

New Trends in Product Placement Strategies - Case of Instagram

Antonín PAVLÍČEK * and Jana SYROVÁTKOVÁ

University of Economics, Prague, Czech Republic; antonin.pavlicek@vse.cz; jana.syrovatkova@vse.cz

* Correspondence: antonin.pavlicek@vse.cz

Abstract: The paper focuses on product placement strategies used on Instagram platform. 1,000 posts in total from 100 most influential instagrammers were analyzed. For each post numerous data were collected: URL, Number of Followers, Age Average, Likes, Comments, Publication format, The caption of the publication, Date of publication, Staging of the publication, The name of the brands placed, The category of the product placed (16 categories were taken into consideration). We found women are slightly more influential than men and make much more product placements in the "Beauty & Fashion" and "Clothes, Shoes" categories, but otherwise the category of the product is not much differentiated by the gender of the influencer. A category determines a popularity in terms of likes, while sport categories correlates positively with paid partnership captions. The video format has a lower popularity in terms of likes and the posts with products and influencers in the same photo are more appreciated than other staging.

Keywords: product placement; influencers; Instagram

JEL Classification: M2; O3

1. Introduction

It is one of people's desires to socialize and communicate with each other. Digital social networking was born in 1971, when the first email was sent. In 1978 the first social media called BBS – (Bulletin Board System) was born. It was the first system that lets users interact with one another over the internet. By the 1980s, home computers were becoming more common and social media was becoming more sophisticated. Social media exploded in popularity after people came to the platforms and started to create and spread content. Today, there is an enormous variety of social networking sites and Instagram is in the top 5 of the favorite ones. The number of social media users worldwide in 2019 was 3.484 billion. (Chaffey 2019; Vondra 2015)

There is a real change between the media of the past and the media now. Although the majority of the past media is still used, most are not used as much or used in a different way. For example, newspaper sales have fallen down but at the same time the audience of the online version grew up due to the technological transition. Therefore, online advertisement also became more frequent. Nowadays, most of us get our news from social media, while newspapers are less utilized.

Every month, 1 billion people use Instagram. This platform was launched only seven years ago (October 2010 for iOS and a year and a half later for Android) and already has about 500 million active users daily. (Newberry 2019) The social networks allow users to upload photos and videos from smartphones, adding various filters, hashtags, caption and location information. The service also includes a messaging and sharing content features. An account's posts can be shared publicly or with pre-approved followers. The photo and video sharing social networking service is owned by Facebook. It was found that Instagram creates big social pressure therefore a big change on Instagram might be coming as Instagram is now testing disallowing of likes. The goal is to avoid the mental pressure because of an informal competition that some users experience. Many researches show that social networks cause damage to mental health partly because users are addicted to likes. For example, Nottingham Trent University study show that "it may be plausible to speak specifically of 'Facebook Addiction Disorder'...because addiction criteria, such as neglect of personal life, mental preoccupation, escapism, mood modifying experiences, tolerance and concealing the addictive

behavior, appear to be present in some people who use [social networks] excessively." (Nottingham Trent University 2011)

Influencer marketing wasn't even an industry 5 years ago (Potancok 2013). It was the royal family who began the trend for "influencer marketing". Their influence was spread across the globe by the "British Empire". Influencer marketing has been one of the most rapidly evolving types of marketing and it continues to grow. A lot of influencers have a considerable audience (= a high number of subscribers) on their accounts or channels. As of November 2019, the most followed person on Instagram is Cristiano Ronaldo, a Portuguese footballer with over 190 million followers. The most-followed woman is Ariana Grande, a singer with over 167 million followers. Nowadays, an influencer is a profession because it brings a high income, unlike before. More and more brands invest a big part of their marketing budgets into the hands of influencers. (Patel 2017)

Instagram has 4.200 billion daily likes and 95 million photos and videos uploaded daily (Newberry 2019). On Instagram, most of the content is photo although videos are becoming more and more popular. The 5 most famous hashtag on Instagram are: #love, #instagood, #photooftheday, #fashion and #beautiful according to Instagram. Hashtags are creating more traffic on posts and deliver engagement if they are used correctly. With at least one hashtag a post gain 12.6% more engagement. Including a location in a post is also a solution to have more engagement: about 79% more engagement. (Influencer Marketing Hub 2018)

In our research we were interested in what content is the most popular within people and who is creating this content. Some research has already been made in this area.

