Factors Influencing Consumers' Paying Behavior of Online Knowledge Service

Tan Jia Qi
Faculty of Business,
Multimedia University, Melaka, Malaysia

Tan Seng Huat*
Faculty of Business,
Multimedia University, Melaka, Malaysia
Email: tan.seng.huat@mmu.edu.my

Goh Mei Ling
Faculty of Business,
Multimedia University, Melaka, Malaysia

* Corresponding Author

Abstract
Purpose: The objective of this study is to determine the key factors that influencing Malaysian consumers' paying behavior of online knowledge service with UTAUT model by incorporating perceived trust, perceived cost, content quality and key opinion leader.
Design/methodology/approach: The study surveyed 200 respondents based on convenience sampling and partial least square structural equation modeling is used to determine significant predictors.
Findings: The findings reveal performance expectancy and key opinion leader as significant positive predictor of consumers' paying behavior of online knowledge service. Effort expectancy, perceived trust, perceived cost and content quality were found to have no any influence on the relationship.
Practical implications: This study benefits knowledge service providers and platform operators to further understand the factors that determine consumers to use the platforms and successfully implement their business and marketing strategy.
Originality/value: This study provides an empirical evidence on Malaysian customers' paying behavior of the online knowledge service.

Keywords: Online Paid Knowledge, Paying Behavior, UTAUT Model

Introduction

The significance of technology in human life has been recognized along with the world economic development. Many major breakthrough technologies have achieved in the telecommunication sector, noticeably the Internet technology where it drives and makes the world becoming more efficient and productive either in physical or digital universes. The continuous technological progress has yielded us with a wide range of electronic devices from anything as big as computers to anything as small as smartphones. All this innovation has certainly increased the number of channels for individuals' communication in the society. These advanced devices do not only assist individuals to perform tasks more efficiently but also enable one communicating with others through tiny technology gadget. With ever increasing technology consumption, substantial impacts like enhanced information access, improved communication, more convenient entertainment, increased and better efficiency all have deepened in many areas of life. Hence, humans and technology are inextricably linked and society is getting more reliant on technology today. The rapid expansion of information technology has led many new business opportunities emerge and online paid knowledge industry was observed to be one of the fast-growing sectors in the economy.

Online paid knowledge refers to the producers or publishers who produce standardized paid products based on their own knowledge, integrating the knowledge, information or book into a structured system (Yu et al., 2021). Coupled with the growth of Internet content consumption, a new industry which is online paid knowledge business has come into appearance. This new trend benefits people as it helps to solve problems, develop new ideas, have access to a large pool of talents and also empower cross-cultural exchange in the education, consulting and publishing industries. These industries have rapidly developed on the internet network, thus giving rise to a series of paid courses, paid newspapers, paid channels, paid communities and other paid knowledge products (Yu et al., 2021). In today's knowledge economy, knowledge spreads more quickly through networks, where individuals and businesses have recognized the value of information (Li et al., 2017). Kian et al., (2018) explained the Internet has created a window of opportunity to interact with people all over the world without regard to geography and it has provided everyone with the ability to conduct business over the Internet. The Internet not only allows people to communicate but it also allows them to trade information, occupy themselves and even purchase without having to go to a store, supermarket or shopping mall. (Annisa et al., 2018).

In Malaysia, the online paid knowledge industry is relatively new. The usage of such service apparently increased in 2020 amid the Covid-19 pandemic. Online knowledge service in Malaysia includes online course, online training, online news and etc. According to Malaysian Communications and Multimedia Commission (MCMC), the largest group of internet users in 2020 are those from the age group of 20's and below that are mostly students. And the virtual education from home has accounted for 70.5% of total internet access. The growth of online paid knowledge industry in Malaysia is seemingly getting momentum because of the digital economy as the key to recover Malaysia's post-pandemic economy as emphasized by Minister of Communications and Multimedia (Khaleej, 2022). In addition, the launch of MyDigital Initiative is expected also to speed up the country digital economy development and aiming to attract around US$17.32 billion in local and international digital investment (Bernama, 2021). Furthermore, Azuar (2022) believes that digital education platform still remains important compared to offline learning even though in

post-pandemic as it can provide quality and productive knowledge to learners. Thus, the online paid knowledge industry in Malaysia has opportunity for growth in the future.

