

## The Role of Personal Innovativeness and Social Influence Towards Over The Top (OTT) Video Streaming During the Covid-19 Pandemic

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### Abstract

Over the Top services (OTT) is a significant internet industry. It delivers video, audio, and other media such as voice and chat services and is transmitted to different platforms or devices through the internet. The services are delivered via the internet by a service provider that is not accountable for the signal's transmission to the end-user, and users will log on to the OTT services using the open internet protocol or public internet. When COVID-19 hit Malaysia in early 2020, the number of new users for OTT services increased to 14.1 million users. The numbers keep increasing as most users depend on OTT services for the latest information including entertainment. This study used Technology Acceptance Model (TAM) as the outline and take into account the external variables (personal innovativeness and social influence) on users' attitudes towards OTT video streaming. Thus, this study aimed to identify the influence of external variables by examining the perceived usefulness and ease of use towards users' attitudes. There were 352 respondents who have been selected among Klang's citizens via an online survey. The findings supported the idea that personal innovativeness and social influence have an impact on Klang's citizens to stream OTT video streaming. The hypotheses showed a positive and significant effect on users' attitudes, perceived usefulness, and ease of use (H1a, H1b, H1c, H2a, H2b, H2c). Meanwhile, perceived usefulness and ease of use showed insignificant relationships on users' attitudes toward OTT video streaming (H3a, H3b, and H4). The findings also acknowledged our understanding of OTT video streaming can be used as part of an educational approach to create awareness and give information.

**Keyword:** OTT, Video Streaming, COVID-19, Personal Innovativeness, Social Influence

**Introduction**

Over the Top services (OTT) is a significant internet industry. It delivers video, audio, and other media such as voice and chat services and is transmitted to different platforms or devices through the internet. The services are delivered via the internet by a service provider that is not accountable for the signal's transmission to the end-user, and users will log on to the OTT services using the open internet protocol or public internet. When COVID-19 hit Malaysia in early 2020, the number of new users for video streaming on OTT services increased to 14.1 million users (Nielsen, 2021). The numbers keep increasing as most users depend on OTT services for the latest information including entertainment. Research appointed by a tech company named The Trade Desk and managed by Kantar Consultant has found that 31 million out of 180 million OTT viewers have not watched traditional television in the past three months (Goh, 2020). Meanwhile, Media Partners Asia (2020) reported that total video streaming increased to 60% across Malaysia and other Southeast Asia countries such as Indonesia, Philippines, and Singapore between January to April 2020. Nielsen has tracked a variety of OTT platforms used in Peninsular Malaysia including Netflix, HyppTV everywhere, Tonton, Iflix and others during the Movement Control Order (MCO). The Malaysian Digital Association (MDA) has also reported that the demand for entertainment increase with a surge in video streaming consumption by end of March 2020. The MDA said that "the greater flexibility and ease-of-use of OTT over TV have driven the growth of the services and the platforms remain a threat to TV" (Yunus, 2020, para 16). The OTT video streaming famous tagline "anytime and anywhere", might change the patterns of media use due to its convenience and availability, especially during the pandemic period.

Several models have been developed in the past three decades to investigate factors that influence individuals' technology acceptance (Agarwal & Karahanna, 2000; Thompson, et al., 2006). The development of adopting new technologies has been studied for more than 30 years and the famous model for adoption study is described by Rogers (2003) in his theory of Diffusion of Innovations. Davis (1989) in Technology Acceptance Model (TAM), Ajzen (1991) proposed the Theory of Planned Behavior (TPB), Venkatesh et al (2003) in Unified Theory of Acceptance and Use of Technology (UTAUT) and etc. In most of the innovation research, the technology focuses on the importance of personal characteristics (i.e consumer's experience with similar technology innovations) and inclination to accept new technology (Zhu et al., 2006). Apart from demographic characteristics, individuals are believed to have certain personal characteristics that fixed them apart from the population. These characteristics relate to users who are risk-takers and more innovative in adopting new innovations (Rogers 2003). He discovered that individual differences cause users to react differently to a new idea, practice, or object. In addition, individual differential can be seen through continuous characteristics of personal innovativeness. In this study, the researchers have selected personal innovativeness and social influence as factors that influence the diffusion process and the decision to use OTT services. Many studies have been conducted on personal innovativeness and social influence in technology adoption research such as attitude to use internet banking, e-commerce, online shopping, and others. However, less studies have been done on OTT video streaming. As OTT services are considered new in this digital era, thus it is important to identify personal innovativeness and social influence as part of the factors that contribute to OTT video streaming.

Therefore, to explore the role of personal innovativeness and social influences in the process of technology acceptance, this study uses the individual construct proposed by Technology Acceptance Model. This study aimed to identify the relation between users' intention to adopt OTT services with selected variables based on the TAM Model as an outline such as perceived usefulness, perceive ease of use, personal innovativeness, social influence, and attitude towards OTT video streaming.

### Research Objective

1. To identify the relationships between personal innovativeness and attitude towards OTT video streaming.
2. To identify the relationships between social influence and attitude towards OTT video streaming.

