ACCEPTANCE AND USAGE OF WEBCASTING AMONG USERS OF SELECTED CYBER CAFÉS IN KLANG VALLEY

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Abstract
The Malaysian public now has access to the Internet not only at home and the workplace, but also at cyber cafés. This study aims to examine the level of acceptance of webcasting among users of selected cyber cafés in the Klang Valley. The specific objectives of the study are: to determine the profile of webcasting users and its usage; to determine the types of webcasting technology most frequently used, level of knowledge of webcasting and the main source of knowledge in becoming aware of webcasting; to determine the acceptance of webcasting among non-users of webcasting; and to determine the relationship between behavioral intention to use and the actual usage of webcasting among users of webcasting. This study used the survey design, using purposive sampling to select the cyber cafés and visitors of these cafés. The findings indicate that usage of webcasting is still relatively low among users of selected cyber cafés in the Klang Valley. Users of webcasting were found to be mostly male, young and relatively well educated with at least a diploma as the highest level of education obtained.

Penerimaan dan Penggunaan Webcasting Di Kalangan Pengguna Kafe Siber Terpilih di Lembah Kelang

Abstrak
Masyarakat Malaysia kini mempunyai capaian Internet bukan saja di rumah dan tempat kerja, tapi juga di kafe siber. Kajian ini bertujuan untuk mengukur tahap penerimaan *webcasting* di antara pengguna siber kafe terpilih di Lembah Kelang. Objektif khusus ialah untuk menentukan jenis teknologi *webcasting* yang kerap digunakan, tahap pengetahuan tentang *webcasting*, mengukur penerimaan di kalangan bukan pengguna *webcasting* serta menentukan hubungan antara niat menggunakan dan penggunaan sebenar *webcasting*. Survei digunakan dengan menggunakan persampelan bertujuan bagi memilih siber kafe dan pengunjung siber kafe. Dapatan kajian menunjukkan

penggunaan *webcasting* masih di tahap rendah di kalangan pengguna siber kafer terpilih di Lembah Kelang. Pengguna *webcasting* kebanyakannya muda, lelaki dan mempunyai tahap pendidikan sekurang-kurangnya diploma.

***Keywords**: webcasting*, Internet, technological determinism, acceptance, usage

Introduction

The Internet is the latest communication tool. With it, one can transcend borders and have access to encyclopedias, television stations, newspaper articles, the latest music videos and movie trailers, all at one stop. The growth of the Internet has been phenomenal, and it is perhaps the most important platform shift to hit the computing industry since the introduction of IBM personal computers in 1981 (Keyes, 1997).

In Malaysia, the formation of "RangKom" in 1987 was the start of the Internet growth (Musa, 2002). The institution that was directly responsible for the establishment of Internet in the country was the Malaysian Institute of Microelectronic Systems (MIMOS), which was set up in 1985. The impetus for the Internet boom in Malaysia was the set up of the Joint Advanced Research Integrated Networking (JARING) by MIMOS in 1991. JARING provided Malaysia with Internet infrastructure, and became Malaysia's first ISP with thirty subscribers (Malaysia, 1996). By the end of 1999, there were two million Internet users. By the year 2005, the number of Internet users has reached an estimated 10.317 million users, according to the Malaysian Communication and Multimedia Commission website (MCMC, 2006).

The general public in Malaysia now has access to the Internet not only at home and the workplace, but also at cyber cafés. Because of its capabilities for worldwide access and delivery of information, the Internet creates demand for its access, and attracts the set up of many cyber cafés. There has been an increasing number of cyber cafés in developed and developing countries, including Malaysia (Fauzan & Roslina, 2001).

Cyber cafés are known alternatively as Internet or PC café. Caslon Analytics (2005) defines it as "a commercial venue where members can access the net for a fee, usually per hour or minute". Stewart (2000) classifies cyber cafés as "a café or a shop that is open to the public, where a computer can be hired for periods of half an hour to access the Internet, write a CV or play a game".

Nowadays, cyber cafés and kiosks are located worldwide, although they tend to cluster in major population centers and locations such as airport and shopping malls. Some cyber cafés offer beverages and food at its premise, in addition to access to the Internet. With the explosion in the use and profile of the Internet and personal use of ICT and multimedia, cyber cafés have become part of our contemporary culture. It is also acknowledged as a vital place to access the Internet and plays an instrumental role to expose the usage of the Internet to the general public.

Nowadays, since cyber cafés are one of the access point that are equipped with the latest

Internet technology and facilities, as they offer high-speed Internet connection (which is especially vital for webcasting usage) at a moderate price. Therefore, cyber cafés have the possibility of making these broadcast technologies available to the general public, and perhaps provide access to newer Internet applications that require high speed Internet connection, such as webcasting. Hence, it is with these concerns in mind that the study has attempted to provide a clearer picture on the acceptance and usage of webcasting among a select group of Internet users, which are cyber café users in selected cyber cafés in Klang Valley.