There are a number of previous studies based on the Unified Theory Acceptance and Use of Technology (UTAUT) model in Malaysia context focusing on consumer market and education research. For consumer market study in Malaysia, a variety of empirical work can be observed in the literature. For example, some recent works such as home healthcare robot adoption by Yeoh and Chin (2022), mobile agricultural finance application adoption by Omar et al., (2023), mobile payment usage intention by Tang et al., (2021) and etc. However, the resources in the literature shows there are limited study on online paid knowledge paying behavior in Malaysia. The gap between consumers' desire to pay and the rapid growth of the knowledge payment business still remains imbalanced. Malaysians are still not ready to keep pace with the digital transformation as some of them are not familiar in using the digital platform since online paid knowledge service is relatively new in Malaysia environment. (Ayamany, 2021). As such, this study aims to fill the gap by using UTAUT model to investigate the factors influencing consumers' paying behavior of online paid knowledge service. The variable perceived trust, perceived cost, content quality and key opinion leader are incorporated into the UTAUT model based on previous study,

Literature Review

The factors of online knowledge paying behavior has been researched by a number of previous studies. Cai et al. (2018) displayed students' desire to pay for the live broadcast was influenced by additional information such as review ratings, speaker-audience interactions and comments. Meanwhile, Horng et al., (2016) presented the degree of financial resources and experience level of users influencing the users' desire to pay for social network subscriptions. Knowledge is becoming more valuable, and online knowledge platforms are gaining information chains, traction in the value, and production (Yu et al., 2021). Moreover, the future information business cannot overlook the importance of developing online knowledge platforms as well as users' payment experiences, and desire to purchase knowledge in order to boost knowledge income (Foerderer et al., 2018).

Theory of Unified Theory Acceptance and Use of Technology (UTAUT)

In 2003, the Unified Theory of Acceptance and Usage of Technology (UTAUT) was established by Venkatesh. The UTAUT model was created as an expansion of the well-known Technology Acceptance Model (TAM). The UTAUT model was improved based on the eight acceptance models that included Theory of Reasoned Action (TRA), Innovation Diffusion Theory (IDT), Model of PC Utilization (MPCU), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behavior (TPB), Task- Technology Fit Model (TTF), and Social Cognitive Theory (SCT) (Attuquayefio & Addo, 2014).

The UTAUT model was developed with four primary drivers which are social influence, performance expectancy, facilitating conditions and effort expectancy. First, the social influence is a human element that influences a one's decision to utilize technology (Venkatesh et al., 2003). It is the attitude of those who are important to a person life (Yu et al., 2021). Second, the performance expectancy is a component that assists users in enhancing

their activity performance (Yu et al., 2021). Third, the facilitating condition is a technology-assistance tool for people (Venkatesh et al., 2003). Forth, the effort expectancy is a factor that refers to how easy it is for users to use technology (Venkatesh et al., 2003). Meanwhile the other four moderators of important connections as external variants are voluntariness of use, gender, experience, and age (Venkatesh et al., 2003).

Most recent studies have investigated consumers 'paying behavior based on UTAUT in the area mainly mobile payment (Alkhowaiter, 2022; Al- Saedi et al., 2020: Patil et al., 2020) and mobile banking (de Blanes Sebastián et al. 2023; Hanif & Lallie, 2021; Jadil et al., 2021). Evidently, there is limited study on the online knowledge service paying behavior which included the use of UTAUT based on the recent literature. For example, Zhang et al. (2023) investigated the consumer satisfaction of online knowledge payment platform based on the effect of linguistic disfluency and meanwhile Zhang et al. (2019) analysed the relationship between customer expertise and customer satisfaction. Zhou et al. (2022) used the stimulus-organism-response model to study the predictors of consumers' purchase intention of online knowledge service. Xu et al. (2022) used the Technology Acceptance Model (TAM) and IS success model (IS) to inspect the factors of consumers' continuous intention of online knowledge service payment. Taking these research gaps, this study attempts to explore the factors influencing the consumers' paying behavior for online knowledge service based on UTAUT from Malaysian perspectives.