### Literature Review

#### *Technology Acceptance Model*

TAM has been initially introduced by (Davis, 1989). TAM is modified from the Technology of Reasoned Action (TRA), which is specifically used to predict and describe the acceptance and adoption of technology. Davis recommended that users' intention in TAM have identified three main elements such as "perceived ease of use, perceived usefulness, and attitude toward using the system". He also added that users' attitudes toward a system became an important factor in determining users' acceptance or rejection of the system. In addition, "the users' attitude was predicted to be the factor in influencing two major beliefs; perceived usefulness, perceived ease of use, and the perceived ease of use have a direct effect on perceived usefulness". At the same time, perceived usefulness and ease of use are also mediated by external variables (personal innovativeness and social influence). TAM was always used in previous research, especially in several technology studies to predict and explain the acceptance of the Internet on behavioral intention and usages, including Internet television (Latiff et al., 2019), mobile banking (Wah et al., 2019) and electronic wallet (Lim et al., 2019). As shown in figure 1, personal innovativeness and social influence are both external variables that will influence users' attitude towards OTT video streaming. Meanwhile, perceived ease of use and perceived usefulness represented as mediating variables. Lastly, users' attitude towards OTT video streaming is the dependent variable that influenced directly by the external variables, and mediating variables (perceived usefulness and ease of use)

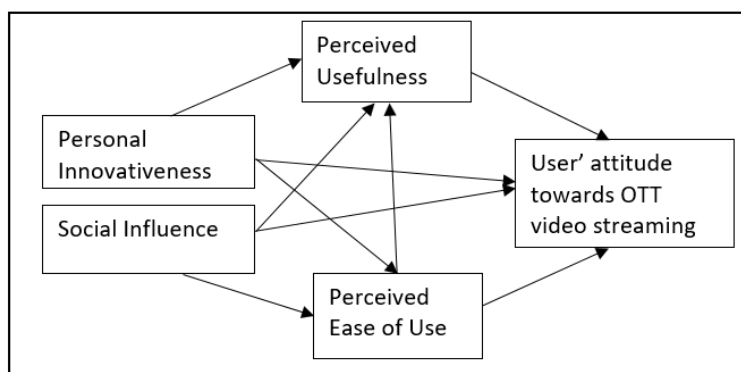


Figure 1: Research Framework

**Perceived Ease of Use**

Perceived ease of use (PEOU) is one of the important constructs in TAM, and it refers to the extent that which using new technology will bring convenience either physical, and mentally. According to TAM, users who perceived a high level of ease of use of new technology will show positive attitudes in accepting the technology because it helps to reduce the barriers among consumers toward new technology (Lim et al., 2019). If users perceived information or entertainment on OTT services are useful and satisfying, they will respond positively. This definition is consistent with Davis (1989) who confirmed PEOU as 'one's belief that using the system will be free of effort'. Earlier literature has recommended that PEOU is among the most important factors towards intention to use or adopt new technology. Studies showed that there is a significant relationship between PEOU and mobile internet banking (Lule, et al. 2012; Khasawneh, 2015), and online learning (Johari et al., 2015). Thus, PEOU can be a significant indicator of attitude towards using OTT video streaming. Moreover, perceived ease of use has recognized to influence attitude through perceived usefulness (Schierz et al., 2010). Past studies have confirmed the significant effect of PEOU toward perceived usefulness (PU) (Raleting & Nel, 2011; Mohammadi, 2015; Latiff et al., 2017).

**Perceived Usefulness**

Perceived usefulness (PU) is also an important construct in TAM, and it refers "to the degree to which an individual is confident with the adoption of a particular system that will enhance their performance" (Davis, 1989). The relationship between PU and attitude towards new technology in TAM indicated an essential cause of attitude towards adoption. Users who perceive a high level of usefulness will have a more positive attitude toward adopting OTT video streaming. Previous studies have discovered positive and significant connections such as adopting Internet TV for online news (Latiff et al., 2017), online learning (Johari et al., 2015; Taat & Francis, 2020; Lazim et al., 2021), mobile internet banking (Lule et al., 2012; Khasawneh, 2015), etc. Therefore, PU of a current study can be a significant factor for users' attitude towards OTT video streaming.

**Attitude towards OTT Video Streaming**

An individual's favourable or negative appraisal of completing an activity is characterised as attitude toward the behaviour. Farahat (2012) stressed out that the degree of interest in a person's real behaviour is referred to as attitude. A more positive attitude may boost a person's openness to accept new technology. TAM emphasises that perceived ease of use and perceived usefulness are the aspects that determine a person's attitude toward technology adoption (Ramayah & Ignatius, 2005). The attitude leads the person's behavior by filtering information and by influencing his or her perception of the world (Fazio et al., 1986). In addition, according to Krosnick and Petty (1995), attitude studies has also gathered a significant body of information demonstrating that some attitudes are very weakly predictive of related behaviours, while others are powerful predictive.

