INTERNATIONAL JOURNAL OF APPLIED BUSINESS RESEARCH

2023, VOL. 5, NO. 2, PP. 208-222

https://ijabr.polban.ac.id/ijabr/



What Factors Affect the Intention of Using Islamic Mobile Apps? An Analysis Using the UTAUT-2 Model

Ivan Alviyana^a, Lina Setiawati^{b*}

^{a,b}Department of Business Administration, Politeknik Negeri Bandung, Indonesia

Received 19 Agustus 2022; accepted 22 November 2022

ABSTRACT

The use of Islamic applications in the current digital era has grown rapidly since users can access anything and everything with just a few clicks. The market potential of M-Productivity applications in Indonesia is large since this country possesses the largest Muslim population in the world with more than 200 million Islam believers. However, this chance seems to be neglected by application developers in Indonesia. This study attempts to investigate the factors that influence consumer intentions to use Islamic M-Productivity applications by employing the UTAUT 2 model as the research model. A self-administered questionnaire was distributed, and 320 valid responses were generated from Muslim users who have or are currently using Islamic M-Productivity applications. PLS-SEM was applied as a data analysis technique to examine the hypotheses of this study. The results explain that performance expectancy and habit significantly influence a person's intention to access Islamic M-Productivity applications. In addition, this study theoretically enriches the literature on consumer intentions to use Islamic mobile applications and their factors.

KEYWORDS

Mobile apps Islamic m-productivity Using intention UTAUT-2

INTRODUCTION

The rapid technological developments on mobile devices allow users to perform various mobile activities such as checking email, browsing the web, using GPS, playing games, and using organizer-type applications (Dhiman, 2021; Tak & Panwar, 2017). Thus, many users have various mobile applications on their mobile devices. For Android users, mobile applications can be downloaded via Google PlayStore while iOS users can get them from Apple AppStore. In 2020, Indonesia was recorded to have 7.1 billion downloads on the Apple App Store and Google Play Store, putting it as the third largest country in Asia in terms of application downloads. This number proves that Indonesia is a potential market for mobile applications. This is in line with the emergence of various mobile applications, one of which is Rubin.id. This application offers users various features to help them perform daily tasks, so it is a type of Mobile Productivity (M-Productivity) application. M-Productivity Apps are mobile applications that allow users to perform various tasks on their mobile devices (Islam et al., 2013), or in other words, to be their personal assistants (Pinochet et al., 2020). These M-Productivity applications provide users with Notebooks, online calendars, to-do lists,

^{*}Corresponding Author: lina.setiawati@polban.ac.id; doi: 10.35313/ijabr.v5i02.295 © 2023 Politeknik Negeri Bandung

sports, food monitoring, expense management, and worship management that help increase and facilitate users' routines (Azfar et al., 2016; Bertschek & Niebel, 2016).

For today's generations, the Internet has become a friend, a source of entertainment, a playground, a teacher, and even a medium to receive religious messages. Regarding the last-mentioned function, this new phenomenon has given birth to a new term called 'digital religion,' which describes the relationship between religion and the Internet (Campbell, 2012). Campbell, (2012) explained that the term 'digital religion' does not only refer to any activity that a particular religion carries out and is articulated online. It refers to certain situations with significant and substantive ways of religious practice with the help of the media and digital space. Rubin.id mobile app, originating from Indonesia, appears to be one example of Productivity Mobile apps that are specifically designed for Muslim users. The existing features are designed according to the needs of Muslims in carrying out their daily worship series, such as the five daily prayer schedules. The application is also equipped with a list of various types of worship, a history of worship that has or has not been done, the donation or alms feature, Qibla direction, and others.

Although the market potential and users of the M-productivity applications in Indonesia are enormous considering that this country possesses the largest Muslim population in the world, the most downloaded Islamic applications are still dominated by foreign-made applications. This was justified by numerous studies stating that the number of Islamic M-Productivity Apps downloaded in the AppStore and Google PlayStore is still dominated by foreign developers (Data.ai, 2022). Meanwhile, the domestic players seem to be set aside. Local apps, whose primary target market is the Indonesian Muslim community, have not taken advantage of this enormous potential market. The existence of Islamic applications in Indonesia illustrates the euphoria of new technology, and the quality of the applications developed is very essential, especially in terms of authentication, reliability, and credibility of facts or information about Islam.

Regarding the above-mentioned issue, this study attempts to identify the variables influencing user intention to use Islamic M-productivity applications by employing the UTAUT 2 model. Habit, price value, and hedonic motivation are counted as unexplored constructs to formulate UTAUT 2. Previous studies have shown that the UTAUT 2 model is able to empirically determine user intention in using technology (Ameri et al., 2020; Palau-Saumell et al., 2019; Ramírez-Correa et al., 2019; Raza et al., 2018). However, none of these studies have explicitly examined the effect of UTAUT 2 on the intention to use Islamic M-productivity apps. This study's results are expected to contribute to both the academic side and practical side of the mobile apps industry. From the theoretical aspect, this research can provide broader knowledge about the factors affecting user intention to use Islamic M-productivity. Thus, this study expands the literature on mobile applications, especially Islamic M-productivity applications. Meanwhile, from the practical point of view, the results of this study can help to develop tools used to maintain Islamic productivity-M applications by considering the underlying factors of user intentions.