There is the case for the study "Happiness on Instagram - Content Analysis and Engagement Based on Attention Theory" (Li 2019) which is about Instagram and happiness. This study of Qiuwen Li and Young Ae Kim try to explain the concept of happiness on Instagram. To do that, the study downloaded the 200 most recent posts from individual accounts between January 9 and 20 2019 with the hashtag #happy or #happiness. The point here was to find the reality behind posts on Instagram concerning honesty. Are people being honest on Instagram? Are they being sincere with their comments? Are they truly happy when they put the hashtag #happy or #happiness?

The main results of Quiwuen's study show that the kind of post the more link to the idea of happiness is "physical appearance" with 36 %. It is 15 % more than happiness from the relationship and 27 % more than happiness from the achievement. This study then provides a better understanding of the behavior of Instagram users and what attracts them to this social network. In addition, this study shows that users' behaviors can be different according to the gender. Indeed, women like and comment on the content of others more than men (+2.3 times more comments and +1.7 times more likes). Finally, regarding sincerity, this study tries to show through the study of many accounts that Instagram often deviates from reality and that users are not always honest on this social network. To do this, they also observed the comments under the posts. Here, the results show that the majority of comments are not sincere and that only 13.1% of the comments are.

Another study to look for in a similar way to study the behaviors of Instagram users. The analysis criteria are different, but the idea is always to understand the behavior on this social network. According to Nils Herrmann in this study "Instagram Study: We analyzed 9 million posts and here's what we've learned" (Herrman 2018), images are more shared but less efficient than videos or carousels, short posts generate more interactions and the majority of accounts observed use hashtags but no emojis. This is a study conducted by Quintly on 9 million posts and 44,000 Instagram Business profiles to identify and better understand publication performance criteria. The profiles analyzed are diverse and categorized according to the number of followers. Concerning the results, the study highlights that images represent 72.6% of posts but that they are less efficient than carousels or videos. Indeed, videos involve 21.2% more interaction than images. A type of post that also involves a lot of interaction is the short post, with little character. However, on the posts studied, the majority of content is long content of more than 300 characters. But it is the shortest posts that bring interaction. Finally, the study aims to understand the role of hashtags and emojis in posts. The results show that 54.9 of the Instagram profiles do not use emojis. However, hashtags are widely used and 36.2% of publications contain 1 to 3 hashtags.

There is another study by Yuheng Hu Lydia Manikonda and Subbarao Kambhampati (2014) who determined 5 main types of Instagram users. The University of Arizona's Computer Science Department conducted this study on Instagram photo content and user types. For this study, the analysis is based on a sample of 50 users among friends and followers from the 37 most popular Instagram users. In addition to the 5 types of Instagram users, this study established 8 main categories of popular photos: Selfies, Friends, Food, Gadgets, Images with embedded text, Animals, Activities and Fashion. Concerning the 5 types of users, the study distinguishes between the "Foodies", a common user who mainly posts images of food, the "thinker" who posts images with integrated text, the "active" who posts images of his activities, the "selfies-lovers" who posts images of himself and finally the "My friends and me" who post images of their friends and themselves.

2. Methodology

From auditing server hypeauditor.com were selected 50 most followed female and 50 most followed male Instagram influencers in the world. We then chose to analyze 10 posts per personality, so, 1000 posts in total. For each post following data were collected: URL, Number of Followers, Age Average, Likes, Comments, Publication format, The caption of the publication, Date of publication, Staging of the publication, The name of the brands placed, The category of the product placed (16 categories were taken into consideration: Beauty & Fashion, Cars & motorbikes, Children & Family, Clothes, Shoes, Handbags & Accessories, Education, Entertainment, Fitness & yoga, Home & garden, How to & Style, Movies & TV, Music, Photography, Restaurant, Food & Grocery, Sports, Travel & Tourism, Video games).