**Personal Innovativeness**

In diffusion of innovation research, it has been recognized extensively that individuals with high innovations are active explorers in searching new ideas. They manage to confront the high level of uncertainty and improve more positive targets toward acceptance (Rogers, 2003). Li (2004) added that innovativeness is the user's inclination to find novelty on new ideas and technology. Meanwhile, Schillewaert et. al (2000) claimed that personal

innovativeness is a characteristic that significantly affects user acceptance of new technology. The high innovativeness level in a person reflects better willingness in adopting new technology. Thus, it has also been reflected as a predictor for the adoption of innovations. There are numbers of research in technology innovation focusing on marketing, social and individual psychology which invested the effect of personal characteristics on adopter's behavior as an internal motivation. Most of the studies showed significant relationship towards users' attitude such as research on Library and Media Teachers (LMTs) towards technology acceptance by Noraini et. al. (2016), internet shopping (Duane et al., 2014) and mobile payment adoption (Tan et al., 2014).

### **Social Influence**

Social influences have been perceived as a vital component in innovation diffusion literature. Supports from others that have strong influences give impact to potential adopters to adopt because individual will adapt their attitudes, behavior and belief to their social context (Salancik and Pfeffer, 1978). Innovation creates uncertainty about the potential effect for the potential adopters. Basically, individual feel uncomfortable with uncertainty and thus tend to interact with social network to discuss about their adoption decision through social and normative influences. Stafford et. al (2004) also claimed that "the strongest potential adopters may come from interactions and observations of those close to the potential adopter, and from those in whose opinions the adopter places great value" (p.263). Studies have shown that followers of social network sites are not simply passive recipients of promotion messages but can actively generate shared meaning of the product with other members (Geurin & Burch, 2017). Meanwhile, the websites can also be "a source of social influence as members may rely on the perception and judgment of others in consumer decision making" (Ruiz-Mafe et al., 2018).

Thus, the researchers would like to investigate the relationship between the personal innovativeness and social influences towards users' attitude on OTT video streaming by using TAM as the study outline as below:

- H1a: Personal innovativeness of OTT services has significant influence on users' attitude toward OTT video streaming
- H1b: Personal innovativeness of OTT services has significant influence on perceived ease of use of OTT video streaming
- H1c: Personal innovativeness of OTT services has significant influence on perceived usefulness of OTT video streaming
- H2a: Social influence of communication channels has significant influence on users' attitude toward OTT video streaming
- H2b: Social influence of communication channels has significant influence on perceived ease of use of OTT video streaming
- H2c: Social influence of communication channels has significant influence on perceived usefulness of OTT video streaming
- H3a: Perceived ease of use has significant influence on users' attitude toward OTT video streaming
- H3b: Perceived ease of use has significant influence on perceived usefulness of OTT video streaming

H4: Perceived usefulness has significant influence on users' attitude toward OTT video streaming

## Methodology

### *Sample and Statistical Procedure*

The population of this research consist of people of Klang District in Selangor. A cross sectional survey was conducted on the first week of June 2021 (1<sup>st</sup> June 2021 until 6<sup>th</sup> June 2021). Convenience sampling was used and open to all users in Klang district. The total population of Klang's citizens is 1,055,207 as at 2021 (Population-Hub.com, 2021). Klang is among the top three high population out of 14 top cities in Malaysia. Due to high number of COVID-19 cases that has been reported increasing by Minister of Health (MOH, 2021). Klang has been chosen as one of the suitable locations for this study. The number of new cases was reported 825 between 2<sup>nd</sup> April to 15<sup>th</sup> April and increased sharply to 4040 cases by 15 May 2021 (MOH, 2021). According to table of sampling by Krejcie and Morgan (1971), 386 samples are appropriate for 1,055,207 population. Thus, 386 online questionnaires were administered. After data screening has been done, 34 responses were removed due to incomplete feedback and finally only 352 surveys are used. According to Hair et al., (2010), sample in a range of 150-400 is stable when using Structural Equation Model (SEM). The data were entered and analyzed using SPSS and Amos version 23.

Table 1 shows the profile of respondents based on the survey. Majority of the respondents are female (68%), with most of the age between 31 to 40 years old (33%). Malays are among the highest rate (50%) and most of them are married (48%). Meanwhile, the highest education levels are among the degree holders (41%) with the government sector is the highest response rate (34%). Most of them earned between RM1,000-RM2000 and RM3000-RM4000 (17%). As for the question regarding "how much time the respondents spend on OTT video streaming daily during the COVID-19 pandemic?", majority of them spent more than two hours daily (43%), followed by one to two hours (28%), 30 minutes to 1 hour (10%), less than 30 minutes (11%) and less than 15 minutes (8%). Meanwhile, Tonton (18%), Netflix (17%) and Astro Go (14%) are the top platform for video streaming. As for the favourite genre for OTT video streaming are News/Talk Show (13%), Movies, Comedy and Drama (11%) and least favourite are education (4%), sport (5%), cartoon (5%) and religious program (5%).