LITERATURE REVIEW

UTAUT-2

Using a thorough review of eight prevalent technology adoption models, (Venkatesh et al., 2003) established the Unified Theory of Acceptance and Use of Technology (UTAUT) in an organizational context. This model highlights the practical value (extrinsic motivation) of corporate users after the elimination of similar/excessive constructs. A number of observations proved that 70% of UTAUT users got a better success rate in explaining technology acceptance. However, with today's

technological development, consumers require a model that can emphasize the hedonic value of using technology. Thus, the UTAUT2 model was established. (Venkatesh et al., 2003) developed three new constructs (hedonic motivation, habit, and price value) in the UTAUT 2 model. Compared to the old one, this new model is better able to explain the theory. Therefore, this present study employed the UTAUT 2 model to discover the influencing factors of consumer adoption of Islamic M-Productivity Apps.

Behavioral Intention

Mowen et al., (2002) explained that behavioral intention describes the extent to which a person desires to use or not use something and behaves in a certain way regarding the choice. This intention depicts a person's interest to perform or not perform specific actions in a particular situation that are influenced by motivational factors (Fishbein & Ajzen, 2011). This study, therefore, set the behavioral intention variable as the dependent variable.

Performance Expectancy

According to Venkatesh et al., (2012), performance expectancy describes a condition of how technology can carry out certain activities to achieve more optimal work performance. One believes that the system will benefit him in assisting activities and result in more optimal performance at work. This is in line with recent studies that affirmed that performance expectancy significantly influences the intention to use mobile applications such as mobile-based education applications (Ameri et al., 2020) and mobile money services (Penney et al., 2021). This present research predicted that users' perceived benefits (including Muslim users) of Islamic M-Productivity Apps will influence their intention to use the applications. Thus, the proposed hypothesis is:

H₁: Performance expectancy positively affects the behavioral intention to use Islamic M-Productivity Apps.

Effort Expectancy

Effort expectancy depicts the easiness a person feels when using technology (Venkatesh et al., 2003). A person will likely adopt a technology if it is easy and does not require a lot of effort (Gwebu & Wang, 2011). In this study, effort expectancy relates to the ease of performing a Muslim's daily Islamic worship using certain applications. Previous studies have shown that effort expectancy positively correlates with behavioral intentions in adopting mobile money services (Penney et al., 2021), online food delivery applications (Palau-Saumell et al., 2019), and e-government service adoption (Mansoori et al., 2018). Accordingly, the construct hypothesis is:

H₂: Effort expectancy positively affects the behavioral intention to use Islamic M- Productivity Apps.

Social Influence

Social influence describes a person's intention to adopt a particular technology because their belief influences the beliefs of their significant people (i.e friends, family, and co-workers) (Nikolopoulou et al., 2020; Ramírez-Correa et al., 2019; Venkatesh et al., 2003). Another definition explains that changes in a person's thoughts, behaviors, feelings, or attitudes are the results of combative social

influence from other people or groups (Rashotte, 2007). Numerous studies have confirmed that social influence has a positive relationship with behavioral intentions in adopting certain technologies (Ameri et al., 2020; Nikolopoulou et al., 2020; Penney et al., 2021; Ramírez-Correa et al., 2019). Thus, the proposed hypothesis is:

H₃: Social influence positively affects the behavioral intention to use Islamic M- Productivity Apps.

Facilitating Condition

Facilitating condition refers to an individual's belief that the existing technology and infrastructure in the environment can support the use of certain technology (Venkatesh et al., 2003). Users' resources such as mobile devices to operate Islamic M-Productivity Apps, users' knowledge to use these applications, and the assistance of others when facing difficulties are those facilitating conditions set for this study. An empirical study discovered that facilitating condition influences behavioral intention, and it also has a significant impact on usage behavior (Onaolapo & Oyewole, 2018). Thus, the proposed hypotheses are:

H₄: Facilitating condition positively affects the behavioral intention to use Islamic M-Productivity Apps.

H₅: Facilitating condition positively affects the behavior of using Islamic M-Productivity Apps.

Hedonic Motivation

Hedonic motivation is used to investigate a user's feelings when adopting technology. It is related to a person's pleasure or excitement when operating something (Venkatesh et al., 2003). This construct empirically has an essential role in accepting and using technology from the consumer's point of view (Brown & Venkatesh, 2005). In addition, previous studies have shown that hedonic motivation significantly influences behavioral intentions (Nikolopoulou et al., 2020; Ramírez-Correa et al., 2019). Therefore, the following hypothesis was proposed:

H₆: Hedonic motivation positively affects the behavioral intention to use Islamic M-Productivity Apps.