While collecting the data, we added some variables to make the data more relevant.

First, the **Engagement Rate** of each influencer is the sum of comments and likes divided by the number of followers they have, it is a metric that measures the level of engagement that a piece of created content is receiving from an audience. It shows how much people interact with the content. Because the engagement rate is calculated relative to the number of followers an influencer has on Instagram, the rate for both small and large influencer's audience can be compared equally. It is very important to keep an eye on this metric because a higher engagement rate means higher potential consumers for the product placed.

The **Ratio of likes to followers** is the number of likes divided by the number of followers. Likes are a real indicator for great content and likes matter because the more likes, the more the influencer knows what their followers prefer. This metric is important as Instagram algorithms will expose posts with a higher amount of likes to other users. This means, the more likes, the faster their account will grow, the faster their posts could attract more potential customers. The average rate of likes on Instagram is 37 likes per 1000 followers for photos (3.7 %) and 24 likes per 1000 followers for videos (2.4 %), which means above this amount for a post, the content is more appreciated than the average.

The **Ratio of comments to followers** is the number of comments divided by the number of followers. There is a major difference between likes and comments when it comes to evaluating Instagram performance metrics. Likes are basically easy to give and oftentimes the influencer can't be certain a post was truly seen by their followers, but with comments, it is clearer. Whether positive or negative, comments left on their posts are an indication that the content had some kind of impact, or at least enough for the individual to take the extra step to leave feedback. This type of engagement, especially when positive, is a strong factor in community building and establishing a loyal fan base. Anyone can double tap with ease but those who go out of their way to comment are the ones to keep an eye on.

The **Likes/Comments ratio** is the likes divided by the number of comments. It shows how many likes the influencer has for one comment. It is an important metric, because as explained before, the more comments they have, the more they could be sure they have a real fan base and a real engagement from their followers. To be clearer, the lower is the **Likes/Comments ratio** result, the better is the engagement. For example, in the first line of the table, the likes/comments result of Selena Gomez is 205.72859, which means that she got 205 likes per comment.

On the other hand, we also calculated the **Comments/Likes**, which is the same metric but reversed. It shows how many are the comments for one like. The higher the result, the higher the engagement is.

The staging of the product can be very diverse according to the posts and it is very important to classify them in order to be able to compare the differences in posts' engagement. We have 6 categories for the staging:

- **Photo of influencer without the product:** The influencer can only promote the product by themselves if it's immaterial or just without it.
- **Photo of product with influencer:** The product is clearly highlighted with the influencer on the picture (they are wearing or holding it, or by their side).
- **Photo of product without influencer:** The product is highlighted in the picture taken by the influencer.
- **Promotion video with influencer:** The influencer is directly promoting the product in their video (demonstration of use, denouncing the benefits...)
- **Promotion video without influencer:** Commercial of the product without the influencer (demonstration of use of design), most commonly advertisements.
- **Trailer:** Trailer of a movie or TV shows that the influencer has realized or in which they are playing.

Then, we have 4 different captions:

- **Formal / Paid partnership:** The influencer is very clear and says above their post that it is a paid partnership or an official advertisement.
- **Formal / Tag:** the influencer is clear and tag the Instagram account on their post (caption or on the picture / video).
- **Formal / Thank you note:** The influencer is clear and thanks the brand under their post.
- **Informal:** The influencer is ambiguous on the promotion, but the logo of the brand appears clearly.

3. Results

3.1. Descriptive statistics

The average amount of followers amongst the 100 influencers studied is equivalent to 48,826,858. This category has a relatively high variation in the range between the maximum number of followers and the minimum which is equal to over 179 million followers. This is explained as the Hype auditor database did not classify its top influencer ranking solely on the number of followers. Although all our studied influencers have several million followers, there are high disparities between them. The standard deviation of this variable is also extremely high. Assuming that the number of followers follow a normal distribution, we can conclude that approximately 68% of the influencers have a number of followers that lies between one standard deviation away from the mean which is between 9,235,115 and 88,418,601 followers.

