Hankunaseth, S. & Nadee, W. (2022). An analysis of YouTuber's collaboration towards audience engagement. In Li, E.Y. *et al.* (Eds.) *Proceedings of The International Conference on Electronic Business, Volume 22* (pp. 27-34). ICEB'22, Bangkok, Thailand, October 13-17, 2022

# An analysis of YouTuber's collaboration towards audience engagement

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#### ABSTRACT

YouTube has gained its popularity among audiences, and it has been efficiently used to reach mass audiences as same as tradition mass media i.e., television. Therefore, YouTube has become a main channel for marketers. The popularity of YouTube is significantly related to its content creators. Many people have become content creators or youtubers, who produce and publish massive contents on YouTube every day. Youtubers adopt many strategies to gain more attentions from the audiences. One of those strategies is youtubers or channel collaboration where more than one content creator appears in the content. This study aimed to investigate the influence of this kind of collaborative events towards the audience engagement. The observation method was conducted on 29 YouTube channels for three months. The results showed that collaborative events have significantly influence on audience engagement, number of views and followers. Game show was the most positive influential type of content. There was no significant difference between one-way and two-way relationship between YouTube channels. This study might contribute marketers and content creators in creating campaigns and contents, whereas offer deeper understanding in this phenomenon in terms of research.

Keywords: YouTuber, Para-social Interaction, Collaboration on YouTube, Audience engagement.

# INTRODUCTION

YouTube has now shifted the way in which people consume video content since it offers better efficiency and effectiveness to reach target audiences. People do not need to wait until their preferred content is on air on a particular schedule. The content creators have more freedom to produce and publish their organic video contents without permission from television regulators. In 2021, there were approximately 7,000 YouTube channels with more than 100,000 subscribers and approximately 650 channels with more than one million subscribers in Thailand. These numbers indicated the increasing popularity of watching video contents via YouTube rather than via television. According to YouTube's guideline, there are 10 fundamentals i.e., shareable content, collaboration, discoverable topics, accessibility, consistency, targeting, sustainability, converse with viewers, interactive content, and authenticity (Google, 2015). Collaboration is among those ten fundamentals and has been popularly applied in creating content on YouTube. Exchanging appearances between YouTube channels helps gaining followers because this strategy introduces and exchanges followers between channels. Para-social relationship could be applied to help understanding this phenomenon (Niu et al., 2021a; Niu et al., 2021b; Rubin and McHugh, 1987). The co-appearance of more than one youtubers also increases YouTube channels popularity (Koch et. Al., 2018). During the pandemic, there were collaborations between 10 channels in Thailand, which each channel has different number of followers. They created a new channel, which produce different contents then their own original channels. This study aimed to exploring the exchanging appearance amount youtubers between their new collaborative channel and their own original channels. The observation was conducted to measure the impact of collaboration.

