



## Article

# The Effect of Incentives on Facilitating User Engagement with Succulent Retailers' Social Media Pages

Li-Chun Huang

Department of Bio-Industry Communication and Development, National Taiwan University, No.1, Sec. 4, Roosevelt Rd., Taipei 10617, Taiwan; lihuang@ntu.edu.tw

**Abstract:** Social media are an important approach for florists to reach consumers, and many florists have set incentives to encourage users to engage with their social media pages. However, various subjects can serve as rewards, but what is more effective for encouraging users to engage with the florists' social media pages remains unknown. This study is intended to address this deficiency. The objectives of this study are as follows: (1) to explore the typology of the incentives used by succulent retailers to promote user engagement; (2) to compare the difference across various types of incentives in regard to the effect on promoting user engagement with succulent retailers' social media pages. Data were gained from the succulent retailers' empirical practices on their Facebook brand pages. As a result, 2602 Facebook posts were downloaded and analyzed via content analysis to explore the typology of the incentives applied by succulent retailers. The number of clicks on likes, comments, shares, and emojis by users was recorded as the index of user engagement with the post. The effect of various incentives on user engagement with the succulent retailers' FB pages was analyzed via the statistical approach of MANOVA. The study results showed that the incentives applied by succulent retailers can be classified into three categories: economic incentives; social incentives; mixed incentives, which contain both economic and social values. The economic incentives included discounts, gifts, sweepstakes, and bidding, while social incentives included gratitude to customers, leaving a question mark, and inviting users to respond. The statistical results revealed that economic incentives are more likely to encourage users' emotional engagement, while social incentives in the form of inviting users to react are more significant for encouraging users' behavioral engagement in terms of leaving comments on posts.



**Citation:** Huang, L.-C. The Effect of Incentives on Facilitating User Engagement with Succulent Retailers' Social Media Pages. *Horticulturae* **2023**, *9*, 849. <https://doi.org/10.3390/horticulturae9080849>

Academic Editor: Christian Fischer

Received: 13 May 2023

Revised: 6 July 2023

Accepted: 18 July 2023

Published: 25 July 2023



**Copyright:** © 2023 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

**Keywords:** social media marketing; consumer engagement; content analysis; MANOVA

## 1. Introduction

Succulents are favored by many plant collectors and consumers due to their lovely appearance and good adaptability to arid climates or soil environments [1,2]. In the USA, the total sales volume of cacti and succulents grew almost twice from 2014 to 2019, rising from USD 40.9 to 78.5 million [3]. In Taiwan, the retail volume of succulent plants has also been increasing [4]. As many countries have been alerted to the crises in freshwater resources, and it has influenced consumers' purchase choices for plants [5], succulents deserve to be promoted to the market more vigorously.

Regarding the promotion of succulent plants, the media used in marketing communication should fit into the digital behavior of contemporary consumers. Characterized by a large user population, low cost, ease of use, and high speed of information diffusion, social media have become an important digital instrument for enterprises to communicate with their consumers and facilitate good customer relationships [6–10]. Therefore, how to apply social media effectively should be investigated in regard to the promotion of succulent plants. "Consumer engagement" is the level of an individual's physical or psychological investment in a specific object and is composed of cognitive, emotional, and behavioral dimensions [11]. It is a behavior beyond purchase and has been widely used as an indicator

for evaluating the performance of social media marketing [12]. The higher the level of user engagement, the more likely the transformation of users into a social media-based community [13], which reinforces users' brand attitudes and eventually increases their purchase intentions [14].

There are various factors that potentially influence users' engagement behavior from the perspective of behavior motivation theory, including (1) user-based factors, such as users' demographic backgrounds, brand attitudes, purchase goals, resources, or identities; (2) firm-based factors, including the size and type of the firm, the characteristics of the product and brand, or the service, activity, and information provided by the enterprises; (3) environmental-based factors, referring to overall environmental conditions, such as the competitiveness in the market, the variables of the political, economic, and natural environments and social cultures, and the technological aspects of the society within which firms and customers exist; and (4) incentives, such as the rewards or gifts promoted [12,15–17]. However, factors in the first three categories are usually uncontrollable for the enterprises. From the perspective of business administration, incentives or rewards become an important means for enterprises to stimulate user engagement with their social media pages.

Theories of behavior motivation claimed that individuals' behaviors could be changed with the conditioning of rewards. The empirical data from the domain of marketing and human resources also demonstrated that human behavior in marketing or the workplace can be promoted with incentives or rewards. However, incentives are multifarious in context. They can be financial, psychological, or social rewards [18–23]. As social media networks are also a sector of humans' social systems, it is very likely that users' engagement behavior on florists' social media pages can be motivated with planned incentives.

The objectives of this study are as follows: (1) to explore the context of the incentives embedded in the posts that motivate user engagement with succulent retailers' social media pages; (2) to compare the effectiveness of different incentives on motivating users' behavioral and emotional engagements. The findings of this study are helpful for succulent enterprises in regard to developing appropriate reward strategies to motivate both users' behavioral and emotional engagements with their social media pages. Although there are many new emerging social media platforms that are popular for individuals and enterprises, Facebook has long been the most popular social media platform [24]. So, the social network Facebook was taken as the object of this research.

## 2. Literature Review

### 2.1. The Definition of User Engagement

The concept of user engagement is derived from the thought of consumer engagement. Consumer engagement is a multi-dimensional behavior, and it is initially used to conceptualize consumers' involvement behavior for an object. For example, Hollebeek [11] defined customer brand engagement as "the level of a customer's cognitive, emotional and behavioral investment in specific brand interactions", and further proposed that there were three themes in the conceptualization of consumer engagement, namely "immersion", "passion", and "activation". Accordingly, user engagement in the domain of social media marketing can be defined as the level of users' cognitive, emotional, and behavioral activities involved in interacting with a brand's social media pages [23,25,26].

### 2.2. The Measurement of User Engagement

Since the empirical data of user responses to the clicks of "likes", "comments", "shares", and "emoji" are objective, observable, and measurable, they are widely used as indicators of user engagement on the social media platform of Facebook (FB) [27–31]. Based on the conceptualization of consumer engagement (11), the measurement of users' clicks on "likes", "comments", and "shares" represents the level of users' cognitive and behavioral efforts engaged.

However, the measures of users' clicks on "likes", "comments", and "shares" may miss insights into users' emotional engagement. Consumer emotions play an important

role in the facilitation of consumers' behavioral engagement. For example, with retailers' FB brand pages, Antoniadis et al. [32] found that both users' positive (i.e., clicked on "love", "haha", and "wow") and negative (i.e., clicked on "sad" and "angry") emotional response tends to drive users to click on "likes" or leave comments on posts, whereas the positive emotional response also has a positive effect on driving users to share posts. Another study found that the clicks on "sad" and "angry" represent that the post triggers users' negative emotions along with the higher possibility of rumors and complaints about the store. In contrast, consumers' positive reactions triggered by posts may lead to positive e-WoM, while negative reactions and comments can be seen as a channel for venting emotions so that consumers would not take the extra step to share the posts [32].

Due to the importance of users' emotional response for users' behavioral engagement, in 2016, the social media brand Facebook introduced a new choice, namely the emoji clicks, for users to express their emotions caused by posts. There are five kinds of emojis for the users to express their emotions, namely "love", "haha", "wow", "sad", and "angry" [31].

### 2.3. The Incentives That Motivate Individuals' Behaviors

According to the theory of behavior motivation, individuals' behaviors can be motivated with incentives. "Incentives" refer to special treatments, services, or rewards used to motivate individuals' behaviors [33–35]. The incentives can be money, tangible objects, or psychological rewards [33,34]. In the setting of social media, any entry or remuneration that incentivizes users to participate or respond to firms' social media websites, including monetary incentives or any other object, can be seen as personal incentives by users [36]. Social benefits can also be an incentive for users. For example, the website "Yahoo! Answers" uses the evaluation system of points and leaderboards elaborated to encourage users to participate in their website service's question and answer forum [37]. The website "Stack Overflow question-answering" also uses badges or point evaluation systems to encourage users to answer the questions [38].