Price Value

(Dodds et al., 1991) defined price value as a perception that compares the perceived benefits of a particular innovative service (e.g., Islamic M- Productivity Apps) and the costs of using it. Price value will positively impact the intention of using technology when the technology's perceived benefits exceed the costs incurred (Venkatesh et al., 2003). Several previous studies have shown that price value significantly affects the intention to use technology (Owusu Kwateng et al., 2018; Penney et al., 2021; Venkatesh et al., 2003). Thus, we proposed:

H₇: Price value positively affects the behavioral intention to use Islamic M-Productivity Apps.

Habit

Habit depicts the extent to which individuals behave in a certain way automatically and do it repeatedly. It arises from one's perception of the results of previous experiences (Ajzen & Madden, 1986). In the context of technology adoption, habit is believed to be based on learning and the influence of operating certain technologies (Venkatesh et al., 2003). In this study, one's habit influences the use of technology; it describes the intentions to adopt Islamic M-Productivity Apps based on past experience in using mobile technology. Previous studies have documented habit as one of the main factors that determine a person's intention to adopt technology (Moorthy et al., 2017). Further, recent research has shown that habit is a significant predictor of future behavioral intention to use technology (Nikolopoulou et al., 2020; Owusu Kwateng et al., 2018; Ramírez-Correa et al., 2019). Other studies in the mobile game industry and mobile learning applications demonstrated that habit significantly affects user behavior (Ameri et al., 2020; Ramírez-Correa et al., 2019). Therefore, the hypotheses proposed are:

H₈: Habit positively affects the behavioral intention to use Islamic M-Productivity Apps. H_a: Habit positively affects the behavior of using Islamic M-Productivity Apps.

Behavioral Intention

Behavioral intention is related to a person's desire to use or not to use something and to behave in a certain way according to the choice (Mowen et al., 2002). Behavioral intention is often influenced by motivational factors, which direct a person to will or will not perform certain actions (Fishbein & Ajzen, 2011). In the context of technology, behavioral intention illustrates a person's behavioral proclivity to adopt a technology (Davis, 1989). Previous research showed that this intention is the most influential predictor of technology use behavior in the context of cell phones (Nikolopoulou et al., 2020). A similar result was also said for the adoption of mobile learning applications (Ameri et al., 2020) and mobile devices (Ramírez-Correa et al., 2019). In this Islamic M-Productivity research, the behavioral intention is expected to determine the extent to which users want to use the applications. Thus, the hypothesis proposed is:

H₁₀: Behavioral intention positively affects the behavior of using Islamic M-Productivity Apps.

Usage Behavior for Islamic Apps

Venkatesh et al., (2003) explained that usage behavior is the user's actualization of information and communication technology. A person's belief in the benefits of a system increases the interest in using it (Thompson et al., 1991). The frequency and length of time a person spends using a system can determine his usage behavior (Malhotra, 2010). In this research, usage behavior refers to the capacity of users to use Islamic M-Productivity Apps to help them do Islamic worship. Some applications offer information about prayer times at the user's location, including the Qibla direction (the direction of prayer towards Mecca) and notifications to prompt users to pray. In this study, the usage behavior variable was set as the dependent variable.

RESEARCH METHOD

This study employed the quantitative research method to explain Islamic M-Productivity technology and its effect on user intentions to use Islamic M-Productivity applications. The samples were 320 frequent users of an Islamic M-Productivity App, the Rubin.id. The survey instrument, a questionnaire, was created using a Google Form and distributed online via a form-distributed link. The Likert scale used in this study ranged from 1 (strongly disagree) to 5 (strongly agree). An openended questionnaire was also provided to understand consumer attitudes toward Islamic M-Productivity applications. Furthermore, offline in-depth interviews were carried out to allow researchers to make close contact with respondents.

This study used the Variance Based Structural Equation Model (SEM-PLS). PLS-SEM is designed to evaluate the affinity among predictive capabilities and to develop the exogenous construct variables. This study aimed to validate the behavioral intention theory, and the data were not normally distributed; therefore, using the UTAUT-2 model with SEM-PLS was advisable (Hair et al., 2017). A two-step analysis was conducted. First, the measurement model was carried out to test the validity and dependability of the construct. They were examined by the model's analysis outside the measurements. The validity test was carried out to match the instruments used in the measurement model (Hair et al., 2019). The value of factor loading and discriminant factors were examined through the measurement of Average Variance Extracted (AVE). The instrument is considered valid if the AVE value is above 0.5 (Hair et al., 2019). The observation can give consistent results in different conditions if the reliability shows the accuracy of the measurement tools. The coefficients of Cronbach Alpha and Composite Reliability were tested to determine the construct's reliability level with a minimum value of 0.7 (Hair et al., 2019). Second, the structural model was analyzed to determine the model's reliability using F2, Q2, and R2. After that, the hypotheses testing was conducted.

