# Government Communication in New Media Era 4.0: Study on Content-Type of Posts on Instagram @DitjenPajakRI and Their Influence on Online Engagement

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Abstract. This study aims to analyze what type of post content on the Indonesian tax authority Instagram account @DitjenPajakRI that has the highest level of engagement and whether the post frequency affects online engagement measured by the number of likes and comments. Currently, Instagram social media is increasingly being used by government public relations. The Indonesian tax authority is no exception. The content type of posts consists of information, entertainment, remuneration, and social. This research uses quantitative methods with a content analysis approach. For the selected period from January 1 to December 31, 2018. Results show that entertaining content has the highest level of engagement. Whereas if measured by the level of post frequency, only the number of comments has positively influenced. This research can be a reference and consideration of other government accounts in uploading post content on Instagram.

**Keywords:** communication, instagram, new media, online engagement.

# 1 Introduction

The Directorate General of Taxes (DGT) is an institution that has a crucial role in the income of the Republic of Indonesia. More than 70% of the National Budget (APBN) from various tax authorities are assembled in this institute. The target of income by the government in 2019 has reached 1,577 trillion for the DGT from the previous amount at 1,424 trillion [1]. The target of income that increases every year should be well responded by the administrators at the DGT. Moreover, the low level of tax compliance is a barrier to tax-saving [2]. Therefore, it is necessary to increase tax awareness, because it influences the level of tax compliance [2] [3].

In achieving these specific goals, a form of planned communication in terms of multi spatial communication is required to foster it [4]. Communication that becomes a part of Public Relations (PR) is a progressing industry. Therefore, the selection of channels in communication has become an important matter to achieve communication effectiveness [5].

Nowadays, a variety of media has emerged to offer various convenience in communication. One of them is one-way directed communication that presently becomes multiple-way directed communication [6]. In a former time, an organization tends to utilize one-way directed communication devices, such as newspapers, magazines, television, and radio, and now turns to be a social media device. It becomes an influence of multiple-way directed communication. It also offers convenience in communication to support an organization in adopting various manners that have not previously been performed [7].

The existence of social media has become one of the aspects that cannot be separated from human life. For July 2019, there were 3,254 million active accounts on any social media from a total of 7,682 million people around the world [8]. From this percentage, social media has become a necessity for humans. The delivery of information and communication can be easily performed.

Some previous researches have conducted a study on the influence of post content on social media. Research on online engagement (e.g. "like" and "comment") on five online shops on Instagram in term of type and time of post has found that it influenced significantly on type and time of post on March, June, July, and December in every Wednesday, Thursday, and Friday [9]. Other research has also found that the content type on Facebook's brand pages also significantly influenced online engagement [10] [11]. The matrix of performance on Facebook is also useful to predict brand building and provide a viewpoint for the company on social engagement. Besides, it also indicated a significant influence on online user engagement by category of treats, such as "like", "comment", and "share" against Facebook [12] [13]. Meanwhile, an interactive post has a negative influence on the amount of "like", but it can increase a "comment". Thus, a positive "comment" will also influence positively on "like" [14].

From previous researches, some of these have studied the influence of post's content on social media against online engagement. However, these researches focus on commercial products that include materials and professional services. This study intends to focus on taxation products as a governmental product that rarely becomes an interesting product of the online public. This study is also original research that has not been studied previously, particularly on the type of post @ditjenpajakri on Instagram and its influence on online engagement.

This study focuses on @ditjenpajakri on Instagram content to analyze the form of a post that approximately influence online engagement classified as "like" and "comment". This study is expected to be useful for the DGT in determining the interesting post content on Instagram for the public so that the interaction between the DGT and the public can run well.

# 2 Literature Review

Social media is a media that is used by individuals and organizations to share content, such as news, product, and message in the form of text, image, voice, and digital video [15] [16] [17]. One of the social media platforms that mostly be used is Instagram [8]. Many features on Instagram that lead to multiple-way directed communication between users. This multiple-way directed communication is very useful in providing information and getting a direct response to the published content. On social media Instagram, DGT can create posts containing anecdotes, photos, videos, or other material; the followers of the Instagram @DitjenPajakRI can then interact with these posts by liking or commenting on them. To derive our hypotheses regarding the type of post which could increase the level of online engagement, this study refers to the concepts of the content type of post (e.g. information, entertainment, remuneration, social) commonly used as a basis for studying the user responses to different forms of online content. Then we provide details on the underlying reasoning and formulate the hypotheses.