Research Objectives

Therefore, in this study, we aim to examine the level of acceptance of webcasting among users of selected cyber cafés in the Klang Valley. The specific objectives of the study are as follows:

- To determine the profile of webcasting users and its usage
- To determine the types of webcasting technology most frequently used, level of knowledge of webcasting and the main source of knowledge in becoming aware of webcasting
- To determine the acceptance of webcasting among non-users of webcasting
- To determine the relationship between behavioral intention to use and the actual usage of webcasting among users of webcasting

Literature Review

Development of webcasting

Webcasting is known as "the usage of the Internet to broadcast live or delayed audio or video transmission, much like traditional television and radio broadcasts" (Webopedia, 2005). Snyder (2002) defines webcasting, by the transmission of audio, video and data by using streaming technology. The technology started in 1995, when the Internet allowed the transfer of not only text, but also video and audio (Abdul Lazi & Musa, 2005). The webcasting technology therefore is enabled through streaming, and often used inter-changeably with the term 'webcasting'.

Streaming technology is one of the most important outcomes of the Internet. One of the reasons is that it is an important innovation for facilitating networked audio and video, and a significant improvement over the download-and-play approach to multimedia file distribution (Keyes, 1997). If a users, does not have high bandwidth to access large multimedia files, streaming gives them a solution by starting to display the data before the entire files has been transmitted. More simply put, streaming technology allows playback of audio or video to begin before all components have arrived. The ability to squeeze the audio and video into a stream is the basis of streaming technologies.

Today, the use of "streaming audio and video" is now becoming very common the Web (Black, 2000). Most broadcast and cable television networks have been streaming their news, sports and selected programs online, as have major professional sports leagues (Wingfield, 2002). By applying webcasting through streaming technology, websites can now provide true motion video and audio to a person connected to the Internet. This concept has made large

inroads in video seminars, video conferencing and the websites of some of the music oriented cable networks. TV stations are also using video streaming as an up sell to their current advertisers, while newspapers are eyeing it as an opportunity to begin siphoning dollars from broadcast budgets (McGann, 2004).

Profile of Webcasting Users

Even though webcasting has been available to Internet enthusiasts for more than ten years, there are not many studies to explain who are the early adopters of webcasting are, reasons for its usage and the types of webcasting technology most viable for adoption (Lin, 2004). Arbitron / Edison Media Research (2001) conducted one such relevant study on streaming media, entitled "Internet VII: The Internet and Streaming: What consumers want next". In this study, 2,507 individuals were interviewed to probe their Internet and streaming media behavior and usage. The study suggests that the consumption of webcasting has become increasingly common, with more than 50% of Internet users accessing webcasting. The study also discovered that the users of webcasting lived in upscale areas and were Internet-savvy, and this suggests that the streaming media continues to attract a highly compelling advertising target.

A more recent study was conducted by Arbitron / Edison Media Research (2005), entitled "Internet and Multimedia 2005: The on-demand media consumer". In this study, a total of 1,855 individuals were interviewed to investigate how various forms of traditional, online and satellite media are being consumed among the American public. The findings suggested that the average 'streamie' tends to be male (55%), relatively young (62%), more affluent and educated with a majority having had "some" college education (51%) and reasonably high-income earners (18%).

Webcasting users could also be those who have considerable interest in complementing gadgets (Lam, 2001), and would have a greater tendency than the general online user to research MP3 players, and devices that would upgrade their PDAs, home stereos or care stereos for Internet audio. Finally, early adopters of webcasting are found to have distinctive traits and characteristics. Lin (2004) carried out a study on the potential factors that could predict the adoption of webcasting among 454 Internet users. She concluded that in order to plunge oneself into becoming video 'streamies', the Internet user will have to command a certain level of curiosity, interest and skills in exploring this new digital communication. Young users were also found to be more comfortable in online technology compared to older users.

Usage of Webcasting

Usage of webcasting can usually be categorized into usage of audio content (such as Internet radio) or usage of video content (such as online music video clips). However, although Internet audio is becoming a regular habit among Internet users, their use of Internet video has not yet become habitual. This was evident in a study conducted by Arbitron / Edison Media Research (2002) pertaining Internet usage and digital media. The study discovered that although the number of Internet radio listeners in America has nearly tripled, those watching Internet video has shown little growth.