Table 1. Descriptive statistics results.

	Average	Median	Minimum	Maximum	Range	Std. dev.
Followers	48,826,858	34,700,000	7,470,000	186,800,000	179,330,000	39,591,743
Engagement	0.05	0.03	0	0.64	0.64	0.05
Likes	1,518,508	1,120,427	71,760,00	38,823,881	38,752,121	1,754,936
Comments	10,979	5,595	0	490,000	490,000	21,669
Likes per comment	2,129	195	0	244,326	224,326	14,634

The engagement rate has a relatively low standard deviation which shows that most of the data concerning this variable are clustered around the mean. Again, assuming a normal distribution, around 68% of the engagement rate lies between one standard deviation away from the mean which is between 0.00 and 0.1 (0% and 10%) while 95% of the engagement rate lies between two standard deviations from the mean which would be between 0% and 15%. The number 0 is the minimum value of the engagement rate, Comments, and Likes per comment section can be explained due to the fact that certain influencers have a special privacy setting in which they disable the possibility to write any comments. It can be clearly seen that the number of likes is much higher than that of comments. Most followers do not put in the extra effort and time to type a comment on posts they see on their feed. This explains the very high number of average likes per each comment which is equivalent to 2,129.

The following three charts put into perspective the categorical qualitative variables that could not be inserted in the descriptive statistics above.

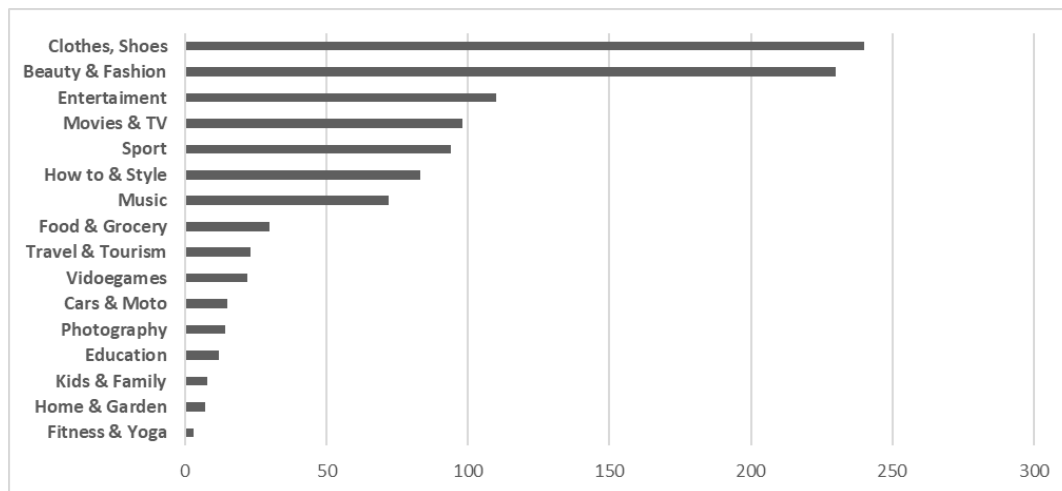


Figure 1. Product placement category.

The histogram above clearly shows the distribution of the main categories in which the product placements are being done. The Category Clothes, Shoes, Handbags and accessories leads with Instagram 240 posts followed closely by Beauty and Fashion with 230 posts. The next main categories are more or less evenly distributed between Movies & TV, Entertainment, Sports, How to & style with just under 100 posts. The other Categories were very slightly represented with less than 15 posts. These categories are also industries in which there is not much importance given to marketing investments.