## 2.1 Content Type of Posts: Information, Entertainment, Remuneration, and Social Posts

"Content" can be news, product, information, text message, image, voice, and video [16]. The content uploaded on Instagram account @ditjenpajakri is said as "post". The analysis of the content approach is useful to understand the correlation between content features and engagement on users [18]. Based on the previous researches, there are four types of post content, namely information post, entertainment, remuneration, and social [13] [14] [19] [20]. These four types of post content are also used in this study.

The information post involves product specification, brand, and any information related to organization, activity, and company's project [14] [21]. In this study, the information post involves programs proposed by the DGT, office, service, product and program tutorial, and activities carried out by the DGT. Meanwhile, entertainment post involves funny video, anecdote, gameplay, slogan, and wordplay [12].

The remuneration post refers to activities that are promoting the company and its product [21]. In this study, the remuneration post content includes the organization's profile, public service advertisement, product campaign/the DGT program, and other contents related to organization and program promotion of the DGT. The type of social content refers to the participatory usage in social media that next to be responded by users [12]. In this study, the type of social post content like "congratulation", "sadness", "social summon", "report on the current condition in a particular area", and other related to user's participation in social media.

# 2.2 Online Engagement

A theory on the impact of media content has developed. Based on its traditional effect, media content has advanced through six phases of thinking about the strength of the effect of media [22]. The sixth phase (1996 to present) is the theory of new media, and it consistently focuses on the extended content and selection of media as well as multiple-way directed communication that is extended through a content made by a user. The effect of the content has developed from a direct effect into a mediated effect [22]. In "new media" like Instagram and other current media, the effect of the content is mediated by feature "like" and "comment".

An expert on communication clarifies that multiple-way directed communication (interactional communication) is a simple definition of engagement [23]. Engagement on social media can be determined by analyzing "like" and "comment" on post content and a result of feedback (response). It can be a primary treatment because post content can be interesting if it has reached several "like" [24] [25] [26]. The online engagement on Instagram is represented by "like" and "comment" feature [27]. Thus, determining the availability of response of the public on multiple-way directed communication can be one of the ways in measuring engagement. When the public is engaged, the public will also engage with the organization [28].

# 2.3 New Media and The Theory of Uses and Gratifications

Web 2.0 and technology presently have a unique feature that has transformed the way people communicate with one another [6]. It can be identified through the existing features on social media. This latest media has created more interactive communication and the latest sense of personal communication [6]. One of the most widely used new media today is Instagram. Instagram is a new media that is one of the most widely used by companies,

institutions, private and public institutions, and everyone in the world. DGT is one of the government institutions that use Instagram as a new media in communicating with the public.

The effect of media content usage also addresses motivation, usage, and consumption against media content. In the theory of uses and gratification, the motivation of media content usage and type of media are considered in fulfilling the publics' necessity (gratifications) [29]. The theory of uses and gratification has given an understanding of how the content of social media presents and give an effect on engagement. Besides, the application of this theory on social media is to clarify the reasons for the public in utilizing and preferring social media [30] [31]. One of the primary points in this theory is a necessary fulfillment that also becomes a reason in using media content and classify it into five types of need as follows [32]:

- 1. Cognitive: a need for information, knowledge, and comprehension;
- 2. Affective: a need for aesthetic, happiness, and emotional;
- 3. Personal Integrative: a need for credibility, trust, stability, and status;
- 4. Social Integrative: a need for kinship communication, friend, and the world;
- 5. Tension Release: a need for tension release.

#### 3 Method

This study used a quantitative approach. The data were all posts uploaded on Instagram @ditjenpajakri within one year for January 1, 2018, to December 31, 2018. From the period, this study noted a total of "like", "comment", and post type in each post on @ditjenpajakri. This way was carried out because the public's feedback and interaction could be viewed through both features. In previous research, social media like Facebook and Instagram had also used a feature "like" and "comment" to measure online engagement [9] [10] [11] [13] [14] [27].