The reasons for accessing webcasting vary, but those who access Internet audio are mainly

searching for content that are not available in traditional media, as well as to have some form of audience control. In the 2005 study conducted by Arbitron / Edison Media Research, the 37 million Americans who tune in to Internet radio are doing so "to listen to audio that aren't available elsewhere" (17%) and "to control / choose the music played" (15%). Listening to online radio appeared to be concentrated on five well-known radio brands: which are America Online's AOL @ Radio Network, Yahoo! @ Music, Microsoft's MSN Radio, WindowsMedia.com and Live365. The availability of webcasting has enabled music choices to expand, and to include Internet radio with thousands of stations that are available to suit each individual taste in music.

With regards to the Internet video, according the 2005 study by Arbitron / Edison Media Research, a significant number of consumers are watching online movies on demand through their cable box or renting them online, as well as accessing news and sports clips online. One in four reported to having viewed video over the Internet. Short form programming dominates the Internet video content, with news clips as the number one destination for the visually fixated, attracting 11% of video streamies, followed by movie trailers (9%), music videos (8%), highlights of sporting events (5%), and short or full-length movies (3%).

In Malaysia, Abdul Lazi (2000) carried out a study on the usage of Internet radio and its satisfaction among MMU students. The findings suggested that although the technology was still in the early stages, Internet radio was gaining acceptance. A quarter of the respondents (25%) listened to Internet radio at least once to five times a week.

It is obvious that the usage of webcasting is slowly gaining acceptance among Internet users around the world. However, Internet audio is more popular among users compared to Internet video. Some studies such as the study conducted by Lin (2004) and Abdul Lazi (2000) reported that factors that could be hindering webcasting adoption were technical constraints such as poor audio quality and slow transmission speed and bandwidth. Another factor is the availability of high speed Internet connection, which is vital for webcasting adoption. According to Atkin (2002), based on the industry tracking statistics, the total video streams accessed in 2002 increased 52.3% to nearly 4 billion since 2001 and this growth was primarily triggered by the increased penetration of broadband connection to Internet home users. Therefore, if these technical glitches were improved and access to high speed broadband connection are provided among the critical mass of online users, the adoption of webcasting among Internet users is likely to increase tremendously.

Technology Acceptance Model (TAM)

Understanding and creating the conditions which information systems will be embraced by human organizations remain a high-priority issue with researchers (Venkatesh & Davis, 2000). Significant progress has been made over the last decade in explaining and predicting user acceptance of information technology at the workplace. In particular, substantial theoretical and empirical support has accumulated in favor of the Technology Acceptance Model or TAM (Davis, 1989).

Technology Acceptance Model explains how users come to accept and use technology, and currently it is the most effective tool in describing technology adoption (Davis, 1989). IT was based on the Theory of Reasoned Action (TRA) was introduced by Azjen and Fishbein, and

later was developed by Fred Davis and Richard Bagozzi in 1989 (Wikipedia, 2005). Both theories assume that when someone forms an intention to act, they will be free to act without limitations. In the real world however, there will be many constraints such as limited ability, time constraints, environmental or organizational limits or unconscious habits, which will limit the freedom to act (Bagozzi et al., 1992).

Because newer technologies are complex, an element of uncertainty exists in the minds of decision makers with respect to the successful adoption of them (Bagozzi et al. (1992). Subsequently people will form an attitude and intention towards trying to learn to use the new technology. As such, when users are presented with new technology such as a new software package, there will be a number of factors that would influence their decision about how and when they will use it (refer to Figure 1), notably:

> **Perceived usefulness,** which is the degree to which a person believes that using a particular system would enhance his or her job performance.
> **Perceived ease-of-use,** which is the degree to which a person believes that using a particular system would be free from effort.

Attitudes towards usage and intention to use may not be well formed and may occur only after effort to learn to use the technology has started. Behavior is best predicted by intentions, and "intentions are jointly determined by the person's attitude and subjective norms concerning the behavior" (Klopping & McKinney, 2004).