Performance Expectancy

Performance expectancy refers to the degree to which an individual feel that utilizing a specific technology would improve students' performance (Al-Saedi et al., 2020). Online classes may enhance and speed up the users' academic performance and grades (Tiwari, P, 2020) From a theoretical perspective, performance is the direct utility of purchasing knowledge products. This is because students feel that the more online knowledge platforms offerings the more better and beneficial, the more online knowledge platform being used and the more they will be adopted. For example, the direct goal of students' consumption on the knowledge platform is to enhance their self-efficacy substantially through learning effects (Yu et al., 2021). This genuine intention will lead to increases in the willingness-to-pay of students. Some past studies have been focused on the role of performance expectancy. For example, the study by Yu et al. (2021) focusing on the online knowledge paying platform. According to their work, the benefits received from online knowledge platforms by students include energy and time saving, self-efficacy enhancement and extra professional knowledge gains. Similarly, in a study of mobile learning, Sultana (2020) mentioned that the mobile learning enables users to complete their job more quickly and provide opportunities to users to learn more efficiently.

Effort Expectancy

Effort expectancy was defined as the ease with which any gadget may be utilized (Venkatesh et al., 2003). Shafie et al., (2020) has demonstrated the importance of effort expectancy in influencing the behavior of people adopting new technologies. This implies that the effort required to complete a task could be easy or difficult. When utilizing a knowledge payment platform, users commonly want it to be simple to understand and operate. This is important so that they can enhance their performance. The evidence from previous studies have focused on the role effort expectancy and discovered some supporting reasons. For instance, the study

by Yu et al. (2021) reveals that effort expectancy as source of online knowledge paying platform. Using online knowledge platforms allow someone to enhance their work performance. Tiwari (2020) examined online lessons during Covid-19 and claims online lessons are reasonable, simple to use and to engage. In different example, Foon and Fah (2011) have noted that the effort expectancy also important for Internet Banking adoption with reasons such as easy to use, adaptable for users and helping users saving time.

Perceived Trust

Perceived trust is described as an emotional condition in which one is encouraged to trust another based on the other's pleasing behavior (Liébana Cabanillas et al., 2018). Trust also means to minimize ambiguity or anxiety about the cost of privacy and it motivates consumers to utilize online knowledge platforms (Cheung et al., 2015). However, as the service provider for an online knowledge platforms site is being seen as kind, genuine, and persistent in deals with consumers, consumers will be less concerned about the hazards of utilizing online knowledge service sites in terms of their privacy, which it may perhaps to boost the level of consumers self-disclosure (Cheung et al., 2015). As pointed out by Yu et al. (2021) trust in security, platforms, goods or services will directly influence users' paying behavior for online knowledge. Meanwhile, the study by Singh and Sinha (2020) based on mobile wallet platform reveals that the significant trust of using mobile wallet encompass the functionality of security, safe personal and financial information. Another example, Yin (2020) used the UTAUT model to investigate the elements that influence customers' desire to buy medications online with focus on trust and risk perception. The study concluded that trust perception has a positive and substantial impact on purchase intention.

Perceived Cost

Perceived cost is defined as the impressions and assessments of the fee to be paid when employing a knowledge payment platform (Yu et al., 2021). Alternatively, followed on Chen et al. (2021), perceived cost is referred as students' perceptions on the costs they must pay while purchasing paid courses. In common, perceived cost involves operating charges, investing costs of using an online paid knowledge platform, payment processing expenses and other amounts paid to security. Previous research has shown that customers' perceptions on cost have a substantial negative influence on their purchase intention (de Sena Abrahão et al., 2016). For example, MOOC platforms which is used to offer free video course videos. But, later MOOC providers began to pursue a commercial model, some course elements were switched to paid mode (Chen et al., 2021). In order to charge consumers more money, the platform began to offer a number of fully-paid courses which includes foreign EDX platforms and Coursera courses such as vocational education through established professional subscription (Chen et al., 2021).

Content Quality

Content quality is described as the degree of material quality supplied students on a knowledge-based payment platform (Yu et al., 2021). Besides, content quality also involves well formatting as well as comprehensiveness that reflects trustworthy and crucial info (Rieh, 2002). As a result, high-quality material will assist consumers in comprehending the issue and making an informed decision about information adoption (Watts & Zhang, 2008). This idea implies that high-quality material is believable, trustworthy and dependable. There are

seven primary elements that influence online knowledge paying behavior and the quality of information being the most important key (Yu et al., 2021). The content quality has an important role in online knowledge platforms. Shi et al. (2020) explored payment behavior for live courses in Social Q&A Communities with focuses on the completeness of the content along with accurate, clear and latest information. The study shows the content's relevancy, interpretability, correctness and timeliness are all factors to consider.