Previous studies have shown that incentives have certain influences on user engagement. For example, Rafaeli et al. [39,40] investigated users' participation behavior on "Google Answers" and found that economic incentives, e.g., tips or price, alone do not explain the entire variance in users' participation in contributing their time and knowledge to that website. Non-monetary incentives, such as the social rewards of "star" ratings and comments from other users, account for a part of the variance in user participation. Nov [41] used the motivation scales to test the influence of incentives on users' voluntary participation in the platform "Wikipedia". The study results showed that ideology and social incentives were not significantly correlated with the level of users' contributions to generating content on Wikipedia. Obviously, users' engagement behavior on social media can be motivated with incentives, but what types of incentives work effectively can vary for different social media platforms.

As a social media-based community is one of the human social systems [42], it is very likely that the incentives motivating individuals' social behaviors would very likely influence individuals' behaviors on social media pages. To comprehend the possible incentives that may influence users' engagement behavior for enterprises' social media pages, this study reviewed the relative studies in the domains of marketing and human resource and classified the incentives into the categories of economic incentives, social incentives, and useful information that may influence users' engagement with succulent retailers' social media pages.

#### 2.3.1. Economic Incentive

Money is the most common incentive to motivate individuals' behaviors due to its value applicable in the exchange of most goods, services, or privileges [23]. In empirical practice, it is common to see that money is translated into rewards or bonuses to motivate individuals to seek higher performance in the workplace, and it has also been found to be effective in motivating users' engagement behaviors on social media pages. For example,

Garnefeld et al. [43] found that a one-time monetary reward (EUR 5) increased both active and passive users' immediate intention to post on the question-and-answer board in the setting of an online community.

Besides money, tangible objectives with economic value are frequently used to motivate individuals' behavior too. They are usually transformed into gifts or any other objective items that are redeemed with certificates, coupons, points, etc. [44–48]. Although both material and monetary incentives may be perceived as the same due to their commonality in economic values [21], scholars found that both functioned differently in regard to promoting individuals' behaviors [46]. For example, Rehnen et al. [49] compared the effects of direct non-monetary rewards (e.g., product/free service) and indirect monetary rewards (e.g., loyalty points) on users' engagement behaviors, and they found that monetary incentives are more effective in rewarding user engagement.

### 2.3.2. Social Incentive

"Social incentive" defined in this study refers to the benefits of extrinsic social status, social approval, or opinion feedback rewarded to the users. They are a kind of psychological reward that satisfies individuals' social needs [45]. Scholars have found that social incentives have an influence on users' social media behaviors. For example, online user engagement in the virtual community was found to be motivated by rewarding users with elevated status and privileges [50]. It was also found that members of the social media-based community can be motivated by satisfying their desires for social status or social approval. Moreover, social incentives, such as member privileges, normative requesting, and activities operated by the enterprisers, can serve as incentives to motivate users' psychological and behavioral investment toward the social media-based community and/or the brand [43].

### 2.3.3. Useful Information

The incentive of "valuable information" refers to the approach of motivating individuals' behaviors by providing information, knowledge, or experience that can help solve problems or increase benefits for the individuals [21,23,51]. Kuo [52] found that the better the users were satisfied with the information or knowledge provided by other users or the hosts of the social media page, the more likely the users will be satisfied and loyal to that brand page. Shi et al. [53] also found that quick responses from the other users or the host of the social media pages encourage users to continue their relationship with the social media-based brand community.

## 3. Materials and Methods

### 3.1. Data Collection

The empirical data generated from 21 selected FB pages hosted by succulent retailers were retrieved for investigating the questions aimed at this study. At first, the researcher searched for succulent retailers' FB pages by keying in the keyword "succulent" in Chinese with the software Fanpage Karma. As a result, the first 49 brand pages that have the highest fan size among the overall FB brand pages registered by the succulent retailers were selected as the sources of the data. In the following step, three criteria were adopted to filter the source of the data to meet the goal of this study: (1) the page was registered by the succulent retailers located in Taiwan, (2) the page was registered mainly for the business of succulent plants, and (3) the page has been in operation for at least one year. After filtering, 21 FB pages were valid for the goal of this study. The basic information of these 21 FB brand pages were presented in Table 1.

**Table 1.** Profiles of the 21 selected Facebook brand pages owned by succulent retailers located in Taiwan.

ID of the Succulent Retailers	Locations	Date the Store Founded	Date the Brand Page Initiated	Size of Fan Base	Amount of Total Posts	Amount of Incentive Posts (%) <sup>z</sup>	Website of the Brand Pages <sup>y</sup>
1	Taipei	31 July 2015	27 June 2015	59,523	703	176 (25.04)	<a href="https://www.facebook.com/succuland.com.tw">https://www.facebook.com/succuland.com.tw</a>
2	Online	-	21 December 2012	25,834	3	0 (---)	<a href="https://www.facebook.com/R.Lin888/">https://www.facebook.com/R.Lin888/</a>
3	Kaohsiung	September 2015	22 December 2015	24,122	524	491 (93.7)	<a href="https://www.facebook.com/mcsucculents">https://www.facebook.com/mcsucculents</a>
4	Taichung	20 May 2015	27 March 2015	18,435	43	3 (6.98)	<a href="https://www.facebook.com/saturdays.succulents">https://www.facebook.com/saturdays.succulents</a>
5	Taichung	19 July 1982	21 November 2014	17,247	42	17 (40.48)	<a href="https://www.facebook.com/smilesucculent">https://www.facebook.com/smilesucculent</a>
6	Hsinchu	26 January 2014	26 January 2014	15,983	116	17 (14.66)	<a href="https://www.facebook.com/littleredsucculent">https://www.facebook.com/littleredsucculent</a>
7	Online	-	4 July 2016	11,832	43	36 (83.72)	<a href="https://www.facebook.com/ohcarno">https://www.facebook.com/ohcarno</a>
8	Taipei	8 February 2014	8 February 2014	7204	146	49 (33.56)	<a href="https://www.facebook.com/livingjardin">https://www.facebook.com/livingjardin</a>
9	Tainan	-	7 February 2017	5011	66	4 (6.06)	<a href="https://www.facebook.com/1265441943493208">https://www.facebook.com/1265441943493208</a>
10	Tainan	1 October 2014	29 May 2012	4323	209	24 (11.48)	<a href="https://www.facebook.com/loveiplant">https://www.facebook.com/loveiplant</a>
11	Online	-	17 June 2014	3654	4	0 (---)	<a href="https://www.facebook.com/succulentsshop">https://www.facebook.com/succulentsshop</a>
12	Changhua	-	24 March 2014	2745	241	177 (73.44)	<a href="https://www.facebook.com/colorfulsucculents">https://www.facebook.com/colorfulsucculents</a>
13	Online	23 January 2013	23 December 2013	2162	29	4 (13.79)	<a href="https://www.facebook.com/succulentsc">https://www.facebook.com/succulentsc</a>
14	Taoyuan	15 September 2016	29 September 2016	1699	142	20 (14.08)	<a href="https://www.facebook.com/magicsucculentshouse">https://www.facebook.com/magicsucculentshouse</a>
15	Changhua	-	28 April 2015	1380	5	0 (---)	<a href="https://www.facebook.com/kittenplants/">https://www.facebook.com/kittenplants/</a>
16	Taichung	-	20 March 2017	1197	12	5 (41.67)	<a href="https://www.facebook.com/390589311319283">https://www.facebook.com/390589311319283</a>
17	Online	-	1 April 2015	968	41	14 (34.15)	<a href="https://www.facebook.com/mhleesucculent">https://www.facebook.com/mhleesucculent</a>
18	Taipei	-	6 December 2015	933	43	19 (44.19)	<a href="https://www.facebook.com/succulentsgo">https://www.facebook.com/succulentsgo</a>
19	Online	-	5 August 2018	694	143	5 (3.5)	<a href="https://www.facebook.com/yuyusucculents">https://www.facebook.com/yuyusucculents</a>
20	Yunlin	-	5 April 2019	171	4	0 (---)	<a href="https://www.facebook.com/662752180811630">https://www.facebook.com/662752180811630</a>
21	Online	-	26 August 2017	118	43	2 (4.65)	<a href="https://www.facebook.com/709485199246339">https://www.facebook.com/709485199246339</a>

<sup>z</sup> ratio of incentive posts versus overall posts. <sup>y</sup> accessed on 21 April 2020.

