

SUPERVISION AND PANEL CONFIRMATION

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**A STUDY ON USER ACCEPTANCE TOWARDS THE USE OF LIVE
VIDEO STREAMING TECHNOLOGY AMONG INTERNET USER**

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DECLARATION OF ORIGINAL WORK

“I hereby declare that this project paper is result of my independent work except the summary and expert that have been acknowledgement”

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ABSTRACT

Advance in network facilities nowadays has increase the use of internet around the globe. ICT technology was developed from time to time according to market pull also technology push. Availability of high bandwidth in internet capacity broadband has driven the technology that we called streaming media with concept of providing the video file in the internet. The term of live video streaming also from the streaming media context which the video was encode and compressed in real time. This study was conduct to identify and analyze the acceptance of live video streaming technology among internet user where represent as gen Y in the age of 18 to 30. Methodology was used technology acceptance model (TAM) in identifying the relationship between variable.

Keywords: Information credibility, Perceived usefulness, Perceived enjoyment, Connecting in real time, Behavior intention, Acceptance of live video streaming

ABSTRAK

Kemajuan dalam kemudahan rangkaian pada masa kini telah meningkatkan penggunaan internet di seluruh dunia. Teknologi ICT telah dibangunkan dari semasa ke semasa mengikut tarikan pasaran juga dorongan teknologi. Adanya jalur lebar yang berkapasiti tinggi telah mendorong teknologi yang dipanggil penstriman media berkonsepkan penyediaan fail video di internet. Istilah penstriman video secara langsung juga di dalam konteks media langsung itu adalah satu proses mengekod dan dimampatkan dalam masa nyata. kajian ini di lakukan adalah untuk mengenal pasti dan menganalisis penerimaan teknologi live video streaming di kalangan pengguna internet di mana mewakili gen Y dalam usia 18 hingga 30. Kaedah yang telah digunakan iaitu teknologi model penerimaan (TAM) di dalam mengenal pasti hubungan antara pembolehubah.

Kata kunci :kredibiliti maklumat, kelihatan berguna, kelihatan seronok, berhubung secara langsung, kelakuan hasrat, penerimaan teknologi video secara langsung

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CHAPTER 1

INTRODUCTION

1.1 Background of study

Research on streaming media has grown rapidly during the last decades. It is expected that video streaming is going to explode in 2016 and further. Video has been an important media for communications and entertainment for many decades (Apostolopoulos et al. 2002). Most people nowadays using the video to demonstrate their activity and broadcast something useful to the audience in a real time. According to Bryan Kramer, live video streaming was not a new concept, what is new the availability of technology that make streaming more accessible to everyone (Kramer, 2016). High speed broadband provide by the communication industry to the use of internet network in the current activity was strengthen and support the live streaming concept. Live video streaming refers to sending video and audio signals real time over the Internet. Today, live video streaming technologies are widely used in broadcasting news, connecting friends and relatives in online chat rooms, conducting businesses online face to face, selling products and services, teaching online courses, monitoring properties, showing movies online, and so on. Much interest has been invested in taking advantage of live video streaming (Huang, Sisk, Kirk, Coryell, & Stewart, 2007).

1.2 Problem Statement

This research is aim to find out what are the key factor that influencing users towards the usages of live streaming technology concept in Malaysia. People in current era are more exposed to information technologies because of the enhancement internet network facilities becomes spread to the nationwide. According to (Media 2015) streaming video in real time will give people to share experience on current activities to their audience and friends. Desire to stay connected reflect the world growing need for instant gratification, especially through online connections (Alsop, 2014). Immediate information needed and would be the main point when the current era activities people becomes more busy with their daily activity that encourage them to find the best solution to getting information in easiest way. On top of that, this research has been conduct based on the issue stated to find out the clear factor of influencing users to the use of live stream technology.

1.3 Research Question

This research attempts to answer the following major question :

1. What are the most factors that influencing the behavior intention to use live video streaming technology ?
2. What are the impact of behavior intention to use on acceptance live video streaming technology?

1.4 Research Objective

The research objective of this research will answer the research question on the specific manner :

1. To identify the most factors that influencing the behavior intention to use live video streaming technology.
2. To analyses the impact of behavior intention to use on acceptance live video streaming technology.

1.5 Scope

The scope of this study is to identify the factor that contribute to behavior intension of internet user towards acceptance of live video streaming technology as a medium to get news and connecting friends in social media. The Technology Acceptance Model (TAM) is indeed a very popular model for explaining and predicting system use (Chuttur 2009) Thus, the researcher were choose Technology Acceptance Model (TAM) as a theoretical frameworks in studies of the determinant of new technologies acceptance. Target respondents in this research are the gen “Y” around the age of 18 to 30 that already working in Kuala Lumpur. where the researcher only focus

on the group that predicted the most common internet user nowadays. Hence, They can give the responses according to research question and objective.