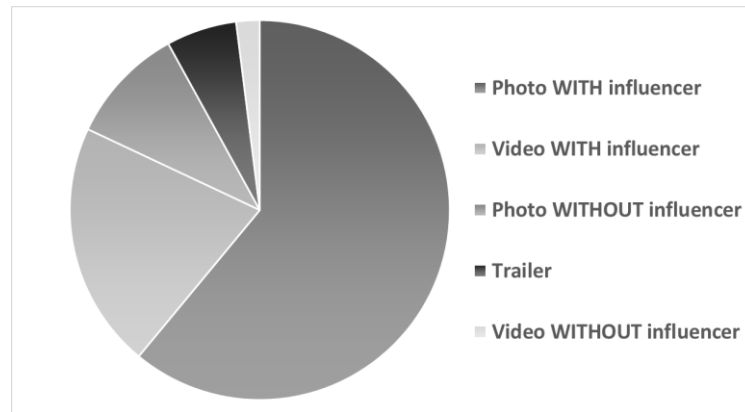


Figure 2. Product placement staging

Most of the Instagram posts from the top influencers we have studied feature product placements through a photo of product with influencer that accounts for 61% of the posts followed by promotion videos with influencers that accounts for 21% of the posts.

Finally, the most common caption used by these Instagram influencers are Formal with at Tag representing 73% of posts. The next highest caption style is Formal with a paid partnership symbol with 13% which is considerably much lower than the first category.

4. Discussion

Over the course of analysis, we have come to following observations or hypotheses:

Women are more influential than men.

“As a new digital opinion leader, the influencer is able to affect purchasing behavior through the keeping of an Instagram account accompanied by intense social activity and high media exposure” (Bour 2017): on Instagram, having a high media exposure means having a high engagement rate and a lot of likes and comments in general on every post. Even if women are more present on Instagram than men (both on the side of users and influencers), are women more appreciated and so more influential as a result?

Therefore, we created a pivot table linking the gender to the engagement rate, ratio of likes to followers, ratio of comments to followers, the total comments and total likes:

Table 2. Gender differences.

	Engagement Rate Average	Ratio of likes to followers Average	Ratio of comments to followers Average	Total Likes	Total Comments
Females	0,0498	0,0495	0,00033	807 122 719	5 383 561
Males	0,0421	0,0418	0,00035	717 565 983	5 592 979
Total	0,0459	0,0456	0,00034	1 524 688 702	10 976 540

We can see that, on average, the engagement rate, the ratio of likes to followers, the ratio of comments to followers and the total likes are **higher for females than males**, but the difference is not very large between the two genders. We can also notice that for the total of comments, *males outnumber females*.

The category of the product is not much differentiated by the gender of the influencer.

Women have two predominant categories: Beauty & Fashion and Clothes, Shoes, Handbags & Accessories which represent both 31% and 28%. The others are not represented that much except for

some standing out from the crowd like Entertainment, How to & Style, Movies & TV and Music. The rest has only 10 posts or less. The lower ones are Travel & Tourism and Video Games with only 2 posts.

Concerning the male gender, the distribution is less divided compared to the female gender. Several categories step out of the line like Beauty & Fashion with 62 posts, Entertainment with 70, Movies & T with 59 and Sports with 78. The predominant one is Clothes, Shoes, Handbags & Accessories with 105 posts.

The rest of the categories are quite low, under 15 posts except for a few like How to & Style, Music, Restaurant, Food & Grocery.

Women make much more product placements in the "Beauty & Fashion" and "Clothes, Shoes" categories.

Thanks to our data analysis, we can confirm this. Out of 50 female influencers, 36 have made at least one post around "Beauty & Fashion", which corresponds to 159 posts. As for men, we have 21 out of 50 male influencers who actually have, which is equivalent to 62 posts. Similar difference is also in "Clothes". On the other hand, males are much more active in "Sports" and "Movies" categories.