This study has adapted several instruments used in previous studies by modifying the study's purposes. The approach toward technology acceptance and usage was established on standard variables that can determine the factors that affect customer intention to use Islamic M-Productivity Apps (Venkatesh et al., 2012). These variables were applied for measurement due to their relation to other variables, such as price value, hedonic motivation, performance expectancy, social influence, effort expectancy, habit, and facilitating condition. The conceptual model is presented in Figure 1.

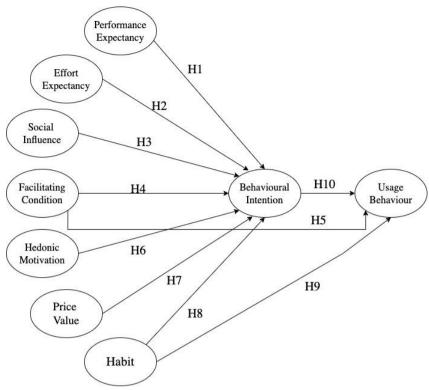


Figure 1. The conceptual model

RESULTS

The characteristics of 320 respondents involved in this research are presented in Table 1.

Table 1. Respondents' demographic attributes

Table 1. Respondents demographic attributes						
Respondents' Profile	N	Frequency	%			
Gender	320					
Men		118	36.8%			
Women		202	63.2			
Age	320					
17 - 20		222	69.4%			
21 - 25		92	28.7%			
26 - 30		3	0.9%			
>30		3	0.9%			
Occupation	320					
Student		292	91.3%			
Entrepreneur		9	2.8%			
Civil Servant		3	0.9%			
Others (Employee, Freelancer, Fresh Graduate, Teacher, etc.)		16	5%			
Frequency (Per Week)	320					
1 - 3		169	52.8%			
4 - 6		86	26.9%			
7 - 9		41	12.8%			
>10		24	7.5%			

Measurement Model

Table 2. Reliability and validity test results

Constructs	Loadings	Cronbach	Composite	AVE
		Alpha	Reliability	
Performance Expectancy		0.890	0.924	0.752
Useful	0.863			
More Quickly	0.857			
Increase productivity	0.882			
Increase opportunities to achieve important	0.867			
things				
Effort Expectancy		0.903	0.932	0.774
Easy to use	0.867			
Clear and understandable	0.895			
Easy to learn	0.913			
Easy to become an expert	0.844			
Social Influence		0.881	0.926	0.807
Encouragement from important people	0.912			
Encouragement from influential people	0.870			
Suggestions from the closest people	0.913			
Facilitating Condition		0.851	0.900	0.693
Have the required facilities	0.833			
Have knowledge	0.858			
Compatible with other technologies	0.827			
Get help from other people	0.810			
Hedonic Motivation		0.846	0.907	0.765
Pleasure	0.841			
Pleasant	0.897			
Enjoyable	0.885			
Price Value		0.911	0.944	0.849
Reasonable price	0.904			
The cost incurred is appropriate to the	0.939			
benefits obtained				
Features available according to price	0.921			
Habit		0.900	0.930	0.769
Habit	0.883			
Need	0.868			
Enthusiast	0.883			
Automatically	0.874			
Behavioral Intention		0.893	0.933	0.824
Intend to continue	0.909			
Always try to use	0.893			
Plan to use it frequently	0.921			
Usage Behavior	-	0.879	0.917	0.734
Often used	0.881	, -		
Regularly used	0.878			
Pleasant experience	0.815			
Currently used	0.851			

Table 3. Fornell & Larcker Criterion

Constructs	PE	EE	SI	FC	HM	PV	HT	BI	UB
PE	0.867								
EE	0.722	0.880							
SI	0.626	0.392	0.899						
FC	0.667	0.698	0.533	0.832					
HM	0.778	0.636	0.617	0.651	0.875				
PV	0.577	0.628	0.398	0.608	0.575	0.922			
Habit	0.687	0.558	0.700	0.580	0.660	0.568	0.877		
BI	0.642	0.533	0.439	0.564	0.607	0.542	0.752	0.908	
UB	0.732	0.576	0.588	0.595	0.800	0.558	0.825	0.820	0.857

This investigation shows consistent results since both categories, Composite Reliability (CR) and Cronbach Alpha (CA), have a minimum value of 0.7 (Hair et al., 2019). The CR values have met the criteria; 0.932 for Effort Expectancy, 0.924 for Performance Expectancy, 0.900 for Facilitating Conditions, 0.926 for Social Influence, 0.944 for Price Value, 0.907 for Hedonic Motivation, 0.930 for Habit, 0.917 for Usage Behavior, and 0.933 for Behavioral Intention. The CA values have also met the criteria; 0.881 for Social Influence, 0.890 for Performance Expectancy, 0.852 for Facilitating Conditions, 0.846 for Hedonic Motivation, 0.903 for Effort Expectancy, 0.911 for Price Value, 0.893 for Behavioral Intention, 0.900 for Habit, and 0.879 for Usage Behavior. The result indicates that the indicators' outer loadings are 0.7, and the AVE values are higher than the cut-off value of 0.5. It means that the variable requirements for convergent validity are satisfied (Hair et al., 2019).