Table 1

*Distribution of OTT user by profile (n=352)*

Profile	Frequency	Percentage (%)	Profile	Frequency	Percentage (%)
<b>Gender</b>			<b>Occupation</b>		
Male	114	32	Private sector	97	27
Female	238	68	Government sector	119	34
<b>Age</b>			Self employed	44	13
18-20	27	7	Pensioner	15	4
21-30	97	28	Student	62	18
31-40	115	33	Unemployed	15	4
41-50	90	26	<b>Time spent on OTT video streaming</b>		

≥51	23	6	Less than 15 minutes	15	27	8
			15 minutes to 30 minutes	30	37	11
<b>Race</b>			30 minutes to 1 hour	1	36	10
Malay	178	50	1 hour to 2 hours	99	28	
Chinese	91	26	More than 2 hours	153	43	
Indian	69	20				
Other	14	4				
			<b>Platform for OTT video streaming</b>			
<b>Income</b>			Tonton	62	18	
Nil	45	13	Netflix	60	17	
≤1000	50	14	Astro GO	52	15	
1001-2000	61	17	Youtube	46	13	
2001-3000	53	15	Facebook	31	9	
3001-4000	59	17	Amazon Prime	28	8	
4001-5000	36	10	Instagram	25	7	
≥5000	48	14	Tubi TV	25	7	
			Dim Sum	23	7	
<b>Status</b>			<b>Top OTT Video Streaming Genre</b>			
Single	154	44	News/Talk Show	45	13	
Married	170	48	Movies	40	11	
Divorce	28	8	Comedy	37	11	
			Drama.	37	11	
<b>Education</b>			Music video	36	10	
Certificate/PMR/S	96	27	Documentary		10	
PM				34		
Diploma	86	24	Games show	32	9	
Degree	144	41	Reality TV Show	20	6	
Master	20	6	Religious		5	
Ph.D	6	2	Programme	19		
			Cartoon/animatio		5	
			n	18		
			Sport.	19	5	
			Education	15	4	

### Instruments and Reliability

The instruments used were adapted from past research studies on new technology adoption. A 24-item survey instrument was adopted and modified including demography data. The questions also included demography items, OTT usage dan platform. Respondents were asked about their experiences of using OTT video streaming during the MCO due to COVID-19 pandemic. The external variables such as personal innovativeness and social influence that use TAM as the outline influence users' attitude towards OTT video streaming. The survey used 4-likert scale and distributed via online.

Table 2 shows the allocation of instruments, items, reliability test, standardized item loadings, average variance extracted (AVE), composite reliability (CR), and Cronbach alpha (CA). The items used four Likert scales. The instruments were adopted by Kim (2003); Li (2004) and Rogers (2003) for item Personal Innovativeness; Social influences (Stafford et al., 2004; Rogers, 2003); Perceived ease of use (Venkatesh et al., 2003), Perceived usefulness (Davis et al., 1989; Venkatesh et al., 2003); Users' attitude towards OTT video streaming (Venkatesh et al., 2003; Wu & Wang, 2005).

Researchers seek assistance from experts before distributing questionnaires to citizens to ensure that the items of an assessment or instrument are appropriate for the targeted study and objectives. The pre-test was given to 30 students enrolled in the degree programme. Table 2 shows the results of the reliability analysis, which show that the reliability test is met after some changes or rewordings were made to avoid misunderstandings when respondents attempted the questionnaire. Each item's factor loading should be .6 or greater, and it must be positive (Hair et al., 2010). In determining the validity of each construct, the Average Variance Extracted (AVE) method must be used. Most of the factor loadings exceeded 0.6. All constructs have AVEs more than .5 and CRs greater than .6 (Fornell & Larcker, 1981) and CRs exceed .6 (Hair et al., 2010).

Table 2

*Instruments, standardized item loadings, CA values AVE, and CR*

Factor	Instrument	Item	Item loadings $\geq .60$	CA $\geq .70$ Pilot Test	CA $\geq .70$ Field Test	AVE $\geq .5$	CR $\geq .6$
Personal Innovativeness (PI)	Kim (2003); Li (2004), Rogers (2003)	PI1	.740	.751	.831	.653	.848
		PI2	.729				
		PI3	.938				
Social Influences (SI)	Stafford et al (2004); Rogers (2003)	SI1	.700	.792	.893	.619	.828
		SI2	.773				
		SI3	.887				
Perceived ease of use (PE)	Venkatesh et al (2003)	PE1	.680	.774	.851	.682	.864
		PE2	.931				
		PE3	.847				
Perceived usefulness (PU)	Davis et al (1989); Venkatesh et al (2003)	PU1	.826	.785	.880	.714	.882
		PU2	.829				
		PU3	.879				
Users' attitude towards OTT video streaming (AT)	Venkatesh et. al (2003); Wu & Wang (2005)	AT1	.912	.873	.870	.766	.867
		AT2	.837				

Kaiser-Meyer-Olkin (KMO)  
(0.78) ( $p < 0.001$ ).

\* Cronbach alpha (CA), average variance extracted (AVE) and composite reliability (CR)

Next, the correlation of each construct has also been analysed (Fornell & Larcker, 1981) (see Table 3). The results reported that the square root of AVE for each construct was larger than



the correlations between itself and all other constructs (Lee & Kozar, 2008). This Implied that there existed discriminant validity for each construct. In addition, the variance of each construct was larger with itself than with other constructs and exceeded the acceptable level of .5.