Afterward, the posts that were posted at the time of one year back from 12 April 2020, the date that the researcher started to retrieve the data, on the 21 targeted FB brand pages were retrieved with the software of Fanpage Karma. We set our search one year back to decide which posts to retrieve because we aimed to capture the empirical data covering all the posts across all the possible seasons and holidays that might influence consumers' purchase behavior for ornamental plants in one year cycle [54,55]. As a result, the contents of 2602 posts and their associated numbers of comments, shares, likes, and emojis responded to by users were downloaded and exported to Excel worksheets using the interface of Fanpage Karma, a software featured in analytics, community management, and editorial planning tools for diverse social media platforms to help business users to grow their social media-based fans or communities [56,57].

### 3.2. The Construction of the Taxonomy of the Incentive Messages Posted by the Succulent Retailers

The content analysis was performed on the 2602 posts sampled in this study to investigate the taxonomy of the incentives contended in the FB posts initiated by the succulent retailers to motivate user engagement. Content analysis is a systematic methodological approach for making objective and valid inferences from qualitative data, such as verbal, visual, or written data, for quantifying specific phenomena implied in the data [58]. In the process of content analysis, a template for the classification of the incentives was built based on the findings or theoretical framework published in previous studies [59,60]. The template worked as a reference frame for classifying the incentives initiated by the succulent retailers to motivate users to engage with their FB pages.

Three coders were in charge of classifying the incentives embedded in the posts. One of the three coders was a research assistant with a master's degree in social science. The other two coders were graduate students who were pursuing their master's degrees in marketing. These three coders were all well trained in the courses on qualitative and quantitative methodology, and they have been trained in the application of content analysis in methodology.

Before coding, the researcher explained the definition of each incentive category listed on the template to the coders [61,62]. After that, the coders worked independently on coding by classifying posts into the categories established on the template based on the incentive identified in the post. If any post was unable to be classified into the categories listed on the template, then open coding was adopted to establish a new category until all the posts were specified. Namely, the coders organized the posts into a new category to ensure that none of the incentive posts was restricted by the proposed classification framework on the template [61,63].



Interjudge reliability was adopted to ensure the reliability of the classification results. According to the calculation formula of interjudge reliability, i.e., the ratio of coding agreements to the total number of coding decisions ( $r/R$ ), the agreeability of the classification results in this study was 89.66%, and 2333 posts were classified consistently by the three coders, exceeding the suggested threshold of 85%. The calculation of interjudge reliability supported the reliability of the classification results [62]. For the 269 posts that were classified differently, their contents were discussed one by one until the three coders reached an agreement on the classification of those posts. As a result, 1063 out of 2602 posts were identified as posts containing the potential incentives motivating user engagement with succulent retailers' FB pages.

### 3.3. Analyzing the Effect of Incentives on Triggering User Engagement

There are two dimensions in the conceptualization of engagement, including behavioral engagement and emotional engagement. In this study, users' behavioral engagement was measured using the number of comments and shares responded to by the users, and users' emotional engagement was measured using the number of user responses with emojis of like, love, haha, wow, sad, and angry to the posts. Among the 1063 incentive posts, 49 posts had outliers on the measures of shares, comments, or emojis. Those 49 posts were excluded from subsequent statistical analyses, leaving 1014 (95.39%) incentive posts for subsequent statistical analyses [64].

The statistical analysis of MANOVA was processed to examine the effect of incentives on user engagement with the software of SPSS (Version 20.0., IBM Corp., Armonk, NY, USA, 2011). MANOVA is a statistical approach suitable for intrinsically multivariate questions, which concern how a set of dependent measures differs as a whole across groups of independent variables [65,66]. Then, a series of follow-up univariate analyses of variance and post hoc analyses were conducted to assess the question of which incentive category was salient in influencing user engagement toward succulent retailers' FB brand pages [65].

## 4. Results

### 4.1. The Incentives Used by Succulent Retailers to Motivate User Engagement

To clarify the incentives used by the succulent retailers for capturing user engagement, this study performed a content analysis on the 2602 posts cited from the targeted FB pages hosted by the succulent retailers in Taiwan. As a result, 1063 out of the 2602 posts (40.85%) were identified as "incentive posts" that carry the messages of incentives for encouraging user engagement with succulent retailers' FB pages. With the template prepared for content analysis, these 1063 incentive posts were classified into three categories, including economic incentives, social incentives, and multiple incentives. The economic incentives were reclassified into four subcategories, including discounts, gifts, sweepstakes, and bidding. There were three subcategories belonging to social incentives, namely gratitude to customers, leaving a question mark, and inviting users to make responses. The other was a multiplied strategy of providing more than one type of incentive to motivate users, which was classified independently and named "multiple incentives" in this study. The definition and examples for each incentive category are presented in Table 2, and the number of posts in each incentive category is presented in Figure 1. Posts containing the incentive of "inviting users to make response" shared the highest portion, accounting for 68.30% of the total incentive posts, followed by the sub-categories of "leaving a question mark", "discounts", "gifts", "sweepstakes", and "gratitude to customers", ranging from 3 to 10% in descending order. The contents for each incentive category are profiled in the following.

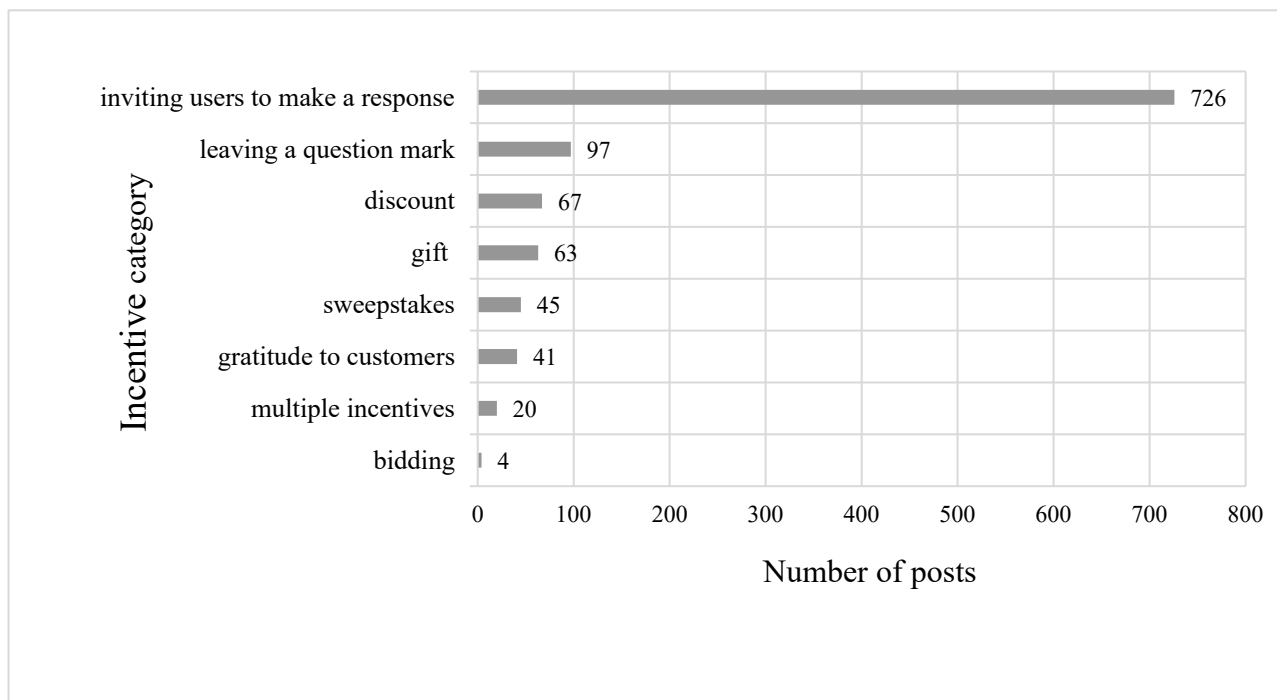
**Table 2.** The taxonomy of incentives built based on a content analysis of 1063 Facebook posts initiated by the succulent retailers located in Taiwan.