# LITERATURE REVIEW

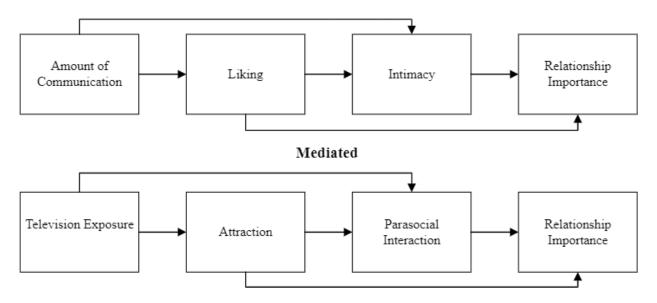
#### Collaboration

In digital era, collaboration is happened when more than one party agree to work together, which seems to be less formal than before (Arina and Rustiadi, 2018; Frey et al., 2006; Koch et al., 2018). People used social media platforms in learning and knowledge collaborations both formally and informally (Kaewkitipong et al., 2016; Ractham et al., 2012). However, there were more opportunities when adopting collaboration approach in different aspects for activities in digital platforms. For content creation, collaboration is one of 10 fundamentals, which is mentioned in the guideline for creating content people love (Google, 2015; Tafesse, 2020; Wisankosol, 2021). Koch et al. (2018) defined collaboration on YouTube as two youtubers internally or externally appear in each other channels. One youtuber could internally appear in the shows as a host, where another may externally appear in the shows as a guest. The collaboration does not mean that two youtubers need to appear together in the same scene. They can either appear together side by side or just in different scenes in the same clip. For example, a guest can appear in a short scene just to greet the host. Koch et al. (2018) also demonstrated the efforts to achieve analyzing data using image processing technology to detect the appearance of youtubers in 7,492 channels, which resulted in 1,599 channels with collaboration, which emphasized the growing number of collaborations in video content creations. This also highlighted the needs for automate analysis of video contents using technologies such as image processing, deep learning, and artificial intelligence.

# **Para-social Relationship**

Horton and Wohl (1956) defined para-social relationship as the process to create relationship between characters on media (celebrities) and audiences (fan club). The audiences imaginatively treat their favorite celebrities as members of their network and seek more interactions and participations to gain emotional satisfactions. There were more factors, which indicate para-social relationship such as frequency of viewing and meeting. Isotalus (1995) stated that para-social relationship is one-way continuous viewing of characters on media with no feedback. The audiences perceived these characters like a friend and continuously watch those characters. Rubin and McHugh (1987) proposed a model to show the relationship development, which compare between interpersonal and mediated relationship. The more people communicate, the more they like each other, the closer they are and the more important relationship they development. It is the same for mediated relationship. The more the audiences watch, the more attractive they feel, the higher para-social interaction the relationship gain and the more important relationship the audiences have with their celebrities (See figure 1). Para-social relationship could be accelerated with collaboration between celebrities and their guests in the shows etc.

#### Interpersonal



*Source*: Rubin and McHugh (1987). Figure 1: Interpersonal and mediated relationship development.

#### **Celebrity Culture on YouTube Platform**

YouTube is considered as user generated content platform, which mean the content creators are responsible for creating content (Burgess and Green, 2018; Chau, 2010; Driessens, 2011). Moreover, the contents reflect the identity of the creators. The relationship is focusing mainly between content creators and consumers. This makes YouTube different from other social networks, which focusing more on building network and daily activities of their users. Furthermore, generating content on YouTube is far more resource consuming than on other social media platforms. The creators need to create their organic contents and develop relationship with their audiences at the same time. It could be seen that some part of the celebrity culture on YouTube platform was inherited from traditional media. But there are differences such as no regulators, no limit of channel owner. Some are still the same such as there is an award body or hall of fame, which will be given to youtubers with particular numbers of followers (see table 1). YouTube channel can also be classified as celebrity, professional, and amateurs (see table 2).

Table 1: Youtuber Category.			
Categories No. of Followers			
Graphite	0 – 999		
Opal	1,000 - 9,999		
Bronze	10,000 – 99,999		
Silver	100,000 – 999,999		
Gold	1,000,000 - 9,999,999		
Diamond	10,000,000 - 49,999,999		
Ruby (Custom Creator)	50,000,000 - 99,999,999		
Red Diamond	> 100,000,000		

Source: YouTube Creator Award.

	Table 2: Youtuber Level.			
Level No. of Followers				
Celebr	ity	> 1,000,000		
Profess	sional	10,000 - 1,000,000		
Amate	urs	< 10,000		

Source: Niu et al. (2021b).

# Video Categories on YouTube Platform

Video categories on YouTube platform were classified in 15 types i.e., entertainment, people/blog, comedy, how-to & style, film and animation, education, music, science & technology, sports, gaming, news & politics, travel & events, cars & vehicles, pets & animal, non-profits & activism. The content creators use these categories to build up their initial audiences and channel loyalty (Bärtl, 2018; Holland, 2016). However, these categories do not cover overall content aspects. Niu et al., (2021a) proposed additional video style as in table 3.

Video Style	Descriptions		
Artistic	Arts / Paints/ Performances / Animations		
Challenge	Popular or adventurous activities		
Chatting	Interactive live streaming with audiences		
Game	Game live streaming		
Homelife	Life at home and family		
How-to	Guideline / teaching / learning i.e., cooking, languages etc.		
Religious	Beliefs or prayers		
Review	Product or service reviews		
Story	Story telling or journey		

Source: Niu et al. (2021a).