Key Opinion Leader

Key opinion leaders (KOL) are the persons who have the ability to influence other people's ideas, attitudes or actions, causing them to act in a specific manner at a certain frequency (Nunes et al., 2018). Key opinion leaders typically give product information and recommendations to other customers via word-of-mouth (WOM) communication, influencing their beliefs, actions and attitudes toward the product (Chen et al., 2021). The example of KOLs includes experts, bloggers, celebrities and Internet celebrities (Yu et al., 2021). Benoit (1964) explained KOLs have varied degrees of effect on individual decisions and are distinguished by their inventiveness of knowledge and high levels of product engagement. Yu et al. (2021) studied on online payment platform and revealed that KOL influence users paying behavior not only through the high levels of product engagement but also the idea creativity. Additionally, Wang et al. (2020) mentioned KOL can offer good reference for frequent users in the recommendation systems with some actions such as clearly communicating their thoughts on books, leaving more reviews, ratings and tags which are deemed as powerful influence in triggering usage behavior.

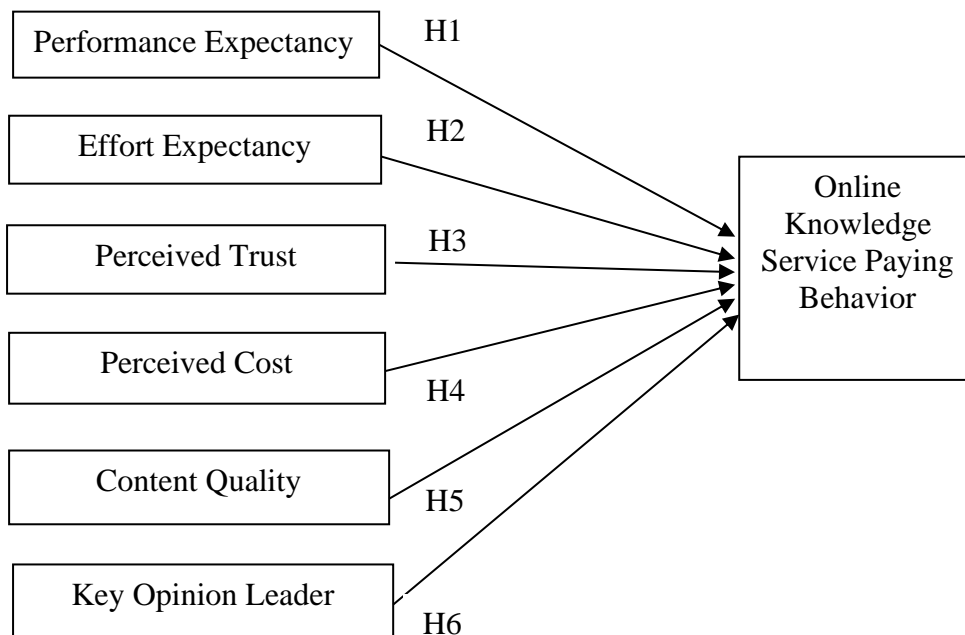**Theoretical Framework and Hypothesis Development**

Figure 1: Theoretical Framework

Method

A total of 200 respondents was surveyed based on convenience sampling using a set of self-administered questionnaires. Convenience sampling is a non-probability sampling method and it has been frequently used in quantitative research despite of qualitative research. The sampling method has primary emphasis on the generalizability of study (Etikan et al., 2016). The data collection was realized online through Google Form in accordance to Covid-19 health safety practice. There are three sections for the questionnaire. In the first section, the demographic information of respondents was addressed. In second section, the measurement of all explanatory variables was covered which consists of performance expectancy (4 items), effort expectancy (4 items), perceived trust (4 items), perceived cost (4 items), content quality (4 items) and key opinion leaders (4 items). In last section, the items for online knowledge paying behavior (4 items) were measured. All variables' measurements in this study were adapted based on previous studies. All the variables were measured using 5-point Likert scale ranging from 1 represents strongly disagree to 5 represents strongly agree.

The data collected was estimated based on Partial Least Square Structural Equation Modeling (PLS-SEM) to assess the measurement model and structural model. Under the measurement model two assessments were performed which include the convergent validity and the discriminant validity. The estimation is used to confirm the reliability and validity of all constructs. Meanwhile, for structural model, the predictive capabilities of model and the relationship among the constructs were examined. Lastly, the partial least square predict was tested to identify low prediction error and thus validate the predictive power of response variable.