1.6 Limitation of the research.

This research are focus on the studies towards the acceptance of live video streaming technology among internet user in connecting their friends and getting a news using TAM theoretical frameworks include perceived usefulness (PU) and perceived enjoyment (PENJ). Hence, the other factor are not contribute to the research. The survey will be conduct using social media like Facebook and twitter where the location of the research was not have any specific places. So, The researcher will assume that all respondent will able to answer with logical and honestly.

1.7 Significant of the studies

This research would be value to the communication industry during their analysis of consumer behavior trend in current era with the technological advancement which force the organization to make movement in improvement of the service provider in media. Besides that, business industry also have the significant on this research to know the benefit of using live stream to reach their audience and getting more engagement in their marketing activities where the company can save the cost by reaching their audience using the live streaming video. Live streaming video This research will clearly the factor that most influencing users to the use of live streaming technology nowadays.

1.8 Summary

Live video streaming is one of the technology concept that enable people to watched every single channel that provide by the streaming platform such as Ustream, periscope, YouTube, Facebook live and etc. The streaming technology can be used in two ways whether through mobile device or computer device. This technology has been drive the broadcasting industry to adapt and capture the advantage of streaming media in order to reach the audience through internet without need to use any traditional broadcast. The research on live video streaming technology still on going to the researcher in terms of the advantage of using the live video streaming to the business sector whether this technology can help the business organization to reach their audience in the internet in terms of advertising. This study is aim to identify and analyze the factor that influence and impacting the acceptance of live video streaming technology among internet user in Malaysia.

CHAPTER 2

LITERATURE REVIEW

2.1 Internet usage

The internet has changed the world and connected people across distances. A Malaysian television show can now be watched from someone in Indonesia. A music lover from Singapore can now listen to a concert series happening in the Malaysia. According to Global Web Index report in 2014 shows online media account is about 50% of total daily media consumption worldwide and internet users spend a daily average of 6.09 hours on online media and globally, internet users now spend a daily average of 6.09 hours on online media, up from 5.55 hours in 2012. Online populations in Thailand, Malaysia and Brazil are the most digitally oriented of all, typically consuming 8 hours or more. This reflects a general trend of internet users in fast-growth markets typically spending the most time online (Mander, 2014). Internet also has become a vital technology use around the world with estimated about 130 million people in 171 countries in terms of communication and information sharing (Flanagin & Metzger 2000).

2.2 Definition of live streaming

Live video streaming has become growth from time to time because its accessibility. Most of the people nowadays wanted to broadcast live to share his experience activity like business activity and connecting friends (Brouwer, 2015). Live streaming technology will definitely benefit all the sector and industry. The revolution of internet broadband recently significantly change the way people will interact with computers and internet as a whole (Kontothanassis et al. 2004).

Live streaming refers to internet content delivered in real time, live streaming also require of media source like video camera, encoder as well as audio interface. Its require the combination of hardware and software. According to history, streaming media is one of the manners for information access over the internet. There are two ways of media can be used on the internet which is by downloading and streaming. Streaming video concept was introduced in early 1990s. Streaming is characterized by playing the video data as its received (Julian Bucknall 2012)

According to (Sripanidkulchai et al. 2004) in the study said that live video streaming likely to become an important in the future because the application is pull and technology push. The researcher also stated that internet provides a new medium for live streaming that can give an advantage over traditional media, it is because with traditional media such as radio and satellite television has a limited number of channels. Moreover, (Ho & Yang 2015) said on their study that streaming technology refers to compressed media file on the internet. Live streaming video platform is gradually familiar by people. People can broadcast scene of user's screen or user's performing video to viewer.