Incentive Category		Definition	Example
Economic incentives	Discounts	The incentives with monetary value, including special offers, coupons, free shipping, etc.	(1) “We are having a Valentine’s Day sale! . . .Get 10% discount for every NT \$500 purchase; 15% discount for every NT \$1000 purchase. . .” (2) “NT\$100 worth of coupon will soon fall due. . .we extend the deadline until 7 Jul. . .” (3) “This weekend Exclusive at store . . . Large plant Free shipping in Taiwan area. . .”
	Gifts	The non-monetary objects giving for free or with partial payment for motivating the users.	(1) “. . .Two people who sign up (for the course) will get a succulent plant for free. . .” (2) “Brand day. Don’t miss our exclusive gift on the day. . .Get 3 gifts free for purchasing X (the pot brand’s name) plant pots: (1) Flower shaped pin, (2)Three-inch succulent, (3) Exclusive postcard featuring blooming succulent. . .”
	Sweepstakes	The lottery promotion program is used to motivate users to participate in certain commercial activities.	(1) “#Win the succulent of a lottery at Double Tenth Day. It’s only one step that adds us on LINE (the brand’s other social media platform) to enter the draw. . .” (2) “#Anniversary sale by 30 Nov. #We are having a lottery for people checking in on our Facebook every day!”
	Bidding	The bidding program was initiated by succulent retailers for motivating users to engage in purchases.	(1) “The countdown to the bid from NT\$100 has already begun! It’s really a steal. . . Maybe it’s more than 50% off”. (2) “Let’s place the bid of cutting succulents. . . from NT\$0. . . We will close the auction at 9:00 p.m. tonight”.
Social incentives	Gratitude to customers	Posts are initiated specifically to reveal shops’ feedback with gratitude or congratulations to their customers.	(1) “Thank you for participating in our DIY course and leave a message as feedback for us. . .” (2) “Is it a unique gift for the opening ceremony? We wish the recipient to feel impressed by the giver and enjoy the ecstasy of happiness of the gift. . .” (3) “X (customer’s name) is a fashionable and aesthetic brand consultant team. We received the order that design a valuable flower gift as feedback for their client on the festival. . .” (4) “Exclusive activity only in X (customer’s name) department store. . . Have you bought Mother’s Day present? Have you planned a big meal for Mom? Go shopping with Mom! From now on to Mother’s Day, get a succulent plant free home for NT \$2000 purchase at X department store on that day~. . .”
	Leaving a question mark	The punctuation of the question marks associated with a request initiated by the succulent retailers for motivating the users to respond to that request.	(1) “. . .We found the two kinds of bunnies (metaphor of the succulent plants’ shape) are similar when arranging the photos! Do you think whether the two kinds of bunnies are the same? . . .” (2) “Because of the cooler temperature this May, these succulents from the leaf cuttings grew faster. What an accomplished Spring! #How are your results of leaf cuttings? “ (3) “The rainbow potted plant is exclusive at physical store. If this product can be order online, what do you think?”

Table 2. Cont.

Incentive Category		Definition	Example
Inviting to make responses		The statements posted for inviting users to interact with the posts initiated by the succulent retailers by clicking on “like”, “comment” or “share” associated with the posts.	(1) “...Today, we introduce the identification of String of Beads and String of Pearls!... Click Like if you learn a lot. Click Love if you like the video”.
			(2) “...If you take a photograph just in time. Post a photo of your own Air Plants. On the comment area”.
Other incentives	Multiple incentives	The incentives containing two or more types of incentives are classified in this study.	(3) “...This Sat. 8/24 to Sun. 8/25~ Because typhoon Bailu is coming~ and our sale exhibition is outdoor~ We had to postpone the activity until 8/31 to 9/1~... P.S. Please share this information”.
			(4) “...We have planned for the activity, course, and potted plant for the beginning of 2020... Don’t miss something new. #Set us See First (on Facebook)!”
			(1) “We finally begin purchasing a new product! ... What cultivar do you look for? We will have a lucky draw of free shipping for pre-ordering...” (questioning and lottery incentives in one post)
			(2) “... Grand opening. 1. Get succulent free for checking in our Facebook. 2. Get a 20% discount for purchasing two or more pottery planters. 3. Get points twice...” (gift and discount incentives in one post)





**Figure 1.** The frequency of posts in each incentive category.

#### 4.1.1. Economic Incentives

Incentives in this category were mainly a variety of rewards with economic values but beyond cash. Some previous studies have defined this type of incentive as sales promotion [67–69]. In this study, incentives of this category were further divided into three subcategories as the followings:

- (1) Discounts: Incentives in this subcategory were mainly the discounts conveying monetary value to users under the name of special offers, early bird, clearance, free shipping, etc. [70]. Succulent retailers initiated this type of incentive, mostly for special occasions, such as the holidays of Valentine's Day, Mother's Day, and Christmas, to inform users of the good time for purchasing succulent plants or related gifts.
- (2) Gifts: Incentives in this category mainly refer to material rewards in the form of free gifts. Usually, the gifts are the retailers' products, such as potted plants, or items that were not produced for regular sales, such as postcards of special editions. Meanwhile, incentives in this category were usually initiated for specific occasions.
- (3) Sweepstakes: Incentives of this category refer to the lottery offered by succulent retailers to motivate user engagement. They can be monetary or non-monetary items; meanwhile, incentives in this category differ from those of discounts and gifts in the process of gaining the rewards that users need to spend more effort to participate in the campaign for gaining the rewards.
- (4) Bidding: Incentives in this subcategory were mainly an auction or bidding campaign held by succulent retailers to promote their products or brands. Messages regarding the product, timing, and starting price for the bidding were usually posted. Even though these incentives seem attractive to users since the posts carrying this kind of message gained more "likes" from users, an average of 130.5 likes per post, this type of post accounted for only 0.38% of the overall incentive posts.

#### 4.1.2. Social Incentive

Incentives in this category were initiated by the succulent retailers to actively establish a social interaction in order to create or maintain a favorable relationship with the users.