Findings

In this survey, out of total 200 respondents 44.5% respondents were male compared to 55.5% female. Most of the respondents come from the age group between 17 to 19 years old (27.5%) and 20-22 years old (45%). Meanwhile, 21.5% from 23 -25 years old and 6% from 25 and above. Most of the respondents were Chinese (64.5%), followed by Malay (19%) and Indian (16.5%). More than half of the respondents have limited experience using online knowledge service platform that is 1 year and below (52.5%). There are 21% respondents have 2 years experience and 16.5% have at least 3 years history using the online knowledge service. Among the online knowledge platforms in the market, Cousera appears to be most popular platform used by the respondents (34%), followed by Skillshare (28%), Quora (26.5%), Zhihu (8%) and Himalaya FM (3.5%). In term of usage average, 63.5% respondents purchase online knowledge service with frequency 1 to 3 times monthly, and 27.5 % between 4 to 9 times and 9% with at least 10 times monthly.

Table 1: Respondents' profile

Criteria	Category	Number	Percentage
Gender	Male	89	44.5%
	Female	111	55.5%
Age Group	17-19	55	27.5%
	20-22	90	45%
	23-25	43	21.5%
	26 and above	12	6%

Ethnicity	Chinese	129	64.5%
	Malay	38	19%
	Indian	33	16.5%
Experience using online knowledge service platform	1 year and below	125	52.5%
	2 years	42	21%
	3 years and above	33	16.5%
Online knowledge service platform	Quora	53	26.5%
	Skillshare	56	28 %
	Coursera	68	34%
	Himalaya FM	7	3.5%
	Zhihu	16	8%
Monthly average online knowledge service purchase	1-3 times	127	63.5%
	4-6 times	39	19.5%
	7-9 times	16	8%
	10 times and above	18	9%

Measurement Model

The measurement model was used to assess the reliability and validity of constructs. To verify the measurement, factor loadings, composite reliability and average variance extracted (AVE) were examined. As shown in Table 2, all factor loadings were observed to be greater than 0.7 which fulfils the required minimum value of 0.7. For the composite reliability, all values obtained are above 0.9 that meeting the 0.7 as discussed by Hair et al. (2017). Meanwhile, AVE is used to further to verify the convergent validity. All reported AVE values are within the range 0.794 to 0.845 that is in accordance to suggestion by Hair et al, (2017). Thus, internal reliability consistency is confirmed for all indicators and the convergent validity for all constructs is in presence.

Table 2: Convergent validity

Construct	Item	Factor Loadings	Composite Reliability	Average Variance Extracted (AVE)
Content Quality	CQ1	0.920	0.940	0.840
	CQ2	0.917		
	CQ4	0.912		
Effort Expectancy	EE1	0.887	0.920	0.794
	EE2	0.884		
	EE4	0.902		
KOL Influence	KOL1	0.919	0.956	0.845
	KOL2	0.926		
	KOL3	0.909		
	KOL4	0.923		
Perceived Cost	PC1	0.903	0.942	0.802
	PC2	0.877		
	PC3	0.822		
	PC4	0.974		

Performance Expectancy	PE1	0.908	0.937	0.833
	PE3	0.909		
	PE4	0.921		
Perceived Trust	PT1	0.930	0.953	0.836
	PT2	0.926		
	PT3	0.892		
	PT4	0.909		
Paying Behavior	PB1	0.938	0.948	0.821
	PB2	0.934		
	PB3	0.907		
	PB4	0.841		

In this study, the discriminant validity is assessed based on the Fornell-Lacker criterion and HTMT criterion (Fornell and Larcker, 1981; Henseler et al, 2015). To confirm the validity based on the Fornell-Lacker criterion, comparison between the square root value of AVE and the correlations among the constructs is required. Table 3 shows that all the square root of AVE (in bold) are more that the correlation between the constructs. This indicates the evidence of discriminant validity based on the Fornell-Lacker criterion. Table 4 presents the results of the discriminant validity using HTMT criterion. For this assessment, comparison between HTMT values estimated with the required HTMT threshold is needed. Based on the guidelines by Gold et al, (2001) and Kline (2011), the HTMT ratio for all constructs should be less than 0.9 or 0.85 and Henseler et al, (2015) recommend the value should be less than 1. Thus, in this study all HTMT ratio were within the acceptable levels and the discriminant validity has been established.