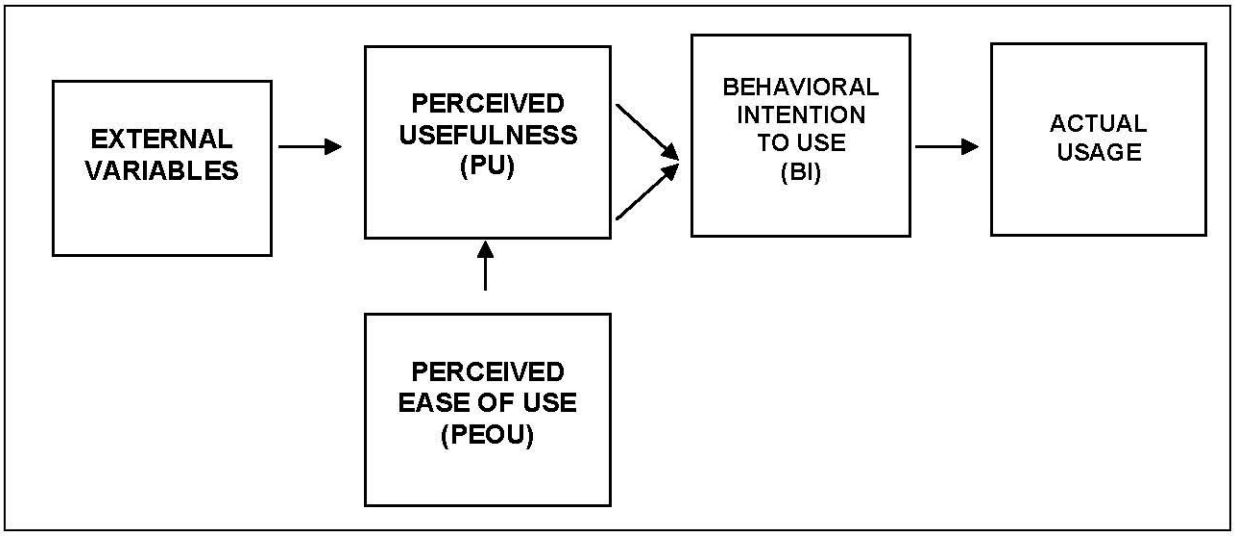


Figure 1: Technology Acceptance Model (TAM)

Therefore, based on Figure 1, TAM maintains that the decision to use a particular information technology (IT) follows four stages (Burton Jones & Hubona, 2005):

> **External variables beliefs**: Users consider a range of external variables (such as their

individual abilities, the type of IT, the task, and situational constraints) to evaluate the consequences of using an IT. Their overall evaluation is reflected in their beliefs about the IT's usefulness (PU) and ease of use (PEOU).
Belief's attitude: The users' beliefs about the consequences of using an IT (PU and PEOU) drive their attitude (or affection) towards that behavior.
Attitude: The users' favorable or unfavorable attitudes toward using an IT drive the extent to which they intend to use it.
Intention to use: The users' intention to use the IT drives whether they will actually use it.

In simpler context, the TAM model states that if something is easy and useful to do, then people are more likely to do it. The acceptance of the technology among users would then best be predicted when they have an intention to use the technology, and this intention is influenced by the positive perceptions towards the technology.

Although initially TAM was developed to predict to explain and predict computer-usage behavior, the model has expanded to include studies explaining the adoption and usage of different types of technological application such as intranet, online banking, e-commerce as well as mobile computing. Klopping and McKinney (2004) conducted a study regarding online shopping among 429 undergraduate students, and it was found that TAM supported the use of online shopping, with perceived usefulness directly linked to actual use. Another study was conducted by Pagani (2004) to explain consumer adoption of 3G mobile multimedia services using the TAM model. In that particular study, it was revealed that perceived usefulness, perceived ease of use, price and speed of use were the most important determinants of adoption of multimedia mobile services.

As such, an impressive body of research has validated and extended TAM (Segars & Grover, 1993; Chin & Todd, 1995; Venkatesh, 2000; Venkatesh and Davis, 2000). In many studies carried out on TAM, the TAM is simplified so as to examine the usage as the dependent variable, with perceived usefulness and perceived ease of use as the main predictors (Davis, 1989; Lederer et al., 1992; Straub et al., 1997). It is also being applied to test the acceptance of users on new computing and Internet technologies. In more than ten years, TAM has become well established as a robust, powerful and parsimonious model for predicting user acceptance. Consequently, the TAM model is acknowledged today s one of the most influential research model in the studies of the determinants of information technologies acceptance (Chau, 1996).

Methodology

Research Design, Sampling and Population of Study

The design of the study required data that was collected from active Internet users in cyber cafés. This study used the survey design, using purposive sampling to select the cyber cafés involved in the study. The cyber cafés that were selected specifically for this study were those that were considered as 'university' cities, situated in areas that were close to private colleges or other educational institutions and located in upscale areas of the Klang Valley.

Based on the list given by local councils and also a compiled Internet list, a complete list of

registered and suitable cyber cafés in the said area was compiled. A total of 15 cyber cafés were identified and chosen in the relevant areas, and finally selected as the cyber cafés that would best represent the population of the study. The total population was estimated from the number of monthly cyber café visitors represented by each of the three areas selected in this study (Petaling Jaya, Kuala Lumpur and Subang Jaya) and the total number of cyber cafés in each area selected in this study. Since the cyber cafés were situated in the same area and have similar characteristics, it could be assumed that they also had a similar number of cyber café visitors per month.

The monthly cyber café visitors were obtained based on the estimation given to the researcher by the supervisor of each cyber café that represented each area. Since most cyber café did not track down or asked the visitors to write their names down, it was difficult to get the exact number of monthly visitors of each cyber café, and hence was only their estimation. Then, the number of the monthly cyber café visitors was multiplied with the total number of cyber cafés that were selected in each location, and thus the total population was obtained. The total population is presented in Table 1 below.