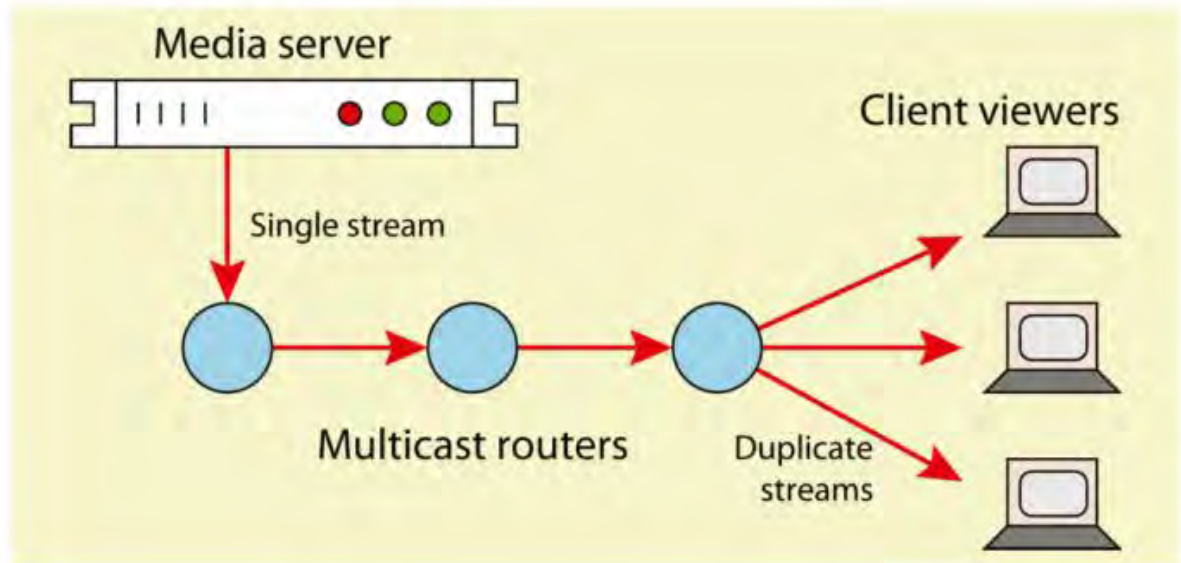


Figure 2.1 : The concept of live video streaming technology by (Julian Bucknall 2012)

2.3 Theory of technology acceptance

The Technology Acceptance Model (TAM) is one of the fundamental theory was created by the Davis in 1989 on his research to define the motivation of the users and explain the factor that contribute to the acceptance of technology itself (Chuttur 2009). Davis attempted to explore the behavior of user accept the information of personal computer (Ho & Yang 2015). TAM was developed by Davis (1989) derives from the theory of reasoned action (TRA) and stated that user acceptance based on two factor which is perceived usefulness and perceived ease of use. Perceived usefulness and perceived ease of use are the primary drivers to determine a person's attitude toward using technology. Perceived usefulness is define as the prospective users subjective probability that using a specific application system will increase his or her job performance within context while perceived ease of use is the degree to which the user expects the target system to be free of efforts (Davis et al. 1992). These theory was extend by later researcher (Zacharis 2012) on his study about Predicting college students' acceptance of podcasting as a learning tool, and the researcher was construct by

added perceived enjoyment that represent the happiness factor by user as a motivation impacting the acceptance of the podcasting technology.

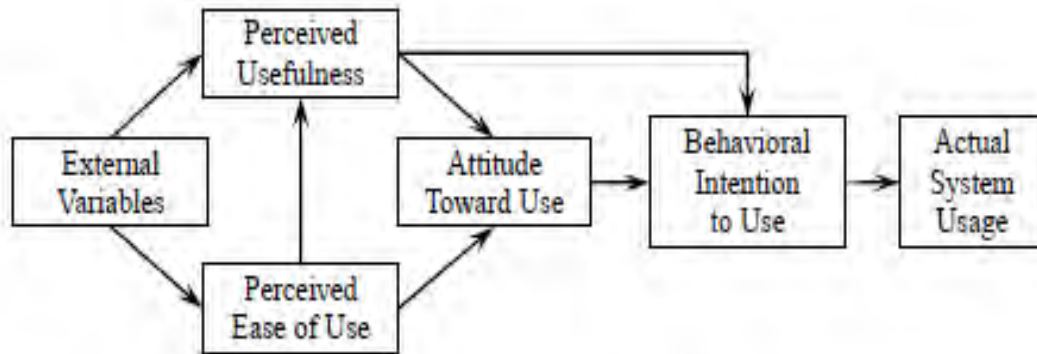


Figure 2.2 : Original framework from (Davis, 1989)

2.3.1 Perceived Usefulness

Based on original research (Davis, 1989) define that perceived of usefulness (PU) is the degree of person believe that using a particular system would enhance his or her productivity. Based on (Shih, 2004) on its study about internet utilization behavior find that perceived usefulness is the major determinant of individual intentions to use an information system (IS) trough internet and also the hypothesis shows that perceived usefulness (PU) positively related to user perception to use the internet. Besides that, in the study on user acceptance towards computer technology by (F. Davis, Bagozzi, & Warshaw, 1989) highlight that people intention was determine by the perceived usefulness where the respondent have experienced the usage of technology itself. Hence, the PU of live streaming consumption in this study is expecting that will contribute in impacting behavior intention of user in acceptance of live video streaming.

2.3.2 Perceived Ease of use

Perceived ease of use (PEOU) is the next variable in theoretical framework of TAM. Which stand for the people believe that some of the influencing them to use the system is easy to use. Even the users believe that the technology or application is useful, they may feel that the technology is too hard to use and learn (Davis, 1989). According to (Zacharis, 2012), people are attempt to minimize their effort to use any technology adoption where easy to them to learn and expert on that technology usage in their study on predicting college student acceptance of podcasting as a learning tool and the findings said that all the respondent feel comfortable to use the technology in education process. In the perspective of live streaming technology usage, not so much effort for users to use it because of the system are currently provide by live stream provider like Facebook live by Facebook and Periscope by Twitter. What users need to have is video camera and internet connection.