Those incentives were usually operated in a social interaction mode, such as posing a question, inviting users to make a response, giving gratitude to users by thanking them for their purchases, answering users' questions, or offering users valuable information to help users solve problems. Those social interactions helped the succulent retailers to build a good relationship with the users and to trigger user engagement with their brand pages. Incentives in this category can be further divided into the following four subcategories based on the difference in their contents:

- (1) Gratitude to customers: Incentives in this category were mainly the succulent retailers' thanks or congratulations to certain users for their purchases. By doing so, those users' names or their enterprises were usually seen on the posts, which provided users the benefit of seeing their names or enterprises on the FB pages owned by the succulent retailers. The exposure of those users' names or their companies' brands can be increased as a result of succulent retailers' actions. It is of value for the users, so it is considered a kind of incentive for facilitating users' engagement behaviors. Those incentives usually happened in circumstances where users had bought succulent plants as a gift, and the succulent retailers posted their thanks and/or congratulations to either the giver or receiver. Even though Huang and Chen [69] found that these posts frequently appeared on florists' FB pages, this kind of incentive seemed less likely to happen for succulent retailers. Posts carrying this type of incentive message accounted for 3.86% of the overall incentive posts.
- (2) Leaving a question mark ("?"): Previous studies in other industry domains have found that posts with question marks usually arouse user responses toward the posts [67,68,71]. It implies that leaving a question mark "?" can be used as an instrument to encourage user interactions with succulent retailers' FB pages. The succulent retailers can interact with the users by leaving a question mark on their FB posts. Posts with this kind of message frame could lead users to think that the succulent retailers cared about their users and liked to know their users' opinions or thoughts. The post associated with the question mark "?" mainly shared the experience and gardening knowledge of succulent plants with the users and then asked for users' opinions, thoughts, or preferences on those posted issues.
- (3) Inviting users to make responses: Incentives of this kind refer to succulent retailers' invitations for users to leave a comment, share posts, or express their feelings about what is posted by succulent retailers. Previous studies have found that this kind of invitation can arouse users to respond to the post [68,71], so it can be seen as a motivator for arousing users' engagement behaviors. Among the nine incentive subcategories explored in this study, posts carrying this type of incentive were the most common on succulent retailers' FB pages, sharing the greatest portion (68.30%) of the total posts initiated by the succulent retailers.

#### 4.1.3. Multiple Incentives

Sometimes, the succulent retailers adopted more than one kind of incentive on the same post to trigger user engagement. For example, the post message "We have new products now! ... What cultivar do you look for? Come to make pre-orders and join our sweepstakes for free shipping. ..." simultaneously conveys the incentive features of "leaving a question mark (?)", "sweepstakes", and "inviting users to make responses". Similar to the incentive of bidding, the manifold incentives were less applied by the succulent retailers. They accounted for a very small portion (1.88%) of the overall FB posts initiated by the succulent retailers.

#### 4.2. The Effect of Incentives on Triggering User Engagement

Means of the frequency of comments, shares, and emojis responded to by users for each incentive category were presented in Table 3. The statistics of multivariate analysis of variance (MANOVA) were applied to test the effect of the incentives identified in this study in terms of triggering user engagement toward succulent retailers' FB brand pages. The incentive post categories that had a sample size of fewer than 20 posts, namely "multiple

incentives” and “bidding”, were excluded from the statistical analysis of MANOVA [65]. The relevant statistical results of MANOVA are presented in Table 4.

**Table 3.** The means of the clicks on comments, shares, and emojis by users by the incentive categories.

Post Category	Sample Size	Percentage (%)	Mean							
			Like	Comment	Share	Love	Haha	Wow	Sad	Angry
Inviting to make a response	709	69.92	33.85	18.77	0.56	0.39	0.03	0.06	0	0
Leaving a question mark	87	8.58	74.40	2.92	1.07	2.20	0.15	0.24	0	0
Discounts	64	6.31	52.34	5.17	0.84	1.09	0.19	0.13	0	0
Gifts	58	5.72	59.59	1.60	1.74	1.41	0.17	0.05	0	0
Gratitude to customers	40	3.94	69.23	1.10	0.88	1.83	0.05	0.20	0	0
Sweepstakes	35	3.45	81.14	17.83	7.14	1.94	0.09	0.29	0.14	0
Multiple incentives	18	1.78	73.06	2.11	3.28	0.67	0.22	0.11	0.06	0
Bidding	3	0.30	95.00	5.33	1.00	0.67	0	0.33	0	0

**Table 4.** The statistical results of MANOVA and the follow-up post hoc analysis for analyzing the effect of incentives on triggering user engagement measured with the frequency of user responses on the clicks of likes, comments, and shares associated with the incentive posts based on the data of 1014 empirical FB posts initiated by the succulent retailers located in Taiwan.

MANOVA			Univariate Analyses			
Pillai's Trace	F (df <sub>1</sub> , df <sub>2</sub> )	p	Dependent Variables	Welch's F (df <sub>1</sub> , df <sub>2</sub> )	p	Post Hoc Test
0.26	18.80 (15, 2961)	0.000	Likes	14.33 (5, 124.93)	0.000	sweepstakes > inviting to make a response leaving a question mark > inviting to make a response gifts > inviting to make a response inviting to make a response > discount inviting to make a response > leaving a question mark
			Comments	99.48 (5, 160.11)	0.000	inviting to make a response > gifts inviting to make a response > gratitude to customers leaving a question mark > gratitude to customers
			Shares	3.93 (5, 134.08)	0.002	gifts > inviting to make a response

Before the analysis of MANOVA, the test of Box's M was applied to test if the data fit the assumption of the equivalence of covariance, which is essential for the analysis of MANOVA. The significant statistical results gained (Box's M = 2128.47,  $F_{(30, 120,592.68)} = 69.39$ ,  $p = 0.000$ ) implied that the assumption of the equivalence of covariance was violated in the data (Hair et al., 2010). Moreover, the statistical results of Levene's test indicated that the assumption of the equality of error variances was violated for the measure of likes ( $F_{(5, 987)} = 10.40$ ,  $p = 0.000$ ), comments ( $F_{(5, 987)} = 40.71$ ,  $p = 0.000$ ), and shares ( $F_{(5, 987)} = 46.99$ ,  $p = 0.000$ ) across the incentive post categories. As a consequence, the statistical results of MANOVA for testing the effect of incentive categories on user engagement were explained with the statistics of Pillai's Trace, and the statistical results of the follow-up univariate analyses after the MANOVA test were explained with the statistics of Welch's F [72–74].

As indicated by the statistical results, incentives played a significant role in influencing user engagement toward succulent retailers' FB pages (Pillai's Trace = 0.26,  $F_{(15, 2961)} = 18.80$ ,  $p = 0.000$ ). The follow-up univariate analyses confirmed the significant differences in user responses in terms of likes ( $F_{(5, 124.93)} = 14.33$ ,  $p = 0.000$ ), comments ( $F_{(5, 160.11)} = 99.48$ ,  $p = 0.000$ ), and shares ( $F_{(5, 134.08)} = 3.93$ ,  $p = 0.002$ ) across different categories of incentive posts. The statistical results of the Games–Howell post hoc test, applied to make multiple comparisons across different incentive categories, demonstrated that different types of incentives had different effects on triggering user engagement [75]. It shows that “inviting to make responses” was more effective in triggering users to make

comments; however, it was less effective in triggering users to click “likes” compared to the incentives of “sweepstakes”, “leaving a question mark”, and “gifts”. However, users’ actions of sharing the posts seemed to not be influenced by the availability of incentives, even though the statistical results showed that the effect of “gifts” was significantly greater than that of “inviting to react” (Table 4).

The next was to test the effect of incentives on users’ emotional engagement measured with the frequency of users’ clicks on the emojis of “love”, “haha”, “wow”, “sad”, and “angry”. The relevant statistical results are presented in Table 5. It was found that none of the investigated incentive posts received any “angry” responses from users. As a consequence, only the emotional responses reflected by “love”, “haha”, “wow”, and “sad” were included in the statistical analysis of MANOVA for this section. The statistical results of Box’s M test indicated that the assumption of equivalence of covariance required for MANOVA was violated in the data (Box’s M = 1466.03,  $F_{(10, 14,802.74)} = 140.31$ ,  $p = 0.000$ ) [65]. Levene’s tests also showed that the assumption of the equality of error variances was violated in the data ( $F_{\text{love}}(5, 987) = 69.90$ ,  $p_{\text{love}} = 0.000$ ;  $F_{\text{haha}}(5, 987) = 16.04$ ,  $p_{\text{haha}} = 0.000$ ;  $F_{\text{wow}}(5, 987) = 21.98$ ,  $p_{\text{wow}} = 0.000$ ;  $F_{\text{sad}}(5, 987) = 40.11$ ,  $p_{\text{sad}} = 0.000$ ). Therefore, the statistical results of MANOVA were explained with the statistics of Pillai’s Trace [73], and the statistical results of the follow-up univariate analysis were explained with the statistics of Welch’s F [72,74].