Table 3

*Measurement Model: Discriminant Validity and Correlations*

	PI	SI	PE	PU	AT
PI	.81				
SI	.57	.79			
PE	.36	.44	.83		
PU	.43	.44	.44	.85	
AT	.18	.26	.17	.11	.87

Note: Diagonal shadow is the square root of AVE

**The Measurement Model**

Three categories of model fit are normally used to assess a model fit in SEM. These are a) absolute fit, b) incremental fit and c) parsimonious fit. Referring to table 4, the absolute fit reported that  $\chi^2$  test showed p-value=.000. The ( $\chi^2/d.f$ ) was below 5.0 showed acceptable fit and the goodness of index (GFI) exceeded the suggested value of .9 or adequate fit (Joreskog & Sorbom, 1996). The standardized root mean square residual (SRMR) was lower (.059) than the acceptable upper bound of .08. The root mean square error of approximation (RMSEA) showed a good fit value (.078) because it was below the recommended value of .08 (Bentler & Bonnet, 1980). Second, the adjusted GFI (AGFI) showed a good fit value (.866) because it is greater than .80 (Tanaka & Huba, 1985). The normed fit index (NFI) showed .960 exceeds the lowest recommended value of .90 (Bollen, 1990). Tucker–Lewis index (TLI) showed a greater value (.919) than the suggested value of .90 and the comparative fit index (CFI) was greater (.941) than the recommended lower bounds of .90 (Bentler & Bonnet, 1980). Third, the parsimonious goodness of fit index (PGFI) was greater (.742) than the suggested level of 0.5 which indicated a good result. The parsimonious normed fit index (PNFI) and the parsimonious comparative fit index (PCFI) were both higher (.669, .683) than .5 which signified a positive fit model (Mulaik et al., 1989). All of the fit indexes were acceptable; thus, the analysis of the hypotheses can be continued.

Table 4  
Fit indexes

Fit index	Values	Fit indexes for the structural model.
<i>Absolute fit measures</i>		
$\chi^2$	244.722	The lower the better
d.f.	66	
p-Value	.000	>.05
$\chi^2/d.f.$	3.708	<5
GFI	.916	>.90
SRMR	.059	<.08
RMSEA	.078	<.08
<i>Incremental fit measures</i>		
AGFI	.866	>.80
NFI	.922	>.90
TLI	.919	>.90
CFI	.941	>.90
<i>Parsimonious fit measures</i>		
PGFI	.576	>.50
PNFI	.669	>.50
PCFI	.683	>.50

### Analysis of Structural Model

The current study has identified that PI and SI have a positive and strong relationship with AT, PE and PU. The hypotheses effects were assessed using the coefficients. Table 5 shows that PI has a positive and significant influence on AT, PE, and PU ( $\beta = .329; .291; .224; p < .001$ ). As a result, H1a, H1b and H1c are supported. Next, SI was also indicated a positive and significant effect on AT, PE, and PU ( $\beta = .284; .392; .491; p < .001$ ). Thus, H2a, H2b and H2c are supported. Meanwhile, PE showed negative but significant influence towards PU ( $\beta = -.194, p < .05$ ). However, PE and PU reported negative and insignificant relationship towards AT ( $\beta = -.068; -.086; p < .05$ ). Thus, H3a and H4 are not supported. H3b supported but negative. The TAM variables in this study explained that the variance of PU showed 25% ( $R^2 = .247$ ), meanwhile PE showed 27% ( $R^2 = .27$ ) and AT reported 16% ( $R^2 = .162$ ). According to Hair et al., (2011), ( $R^2 \leq 0.50$ ) is considered as weak. Although the  $R^2$  of the present study showed low, but it is still acceptable due to novel research in Malaysia. The OTT video streaming is categorized as media technology behaviour and few research has been done related to this topic in Malaysia especially during the COVID-19 pandemic.

Table 5  
Hypotheses and Results

Path	Relationship	$\beta$	S.E	C.R	P. value	Hypothesis Results
H1a:	PI→AT	.329	.072	4.783	***	Supported
H1b:	PI→PE	.291	.047	5.819	***	Supported
H1c:	PI→PU	.224	.052	3.711	***	Supported
H2a:	SI→AT	.284	.080	3.465	***	Supported
H2b:	SI→PE	.392	.049	5.819	***	Supported
H2c:	SI→PU	.491	.056	7.102	***	Supported
H3a:	PE→AT	-.068	.091	-1.005	.315	Not supported
H3b:	PE→PU	-.194	.073	-2.959	.003	Supported but negative
H4:	PU→AT	-.086	.084	-1.233	.218	Not supported

(Personal innovativeness = PI, Social Influence = SI, Perceived usefulness = PU, Perceived ease of use = PEU, Attitude towards OTT video streaming = AT)