Table 3: Discriminant validity (Fornell-Larcker)

	CQ	EE	KOL	PB	PC	PT	PE
Content Quality	**0.916**						
Effort Expectancy	0.787	**0.891**					
KOL Influence	0.37	0.456	**0.919**				
Paying Behavior	0.452	0.516	0.449	**0.906**			
Perceived Cost	0.285	0.239	0.35	0.067	**0.895**		
Perceived Trust	0.658	0.71	0.457	0.549	0.23	**0.914**	
Performance Expectancy	0.728	0.796	0.349	0.528	0.189	0.682	**0.913**

Table 4: Discriminant validity (HTMT criterion)

Construct	1	2	3	4	5	6	7
1. Content Quality							
2. Effort Expectancy	0.886						
3. KOL Influence	0.401	0.499					
4. Paying Behavior	0.493	0.569	0.48				
5. Perceived Cost	0.328	0.269	0.376	0.059			
6. Perceived Trust	0.716	0.782	0.487	0.589	0.25		
7. Performance Expectancy	0.809	0.899	0.378	0.577	0.201	0.745	

In the structural model, six paths were tested. Table 5 shows the results for all six hypotheses, only H1 and H6 are supported compared to H2, H3, H4 and H5. H1 and H6 are significant with t-statistics greater than the critical value of 2.3263. The results reveal H1: Performance expectancy has significant positive influence on paying behavior (β = 0.247, t-value = 2.504) and H6: Key opinion leader has significant positive influence on paying behavior (β = 0.276, t-value = 2.657). Table 6 also provides evidence of lack of support for H2: Effort expectancy has insignificant positive influence on paying behavior (β =0.038, t-value = 0.107), H3: Perceived trust has insignificant positive influence on paying behavior (β = 0.249, t-value = 1.838), H4: Perceived cost has insignificant negative influence on paying behavior (β = -0.147, t-value = 1.444) and H5: Content quality has insignificant influence on paying behavior (β = 0.017, t-value = 0.167). The effect size, f^2 also being examined for all significant constructs. As suggested by Cohen (1988), the effect size is in presence if the f^2 is greater than 0.02. The constructs of performance expectancy and key opinion leader constructs in this study are found to have the effect size as each f^2 value is above 0.02.

Table 5: Partial least square results

Hypothesis	Relationship	Std Beta	Std Error	t-value	Decision	R Square	Q Square	f Square	VIF
H1	Performance Expectancy -> Paying Behavior	0.247	0.099	2.504**	Supported	0.409	0.323	0.033	3.131
H2	Effort Expectancy -> Paying Behavior	0.038	0.107	0.36	Not Supported			0.001	4.084
H3	Perceived Trust -> Paying Behavior	0.249	0.136	1.838	Not Supported			0.044	2.365
H4	Perceived Cost -> Paying Behavior	-0.147	0.102	1.444	Not Supported			0.031	1.183
H5	Content Quality -> Paying	0.017	0.104	0.167	Not Supported			0.000	3.003

H6	Behavior KOL Influence -> Paying Behavior	0.276	0.104	2.657**	Supported		0.090	1.440

** Significant p value <0.01

Structural Model

Hair et al. (2017) recommend to use the structural model for examining the model's predictive capabilities and the relationship among the constructs in the model. The issue of collinearity of constructs could be identified by evaluating the variance inflation (VIF). As indicated by the VIF values for all constructs in Table 5, ranging from 1.183 to 4.084 providing no evidence of collinearity problem among the predictor constructs in this study. The structural model is continued with assessments such as the path coefficients (t-statistics and standard beta value) based on the bootstrapping procedure with 5000 resample (Hair et al., 2017), the coefficient of determination (R^2), the effect size (f^2) and the predictive relevance of the model (Q^2).

The R^2 value indicates the model explanatory power and three indications given by Hair et al., (2017) which include 0.75 (substantial), 0.5 (moderate) and 0.25 (weak). As referred to Table 5, the R^2 value for online knowledge service purchasing behavior is 0. 409 presenting a moderate predictive accuracy in this study. Meanwhile, the blindfolding approach is conducted to investigate the predictive relevance of model. The Q^2 value as shown in Table 5 reveals that the model has predictive relevance with the Q^2 value of 0.323, greater than 0 as per suggestion by Hair et al., (2017).