2.3.3 Perceived Enjoyment

According to (F. D. Davis et al., 1992) Perceived Enjoyment is define as a motivation of users that use the technology without any reinforcement or in other word is feeling happiness. While (Zacharis, 2012) describe when the interaction with the system or technology is perceived to be enjoyable by the users, it will effect positively attitude on influence adoption of system. The study from (Thompson, Lim, & Lai, 1999) about intrinsic and extrinsic motivation in internet usage also stated that people are willing to feel joy based on the frequency of internet usage, daily usage, and diversity of internet usage. Besides that, it is strengthen by the statistic from periscope where over 200 million broadcast have been created on their service site and over 110 years of live video are watched every day (Periscope, 2016). In terms of live video streaming technology concept, it is provide the benefit to the user to have fun when sharing their activity live to their audience. Thus, live streaming seems to be enjoyable

technology to the users because it will give more entertainment when going live while connecting friends on internet line.

2.4 Perception of internet information credibility

People are tend to searching an information immediately through the internet nowadays. People are always to look for free advice from the internet on all sort of issues and someone somewhere has experienced it and probably solved the problem, getting a latest news and sharing information with friends at the same time. By using an internet, it will benefit in minimize the cost and minimal effort where the information facilitated better decision-making process more efficient (Peterson & Merino 2003). According to (Buente & Robbin 2008) people obtain different types of information from multiple sources, use multiple channels, and in different locations, of which the Internet has become an important one. Moreover, media in 2015 stated that streaming video in a real time enable people around the world watch whatever we share and experience as they happen (Media 2015).

2.5 Connecting in real time using live streaming

The findings from the previous research shows that diversity of client in accessing live video stream on the internet is much wider than traditional broadcast such as radio and television because people become more mobile, travelling and working around the globe (Sripanidkulchai et al. 2004). This will drive the demand for connecting with family using the live video streaming technology that provide by the platform such as Facebook live and Periscope.

According to previous research from (Siekkinen et al. 2016) said that live streaming technology platform which is periscope and meerkat has enable users to broadcast live video to a large number of viewers in 2015. Moreover, from the periscope statistic shows that over 200 million broadcast have been created on their service site and over 110 years of live video are watched every day (Periscope 2016).

2.6 Operational Framework

The framework was modified by the researcher with add some variable which is information credibility and connecting friends in real time as a factor variable that have relationship to the perceived usefulness and perceived enjoyment that would be determinant of behavior intension in the decision of acceptance towards the use of live video streaming.

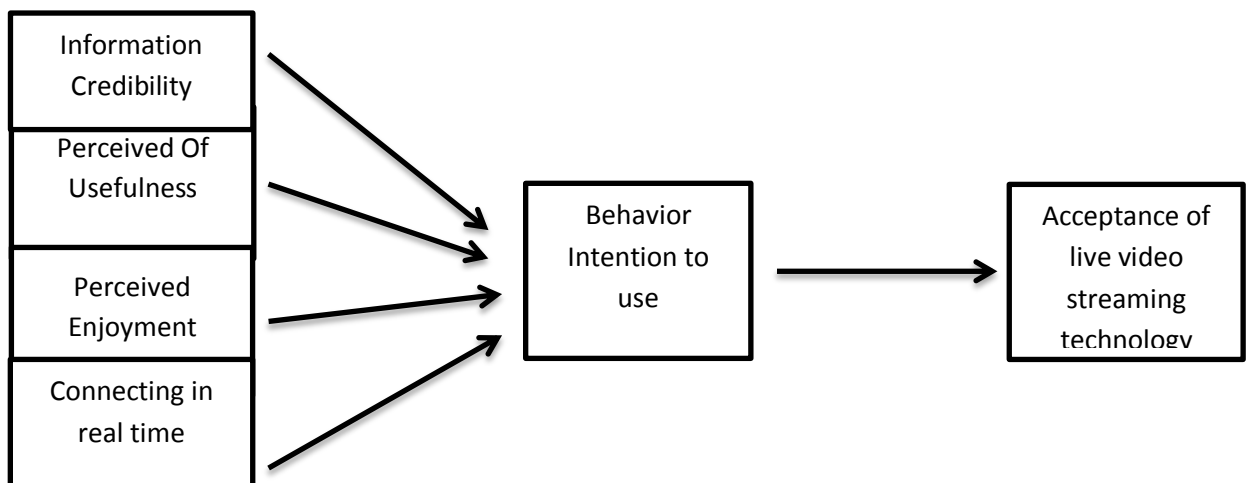


Figure 2.3 : Theoretical framework using TAM model