\*\*\*p<.001, p<.05

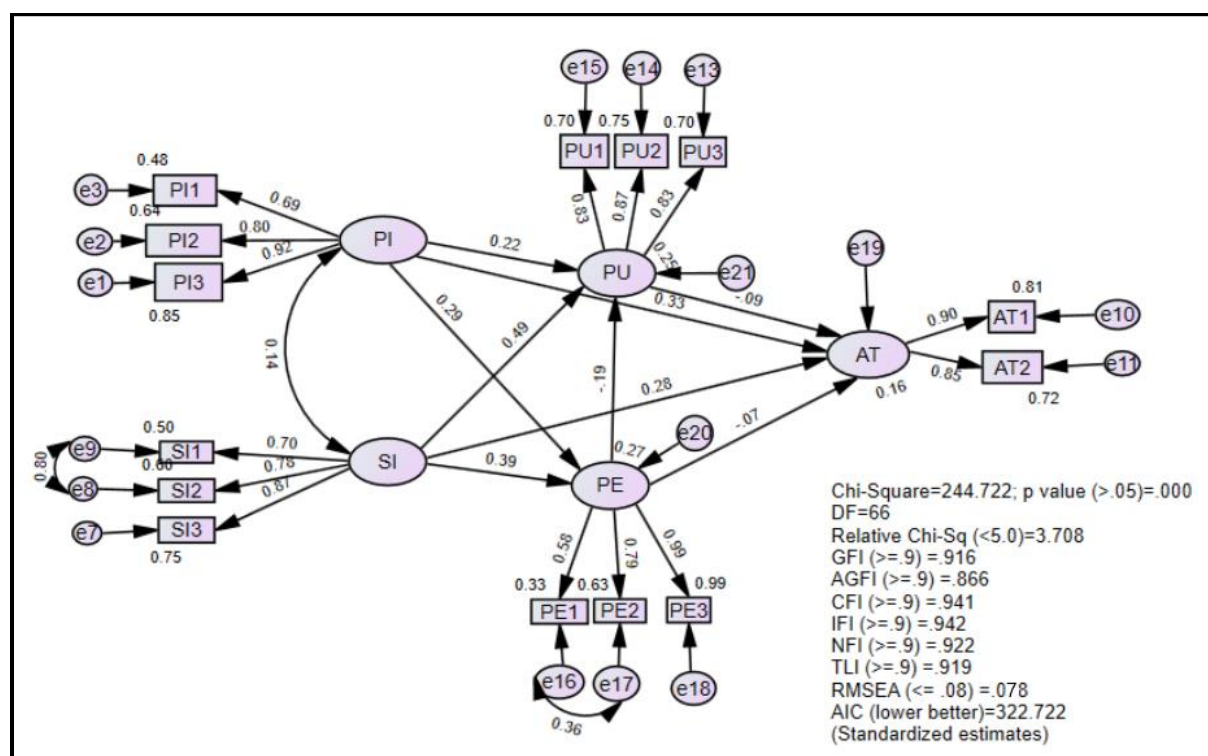


Figure 2: Final Model (Standardize)

**Discussion and Implication**

The survey has shown that majority of respondents relied on Tonton, Netflix and Astro Go, to stream talk show/news program, movies, drama, and music video. However, less streaming on education and religious program. Majority of them spent more than two hours per day streaming the OTT content which is considered as heavy usage. Users’ attitude toward OTT video streaming was influenced by personal innovativeness and social influence of OTT services were found significant relationship among citizen in Klang. It shows that the personal

innovativeness and social influence shape respondents' attitude in this study. Many researchers have proven that users with the same basic knowledge of new technology, have high level of personal innovativeness towards new technology adoption. The findings of this study are consistent with other research such as personal innovativeness towards Internet adoption (Noraini et al., 2016); mobile Internet banking (Lim et al., 2020); and online learning (Lazim et al., 2021). Meanwhile, significant findings on social influence can be seen on past research such as intention to adopt high-tech innovations (Kulviwat et. al., 2009); purchase intention (Tjokrosaputro and Choki, 2020) and internet services (Matsuo et. al., 2018). Social influence platform such as with friends, blog or website or direct inquiry to OTT content providers can contribute to better understanding about quality, money values and programming.

Meanwhile, the result of the relationship between perceived ease of use and perceived usefulness showed negative and insignificant relationship on attitude towards OTT video streaming. This showed that OTT video users who perceived higher ease of use and usefulness of OTT system have negative attitude towards OTT video streaming in Malaysia. Thus, personal innovativeness had been identified as important construct that had direct impact on attitude towards OTT video streaming. The personal innovativeness which included intrinsic motivation and personal value was found as the indicator for attitude to stream OTT video. Social interactions with online societies or communities influenced the development of people's opinions and information exchanged about a new technology.

The Ministry of Information may look at this platform to distribute informative government's messages to citizens especially on COVID-19 issues. Moreover, the advertising companies can also maximize their profits while customers may receive the most satisfaction from using the OTT due to customers' expectation and needs that meet their interests. Besides, managers should apply the findings of this study in their marketing plan in order to increase the productivity. Thus, these findings may help the advertisers with *positioning*; "the process of finding the product's most specific with customer type and creating appeals that will be effective with that type" (Rodmans, 2012, p. 378). Therefore, it's helpful to the broadcast TV industries, content providers, advertising companies and policymakers.