Table 6: Partial least square predict results

Item	PLS-SEM		LM	PLS-SEM - LM
	RMSE	Q^2_predict	RMSE	RMSE
PB1	0.765	0.284	0.838	-0.073
PB2	0.784	0.27	0.852	-0.068
PB3	0.763	0.281	0.831	-0.068
PB4	0.754	0.294	0.856	-0.102

According to Shmueli et al. (2019), when the Q^2 is greater than 0, comparison between the RMSE in PLS-SEM analysis with the naïve LM benchmark enables for identification of low prediction errors of all indicators in the model. Table 6 reveals that the PLS-SEM analysis produces lower prediction errors for all the indicators. The differences are pronounced for all indicators PB1, PB2, PB3 and PB4 which have PLS-SEM RMSE values of 0.765, 0.784, 0.763 and 0.754 compared to 0.838, 0.852, 0.831 and 0.856. The difference for PB4 stand out among the others which suggest the indicator has the lowest prediction errors among all. As explained by Shmueli et al. (2019), if all indicators show low prediction errors hence the model has high predictive power.

Discussion and Conclusion

This study revealed that performance expectancy has positive effect on online knowledge paying behavior. Hence, H1 is supported. This finding is in line with previous studies (Li et al., 2017; Yu et al., 2021). Yu et al. (2021) found that consumer performance anticipation is major predictor of customer desire to acquire premium courses and has considerable impact on paying behavior. Li et al. (2017) found that task completion and competence development were the most important requirements for paid knowledge consumers, followed by social needs, time and energy savings, hobbies, emotional consideration and self-improvement. Therefore, the results in this study indicate that the consumers may increase their desire to purchase of online knowledge product if they believe the paid material is more often of greater quality and beneficial than unpaid content.

Key opinion leader was confirmed to have positive association with online knowledge paying behavior. Thus, H6 is supported. Previous studies have shown the significant influence of KOL towards the willingness to pay. For example, Li et al. (2010) opined that the popularity, professionalism, and homogeneity of KOL have a substantial influence on consumers' paid spectatorship behavior. According to Wang et al. (2020), KOLs can offer adequate reference to frequent users in recommendation systems such as clearly communicating their thoughts on books, leaving more reviews, generating ratings and giving tags. Consumers frequently employ KOL's influence methods to decrease the risks associated with their decision-making. This is because the recommendations given by the key opinion leaders also may assist customers in reducing the quantity of data to be processed and filtering the huge number of products or services accessible in online knowledge platform, directing them to a smaller range of options that meet their individual requirements (Chen et al., 2021). As such, key opinion leader is important predictor on consumers' paying behavior towards online knowledge products given their influence on followers and bringing potential sales to online knowledge businesses.

This study reveals there is no significant relationship between effort expectancy, perceived trust, perceived cost, content quality and online knowledge paying behavior. This shows H2, H3, H4 and H5 lack of support of evidence in this study. This finding of H2 seems to contradict to the finding by Catherine et al. (2017) and Shafie et al. (2020) which discover that effort expectancy tends to affect people to adopt new technologies. In this study, the influence of effort expectancy is not shown as predicted which possibly to be related to respondents' demographic background. Respondents in this study are relatively young where the age group lies from 17 to 25, indicating a truth that they are comparatively tech-savvy and have better adaption to new technology. Therefore, they do not think effort expectancy is an important factor in their consideration. This same reason may also apply for the result of H3 which seems not in consistent to the discussion arrived in past studies such as Liébana-Cabanillas et al. (2018) and Yu et al. (2021). Yin (2020) employed the UTAUT model, focusing on the trust and risk perception in investigating the elements that influence customers' desire to buy medications online. The study concluded that trust perception has a positive and substantial impact on purchase intention. Given the young aged respondents in this study, perceived trust poses as unimportant predictor as this could be related to the fact that young adult is relatively easier in granting their trust in decision making compared to adult due to life experience and personal growth differentials. Therefore, they do not perceive trust is a significant concern. The significant influence of perceived cost on users' desire to use online knowledge product is evidenced in previous research such as Yu et al. (2021) and

Zhang et al. (2020). The users have low desire to pay for paid knowledge when the user's perceived cost exceeds their expected benefits (Yu et al., 2021) and perceived prices have detrimental influences on users' desire to use knowledge-paying applications (Zhang et al., 2020). However, respondents in this study do not share the similar finding. This is most probably they do not perceive cost is an important factor determining their purchase towards online knowledge product as they are being comparatively deficient in term to budget mentality and financial literacy than mature adult. The role of content quality as predictor for online knowledge business has been acknowledged in past research work such as Shi et al. (2020). According to Yu et al. (2021), there are seven primary elements that influence online knowledge paying behavior and the quality of information being the most important key. Nevertheless, the finding from this study shows the opposite. It is postulated that the respondents in this study are less critical on the concern of content quality considering the young age attribute of respondents. The factor may be deemed less prior compared to other factors in purchase decision making.