Table 1: Total Population of the Study

Area	Number of cyber café selected	Monthly cyber café visitors	Total
Petaling Jaya	7	100	700
Kuala Lumpur	5	70	350
Subang Jaya	3	50	150
		Total Population	**1200**

Therefore, the determination of the sample size from a given population followed the guideby Krejcie & Morgan (1970), in which the sample size of this study would be 291. As such, the researcher had targeted ideally about 10 respondents for each cyber café that was visited in order to reach the appropriate number of respondents in this study.

Pre-testing

A pre-test was carried out prior to the actual study to examine the reliability and validity of the measurement. Thirty respondents were selected from cyber café users in the area of Section 14, Petaling Jaya. The respondents possessed similar characteristics to the actual respondents of the study. Although most respondents did not have problem answering the questionnaire during the pretest, several items emerged as slightly confusing for other respondents. Based on their feedback, the researcher subsequently revised the instrument to make it less complicated and more understandable. Since respondents requested translation of the research instrument during the pre-test (prior to the actual study, the research instrument was only administered in the English language) the research instrument was also translated into the Bahasa Malaysia language.

Validity and Reliability of Research Instrument

The scales used to measure perceived usefulness and perceived ease of use were adapted from Davis's research in 1989, which established their reliability and validity. Twelve items used to measure these constructs asked individuals to state whether the statements posed were likely or unlikely, and used a 5-point Likert scale ranging from (1) Strongly Unlikely to (5) Strongly Likely. The scales used to measure behavioral intention was adapted from a study carried out by Klopping and McKinney (2004), which also established their reliability and validity. Five items used to measure the constructs concerning behavioral intention asked individuals to agree or disagree with statements using a 5-point Likert scale ranging from (1) Strongly Disagree to (5) Strongly Agree.

Data Collection

The data collection period ran for one month from 13th of February 2006 to 14th of March 2006. Permission were sought from the operators of the cyber cafés to distribute questionnaires among users of the cyber cafés. Then, the researcher individually approached the cyber café users to ask if they were willing to participate in the study. Once they have agreed, the researcher gave a short explanation and briefing on the study being conducted and respondents proceeded to answer the research instrument. Pencils and papers were provided to the respondents in answering the research instrument. After filling in the questionnaire, each of the respondents was given a small souvenir for participating in the study. Although 250 questionnaires were distributed, a total of 221 cyber café users participated in this study, which brings the response rate of the study to 88%.

Data Analysis

The collected data were coded, entered into the computer and then analyzed using the Statistical Package for Social Sciences (SPSS) version 12. To ensure the accuracy of the data entered, the frequency distribution of each variable was computed. To determine the profiles of webcasting users, descriptive statistics was employed using statistical analysis such as mean, range, standard deviation and percentage.

Finally, to determine the relationship between perceived ease of use (PEOU) and perceived usefulness (PU) and behavioral intention to use webcasting, as well as the relationship between behavioral intention to use webcasting and the usage of webcasting, the correlation test was carried out to analyze and to interpret the strength and the direction of the relationship.

Results and Discussion

Profile of Webcasting Users

From the study, it is evident that the usage of webcasting is still relatively low among cyber café users in Klang Valley, whereby only 78 out of 221 cyber café users admit to accessing webcasting. Put simply, only 3 out of 10 cyber café users currently access webcasting (35%). This contrasted with the study conducted by Arbitron / Edison Media Research (2001), whereby usage of streaming media has surpassed more than 50% among American Internet users. This indicates that the usage of webcasting has not caught on in Malaysia as it has in the US.

Users of webcasting tended to be male (53%), relatively young between the ages of 21 to 25 years (55%), and also fairly well educated, with most obtaining at least a diploma or matriculation certificate (52%) (refer to Table 2 for detailed statistics). Young users are also more likely to use new technology, as they tend to be more comfortable with online technology such as webcasting compared to older users, as indicated by Lin (2004). Finally, those who used webcasting in this study also tended to be single (87%), and half of them were students with no working experience (50%).

The results of this study also mirrored the previous research done by Arbitron / Edison Media Research (2005) in which it is discovered that the average streamie tends to be male (55%), relatively young between the ages of 25 and 54 (62%), and are more affluent and generally educated, with a majority having had "some" college education (51%).