Structural Model

The measurement of the structural model in this study consisted of path coefficient, effect size (f2), cross-validated redundancy (Q^2), and coefficient of determination (R^2) (Hair et al., 2019).

Table 4 Goodness-of-Fit (GoF) R² O²

Construct	AVE	R ²	Q^2
Performance Expectancy	0.753		
Effort Expectancy	0.774		
Sosial Influence	0.807		
Facilitating Condition	0.693		
Hedonic Motivation	0.765		
Price Value	0.849		
Habit	0.769		
Behavioral Intention	0.824	0.620	0.501
Usage Behavior	0.734	0.777	0.565
Average Score	0.774	0.699	
AVE x R ²		0.541	
GoF		0.736	

The above-mentioned GoF test processing results indicate that effort expectancy, performance expectancy, hedonic motivation, facilitating conditions, social influence, price value, and habit are able to predict behavioral intentions in using Islamic M-Productivity Apps, with a value of 0.620 (62.04%). It implies that the prediction accuracy is moderate. Meanwhile, habit, behavioral intention, and facilitating conditions have a predictive accuracy level of 0.777 (77.76%) in predicting

the usage behavior of Islamic M-Productivity Apps. It indicates that the level of prediction accuracy of these three variables toward the usage behavior of Islamic M-Productivity Apps is substantial.

Hypotheses Testing

Table 5 shows that several hypotheses are not accepted. They are regarding the effect of Effort Expectancy on Behavioral Intention (β = -0.051; p > 0.05), Social Influence on Behavioral Intention (β = -0.158; p < 0.05), Facilitating Conditions on Behavioral Intention (β = 0.118; p > 0.05), Hedonic Motivation on Behavioral Intention (β = 0.087; p > 0.05), and Price Value on Behavioral Intention (β = 0.576; p > 0.2515). However, other hypotheses are accepted and have positive and significant test results. They are regarding the impact of Performance Expectancy on Behavioral Intention (β = 0.190; p > 0.05), Facilitating Condition on Usage Behavior (β = 0.092; p > 0.05), Habit on Behavioral Intention (β = 0.576; p > 0.05), Habit on Usage Behavior (β = 0.447; p > 0.05), and Behavioral Intention to Usage Behavior (β = 0.431; p > 0.05).

Table 5. Discriminant Validity

)		
Hypothesis	β	t-value	p-value	Result
H1: $PE \rightarrow BI$	0.190	2.346	0.0191	Supported
H2: $EE \rightarrow BI$	-0.051	0.682	0.495	Not Supported
H ₃ : SI \rightarrow BI	-0.158	2.932	0.003	Not Supported
H4: FC \rightarrow BI	0.118	1.868	0.062	Not Supported
H ₅ : FC \rightarrow UB	0.092	1.977	0.048	Supported
H6: $HM \rightarrow BI$	0.087	1.319	0.187	Not Supported
H7: $PV \rightarrow BI$	0.079	1.147	0.251	Not Supported
H8: HT \rightarrow BI	0.576	8.024	0.000	Supported
H9: HT \rightarrow UB	0.447	7.688	0.000	Supported
H10: BI \rightarrow UB	0.431	7.375	0.000	Supported

DISCUSSION

This study attempts to determine how Muslim users in Indonesia perceive Islamic M-Productivity applications and the factors that influence them to accept and use the applications by employing the UTAUT 2 model. This study shows that, first, habit is the most significant and positive factor that influences the intention to use Islamic M-Productivity applications, one of which is Rubin.id. This finding is consistent with past research on the acceptance and use of innovative technology determined by UTAUT 2 in the contexts of restaurant search applications, mobile games, and mobile phones (Ramírez-Correa et al., 2019). It implies that user intention to adopt Islamic M-Productivity applications will be higher when it becomes a habit and the applications are needed for their routine in helping their daily worship activities.

Second, performance expectancy is empirically proven to positively and significantly influence the intention to use Islamic M-Productivity applications (Rubin.id). It indicates that more and more users feel the usefulness of these applications to help them do worship and complete many things related to their worship. This finding is in line with the previous study (Ramírez-Correa et al., 2019).

