

Analyzing Dating Application Adoption Towards Behavioral Intention Using A Utaut2 (Case Study: Premium Bumble User In Indonesia)

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Abstract

The Covid-19 pandemic has changed the current style of socializing, and dating applications have become an interesting topic of conversation in Indonesia. Rakuten Insight states that interactions on dating apps increased by 32% during Covid-19, and dating app usage increased by 19% over one year. Bumble is one of the biggest dating apps in the world. The purpose of this study was to investigate the factors associated with technology acceptance and use of the Bumble application. The research framework used in this study is UTAUT2. Data collection was processed using a questionnaire technique which was distributed to all Bumble users who are domiciled in Indonesia. Data analysis will use SmartPLS 3.2.9 which produces outer model testing and inner model testing. Descriptive analysis in this study is needed to understand more deeply about the characteristics of the respondents and their assessment of Bumble. The results show that there are five significant factors that influence Use Behavior and Behavioral Intention of Bumble users in Indonesia, namely Performance Expectancy, Social Influence, Facilitating Conditions, Price Value, and Habit and have a significant positive effect on Behavioral Intention. Meanwhile, Behavioral Intention and Habit have a significant positive influence on Use Behavior.

Keywords-Bumble, UTAUT2, use behavior, behavior intention, Indonesia

I. INTRODUCTION

The number of internet users in Indonesia is increasing. In 2018, the number of internet users in Indonesia reached 64.8% of users. In 2019-2020 it continued to increase to 73.70% million internet users, and in 2021-2022 it will increase to 77.2% or 210 million internet users. Internet users in Indonesia grew 12.4% in these three years. The Covid-19 pandemic has contributed to the increase in internet use in Indonesia. As evidenced by data obtained from APJII, 77.02% of users are this year. This causes people to spend more time on social media and, of course, also changes the socializing system and search for a partner through a dating application.

Rakuten Insight noted that from February 2021, there was an increase of 19% in a year. At the same time, conversations between dating application users also increased by 32%. In a survey conducted by Rakuten Insight, 57.6% of respondents used dating applications, and it is proven from data obtained from Business of Apps that there was an increase from 2018 - 2022 by 23 million Dating Applications users. Bumble is one of Indonesia's largest dating application platforms; by 2022, Bumble users will reach 45 million users, with monthly downloads reaching 1,582,350. (Business of Apps). This year, customers who use premium features in dating apps reached 1.5 million users. (Business of Apps). The price is relatively lower and simpler when users use premium on Bumble with features that make users addicted, so they always subscribe to Bumble's premium features.

Dating apps are increasingly competing to improve the quality of service they provide to customers. As a result, understanding customer preferences for dating application services is critical. The author wants to know the factors that significantly influence using the UTAUT2 method after searching for several previous studies related to customer behavioral intentions.

II. THEORETICAL BACKGROUND

A. Performance Expectancy

Performance Expectancy is the level of profit that customers receive when using a technology is referred to as performance expectancy. Users of dating application services benefit from searching for the type of person they want to date. When compared to offline dating with a stranger, which has more consequences such as sexual abuse, kidnapping, and so on, users can feel safe when using this application.

B. Effort Expectancy

Effort Expectancy is the ease with which the system is used. In other words, effort expectancy is the level of comfort that customers experience when they use technology. Subscription-based online music services should be simple to use so that users have a positive experience.

C. Social Influence

Social Influence define as the degree to which an individual believes important others believe he or she should use the new system.

D. Facilitating Condition

Facilitating Condition is the customer's perception of available resources and support to perform a behavior is referred to as the Facilitating Conditions.

E. Hedonic Motivation

Hedonic Motivation as pleasure or satisfaction derived from technology use.

F. Price Value

Price Value is the price value is the customer's perception of the worth of the service less the monetary cost to be incurred.

G. Habit

Habit is formed through the experience of learning something and performing it automatically in the future. In this study, habit is used to examine customer habits when they use subscription-based online dating apps.

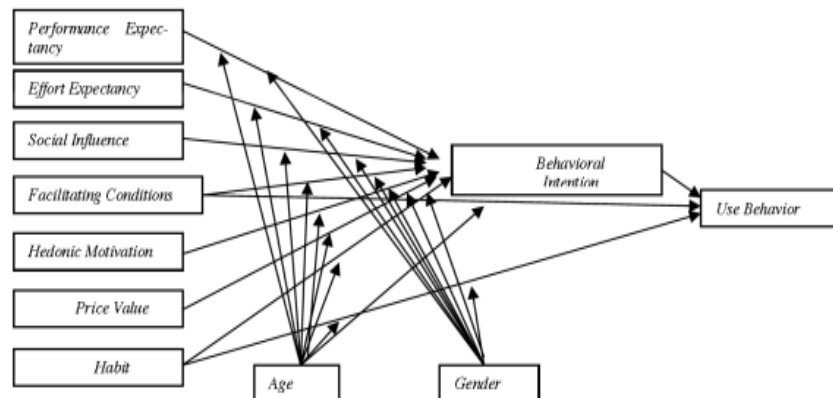
H. Behavioral Intention

Behavioral intention is used in this study to assess how enthusiastic customers are about using subscription-based online dating apps.