Table 2: Profile of Webcasting Users (n=78)

Characteristics	Frequency	Percentage (%)
Gender		
Male	42	53.8
Female	36	46.2
Age		
< 15 years of age	2	2.6
16 -20 years of age	16	20.5
21 -25 years of age	43	55.1
26 -30 years of age	12	15.4
31 -35 years of age	3	3.8
> 36 years of age	2	2.6
(Mean = 24.45, SD = 4.75)		
Highest level of education obtained		
Primary School	1	1.3
Post Secondary Certificate	16	20.5
Diploma / Matriculation	41	52.6
Degree / Professional Qualification	17	21.8
Masters, PhD	3	3.8
Occupation		
Student	39	50.0
Self Employed / Businessman	12	15.4
Professional / Executive	11	14.1
Others	6	7.7
Skilled / Semi Skilled Jobs	5	6.4
Unemployed	5	6.4
Years of Working Experience		
No working experience	39	50
1 -5 years of working experience	29	37.2
6 -10 years of working experience	6	7.7
11 -15 years of working experience	2	2.6
16 -20 years of working experience	2	2.6
(Mean = 2.29, SD = 3.87)		
Marital Status		
Single	68	87.2
Married	10	12.8

Usage of Webcasting

The usage of webcasting in this study would encompass their frequency in using webcasting per week, duration of usage of webcasting, rating of frequency of usage and finally the level of skills in using webcasting (refer to detailed statistics in Table 3). From this study, users of webcasting considered themselves as light (24%) to moderate (34%) users of webcasting, followed by 26% of users who access or use webcasting three to four times a week.

When the respondents were queried on the frequency of use of webcasting, the usage for webcasting is lighter, with users only accessing webcasting mostly once or twice a week only, which accounts to 48%. This is followed by 26% of users who access or use webcasting three to four times a week. Ten users of webcasting access it five to six times weekly (12%), while seven users access or use webcasting seven to eight times a week (9%). Only two users were considered as "heavy" users of webcasting: clocking in at least nine to ten times weekly of webcasting usage, which accounts to only 2%.

Table 3: Usage of Webcasting (n=78)

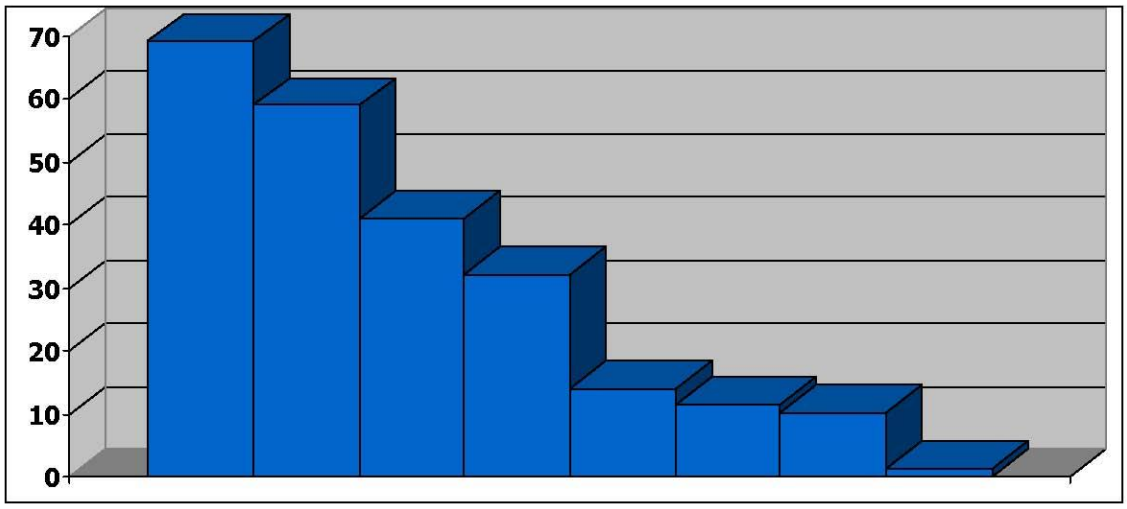
Characteristics	Frequency	Percentage
Frequency of usage of webcasting		
One to two times	38	48.7
Three to four times	21	26.9
Five to six times	10	12.8
Seven to eight times	7	9.0
Nine to ten times	2	2.6
(Mean = 3.10, SD = 2.16)		
Duration of usage of webcasting per visit		
Less than an hour	6	7.8
1 to 2 hours	48	61.5
2.1 to 3 hours	12	15.4
3.1 to 4 hours	4	5.1
4.1 to 5 hours	4	5.1
More than 5 hours	4	5.1
(Mean = 2.39, SD = 2.03)		
Rating frequency of webcasting usage		
Extremely frequent	9	11.5
Quite frequent	21	26.9
Neither frequent nor infrequent	27	34.6
Quite infrequent	19	24.4
Extremely infrequent	2	2.6
Level of skill of webcasting		
Novice / Beginner	15	19.2
Intermediate	50	64.1
Expert	13	16.7

Similarly, the duration of use of webcasting was modest. Almost two thirds (61%) of the cyber café users in this study only accessed webcasting for one to two hours per usage. Only

4% of the respondents used webcasting for a long period of time, with the duration of usage of more than five hours. Finally, the level of skills in using webcasting was also moderate, with 64% of users of webcasting admitting to being "intermediate" users of webcasting. Only 19% revealed that they were novice or beginner users of webcasting, while 16% considered themselves as expert or advanced users of the webcasting technology.