Third, facilitating conditions are discovered to positively and significantly affect user behavior. It implies that support and resources, including the availability of mobile devices and the internet,

make users perceive Islamic M-Productivity Apps as a critical factor for the actual use of the application. This finding is in accordance with studies in the restaurant search mobile applications, m-learning applications, and mobile phones (Ameri et al., 2020; Nikolopoulou et al., 2020; Palau-Saumell et al., 2019). Moreover, in terms of M-Productivity applications, the supportive environmental conditions significantly affect the use of the applications effectively and efficiently; as also stated in the research (Nikou & Economides, 2019) that the use of assessment applications is strongly influenced by their facilitating conditions.

Fourth, behavioral intention empirically has a positive and significant impact on usage behavior. It implies that users intend to use Islamic M-Productivity applications to help them do their worship. This finding confirms past research with similar results (Ameri et al., 2020; Nikolopoulou et al., 2020; Penney et al., 2021). If local developers can increase user behavioral intention, the usage behavior of the Islamic M-Productivity Apps application can also increase.

Previous studies have discovered that facilitating conditions and effort expectancy influence the intention to use a technology (Palau-Saumell et al., 2019). However, this present research does not find a similar result. This study indicates that effort expectancy and facilitating conditions do not affect the intention to adopt Islamic M-Productivity applications. It may be because users do not consider easy use, support, and available resources as important factors in formulating intentions to use these applications. Muslim users use smartphones on a daily basis and they are familiar with various mobile applications. Finally, the presence of a user-friendly system can provide convenience for users in utilizing the Islamic M-Productivity application. Thus, this availability does not encourage behavioral intention to use Islamic M-Productivity applications, in this case, Rubin.id. This finding, in fact, is in accordance with studies in m-learning applications and mobile games (Ameri et al., 2020; Ramírez-Correa et al., 2019).

Social influence has also been discovered to be an influencing factor in the original construct of UTAUT-1. In cellular framework research, this factor is the most tested and empirically proven to influence intentions to use new technologies (Ameri et al., 2020; Palau-Saumell et al., 2019; Penney et al., 2021; Ramírez-Correa et al., 2019). However, this is inconsistent with this study's results, which show that the use of new technology (Islamic M-Productivity applications) is not affected by social influence. The viewpoints and opinions of other people do not have any correlation with the tendency to use the applications. It is probably because people have seen worship as a habit, and using Islamic M-productivity applications has become a necessity and a mandatory routine in helping them to worship regardless of what other people say. Thus, users do not perceive social influence as an essential factor in shaping their behavioral intentions to use Islamic M-Productivity applications. This finding is in line with the research of (Kumar & Bervell, 2019; Venkatesh et al., 2012) in the context of new technologies.

The other finding of this present study, again, contradicts previous research in the cellular context (Ramírez-Correa et al., 2019). This present study states that the use of Islamic M-Productivity applications does not affect hedonic motivation. It implies that users do not consider Islamic M-Productivity applications as an escape from boredom but instead as a need to fulfill. In addition, this study discovered that price value does not affect behavioral intention. Users assume that M-Productivity applications will provide many benefits compared to the costs incurred; thus, the price value is an absolute thing they will get. This is in line with (Al-Adwan & Sammour, 2020) who stated that customers purchase or download mobile Apps because they are considered "fun". The price, then, is not the main thing to consider.

CONCLUSION

This study highlights habit as the most favorable and powerful influence of behavioral intention and usage behavior in adopting Islamic M-Productivity Apps—followed by performance expectancy. Other factors such as facilitation conditions, performance expectancy, social influence, hedonic motivation, and price value do not affect the intention to use Islamic M-Productivity applications. Therefore, it can be concluded that habits and intentions are the primary impetus in utilizing the applications to help users worship more effectively and efficiently and increase the productivity of their worship. The more favorable users embrace the technology, the higher their tendency to utilize M-Productivity Islamic Apps. Therefore, mobile app providers in this industry need to focus on essential factors of features or services related to performance expectancy, facilitating conditions, and habits to help users worship. Those can increase the behavioral intention and usage behavior in adopting Islamic M-Productivity Apps.

MANAGERIAL IMPLICATION

This study has implications for strengthening the understanding of application developers, especially those who target the interest in using Islamic Apps. The results can be used as an evaluation for developers of Islamic Apps to improve features and optimize the performance of the applications according to the needs of Indonesian Muslims.

In order to stay competitive in the industry, application developers are further urged to analyze how users behave toward new technologies. There are several implications recommended for developers before adopting new technology and making innovations.

- Developers need to understand users' habits in using mobile apps, especially in the category
 of mobile apps that will be developed. There are several categories of mobile apps that users
 install on certain occasions. Islamic mobile apps, for example, will rank at the top during
 Ramadan. However, if the development team understands user habits in more detail, these
 mobile apps will not be used on certain occasions only.
- 2. To meet the performance expectancy, developers need to understand users' demands and needs. Make them the primary touch point of the features of Islamic Mobile Apps. Thus, they can fulfill customers' expectations.