This research aimed to explore types of videos with collaboration, indicators and characteristics of collaboration, audience engagement towards collaboration. Moreover, the relationship between collaboration and engagement will be evaluated according to channel levels and video types.

#### **RESEARCH METHOD**

#### **Data Collection and Samples**

To explore collaboration on YouTube platform, this research conducted observational study on daily activities focusing on no. of views, likes and subscribers to monitor degree of changes of the popularity of YouTube channels between January - April 2022. The samples were chosen via purposive sampling, which are group of channels called "Yok Kam Lang". This group consisted of 10 channels agreed to collaborate. They were Softpomz, Zommarie, PEACHII, Subsarb Production, Thep Lee La, Soundthis ST, Let's Girl, Soloist, Pop Mai, and Na Nuad. In total, there were 11 channels (10 original channels + 1 collaborative channels). During data collection, if there is any additional youtubers join/appear in the collaborative channels, they will be included in the analysis.

# **Data Analysis**

All data collected from daily no. of views, likes and subscribers on targeted YouTube channels were recorded in spreadsheet to keep track on changing accordingly. The authors also monitor news or any particular events apart from daily statistics to observe any cause of spike in no. of views, likes and subscribers. Google Collaboratory was used along with Python, Pandas and Matplotlib to visualize results. Furthermore, Microsoft Excel was used to conduct paired sample test for evaluating the differences between audience relationship.

#### **Collaborative Events**

# From the observation, there were 446 videos, included in the analysis. 118 videos were collaborated with193 collaborative scenes (there can be more than one collaborative scene in one video). 84 videos were one-way collaborations and 34 were twoway collaborations (see table 4). Figure 2 shows that there were 3, 4, and 5 channels, which collaborate in the same videos, whereas most videos were collaborated between 2 channels.

RESULTS

Type of Collaboration	Descriptions	No. of Videos	%
One way collaboration	Uploaded to main channel	84	71.19
Two ways collaboration	Uploaded to more than one channels	34	28.81
Total		118	

Table 4: No. of one-way vs. two-way collaborations.
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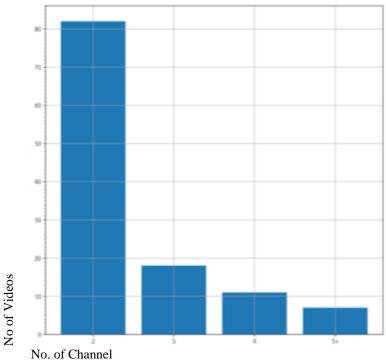


Figure 2: No. of channels appear in video.

# **Different Channel Level Collaboration**

This study found that collaborations were mostly among celebrities and professionals (see figure 3 left). Professional channels collaborated in 57 videos and 20 videos for celebrity channels. Celebrity internally collaborated with professional channels for 28 videos, whereas professional channels seem more internally collaborated with celebrity (52 videos). Professional channels seem more open in collaboration with different channel types (see figure 3 right).

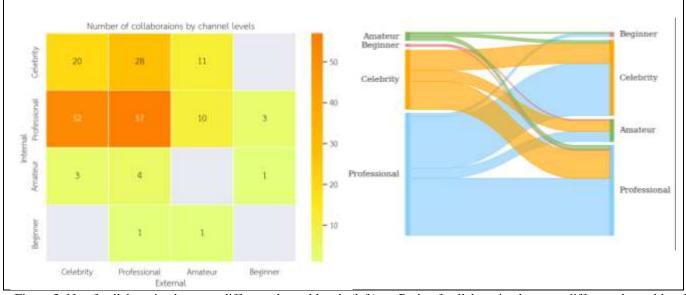


Figure 3: No of collaboration between different channel levels (left) vs. Ratio of collaboration between different channel level (right)

# No. of Daily Views affected from Collaboration

The authors monitored no. of views daily for 14 days after each video was uploaded. Total 117 videos were included. The analysis showed that the number of daily views between collaborated and non-collaborated videos were radically different. The number of views from collaborated videos seem to higher according to figure 4. Statistically, t-Tested was used and the results indicated that two types of videos were significantly different (P=0.014) (see table 5). Figure 5 shows that celebrity channels have most view compared with professional and other channels.