**Table 5.** The statistical results of MANOVA and the follow-up post hoc analysis for analyzing the effect of incentives on triggering user engagement measured with the frequency of user responses with emojis based on the data of 1014 empirical posts initiated by the succulent retailers located in Taiwan.

MANOVA			Univariate Analyses			
Pillai’s Trace	F (df <sub>1</sub> , df <sub>2</sub> )	p	Dependent Variable	Welch’s F (df <sub>1</sub> , df <sub>2</sub> )	p	Post Hoc Test
0.24	12.61 (20, 3948)	0.000	Love	18.50 (5, 119.36)	0.000	sweepstakes > inviting to make a response leaving a question mark > inviting to make a response gifts > inviting to make a response discount > inviting to make a response gratitude to customers > inviting to make a response leaving a question mark > discounts
			Haha	1.92 (5, 124.31)	0.095	-
			Wow	2.86 (5, 125.72)	0.018	-
			Sad	-	-	-

The statistical results of MANOVA revealed the significance of the incentives on users’ emotional engagement with succulent retailers’ brand pages on FB (Pillai’s Trace = 0.24,  $F_{(20, 3948)} = 12.61$ ,  $p = 0.000$ ). To control type I errors, all follow-up univariate analyses and post hoc tests in this section were explained based on the adjusted alpha level of 0.0125 with Bonferroni inequality that the overall alpha level divided by the number of tests ( $0.05/4 = 0.0125$ ) [65]. The statistical results of the follow-up univariate analyses showed a significant effect only on the emoji of “love” ( $F_{(5, 119.37)} = 18.50$ ,  $p = 0.000$ ), whereas there were no significant differences with the emoji of “haha” ( $F_{(5, 124.31)} = 1.92$ ,  $p = 0.095$ ) nor of “wow” ( $F_{(5, 125.72)} = 2.86$ ,  $p = 0.018$ ). Meanwhile, the statistics showed that at least one variance in the measure of user responses on the “sad” emotion across different incentive post categories is zero; the Welch’s F test was unable to be conducted in the post hoc multi-comparison analysis regarding user responses with “sad”. Thus, the multiple comparison tests were only conducted on the measure of user responses with “love” via the Games–Howell post hoc test [75]. The results of the post hoc test demonstrated that the incentive categories of sweepstakes, question marks, gifts, discounts, and gratitude to customers received more user responses of “love” than those inviting users to react.

The findings explored above were consistent with those of previous studies conducted on the industries of flower retailing, wines, and mobile phones [67] and various industries in which user engagement can be promoted with incentives [68,69,76]. However, the effect varies from the difference in incentives. In sum, the social incentive of “inviting to make response” revealed a better effect on triggering users’ behavioral engagement than on triggering users to comment on posts. Those posts usually guided users through declarative or imperative sentences about how they could react and respond and asked the users to leave a comment for the post. Theoretically, posts inviting users to leave comments work as an antecedent to awakening users’ social needs of participation [12,77]. It may be the reason that the incentive of “inviting to make response” works better in causing users to leave comments on a post.

In contrast, the economic incentives of discounts, gifts, and sweepstakes worked better compared with “inviting to react” in regard to users’ emotional engagement. As shown in this study, the incentives of discounts, gifts, and sweepstakes revealed more positive effects on triggering users to respond to either “likes” or “love”. However, whether users would share the posts was not much different across the difference in incentives except that “inviting to react” revealed a lesser effect on it.

Some studies have conceptualized the incentives of “gifts” and “sweepstakes” as the same type of incentives [68], as well as identified “question mark” and “inviting to react” as the equivalent type [68,71]. However, this study revealed that the posts identified as the same as those described above revealed different effects on users’ engagement behaviors toward succulent retailers’ FB brand pages.

## 5. Conclusions

Succulents are “sustainable” plants that need much less water resources and demand less from soil conditions for growth. As sustainability is the mainstream practice of contemporary agriculture, the promotion of succulent plants deserves more aggressive actions from the horticultural industry.

To make the promotion of succulent plants comparable to the characteristics of consumers’ digitalized purchase behavior, this study aimed to explore incentives that enhance user engagement with succulent retailers in the social media era and how the enhancement varies with a difference in incentives. With the empirical data generated from succulent retailers’ brand pages on Facebook, this study identified that the incentives used by succulent retailers can be divided into three categories: economic incentives, social incentives, and multiple incentives that contained both economic and social values. The economic incentives were mostly price discounts, gifts, sweepstakes, and bidding, while the social incentives included gratitude, leaving a question mark, and inviting to react. The social incentive of inviting to react was the most frequently used one for the succulent retailers to encourage the users to interact with their FB posts.

This study also revealed that both users’ emotional and behavioral engagements were significantly influenced by the incentives, but the effect varied across different types of incentives. It implies that succulent retailers can strategically motivate user engagement with their promotion strategies.

Furthermore, this study discovered that the incentive effect on users’ actual engagement seemed to be a part of posts of gifts, sweepstakes, question marks, and inviting reactions among succulent enterprises’ Facebook brand pages. The posts of gifts, sweepstakes, and question marks had higher effects in terms of triggering users to click on the “like” and “love” emojis than incentives of “inviting to react”, while the incentive of inviting to react had higher effects on triggering users to comment on the posts compared with other incentives explored in this study. In sum, economic incentives are more likely to encourage users’ emotional engagement, while the social incentive of “inviting to react” was more likely to encourage users’ behavioral engagement.

Findings from this study have significant implications for the development of academic theory as well as for empirical practices. For the development of the academic theory



regarding users' engagement behavior on florists' social media pages, previous studies mainly focused on the issues regarding user responses toward the components of posts [69, 78]. The incentives for facilitating user engagement with florists' social media pages were rarely discussed. Findings from this study can fulfill this gap. For empirical practice, findings from this study implied that if succulent retailers or florists would like to have comments from users, they can just ask for comments directly from the users since this study found that compared with other incentives, the social incentive of "inviting to react" revealed a better effect on motivating users' behavioral engagement, namely to comment on posts. In contrast, if succulent retailers or florists would like to motivate users to have positive attitudes toward their social media pages, economic incentives, such as gifts or sweepstakes, can be more useful for reaching the goal.

**Funding:** This research was funded by the National Science and Technology Council of Taiwan (MOST 109-2410-H-002-113; MOST 110-2410-H-002-209).