In general, development teams involved in building applications in the M-Productivity category are advised to pay attention to user behavior and market conditions. For the technology itself, users will be ready if the technology can meet their expectations. The development team should strive to build more intense relationships with relevant stakeholders that can assist them in adopting the latest technology and innovation. This study's results indicate that the behavioral intention to use Islamic M-Productivity applications allows mobile application developers to know customer preferences and function usage patterns. Also, they provide insight for the development team to design a bundle of functions that can increase customer satisfaction and tempt prospective customers.

LIMITATIONS AND FUTURE RESEARCH

The study offers several important implications but unavoidably has certain flaws. First, most respondents were students with an age range of 17-20 years. Experience in using the M-Productivity

type application has not become a regular thing for their daily activities. A habit will be established when users have been using mobile apps longer. In other words, users 30 years old may be more loyal to certain types of mobile apps. To increase the generalizability of the results, further research can employ respondents in other age ranges to obtain more diverse results.

The second limitation relates to the variables used in this study, namely performance expectancy and effort expectancy. Theoretically, how technology benefits in carrying out specific activities to achieve better job performance is also influenced by how users can quickly accept this technology. Future studies may consider using other types of M-Productivity to broaden the understanding of external influencing variables, such as perceived usefulness and perceived ease of use. The suggested model can be revisited and expanded by including those factors in future studies.

REFERENCES

- Ajzen, I., & Madden, T. J. (1986). Prediction of goal-directed behavior: Attitudes, intentions, and perceived behavioral control. *Journal of Experimental Social Psychology*, 22(5), 453–474. doi: 10.1016/0022-1031(86)90045-4
- Al-Adwan, A. S., & Sammour, \G. (2020). What Makes Consumers Purchase Mobile Apps: Evidence from Jordan. *Journal of Theoretical and Applied Electronic Commerce Research*, *16*(3), 562–583. doi: 10.3390/jtaer16030034
- Ameri, A., Khajouei, R., Ameri, A., & Jahani, Y. (2020). Acceptance of a mobile-based educational application (LabSafety) by pharmacy students: An application of the UTAUT2 model. *Education and Information Technologies*, 25(1), 419–435. doi: 10.1007/s10639-019-09965-5
- Azfar, A., Choo, K.-K. R., & Liu, L. (2016). Android mobile VoIP apps: A survey and examination of their security and privacy. *Electronic Commerce Research*, *16*(1), 73–111. doi: 10.1007/s10660-015-9208-1
- Bertschek, I., & Niebel, T. (2016). Mobile and more productive? Firm-level evidence on the productivity effects of mobile internet use. *Telecommunications Policy*, 40(9), 888–898. doi: 10.1016/j.telpol.2016.05.007
- Brown, S. A., & Venkatesh, V. (2005). Model of Adoption of Technology in Households: A Baseline Model Test and Extension Incorporating Household Life Cycle. *MIS Quarterly*, 29(3), 399–426. doi: 10.2307/25148690
- Campbell, H. A. (Ed.). (2012). *Digital Religion: Understanding Religious Practice in New Media Worlds*. Routledge. doi: 10.4324/9780203084861
- Data.ai. (2022). *Today's Top App Downloads*. Data.Ai. diakses dari https://www.data.ai/en/apps/ios/top/downloads/indonesia/productivity/ios-phone/
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319–340. doi: 10.2307/249008
- Dhiman, D. B. (2021). *Impact of Smartphone: A Review on Negative Effects on Students*, 18(4), 5710-5718. doi: 10.2139/ssrn.4205892
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of Price, Brand, and Store Information on Buyers' Product Evaluations. *Journal of Marketing Research*, 28(3), 307–319. doi: 10.2307/3172866
- Fishbein, M., & Ajzen, I. (2011). *Predicting and Changing Behavior* (1st ed.). Psychology Press. doi: 10.4324/9780203838020
- Gwebu, K. L., & Wang, J. (2011). Adoption of Open Source Software: The role of social identification. *Decision Support Systems*, *51*(1), 220–229.doi: 10.1016/j.dss.2010.12.010