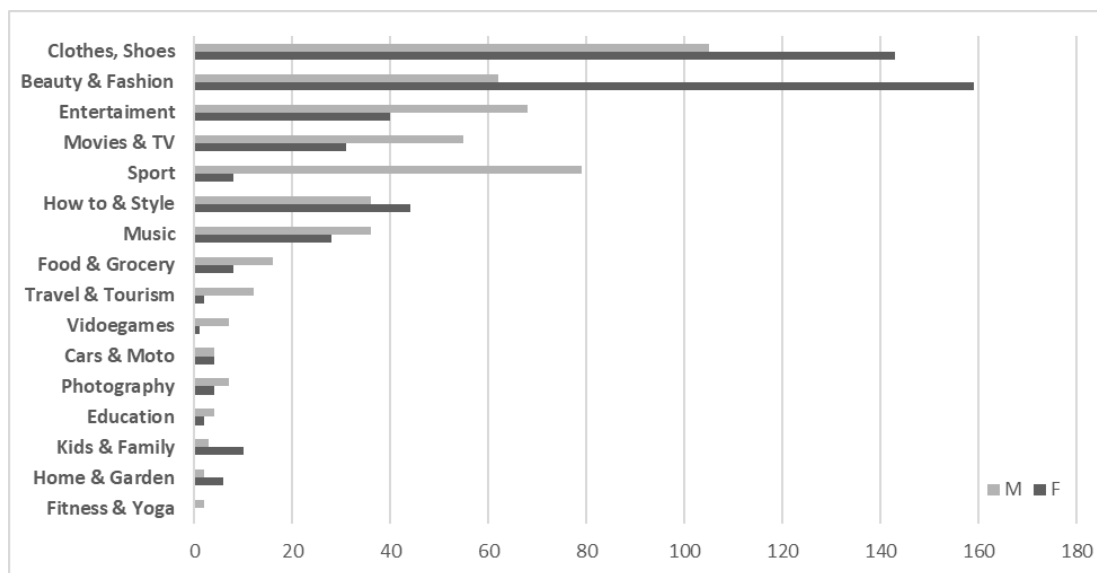


Figure 3. Number of posts per category per gender.

A Category determines a popularity in terms of likes.

To answer this hypothesis, we used a pivot table once more to calculate the average of likes according to each category of product placement posts. Based on the data below, most of the categories are relatively popular to the same extent at around 1,518,509 million likes. However, there are some outliers (very high or very low value) present in these categories that could show that some categories are much more popular. The category of Photography and Fitness & Yoga are the highest with 5,169,820 and 3,132,338 likes each. The lowest in popularity concerns Home & Garden. This hypothesis cannot be confirmed as the outliers represent categories that are very little represented in our database with less than 15 posts each out of 1,000 and is thus statistically invalid. There is not enough statistical power that a category determines a popularity in terms of likes.

More transparent influencers admit a paid partnership.

728 posts out of 1,000 posts were formal, and the influencer puts a tag but does not explicitly say "Paid Partnership" when it has the possibility to do so since 133 posts out of 1,000 specify it. We can note that James Rodriguez and Zlatan Ibrahimović, are the only two personalities who have put on their last 10 posts the caption "Paid Partnership".

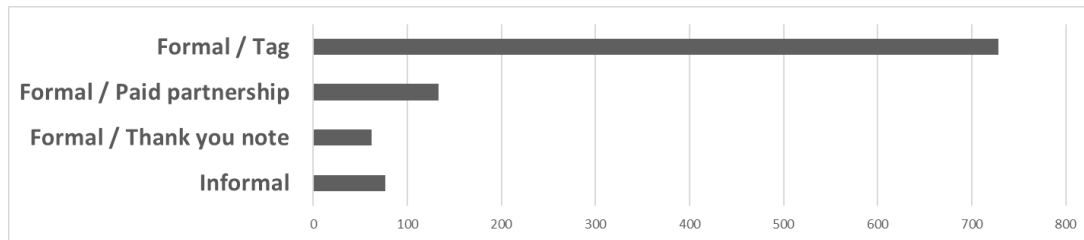


Figure 4. Number of posts per caption

Sport categories correlates positively with paid partnership captions

A pivot table counting the different categories and caption was created to answer this question. It can clearly be seen from the table below that the Sports category has the highest amount of paid partnership caption both in terms of absolute number and relative proportions. It has 32 paid partnership posts out of 87 total posts which means that 36.8 % of all sports product placement are made with a paid partnership caption. The second-highest relative number concerns the entertainment category with 20.6% of posts concerning paid partnership captions. We can thus confirm the hypothesis once again and state that the sports category correlates positively with paid partnership captions.