**Data Availability Statement:** Not applicable.

**Acknowledgments:** The author wishes to thank the anonymous reviewers for their thoughtful comments and suggestions.

**Conflicts of Interest:** The author declares no conflict of interest.

## References

1. Beentje, H.J. *The Kew Plant Glossary: An Illustrated Dictionary of Plant Terms* 2010; Royal Botanic Gardens: Richmond, UK, 2010.
2. Sayuti, A.; Ahmed-Kristensen, S. Understanding emotional responses and perception within new creative practices of biological materials. In Proceedings of the Sixth International Conference on Design Creativity, Oulu, Finland, 26–28 August 2020; pp. 144–151.
3. United States Department of Agriculture. Census of Horticultural Specialties. 2022. Available online: [https://www.nass.usda.gov/Surveys/Guide\\_to\\_NASS\\_Surveys/Census\\_of\\_Horticultural\\_Specialties/index.php](https://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Census_of_Horticultural_Specialties/index.php) (accessed on 12 March 2022).
4. Taiwan Today. Goods for the Mind. 2014. Available online: <https://taiwantoday.tw/news.php?unit=8&post=14195> (accessed on 12 March 2022).
5. Knuth, M.J.; Behe, B.K.; Huddleston, P.T.; Hall, C.R.; Fernandez, R.T.; Khachatryan, H. Water Conserving Message Influences Purchasing Decision of Consumers. *Water* **2020**, *12*, 3487. [CrossRef]
6. Ahmad, S.Z.; Ahmad, N.; Bakar, A.R.A. Reflections of entrepreneurs of small and medium-sized enterprises concerning the adoption of social media and its impact on performance outcomes: Evidence from the UAE. *Telemat. Inform.* **2018**, *35*, 6–17. [CrossRef]
7. Ainin, S.; Parveen, F.; Moghavvemi, S.; Jaafar, N.I.; Shuib, N.L.M. Factors influencing the use of social media by SMEs and its performance outcomes. *Ind. Manag. Data Syst.* **2015**, *115*, 570–588. [CrossRef]
8. Czarnecka, M.; Kinelski, G.; Stefańska, M.; Grzesiak, M.; Budka, B. Social media engagement in shaping green energy business models. *Energies* **2022**, *15*, 1727. [CrossRef]
9. Galati, A.; Tinervia, S.; Tulone, A.; Crescimanno, M. Drivers affecting the adoption and effectiveness of social media investments: The Italian wine industry case. *Int. J. Wine Bus. Res.* **2019**, *31*, 260–278. [CrossRef]
10. Tsimonis, G.; Dimitriadis, S. Brand strategies in social media. *Mark. Intell. Plan.* **2014**, *32*, 328–344. [CrossRef]
11. Hollebeek, L. Exploring customer brand engagement: Definition and themes. *J. Strateg. Mark.* **2011**, *19*, 555–573. [CrossRef]
12. Van Doorn, J.; Lemon, K.N.; Mittal, V.; Nass, S.; Pick, D.; Pirner, P.; Verhoef, P.C. Customer engagement behavior: Theoretical foundations and research directions. *J. Serv. Res.* **2010**, *13*, 253–266. [CrossRef]
13. Laroche, M.; Habibi, M.R.; Richard, M.O.; Sankaranarayanan, R. The effects of social media based brand communities on brand community markers, value creation practices, brand trust and brand loyalty. *Comput. Hum. Behav.* **2012**, *28*, 1755–1767. [CrossRef]
14. Wang, X.W.; Cao, Y.M.; Park, C. The relationships among community experience, community commitment, brand attitude, and purchase intention in social media. *Int. J. Inf. Manag.* **2019**, *49*, 475–488. [CrossRef]
15. Carlson, J.; Rahman, M.; Voola, R.; De Vries, N. Customer engagement behaviours in social media: Capturing innovation opportunities. *J. Serv. Mark.* **2018**, *32*, 83–94. [CrossRef]
16. Lin, S.; Yang, S.; Ma, M.; Huang, J. Value co-creation on social media: Examining the relationship between brand engagement and display advertising effectiveness for Chinese hotels. *Int. J. Contemp. Hosp. Manag.* **2018**, *30*, 2153–2174. [CrossRef]
17. Wirtz, J.; den Ambtman, A.; Bloemer, J.; Horváth, C.; Ramaseshan, B.; van de Klundert, J.; Kandampully, J. Managing brands and customer engagement in online brand communities. *J. Serv. Manag.* **2013**, *24*, 223–244. [CrossRef]
18. Blattberg, R.C.; Neslin, S.A. Sales promotion: The long and the short of it. *Mark. Lett.* **1989**, *1*, 81–97. [CrossRef]
19. Gilbert, D.C.; Jackaria, N. The efficacy of sales promotions in UK supermarkets: A consumer view. *Int. J. Retail. Distrib. Manag.* **2020**, *30*, 315–322. [CrossRef]



20. Norberg, P.A. Employee incentive programs: Recipient behaviors in points, cash, and gift card programs. *Perform. Improv. Q.* **2017**, *29*, 375–388. [CrossRef]
21. Peterson, S.J.; Luthans, F. The impact of financial and nonfinancial incentives on business-unit outcomes over time. *J. Appl. Psychol.* **2006**, *91*, 156–165. [CrossRef]
22. Putri, C.M.; Susanti, I.W. How do budget level and type of incentives influence performance? *J. Ilm. Akunt. Dan Bisnis* **2019**, *14*, 34–40. [CrossRef]
23. Stajkovic, A.D.; Luthans, F. Differential effects of incentive motivators on work performance. *Acad. Manag. J.* **2001**, *44*, 580–590. [CrossRef]
24. Statista. Social Media—Statistics & Facts. Available online: <https://www.statista.com/topics/1164/social-networks/#topicOverview> (accessed on 19 June 2023).
25. Gómez, M.; Lopez, C.; Molina, A. An integrated model of social media brand engagement. *Comput. Hum. Behav.* **2019**, *96*, 196–206. [CrossRef]
26. Hollebeek, L.D.; Glynn, M.S.; Roderick, J.B. Consumer brand engagement in social media: Conceptualization, scale development and validation. *J. Interact. Mark.* **2014**, *28*, 149–165. [CrossRef]
27. Luarn, P.; Lin, Y.F.; Chiu, Y.P. Influence of Facebook brand-page posts on online engagement. *Online Inf. Rev.* **2015**, *39*, 505–519. [CrossRef]
28. Sabate, F.; Berbegal-Mirabent, J.; Cañabate, A.; Lebherz, P.R. Factors influencing popularity of branded content in Facebook fan pages. *Eur. Mgt. J.* **2014**, *32*, 1001–1011. [CrossRef]
29. Schultz, C.D. Proposing to your fans: Which brand post characteristics drive consumer engagement activities on social media brand pages? *Electron. Commer. Res. Appl.* **2017**, *26*, 23–34. [CrossRef]
30. Tafesse, W. Content strategies and audience response on Facebook brand pages. *Mktg. Intell. Plan.* **2015**, *33*, 927–943. [CrossRef]
31. Turnbull, S.; Jenkins, S. Why Facebook Reactions are good news for evaluating social media campaigns. *J. Direct Data Digit. Mark. Pract.* **2016**, *17*, 156–158. [CrossRef]
32. Antoniadis, I.; Paltsoglou, S.; Patoulidis, V. Post popularity and reactions in retail brand pages on Facebook. *Int. J. Retail. Distrib. Manag.* **2019**, *47*, 957–973. [CrossRef]
33. Barreda, A.A.; Bilgihan, A.; Nusair, K.; Okumus, F. Generating brand awareness in online social networks. *Comput. Hum. Behav.* **2015**, *50*, 600–609. [CrossRef]
34. Jang, H.; Olfman, L.; Ko, I.; Koh, J.; Kim, K. The influence of on-line brand community characteristics on community commitment and brand loyalty. *Int. J. Electron. Commer.* **2008**, *12*, 57–80. [CrossRef]
35. Kamboj, S. Applying uses and gratifications theory to understand customer participation in social media brand communities: Perspective of media technology. *Asia Pac. J. Mark. Logist.* **2020**, *32*, 205–231. [CrossRef]
36. Chua, A.Y.K.; Banerjee, S. How businesses draw attention on Facebook through incentives, vividness and interactivity. *Int. J. Comput. Sci.* **2015**, *42*, 275–281.
37. Jain, S.; Chen, Y.; Parkes, D.C. Designing incentives for online question-and-answer forums. In Proceedings of the 10th ACM Conference on Electronic Commerce, Stanford, CA, USA, 6–10 July 2009; pp. 129–138.
38. Gharibi, R.; Malekzadeh, M. Gamified Incentives: A Badge Recommendation Model to Improve User Engagement in Social Networking Websites. *Int. J. Adv. Comput. Sci. Appl.* **2017**, *8*, 272–278. [CrossRef]
39. Rafaeli, S.; Raban, D.R.; Ravid, G. Social and economic incentives in Google Answers. In Proceedings of the ACM Workshop Sustaining Community: The Role and Design of Incentive Mechanisms in Online Systems 2005, Sanibel Island, FL, USA, 6–8 November 2005.
40. Rafaeli, S.; Raban, D.R.; Ravid, G. How social motivation enhances economic activity and incentives in the Google Answers knowledge sharing market. *Int. J. Knowl. Learn.* **2007**, *3*, 1–11. [CrossRef]
41. Nov, O. What motivates wikipedians? *Commun. ACM* **2007**, *50*, 60–64. [CrossRef]
42. Bandura, A. Social cognitive theory of personality. In *Handbook of Personality*, 2nd ed.; Pervin, L., John, O., Eds.; Guilford Press: New York, NY, USA, 1999; pp. 154–196.
43. Garnefeld, I.; Iseke, A.; Krebs, A. Explicit incentives in online communities: Boon or bane? *Int. J. Electron. Commer.* **2012**, *17*, 11–38. [CrossRef]
44. Condly, S.J.; Clark, R.E.; Stolovitch, H.D. The effects of incentives on workplace performance: A meta-analytic review of research studies 1. *Perform. Improv. Q.* **2003**, *16*, 46–63. [CrossRef]
45. De Gieter, S.; Hofmans, J. How reward satisfaction affects employees' turnover intentions and performance: An individual differences approach. *Hum. Resour. Manag. J.* **2015**, *25*, 200–216. [CrossRef]
46. Jeffrey, S.A.; Adomdza, G.K. Incentive salience and improved performance. *Hum. Perform.* **2011**, *24*, 47–59. [CrossRef]
47. Jeffrey, S.A.; Shaffer, V. The motivational properties of tangible incentives. *Compens. Benefits Rev.* **2007**, *39*, 44–50. [CrossRef]
48. Presslee, A.; Vance, T.W.; Webb, R.A. The effects of reward type on employee goal setting, goal commitment, and performance. *Account. Rev.* **2013**, *88*, 1805–1831. [CrossRef]
49. Rehnen, L.M.; Bartsch, S.; Kull, M.; Meyer, A. Exploring the impact of rewarded social media engagement in loyalty programs. *J. Serv. Manag.* **2017**, *28*, 305–328. [CrossRef]
50. Yoo, W.S.; Suh, K.S.; Lee, M.B. Exploring the factors enhancing member participation in virtual communities. *J. Glob. Inf. Manag.* **2002**, *10*, 55–71. [CrossRef]