Type of Webcasting Technology Most Frequently Used

In this study, Internet audio is more popular among users of webcasting, as compared to Internet video (refer to Figure 2). More specifically, Internet radio is the most frequently used broadcast technology among streamies (69%). This is followed by online music videos (59%) and online movie trailers (41%). The least popular and less frequently used broadcast technology among users of webcasting appeared to be live sporting events (10%) and WebTV (1%). This is similar to studies done by Arbitron / Edison Media Research (2001) which indicated that Internet audio is currently viable for adoption and more popularly consumed compared to Internet video among streamies.



*Note: Respondents allowed more than one response

Figure 2: Type of Webcasting Technology Most Frequently Used

Level of Knowledge of Webcasting

Generally, the level of knowledge of webcasting in this study was moderate. Majority of users of webcasting admitted to being moderately informed on the knowledge of using webcasting; more precisely about 60% of users admitted to "knowing some" about webcasting technology. The rest of the respondents reported their level of knowledge of

webcasting as "knew a lot" (20%) or "knew a little" (19%). Since webcasting is still a relatively new technology among Malaysian Internet users, perhaps this would account for the level of knowledge of webcasting as being quite modest.

Source of Knowledge in Becoming Aware of Webcasting

The most sought after source in becoming aware of the webcasting technology is the Internet (69%). Next was through friends, with 56% of users indicating that they discovered information on webcasting through friends. With regards to traditional media (print and electronic), magazines were the most popular source in becoming more aware of the webcasting technology (33%). This is followed by other media such as television (29%), newspapers (21%) and radio (21%). The least popular source in becoming aware of the webcasting technology was through family (14%) or through other sources (2%).

Acceptance of Webcasting among Non-Users of Webcasting

According to the TAM model, the acceptance of a technology depends on the relationship between perceived usefulness and perceived of use of a technology, with the behavioral intention to use the technology among non-users. In other words, if a non-user perceived the technology as being easy to use and useful, the more they would have the intention to use the technology in the future.

In order to determine the acceptance of webcasting among non-users in this study, the Pearson's Product Moment Correlation analysis was carried out. Based on the correlation analysis, both perceived ease of use and perceived usefulness have moderate correlation, but also a substantial relationship with the behavioral intention to use and adopt webcasting in the future among non-users (refer to Figure 3). This would mean that the non-users of webcasting perceive it as easy to use and useful, and would therefore potentially have the intention to adopt and use webcasting in the future. Perceived ease of use has a slightly higher correlation with behavioral intention in comparison to perceived usefulness, and thus indicated that there is a stronger relationship with perceived ease of use and behavioral intention compared to perceived usefulness and behavioral intention.

Therefore, this finding would validate the basic TAM theory; perceived usefulness and perceived ease of use would drive the behavioral intention to use the technology among non-users. Based also on the analysis, the acceptance level of webcasting among non-users of webcasting proved to be encouraging. In other words, they will definitely have the intention to use webcasting if they think that the technology is easy to use and also useful for their job.

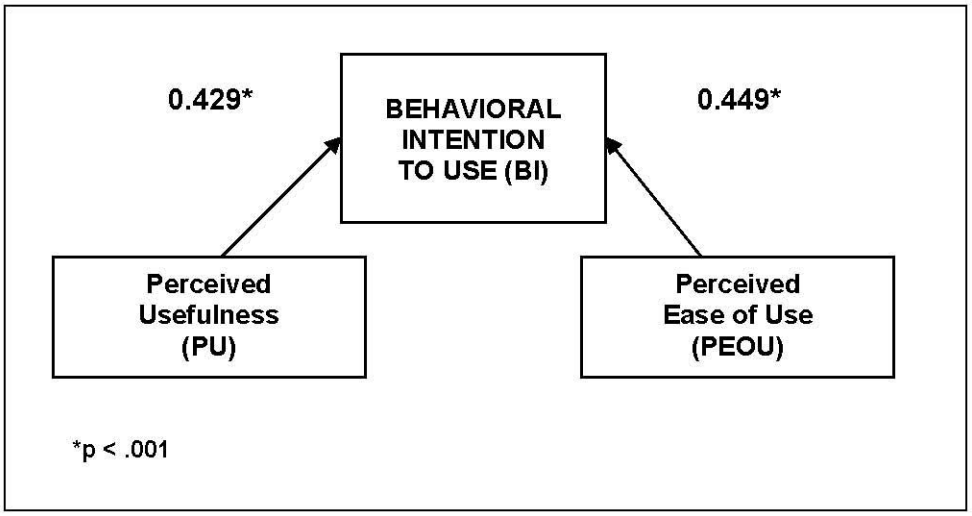


Figure 3: Acceptance of Webcasting among Non-Users of Webcasting

Behavioral Intention to Use Webcasting and Actual Usage of Webcasting

The Technology Acceptance Model also indicated that the behavioral intention to use webcasting would be the driving force to the actual usage of the technology among users of the technology. In order to determine the relationship between the behavioral intentions to use webcasting with the usage of webcasting among users of webcasting, the Pearson's Product Moment Correlation analysis was carried out (refer to Figure 4).