The variables used in this study were the dependent and independent variables. The independent variable in this study were four types of post content on Instagram (information, entertainment, remuneration, and social). Meanwhile, the dependent variable was the total of "likes" and "comment" on Instagram post content.

This study purposed to identify the type of post content that highly influences online engagement by comparing one post content to others. Content analysis was used to compare content type with an extensive sample because content analysis offered a systematic and objective method [13]. Therefore, the hypothesis test in this study was to overview the type of post content at the @ditjenpajakri account that influences the level of online engagement (like and comment). Based on the previous research, the entertainment and informative content on social media are important factors in online engagement [21] [33]. On the other hand, other research finds that entertainment content has a stronger effect than others, and it is also a crucial factor [34] [35] [36]. Besides, other research has indicated that the type of remuneration post content has a lower level of engagement than the entertainment and information content, but it is higher than other types of post content [12]. This study states that social post content has produced a lower amount of "like" than other types of content [13]. Therefore, this study addresses and focus on some following hypothesis.

- H1. There is an influence on the difference in the amount of "like" on the type of post content uploaded by the @ditjenpajakri account.
- H2. There is an influence on the difference in the amount of "comment" on the type of post content uploaded by the @ditjenpajakri account.

Meanwhile, the previous research has found upload frequency with the level of reaction [37]. Furthermore, the hypothesis heads to the following lists.

- H3. There is a correlation between the amount of "likes" and the frequency level of upload by @ditjenpajakri account.
- H4. There is a correlation between the amount of "comment" and the frequency level of upload by @ditjenpajakri account.

To determine the significant difference between the average of two or more independent groups statistically, the One-Way ANOVA analysis was used [38]. The method of data analysis used the Kruskal-Wallis H test because it is a non-parametric test-based level that was used to determine the availability of significant difference statistically between two or more independent variables within ordinary dependent variable [39].

Meanwhile, in determining the availability of correlation between two variables, the Chisquare test was used [40]. Therefore, the hypothesis of this study was to determine the availability of difference influence between the independent variable (the type of post) with the dependent variable (amount of "likes" and "comment") as well as to overview the availability of correlation on the influence of upload frequency and the amount of "likes" and "comment". Invalidating the tools, the reliability test of Inter-coder was performed by comparing coders to one another [41]. This study used two coders (coder 1 and coder 2), and those were compared in this study.

## 4 Results and Discussion

Based on the official Instagram link of the DGT, the account @ditjenpajakri has 204,000 followers and 3 followings. The 3 followings are the Indonesia Republic President Joko Widodo (@jokowi), Ministry of Finance of the Republic of Indonesia Sri Mulyani Indrawati (@smiindrawati), and the official account of Ministry of Finance of the Republic of Indonesia (@kemenkeuri).

This study used all post contents uploaded by @ditjenpajakri as data that had been collected for one year, namely January 1, 2018, to December 31, 2018. In carrying out a reliability test, there were 10% of the unit of the total amount of population that were used in this study [40]. Based on the result of the study, there were 513 post contents at the @ditjenpajakri account, so that the random sample towards 513 post contents of @ditjenpajakri in one year was 51 post contents. The coefficient reliability value (CR) was 94,11% based on R formula. On the other hand, Holsti has highly reached the minimum score that was 70%. Therefore, the level of reliability test at this level of the category is achieved [38].

In the normality test, this study used the SPSS application and indicated that the value of all variables has indicated sig < 0,05, which meant that the data distributed abnormally. Therefore, this study conducted the Kruskal-Wallis H test. Based on the result of the Kruskal-Wallis H test in testing H1 and H2, all variables indicated score value sig < 0.05, which meant that the hypothesis was accepted. The influence of the difference can be seen as follows: (1) type of entertainment post content has a high number of "likes" among other post contents (M=396.32, df=3), as well as "comment" that has a high level than other post contents (M=475.79, df=3); (2) in post content of remuneration, the amount of "like" has the second