This study has confirmed the role of performance expectancy and key opinion leaders as the predictors of consumers' paying behavior towards online paid knowledge service. The online knowledge service providers should adequately consider and continue to enhance the dimension of performance expectancy. Customers' willingness on continuous usage behavior is greatly influenced by the sets of attributes offered by the online paid knowledge service platform. It is customers' core belief in expecting to receive some benefits from the usage of the service as to get the most value out of the money they spent. Therefore, the performance expectation is a real factor to consumption activities. For example, the platform administrators could pay more attention to the trial paid knowledge of individual experience since the attribute has a considerable influence on the respondents' performance expectations. In addition, the utility and efficacy of the paid knowledge material may influence how people interact with online knowledge paying behavior. Chen at al., (2021) asserted that if administrators are serious about generating a positive trial experience, they should offer material that will delight and intrigue online learners, allowing instructors to conduct vibrant and interactive trials.

Meanwhile, key opinion leader (KOL) influence is a key component on the younger generation's willingness to pay for information. To ensure successful marketing strategy, the service providers may have stressed on the importance of human connection, brand recognition, and word-of-mouth impacts in marketing strategy development. For example, strategies of inviting well-known knowledge providers from different sectors to attract customers such as professionals or social celebrities (Xu et al., 2021) could be long term strategic business marketing. However, there are some challenges surrounding this strategy which it may harm the interest of consumers and the service providers if the environment left unmonitored and unregulated. The quality of key opinion leader emerges as a real concern in triggering responsible consumers' continuous paying behavior and also sustainable revenue to online knowledge service businesses. Specific legal framework should be established and law to be introduced to regulate the qualification of key opinion leaders (mainly celebrities, Internet influencers, bloggers, vloggers and etc.). They are expected to have adequate knowledge and more importantly to exhibit a positive and responsible influence in a consumer market or consumption circle.

In contrast, for effort expectancy, perceived trust, perceived cost and content quality, respondents in study don't perceive them have important predictive role empirically.

However, this does not undermine the great role of these variables on the online knowledge paying behavior. These areas should gain continued attention by platform administrators to work for greater future improvement. For example, preserving and strengthening the confidence of online learning customers which ultimately to increase paying behavior (Chen et al., 2021). Improving user perceptions of content effectiveness by delivering a better experience and developing high-quality knowledge payment solutions also is much considerable. People are more inclined to pay when their information is seen to be of higher quality (Zhao et al., 2018). Understanding the factors influencing the paying behavior of consumers towards online paid knowledge is important to service providers in proving and meeting the quality dimensions that desirable by consumers and also sustaining business attraction, customer retention and therefore building long-term consumers' loyalty.

This study adds to the existing body of knowledge about the antecedents of performance expectation, effort expectancy, perceived trust, perceived cost, content quality, and KOL influence, particularly in the context of online paid knowledge businesses. The integration of perceived trust, perceived cost, content quality and KOL influence into UTAUT model for the context of online knowledge payment behavior will enrich the existing literature on this research subject. The findings of this study provide further insights on the empirical evidence on the role of performance expectancy and key opinion leaders in UTAUT model. The latter is more influential than the former. The significant influence of these two variables provides further justification on the variables for their role as explanatory variables in studying perception and acceptance of technology model, namely UTAUT. This study also reveals the insignificant influence of effort expectancy, perceived trust, perceived cost and content quality as important predictors on the paying behavior for the online paid knowledge service. The lack of empirical evidence and inability of these variables produce incentives for future study to reinvestigate and verify the roles of these variables in explaining consumers' paying behavior in the online paid knowledge service market.

There are several limitations in this study. First, the participation of respondent's lack of diverse background in term of ethnicity and age group. The respondents were mostly Chinese and they are majorly young aged respondents. Second, the data collection for this study was conducted online via Google Form without face to face communication due to Covid 19 pandemic. This barrier may reduce the nature of quality of response. Third, the lack of statistical evidence for effort expectancy, perceived trust, perceived cost, content quality on purchasing behavior despite significant role in literature. Thus, it is recommended that future research should consider to improve on the diversity of respondents' background to well-represent the general population and also to include different age groups to gain more insightful findings. It is suggested future research to use physical data collection method to preserve good quality of response and it is essential to have more future work in revalidating the roles of those variables particularly that lacking of evidence support in this study.

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