- Hair, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107–123. doi: 10.1504/IJMDA.2017.087624
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, *31*(1), 2–24. doi: 10.1108/EBR-11-2018-0203
- Islam, Z., Kim Cheng Low, P., & Hasan, I. (2013). Intention to use advanced mobile phone services (AMPS). *Management Decision*, *51*(4), 824–838. doi.: 10.1108/00251741311326590
- Kumar, J. A., & Bervell, B. (2019). Google Classroom for mobile learning in higher education: Modelling the initial perceptions of students. *Education and Information Technologies*, 24(2), 1793–1817. doi: 1007/S10639-018-09858-z
- Malhotra, N. (2010). Riset Pemasaran (Marketing Research)(Edisi 4 Jilid 1). PT. Indeks.
- Mansoori, K. A. A., Sarabdeen, J., & Tchantchane, A. L. (2018). Investigating Emirati citizens' adoption of e-government services in Abu Dhabi using modified UTAUT model. *Information Technology & People*, *31*(2), 455–481. doi: 10.1108/ITP-12-2016-0290
- Moorthy, K., Suet Ling, C., Weng Fatt, Y., Mun Yee, C., Ket Yin, E. C., Sin Yee, K., & Kok Wei, L. (2017). Barriers of Mobile Commerce Adoption Intention: Perceptions of Generation X in Malaysia. *Journal of Theoretical and Applied Electronic Commerce Research*, 12(2), 37–53. doi: 10.4067/S0718-18762017000200004
- Mowen, J., Michael, M., & Yahya, D. K. (2002). *Perilaku konsumen / John C, Mowen, Michael Minor*; *alih bahasa, Dwi Kartini Yahya* | *OPAC Perpustakaan Nasional RI*. https://opac.perpusnas.go.id/DetailOpac.aspx?id=312314
- Nikolopoulou, K., Gialamas, V., & Lavidas, K. (2020). Acceptance of mobile phone by university students for their studies: An investigation applying UTAUT2 model. *Education and Information Technologies*, 25(5), 4139–4155. doi: 10.1007/s10639-020-10157-9
- Nikou, S. A., & Economides, A. A. (2019). Factors that influence behavioral intention to use mobile-based assessment: A STEM teachers' perspective: Teachers' adoption of mobile-based assessment. *British Journal of Educational Technology*, 50(2), 587–600. doi: 10.1111/bjet.12609
- Onaolapo, S., & Oyewole, O. (2018). Performance Expectancy, Effort Expectancy, and Facilitating Conditions as Factors Influencing Smart Phones Use for Mobile Learning by Postgraduate Students of the University of Ibadan, Nigeria. *Interdisciplinary Journal of E-Skills and Lifelong Learning*, 14, 095–115. doi: 10.28945/4085
- Owusu Kwateng, K., Osei Atiemo, K. A., & Appiah, C. (2018). Acceptance and use of mobile banking: An application of UTAUT2. *Journal of Enterprise Information Management*, 32(1), 118–151. doi: 10.1108/JEIM-03-2018-0055
- Palau-Saumell, R., Forgas, S., Sánchez-García, J., & Robres, E. (2019). User Acceptance of Mobile Apps for Restaurants: An Expanded and Extended UTAUT-2. *Sustainability*, 11(4), 1210. doi: 10.3390/su11041210
- Penney, E. K., Agyei, J., Boadi, E. K., Abrokwah, E., & Ofori-Boafo, R. (2021). Understanding Factors That Influence Consumer Intention to Use Mobile Money Services: An Application of UTAUT2 With Perceived Risk and Trust. *SAGE Open*, 11(3), 21582440211023188. doi: 10.1177/21582440211023188
- Pinochet, L. H. C., Tanaka, L. Y., Azevedo, M. C. de, & Lopes, E. L. (2020). INTENTION TO CONTINUE TO USE MOBILE PRODUCTIVITY APPS. *Revista Pensamento Contemporâneo em Administração*,14(2),49–69. doi: 10.12712/rpca.v14i2.40848
- Ramírez-Correa, P., Rondán-Cataluña, F. J., Arenas-Gaitán, J., & Martín-Velicia, F. (2019).

 Analysing the acceptation of online games in mobile devices: An application of UTAUT2. *Journal of Retailing and Consumer Services*, *50*, 85–93. doi: 10.1016/j.jretconser.2019.04.018
- Rashotte, L. (2007). Social Influence. In The Blackwell Encyclopedia of Sociology. John Wiley &

- Sons, Ltd. doi.: 10.1002/9781405165518.wbeoss154
- Raza, S. A., Shah, N., & Ali, M. (2018). Acceptance of mobile banking in Islamic banks: Evidence from modified UTAUT model. *Journal of Islamic Marketing*, 10(1), 357–376. doi: 10.1108/JIMA-04-2017-0038
- Tak, P., & Panwar, S. (2017). Using UTAUT 2 model to predict mobile app based shopping: Evidences from India. *Journal of Indian Business Research*, *9*(3), 248–264. doi: 10.1108/JIBR-11-2016-0132
- Thompson, R. L., Higgins, C. A., & Howell, J. M. (1991). Personal Computing: Toward a Conceptual Model of Utilization. *MIS Quarterly*, *15*(1), 125–143. doi: 10.2307/249443
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, *27*(3), 425–478. doi: 10.2307/30036540
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology, 36(1), 157-178. doi: 10.2307/41410412