Table 3. Caption per categories,

	Formal / Paid	Formal / Tag	Formal / Thank you note	Informal	Total
Clothes, Shoes	27	178	10	19	240
Beauty & Fashion	27	177	17	9	230
Entertainment	21	63	9	9	102
Movies & TV		77	4	7	88
Sport	32	45	8	2	87
How to & Style	8	65	5	3	81
Music	1	50	7	9	67
Food & Grocery	2	21		3	26
Travel & Tourism	3	8	1	5	17
Videogames	7	5		1	13
Cars & Moto	1	10	1		12
Photography		10		1	11
Education		6	3		9
Kids & Family	4	5			9
Home & Garden		7			7
Fitness & Yoga		1			1

The video format has a lower popularity in terms of likes.

The average number of photo likes is considerably higher than videos. The popularity of photos is approximately 36% higher compared to videos. On average, a product placement post consisting of a video has 440 030 lesser likes.

The posts with products and influencers in the same photo are more appreciated than other staging.

As the photo is the more appreciated format, we wanted to know which staging of photo would be the best one for users (and as a result, for influencers). This pivot table represents the average of likes and comments for different Format and Staging:

Table 4. Average of likes and comments per staging.

Stagings	Average of Likes	Average of Comments
Photo	1,638,813	11,381
Photo of product with influencer	1,671,340	11,802
Photo of product without influencer	1,454,137	8,872
Photo of influencer without product	1,312,345	8,746
Video	1,204,186	9,867
Promotion video with influencer	1,237,519	9,783
Trailer	1,141,318	10,429
Promotion video without influencer	533,023	8,123
Grand Total	1,519,606	10,967

So, as expected, we can notice that the photo with the product and the influencer has more engagement with an average of 1,671,340 likes per post than the other staging. Same for the average of comments which is the highest (11,802 comments) for this staging. It makes sense because the Instagram users have more reasons to like the post when the influencer is in the picture, especially when they are promoting something. Placing a product is also making new content for followers, it makes influencer speaking about new subjects and as a result, it attracts more followers, and then gives more engagement.

5. Conclusions

Based on the descriptive analysis and the hypothesis answered in the previous section, several different interrelated strategies will be shown in this section to increase the marketing efficiency of product placement on Instagram. The answer to the hypothesis provided us with a clearer picture on the inner workings of brands product placement strategy.

Since women make much more product placement in the "Beauty & Fashion" category, we think it would be wise for companies to set aside a budget for product placements in their marketing plan to favor women when it comes to promoting products around beauty and fashion. But a brand can also stand out by asking a male influencer to make a product placement around beauty and fashion because few do, and this could clearly make the brand stand out. It would be interesting to start this strategy with a very well-trained male influencer so that it reaches as many followers as possible.

Also, we know that Females are slightly more influential than males. Nevertheless, we can't tell that companies should choose females influencers instead of males to promote their product because it basically depends on the category in which the product refers (and according to the 3rd hypothesis, we can see that categories and gender are narrowly linked) and does not depend on the gender that much. Companies can and should choose an influencer to promote their product for the way they are and for what they represent rather than for their gender.

As the "Clothes, Shoes, Handbags & Accessories" category is the most placed on Instagram, we think it would be wise for the companies concerned by this category to choose their influencers carefully and to ask them to stand out in their product placements since this is the most competitive category. By making posts, for example, explicit, that would explain why one should choose this make-up palette and not another by explaining its advantages and more.

Since we know the favorite staging for Instagram users is a picture with the influencer and the product according to the 6th hypothesis, companies that want to promote their product through an influencer on Instagram should ask the influencer to post a picture of the product with themselves in it. It is indeed more relevant to bet on the more likes and comments they could have, because each like they get are a potential customer for their brand.

Brands that wants the most effective dispersion and highest audition rate should place their product in the format of a photo instead of a video as the engagement rate for the former is considerably lower. Of course, not every advertisement can be made in the format of a photo and it must be noted that most of the video formats were advertisements made for other means of marketing

placement as well such as YouTube and television ads. This strategy thus only works in the case that a brand advertises its product only through Instagram. This is also subsequently cost effective as making a video with the presence of influencers generally cost much higher.