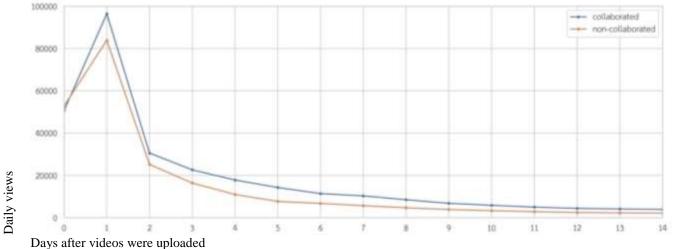


Figure 4: Comparison between collaborate (blue) vs. non-collaborated (orange) videos according to no. of daily views

Type of Collaboration	Collaborated	Non-Collaborated
	Videos	Videos
Mean	22,824.98	15.428.86
Variance	709,343,886.9	531,51,643.9
Observations	15	15
Pearson Correlation	0.923620776	
Hypothesized Mean Difference	0	
df	14	
t Stat	2.774335145	
P(T<=t) one-tail	0.007457289	
t Critical one-tail	1.761310136	
P(T<=t) two-tail	0.014914579	
Critical two-tail	2.144786688	

Table 5: t-Test on differences according to	no. of views
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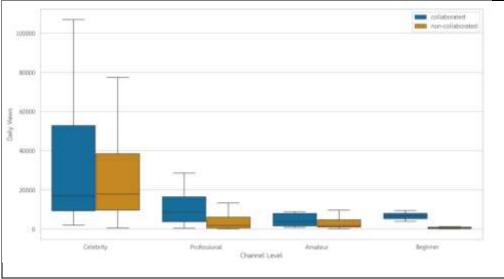


Figure 5: Comparison between collaborate (blue) vs. non-collaborated (orange) videos according to channel levels

# No. of Daily Likes affected from Collaboration

The analysis showed that the number of daily views between collaborated and non-collaborated videos were radically different. The number of views from collaborated videos seem to higher according to figure 6. Statistically, t-Tested was used and the results indicated that two types of videos were significantly different (P=0.045) (see table 6). Figure 7 shows that celebrity channels have most view compared with professional and other channels.

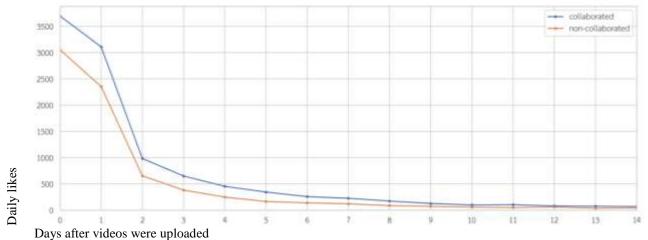


Figure 6: Comparison between collaborate (blue) vs. non-collaborated (orange) videos according to no. of daily likes

Type of Collaboration	Collaborated	Non-Collaborated
	Videos	Videos
Mean	889.49	503.02
Variance	1650098.065	843526.3511
Observations	15	15
Pearson Correlation	0.859348534	
Hypothesized Mean Difference	0	
df	14	
t Stat	2.192882927	
P(T<=t) one-tail	0.022852856	
t Critical one-tail	1.761310136	
P(T<=t) two-tail	0.045705713	
Critical two-tail	2.144786688	

Table 6: t-Test on diff	erences according to no	o. of likes

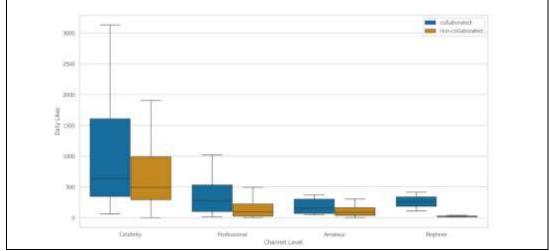


Figure 7: Comparison between collaborate (blue) vs. non-collaborated (orange) videos according to channel levels

# **Type of Videos and Channel Levels**

The analysis shows that most collaborated videos were game show, talk show and challenge show accordingly (see table 7). However, only talk show and challenge show were statistically different from other shows (P=0.01, P=0.028) since the average views for both types of shows were lower than average. Variety show, vlog and game show had the highest average views accordingly. When compared with channel levels, game show was the most popular video type for both celebrity and professional channels. Challenge show was the second popular type of videos but only with professional channel. Celebrity channel aimed more on game show than other types of videos, whereas professional channel looked out for more varieties of video contents (see figure 8).