### **Conclusion**

This study reported a new trend in media industry. OTT services can be considered as the latest digital or online content service which offers interactive innovative features. By developing the attitude towards OTT framework, the study expanded the technology work and literature. It may also serve as a practical guide especially on attitude towards technology adoption. How people use OTT as an innovative medium may contribute to the growth of empirical research on new convergent of mobile technology. The results of this research will help to understand how the external variables such as personal innovativeness and social influence motivate people to use OTT and predict the development of interactive and effective mobile technology applications. Thus, these mobile technologies keep increasing and the development might influence and convert media use. Even though it is new, the analytical assessment of OTT in this research may benefit to form a cumulative knowledge on daily use of convergence mobile technology.

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**References**

- Agarwal, R., & Karahana, G. (2000). Time flies when you are having fun: cognitive assumption and belief about information on teaching usage. *MIS Quartely*, 24(4), 665-694
- Ajzen, I. (1991). The theory of planned behavior, *Organizational Behavior and Human Decision Processes*, 50(2), 179-211, [http://do.org/10.1016/0749-5978\(91\)90020-T](http://do.org/10.1016/0749-5978(91)90020-T).
- Bentler, P. M., & Bonnet, D. G. (1980). Significance tests and goodness-of-fit in the analysis of covariance structure. *Psychological Bulletin*, 88(3), 588-606.
- Bollen, K. A. (1990). Overall fit in covariance structure models: Two types of sample size effects. *Psychological Bulletin*, 107(2), 256-259.
- Davis, F. D. (1985). *A technology acceptance model for empirically testing new end-user information systems: Theory and results*. Ph.D, Management, Massachusetts Institute of Technology.
- Duane, A., O'Reilly, P., and Andreev, P. (2014). Realising M-payments: modelling consumers' willingness to M-pay using smart phones, *Behaviour & Information Technology*, Vol. 33 No. 4, pp. 318-334.
- Farahat, T. (2012). Applying the Technology Acceptance Model to Online Learning in the Egyptian Universities. *Procedia-Social and Behavioral Sciences*, 64, 95-104.
- Fazio, R. H., Sanbonmatsu, D. M., Powell, M. C., & Kardes, F. R. (1986). On the automatic activation of attitudes. *Journal of Personality and Social Psychology*, 50(2), 229-238. <https://doi.org/10.1037/0022-3514.50.2.229>
- Fornell & Larcker. (1981), Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 48, 39-50.
- Goh, G. (2020). On-demand video disrupting TV in South-east Asia, study finds. <https://www.businesstimes.com.sg/asean-business/on-demand-video-disrupting-tv-in-south-east-asia-study-finds>
- Geurin, A. N., & Burch, L. M. (2017). User-generated branding via social media: An examination of six running brands, *Sport Management Review*, Elsevier, vol. 20(3), pages 273-284. DOI: 10.1016/j.smr.2016.09.001
- Hair, J. M., Black, W., Babin, B., and Anderson, R. (2010), *Multivariate data analysis*, 7th ed., Prentice-Hall Inc, Upper Saddle River, NJ.
- Johari, N., Mustaffha, N., Ripain, N., Zulkifli, A., & Ahmad, N. W. (2015). Students' Acceptance of Online Learning in KUIS. *First International Conference on Economics and Banking*, 326-335.
- Joreskog, K. G., & Sorbom, D. (1996). LISREL8 User's reference Guide. SSI.
- Khasawneh, M. (2015). A Mobile Banking Adoption Model in the Jordanian Market: An Integration of TAM with Perceived Risks and Perceived Benefits. *Journal of Internet Banking and Commerce*, vol. 20, no. 3, pp. 1-15, Oct. 3, 2015.
- Krosnick, J. A., & Petty, R. E. (1995). Attitude strength: An overview. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 1-24). Lawrence Erlbaum Associates, Inc.