51. Ao, L.; Bansal, R.; Pruthi, N.; Khaskheli, M.B. Impact of Social Media Influencers on Customer Engagement and Purchase Intention: A Meta-Analysis. *Sustainability* **2023**, *15*, 2744. [\[CrossRef\]](#)
52. Kuo, Y.F. A study on service quality of virtual community websites. *Total Qual. Manag. Bus. Excell.* **2003**, *14*, 461–473. [\[CrossRef\]](#)
53. Shi, S.; Chen, Y.; Chow, W.S. Key values driving continued interaction on brand pages in social media: An examination across genders. *Comput. Hum. Behav.* **2016**, *62*, 578–589. [\[CrossRef\]](#)
54. Liao, M.L. Survey of Flower Purchase Frequency of Taiwan. Master's Thesis, National Taiwan Normal University, Taipei, Taiwan, 2018. (In Chinese).
55. Zhao, S.; Yue, C.; Meyer, M.H.; Hall, C.R. Factors affecting US consumer expenditures of fresh flowers and potted plants. *HortTechnology* **2016**, *26*, 484–492. [\[CrossRef\]](#)
56. Fanpage Karma. Terms of Service. Available online: <https://www.fanpagekarma.com/terms> (accessed on 15 July 2023).
57. Fanpage Karma. Great Features for Great Users. Available online: <https://www.fanpagekarma.com/features> (accessed on 20 May 2020).
58. Downe-Wamboldt, B. Content analysis: Method, applications, and issues. *Health Care Women Intl.* **1992**, *13*, 313–321. [\[CrossRef\]](#)
59. Crabtree, B.F.; Miller, W.L. (Eds.) A template approach to text analysis: Developing and using codebooks. In *Doing Qualitative Research*; Sage: Thousand Oaks, CA, USA, 1992; pp. 93–109.
60. Fereday, J.; Muir-Cochrane, E. Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *Int. J. Qual. Methods* **2006**, *5*, 80–92. [\[CrossRef\]](#)
61. Cho, J.Y.; Lee, E.H. Reducing confusion about grounded theory and qualitative content analysis: Similarities and differences. *Qual. Rep.* **2014**, *19*, 1–20. [\[CrossRef\]](#)
62. Kassarian, H.H. Content analysis in consumer research. *J. Consum. Res.* **1977**, *4*, 8–18. [\[CrossRef\]](#)
63. Corbin, J.M.; Strauss, A. Grounded theory research: Procedures, canons, and evaluative criteria. *Qual. Sociol.* **1990**, *13*, 3–21. [\[CrossRef\]](#)
64. Shiffler, R.E. Maximum Z scores and outliers. *Am. Stat.* **1988**, *42*, 79–80.
65. Hair, J.F., Jr.; Black, W.C.; Babin, B.J.; Anderson, R.E. *Multivariate Data Analysis: A Global Perspective*, 7th ed.; Pearson: Upper Saddle River, NJ, USA, 2010.
66. Hand, D.J.; Taylor, C.C. *Multivariate Analysis of Variance and Repeated Measures: A Practical Approach for Behavioural Scientists*; Chapman and Hall: London, UK, 1987.
67. Chandrasekaran, S.; Annamalai, B.; De, S.K. Evaluating marketer generated content popularity on brand fan pages—A multilevel modelling approach. *Telemat. Inform.* **2019**, *44*, 101266. [\[CrossRef\]](#)
68. Dolan, R.; Conduit, J.; Frethey-Bentham, C.; Fahy, J.; Goodman, S. Social media engagement behavior: A framework for engaging customers through social media content. *Eur. J. Mark.* **2019**, *53*, 2213–2243. [\[CrossRef\]](#)
69. Huang, L.C.; Chen, L.C. Message strategies and media formats of florists' Facebook posts and their effects on users' engagement behaviors. *HortScience* **2018**, *53*, 1647–1654. [\[CrossRef\]](#)
70. Chandon, P.; Wansink, B.; Laurent, G. A benefit congruency framework of sales promotion effectiveness. *J. Mark.* **2000**, *64*, 65–81. [\[CrossRef\]](#)
71. Kim, D.H.; Spiller, L.; Hettche, M. Analyzing media types and content orientations in Facebook for global brands. *J. Res. Interact. Mark.* **2015**, *9*, 4–30. [\[CrossRef\]](#)
72. Delacre, M.; Leys, C.; Mora, Y.L.; Lakens, D. Taking parametric assumptions seriously: Arguments for the use of Welch's F-test instead of the classical F-test in one-way ANOVA. *Int. Rev. Soc. Psychol.* **2019**, *32*, 1–12. [\[CrossRef\]](#)
73. Olson, C.L. On choosing a test statistic in multivariate analysis of variance. *Psychol. Bull.* **1976**, *83*, 579. [\[CrossRef\]](#)
74. Welch, B.L. On the comparison of several mean values: An alternative approach. *Biometrika* **1951**, *38*, 330–336. [\[CrossRef\]](#)
75. Games, P.A.; Howell, J.F. Pairwise multiple comparison procedures with unequal n's and/or variances: A Monte Carlo study. *J. Educ. Stat.* **1976**, *1*, 113–125.
76. Tafesse, W.; Wien, A. Using message strategy to drive consumer behavioral engagement on social media. *J. Consum. Mark.* **2018**, *35*, 241–253. [\[CrossRef\]](#)
77. Pentina, I.; Guilloux, V.; Micu, A.C. Exploring social media engagement behaviors in the context of luxury brands. *J. Advert.* **2018**, *47*, 55–69. [\[CrossRef\]](#)
78. Reid, D.R. Courting the Consumer: Consumer Preferences and Engagement with Social-Media Marketing and Horticultural Businesses. Master's Thesis, Kansas State University, Manhattan, KS, USA, 2020.

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.