任何偏离平均值的变化都归因于治疗效果。当治疗前有多个阶段时，检查平行趋势的一个简单方法是目视检查两组之间的治疗前时间趋势41。因为我们的数据只在两个时期内（活动前后三个月内的订单），我们承认我们无法直接检查假设，相反，我们通过事先确保治疗组和对照组之间的相似性来部分验证假设。表3显示两组治疗前不同产品特征的平均比较，以及组假人的回归系数表明治疗前的组间差异。两组间无显著性差异。因此，我们可以预期，具有相似产品的两个组具有相同的趋势。除了之前的相似性外，分析方法解决组间的非平行结果，以调整治疗效果的条件是观察到组间差异。因此，在考虑观察到的群体差异后，我们进行倾向评分[82]来估计Facebook营销的效果。这一估计与我们最初的发现是一致的，我们承认我们对群体差异的观察有限，除了通过倾向来处理观察到的群体差异外，通过构造（差异化）来处理观察到的群体差异还可以适应不同群体差异的时间。

共同趋势假设还要求，在我们的病例中，没有外生因素导致时间趋势的变化，同时对治疗组进行额外的刺激可以导致时间趋势的变化。我们已与该公司确认，治疗组的Facebook活动由管理层管理。换句话说，治疗组和对照组之间唯一显著的区别就是Facebook营销。此外，我们的实验周期是六个月而不是几年，相当短。我们可以预期，或者可以适当地假设，在时间趋势上没有显著的变化，即两组人的共同冲击。尽管如此，我们承认我们无法排除外生事件的可能性，并且受到数据可用性的限制。最后，我们进行置换测试，以验证DID估计是否符合误差分布的正态性假设[24411]。我们将治疗组随机分为“安慰剂治疗”组，并对安慰剂治疗进行了观察。在n个排列上重复这个过程，然后我们就得到了置换处理估计的密度函数。在安慰剂治疗下，我们发现分布以零为中心，没有因果关系。

此外，真实的DID估计值位于安慰剂分布的右尾（见下图3），因此，我们可以拒绝无治疗效果的无效假设，即，真实的DID估计值等于安慰剂估计值。以上讨论除了DID的限制外，我们的数据仅在公司收集到188种产品。从两阶段实验中的有限数据导出结果。研究结果对其他旅游公司乃至其他国家都适用，值得进一步研究。我们注意到东亚国家如韩国、日本和中国有着相似的经济地位和文化背景。研究人员可以从这些国家开始，用我们的研究作为参考点来进一步评估重要影响。除了数据的可获取性，我们的研究内容是建立在企业的积极作用，它的自有社交媒体。所有的内容，尽管产品的变化，是在客户。然而。并不是所有的客户都是平等的，不同特性的客户，如在采购金额或在一个特定类型的产品消费者关注方面忠诚，回应不同社会媒体。在顾客购买模式的数据，未来的研究可以从所有的社交媒体来个性化广告付费社交媒体平台推广营销推广（赞助网络广告）。总之，我们的研究仅仅是一个起点，考察企业在在线社交互动的积极作用。我们期望研究人员，当适当的研究背景和实证资料，连续工作上的局限性，因此，潜在的研究方向，进一步扩大和积累我们的在线社交媒体的理解。



7．结论

社交媒体正在从根本上改变我们交流合作的方式。消费和创造。研究人员对社交媒体、商业和社会之间的关系进行了多种调查。由于Web 2.0的本质，它强调客户在创建内容和向他人交付内容时的IDEAOF协作，因此大多数先前的研究主要采用以客户为中心的个人观点来探讨EWOM的有用性及其对客户行为的影响。在这些研究中，大多数是在赢得的社交媒体背景下进行的，客户通过博客帖子和第三方在线社区的对话控制内容生成。对赚来的社交媒体的研究数量不平衡，可能导致了一个错误的观点，即一家公司只能扮演被动角色。我们的研究旨在通过探索其自有社交媒体在后营销活动中的坚定作用，以及通过检验企业努力的有效性和产品特性的管理来扩展研究流。

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