high level after entertainment post content (M=262.59). Meanwhile, "comment" also has the second high level after entertainment post content (M=285.86, df=3); (3) in the next test, the amount of "likes" and "comment" in the information post content has a lower level rather than remuneration and entertainment post content, but it is higher than social post content (M=251.34, df=3) and (M=244, df=3); and (4) the social post content has a small level of online engagement rather than other post content types in term of "like" (M=246.80, df=3) and "comment" (M=223.99, df=3). These results indicate that online engagement through the type of post content uploaded by @ditjenpajakri has a significant influence so that this result of the study supports the hypothesis H1 and H2. The summary of the result of the Kruskal-Wallis H test in testing H1 can be seen in Table 1.

**Table 1.** The Result summary of kruskal-wallis test

Dependent Variable	Type of Post Content	n	M	df	Asymp. Sig
Like	Information	264	251.34	3	0.004*
Comment	Entertainment	14	396.32		
	Remuneration	122	262.59		
	Social	111	246.80		
	Information	264	244.00	3	0.000*
	Entertainment	14	475.79		
	Remuneration	122	285.86		
	Social	111	223.99		

Source: secondary data processing

On the other hand, in testing H3 and H4 by using the Chi-square test has resulted that the value of Pearson Chi-square in the amount of "like" was 0.471 or more than 0.05. It meant that there was no correlation between the frequency of upload and the amount of "like" so that it could not support the H3. Meanwhile, the value of Pearson Chi-square on the amount of "comment" was 0.000 or less than 0.05. It meant that there was a correlation between the frequency of upload and the amount of "comment" so that it supported the H4. Based on the clarification on the type of post content (amount of post), the following frequencies can be obtained: (1) information post =264 (51%), (2) entertainment post =14 (3%), (3) remuneration post =123 (24%), and (4) social post =112 (22%), see Figure 1.

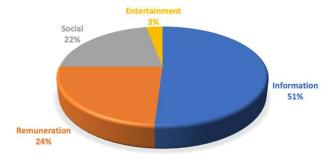


Fig.1. Frequency of Uploading Type of Post Content

From the results, of the four types of the post content available, entertainment post content is the most influencing post towards online engagement uploaded on @ditjenpajakri. This result is similar to some previous researches that entertainment post has the greatest influence in producing online engagement [21] [33] [34] [35] [36]. This result is also similar to the theory of Uses and Gratifications that entertainment is one of the important elements in consuming media content [32]. Meanwhile, remuneration post content has a lower amount of "like" and "comment" rather than entertainment post content, but it is higher than information and social post content that has a low amount of "likes" and "comment" among other content types. This evidence occurs because the public feels that they cannot get their need to reach their satisfaction in using media content on the @ditjenpajakri Instagram account. However, in terms of frequency of uploading post content, the amount of "comment" merely has a positive correlation, and that the amount of "likes" does not correlate with the frequency of upload carried out by @ditjenpajakri.

From this discussion, it can be seen that Public Relations as the spearhead of communication planners must continue to adapt to the development of new media through technology and how they can get engagement with the public. In the effect of tradition that continues to develop as in the current era of the new media 4.0, public relations can more easily evaluate what communication content gives high engagement to the institution. Algorithms on new media such as Instagram are very interesting to study at this time. This is because Instagram has become a daily public consumption so it is important for communication strategy designers in determining the content that can provide high engagement. The use of uses and gratifications theory becomes the key theory in this study to prove that in the use of media content there are things that must be considered by the designers of communication content.

## **5** Conclusion

Social media Instagram nowadays is more than an additional channel for disseminating information, because Instagram allows people to interact and share their opinions with others. Therefore public relations as a communication planner must consider that their posts may influence people's online engagement and should not create an Instagram post simply because other organizations have done so. The findings of this study indicate that enhancing the number of likes and comments requires various instruments, which are interesting for academics and practitioners. Also, the findings can encourage public relations to prepare engagement strategies that facilitate the interactivity of the public and enhance the performance of their social media Instagram. Besides, this study also recommends further research related to the classification of the public that gives a response in the form of "like" and "comment" on @ditjenpajakri to identify the identity of respondents. This way can be carried out to identify the influence of the post.

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