On the same argument, we have discovered that generally, influencers with a lower number of followers (>40 million), has an engagement rate twice as much as those with more than 40 million followers. It may be that the fanbase of relatively smaller influencers are closer to the influencer and relate themselves more. Having this information, Brands should target their audience accurately and then find an influencer represented by this audience even though the number of followers is lesser. This would result in a higher engagement rate and thus audience reactivity.

Since most influencers are not transparent when it comes to explicitly stating that the post is a paid partnership, we think it would be wise for brands to ask influencers to be transparent with their audience by explicitly stating that it is a paid partnership or for example an "#Ad" hashtag. This is very important because it is more professional, more moral and ethical. Several influencers do this, especially in France where several personalities start their positions with the "#Sponsored" hashtag. French influencers have every interest in maintaining this transparency since the ARPP (Professional Advertising Regulatory Authority) warns fraudulent influencers who do not clearly indicate that their publication is sponsored. This hashtag law was set up because there was a period when many people complained about the abuse of product placement by certain personalities.

On the same note, concerning brands promoting sports good, it is recommended that it follows the industry norm by explicitly showing the paid partnership caption as it allows for an honest interaction with the customers that are then perfectly aware that the concerned post is an advertisement for a specific product.

These are thus the 8 strategies that we have come up with in order to increase the efficiency and marketing capabilities for brands to promote their product through the use of an influencer on Instagram.

Acknowledgments: The contribution is processed as an output of the research project by the Internal Grant Agency of University of Economics, Prague under the registration number F4/27/2019.

References

- Herrmann Nils. 2018. Instagram Study: We analyzed 9 million posts and here's what we've learned. Available online: <https://www.quintly.com/blog/instagram-study> (accessed on 24 November 2019).
- Hu Yuheng, Manikonda Lydia, and Kambhampati Subbarao. 2019. What We Instagram: A First Analysis of Instagram Photo Content and User Types. Paper presented at the 8th International Conference on Weblogs and Social Media, Ann Arbor, United States, pp. 595–598, June 1–4. Available online: <http://149.169.27.83/instagram-icwsm.pdf> (accessed on 12 December 2019).
- Chaffey Dave. 2019. Global social media research summary 2019. Available online: <https://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/> (accessed on 28 November 2019).
- Influencer Marketing Hub. 2018. 15 Mind Blowing Instagram Statistics You Don't Know. Available online: <https://influencermarketinghub.com/15-instagram-influencer-statistics/> (Accessed 25 Nov. 2019).
- Li Qiuwen, and Kim Young Ae. 2019. Happiness on Instagram – Content Analysis and Engagement Based on Attention Theory. In: *Advances in Interdisciplinary Practice in Industrial Design*. Washington, USA, Vol 968, pp. 13–20. https://doi.org/10.1007/978-3-030-20470-9_2.
- Newberry Christina. 2019. 37 Instagram Statistics That Matter to Marketers in 2020. Available online: <https://blog.hootsuite.com/instagram-statistics/> (Accessed 24 Nov. 2019).
- Patel Deep, 2017. 3 Things You Should Know About Influencer Marketing (According To This Industry Pro). Available online: <https://www.forbes.com/sites/deeptatel/2017/06/21/3-things-you-should-know-about-influencer-marketing-according-to-this-industry-pro/#64febc3976ae> (accessed on 7 December 2019).
- Potancok Martin, and Feige Tomas. 2013. Enterprise Social Networks as a Tool for Effective Collaboration in Health Care Facilities. Paper presented at the 7th International Conference on Research and Practical Issues of Enterprise Information Systems, Prague, Czech Republic, September 11–13.

Vondra Zdenek. 2015. Explanation of Multimedia Communication Using Catwoe Analysis. In Proceedings of the IDIMT-2015: *Information Technology and Society Interaction and Interdependence* Verlag Trauner, Austria, Vol. 44, pp. 311–318.