Type of Videos	No. of Videos	%	P-value	Average views for	Average view for
Challanaa	17	14 41	0.010	this type	other types
Challenge	17	14.41	0.010	8,862.62	21,419.32
Game show	42	35.59	0.807	22,058.28	23,098.55
Talk show	22	18.64	0.028	15,924.54	24,248.30
Variety show	12	10.17	0.115	52,401.90	19,183.93
Vlog	9	7.63	0.367	48,611.37	20,427.90
Others	16	13.56	0.012	10,933.22	24,604.16
Total	118	100			

Table 7: No. of Videos according to types.

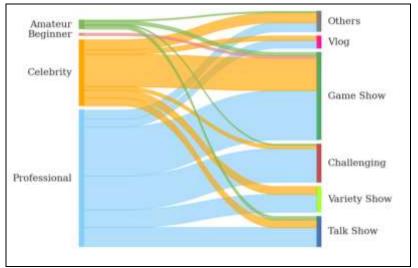


Figure 8: Ratio of video types vs. channel level

# DISCUSSION AND CONCLUSION

#### Discussions

The observation data indicated that most collaboration were adopted by professional channels. Koch et al. (2018) mentioned two reason to support this phenomenon. First, the content style of professional channels normally provides supportive environment for collaboration i.e., same audience group, similar content style etc. Second, most professional channels mainly aim to gain number of their audiences. Therefore, collaboration is one of their strategies to achieve that goal. There is contrast results between this study and Koch et al. (2018). This study celebrity channel seems to collaborate more compared to amateur channel, whereas Koch et al. (2018) reported in the opposite result. The reason might be during the pandemic most celebrity channels were trying to gain their audience than normal period.

All results indicate in the same direction that collaboration gives significant effects to the number of audience engagement for YouTube channels. It simply because those channels not only exchanging their appearance between their channels and their exclusive channels. They are also exchanging their audience too. However, this research discloses preliminary underlying implication on how collaboration accelerates para-social relationship. To gain deeper understanding in this phenomenon, only no. of views and likes might not be sufficient. Further study might include analysis of comments on each video, which need to involve with more advance technology such natural language processing (NLP). Traditional method such as interview might also help revealing insights. Furthermore, the results from this study could be an input for developing of a framework for analyzing collaborative activities on digital platforms. To develop such a framework, design science research (Hevner et al., 2004) might be used as a theoretical paradigm.

# Limitations

This study observed data only from sample channels, which were considerably small compared to the number of total channels available on YouTube platforms. The method to collect data was manual. It would be more effective if the authors will be able to collect data using programming bot. This mean a greater number of channels can be monitored and the period of monitoring will be longer. However, it will be more difficult to highlight specific external events, which might cause spike in numbers of view, likes and subscriptions. Moreover, collaboration is only one among 10 fundamental strategies to gain audience for youtubers, which other factors should be included for future studies. This research was also focused more on professional and celebrity channels whereas, many more amateur channels have been producing contents every day. In terms of generalizability, channels with variations of subscribers and views should be included in the analysis systematically. To achieve this, longer data collection period is mandatory with closed monitoring. The study might be expanded into longitudinal to be able to compare events across years.

#### Conclusions

This research concludes that in Thailand, collaboration among youtubers cause high effects on gaining number of audience engagement for youtuber. Exchanging appearances and audiences is more important than creating content alone. Moreover, digital video platform like YouTube, will gain more power among audiences since it is more effective in terms of on-demand watching and favor content creators more than traditional television programs. The acceleration of para-social relationship via collaboration was preliminary underlined. In practical, youtubers or content creators could see the benefits of collaboration. Therefore, further investigation and development to reveal insight of para-social relationship and other factors apart from collaboration should be considered.

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