- Krejcie, R. V., & Morgan D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurements*, 30, 607-10
- Kim, S. W. (2003). Exploring factors influencing personal digital assistant (PDA) adoption. Unpublished Ph.D thesis, University of Florida, Gainesville, FL.
- Kulviwat, S., Bruner, G. C., & Al-Shurian, O. (2009). The role of social influence on adoption of high-tech innovations: The moderating effect of public/private consumption. *Journal of Business Research* 62(7):706-712
- Lazim, M. C. S. L., Ismail, N. D., Tazilah, K. M. D. A. (2021). Technology acceptance model (TAM) towards online learning during COVID-19 pandemic: Accounting students perspective. *International Journal of Business, Economics and Law*, Vol. 24, Issue 1 (April)
- Li, S-C. S. (2004). Exploring the factors influencing the adoption of interactive cable television services in Taiwan. *Journal of Broadcasting & Electronic Media*, 48(3), 466-483.
- Lim, F. W., Fakhrorazi, A., Asmat, N., Talib, A. B. (2019). Behavioural Intention towards Using Electronic Wallet: A Conceptual Framework in the Light of the Unified Theory of Acceptance and Use of Technology (UTAUT), *Imperial Journal of Interdisciplinary Research* vol. 5, no. 1, pp. 79-86, 2019.
- Lee, Y., & Kozar, K. (2008). An empirical investigation of anti-spyware software adoption: A multitheoretical perspective. *Information & Management*, 45(2), 109-119.
- Lule, I., Omwansa, T., and Mwololo, T. (2012). Application of Technology Acceptance Model (TAM) in M-Banking Adoption in Kenya, *International Journal of Computing and ICT Research*, vol. 6, no. 1, pp. 31-43, 01/01 2012.
- Matsuo, M., Minami, C., & Matsuyam, T. (2018). Social influence on innovation resistance in internet banking services. *Journal of Retailing and Consumer Services*, 45:42-51 DOI:10.1016/j.jretconser.2018.08.005
- Mohammadi, H. (2015). A study of mobile banking usage in Iran. *International Journal of Bank Marketing*, vol. 33, no. 6, pp. 733-759.
- Media Partners Asia. (2020). Coronavirus Gives 60% Boost to Mobile Streaming in Southeast Asia. *Variety*. <https://variety.com/2020/streaming/asia/coronavirus-boost-mobile-streaming-southeast-asia-1234584706/>
- Ministry of Health (2021). *Terkini negeri covid-19 di Malaysia sehingga 15042021*. <https://covid-19.moh.gov.my/terkini-negeri/2021/04/kemaskini-negeri-covid-19-di-malaysia-sehingga-15042021>
- Mulaik, S. A., James, L. R., Van A. J., Bennett, N., Lind, S., & Stilwell, C. D. (1989). Evaluation of goodness-of-fit indices for structural equation models. *Psychological Bulletin*, 105(3), 430-445. <http://doi.org/10.1037/0033-2909.105.3.430>
- Nielson. (2021). Top 5 streaming platforms in Malaysia. *The Malaysian reserve* Population-Hub.com. (2021). Population of Klang 2021. <https://populationhub.com/en/my/population-of-klang-6883.html>
- Raleting, T., and Nel, J. (2011). Determinants of low-income non-users' attitude towards WIG mobile phone banking: Evidence from South Africa, *African Journal of Business Management*, vol. 5, pp. 212-223, 02/01 2011.
- Ramayah, T., & Ignatius, J. (2005). Impact of perceived usefulness, perceived ease of use and perceived enjoyment on intention to shop online. *ICFAI Journal of Systems Management (IJSM)*, 3(3), 36-51.
- Raleting, T., & Nel, J. (2011). Determinants of low-income non-users' attitude towards WIG mobile phone banking: Evidence from South Africa, *African Journal of Business Management*, vol. 5, pp. 212-223, 02/01 2011.

- Ruiz-Mafe, C., Bigne-Alcañiz, E., Sanz-Blas, S., and Tronch, J. (2018). Does social climate influence positive eWOM? A study of heavy-users of online communities, *BRQ Business Research Quarterly*, Vol. 21, pp. 26-38.
- Rogers, E. (2003). *Diffusion of innovation*, 5th Edition, New York: The Free Press.
- Salancik, G. R., Pfeffer, J. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*. 23, 224-253
- Schierz, G. P., Gerhardt, Schilke, O., & Wirtz, B., W. (2010). Understanding consumer Acceptance of mobile payment services: An empirical analysis. *Electronic Commerce Research and Applications*, vol. 9, no. 3, pp. 209-216, 2010/05/01/ 2010.
- Stafford, T. F., Stafford, M. R., & Schkade, L. L. (2004). Determining uses and gratifications for the Internet. *Decision Science*, 35 (2), 259-288.
- Schillewaert, N. M., Ahearne, R., Frambach, & Moenaert, R. K. (2000). The acceptance of information technology in the sales force. *ISBM Report 15- 2000*.
- Tan, G. W. H., Ooi, K. B., Chong, S. C., and Hew, T. S. (2014). NFC mobile credit card: the next frontier of mobile payment? *Telematics and Informatics*, Vol. 31 No. 2, pp. 292-307.
- Tanaka, J. S., & Huba, G. J. (1985). A fit index for covariance structure models under arbitrary GLS estimation. *British Journal of Mathematical and Statistical Psychology*, 38, 197-201
- Tjoksaputro, M., & Cokki, C. (2020). The Role of Social Influence Towards Purchase Intention With Value Perception as Mediator: A Study on Starbucks Coffee as an Environmentally Friendly Product. *Proceedings of the 8th International Conference on Entrepreneurship and Business Management (ICEBM 2019) UNTAR*
- Thompson, R., Compeau, D., & Higgins, C. (2006). Intentions to use information technologies: An integrative model. *Journal of Organizational & End User Computing*, 18 (3) (2006), pp. 25-46
- Wah, L. F., Fakhrorazi, A., & Islam, R. (2019). Consumers' parsimony of mobile internet banking usage in Malaysia, *Humanities & Social Sciences Reviews*, vol. 7, no. 1, pp. 239-248, 2019.
- Wu, J. H., Wang, S. C. (2005). What drives mobile commerce? An empirical evaluation of the revised technology acceptance model. *Information management*. 42 (5), 719-729
- Yunus, R. (2020). Increasing streaming subscribers signals viewing preferences. <https://themalaysianreserve.com/2020/08/03/increasing-streaming-subscribers-signals-viewing-preferences/>, para 16
- Zhu, K., Kraemer, K. L., Gurbaxani, V., and Xu, S. X. (2006). Migration to open-standard interorganizational systems: Network effects, switching costs, and path dependency, *MIS Quarterly* (30:1), 515-539.