Based on the correlation analysis, there is no significant relationship between the usages of webcasting with the behavioral intention to use webcasting among users of webcasting. Therefore, based on the results this would mean that among the users of webcasting, the actual usage of webcasting (frequency of use, duration of use, level of skill and the rating on the frequency of use) is not influenced by the behavioral intention to use webcasting.

This result contrasted with the extension of the TAM theory that behavioral intention would drive the usage of the technology among users; perhaps other external variables or factors (such as individual abilities and the situational constraints) drove the actual usage of webcasting and it was not just dependent upon behavioral intention to actual use of webcasting among users of webcasting.

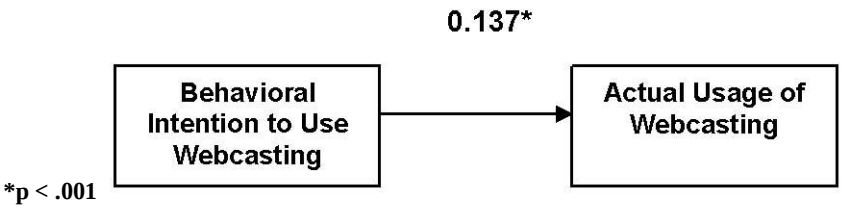


Figure 4: Relationship between Behavioral Intention to Use Webcasting and Actual Usage of Webcasting among Users of Webcasting

Conclusion

This study is meant to provide a clearer understanding on the acceptance and usage of a relatively new communication technology, which is webcasting among a select group of Internet users in cyber cafés in the area of Klang Valley. As webcasting is a relatively new communication technology, not much is known about its acceptance and usage especially concerning who the early adopters are, reasons for its adoption and the most viable content for adoption. It is with these prudent observations that this research was conducted, to study the acceptance and usage of webcasting among selected cyber café users in Klang Valley from the perspective of Technology Acceptance Model (TAM).

Based on the findings a few conclusions can be drawn. Currently, the usage of webcasting is still relatively low among users of selected cyber cafés in the Klang Valley, in which only three out of ten users admit to accessing webcasting. The profile of webcasting users in this study tallied with previous findings in research carried out by Arbitron / Edison Media Research (2005) and Lin (2004). Users of webcasting were found to be mostly male, young and relatively well educated with at least a diploma as the highest level of education obtained.

However, the level of knowledge and skill in using webcasting were moderate. Usage ranged from light to moderate; most users of webcasting access the technology only once or twice a week, with the duration of usage amounting to one to two hours per usage. Internet audio is the most viable content for adoption; it is more frequently used compared to Internet video. The Internet, friends and magazines were the most popular source in becoming more aware of the technology. With the young level of the users taken into consideration, it is perhaps their high level of curiosity, and in addition to the exploratory nature of the Internet that drives them to seek for information on webcasting on the World Wide Web. Moreover, friends would also be in the know on the latest content and trend of webcasting available (for example the latest music video online).

Based on the relationship between perceived usefulness and perceived ease of use, together with the behavioral intention to use webcasting, the acceptance of webcasting among non-users was determined. It was found that there is a positive and moderate correlation between PEOU, PE and BI. As such, this would indicate that there is gaining acceptance of the webcasting technology among non-users of webcasting.

However, there is no relationship between behavioral intention to use webcasting and the usage of webcasting among users of webcasting. Perhaps other factors play a role in influencing users to use webcasting besides behavioral intention, such as individual abilities and situational constraints.

Webcasting as a new technology appears to still be in the early stages among cyber café users in the Klang Valley. Technical constraints such as slow transmission speed and poor sound quality and lack of broadband connection contribute to the lackluster adoption of webcasting among Internet users. Nevertheless, even though there is low usage, based on this study it is encouraging to note that there is gaining acceptance of the technology among non-users; they would have more intention to use the technology if they perceive the technology as being

easy to use and useful for their jobs.

If its technical glitches are solved within the next few years and with more widespread broadband connection, there is no doubt that there will be increased acceptance of webcasting. The future of webcasting as an alternative media definitely looks to be promising in the years to come.

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