I. Use Behavior

Use Behavior is the intensity or frequency of users in using the technology of subscribers in using subscription-based online dating applications is measured using use behavior.

J. Research Framework



K. Research Hypothesis

1. PE has a significant and positive influence on BI.
 - 1a Age moderates the effect of PE on BI.
 - 1b Gender moderates the influence of PE on BI.
2. EE has a significant and positive influence on BI.
 - 2a Age moderates the effect of EE on BI.
 - 2b Gender moderates the effect of EE on BI.
3. Age moderates the effect of SI on BI.
 - 3a Age moderates the effect of SI on BI.
 - 3b Gender moderates the effect of SI on BI.
4. The FC has a significant and positive influence on BI.
 - 4a Age moderates the influence of the FC on BI.
 - 4b Gender moderates the influence of the FC on BI.
5. HM has a significant and positive influence on BI.
 - 5a Age moderates the influence of HM on BI.
 - 5b Gender moderates the influence of HM on BI.
6. PV has a significant and positive influence on BI.
 - 6a Age moderates the influence of PV on BI.
 - 6b Gender moderates the influence of PV on BI.
7. H has a significant and positive influence on BI.
 - 7a Age moderates the influence of H on BI.
 - 7b Gender moderates the influence of H on BI.
8. FC have a positive and significant impact on UB.
 - 8a The influence of the FC on UB is moderated by Age.
 - 8b The influence of the FC on UB is moderated by Gender.
9. H has a significant and positive influence on UB.
 - 9a Age moderates the influence of H on UB.
 - 9b Gender moderates the influence of H on UB.
10. BI Influences UB in a Positive and Significant impact.

III. METHODOLOGY

A. Research Characteristic

For the research type, author used quantitative method for this research. Quantitative method is a research method that attempts to accurately measure behavior, knowledge, opinions, or attitudes. The goal of this study is to find conclusive or causal evidence. When researchers see or read previous research that discusses the relationship between variables, they conduct casual research. The objectives of this research will be descriptive is a study of problems in the form of actual population facts involving individual behavior or point of view, organization, circumstances, or procedures. The researchers conducted casual research to see if the relationship between variables in the study also exists in the object or field under study. This research is classified as causal research based on the type of investigation. Causal research is conducted when a researcher wishes to describe the cause of a problem, whether it is done experimentally or not.

B. Measurement Scale

To calculate data gathered from the sample, this research uses systematic differential with 5 levels of measurement, ranging from “Strongly Disagree” and “Strongly Agree”

C. Population and Sample

In this study, If sampling is chosen the researcher must decide who and how many people to interview, who and how many people to observe, and how many records to examine. Because the population in this study is unknown, the researcher should use a sample size of 100 to 400, based on the suggestion

D. Data Testing Technique

This study uses SEM methodology that uses SmartPLS due to its structural and complexity. Partial least square regression is a variance-based statistical method. The analytical software used in this study is Smart PLS 3.2.9

E. Validity Test

To meet the face validity criteria, the researcher solicits an opinion from an expert in the field. The first survey will be conducted in the form of a pilot test to ensure that the questionnaire items meet the validity constructs. For preliminary data, 40 people participated in this pilot test. The researcher uses a convergent validity test to ensure construct validity using SPSS as a measurement tools.

F. Reliability Test

The reliability test is used to determine the degree to which a measurement result is relatively consistent when repeated twice or more. Refer to Sekaran's (2010:325) criteria for reliability value limits, where a Cronbach's Alpha coefficient of 0.60 is considered reliable.

IV. RESEARCH RESULT

A. Analysis of SEM

1. Outer Model

The data gathered from 404 respondents then processed and tested for its discriminant validity.

a. Convergent Validity

Convergent validity is considered convergently valid if the value of is greater than 0.6. All of the items in this study are greater than 0.6, implying that it is valid.

Next is AVE if the Average Variance Extracted (AVE) score is greater than 0.50, it has convergent validity. All seven constructs in this study have an AVE score greater than 0.50.

b. Discriminant Validity

The cross-loading value indicates that the correlation value between each variable and the items is greater than the value of the other constructs. Table 4.1 presents the cross-loading value, which indicates discriminant validity.

Table 4. 1 Cross Loading Result

	BI	EE	FC	H	HM	PE	PV	SI	UB
BI 1	0.959	0.183	0.461	0.791	0.552	0.551	0.530	0.592	0.797
BI 2	0.954	0.177	0.465	0.726	0.535	0.541	0.536	0.585	0.744
BI 3	0.965	0.189	0.495	0.784	0.561	0.559	0.572	0.641	0.801
EE 1	0.111	0.852	0.376	0.180	0.347	0.305	0.240	0.213	0.097
EE 2	0.223	0.937	0.422	0.268	0.407	0.385	0.303	0.270	0.194
EE 3	0.141	0.894	0.408	0.223	0.407	0.350	0.268	0.310	0.145
FC 1	0.403	0.411	0.871	0.328	0.368	0.404	0.506	0.551	0.355
FC 2	0.404	0.427	0.896	0.400	0.426	0.439	0.454	0.493	0.369
FC 3	0.463	0.331	0.819	0.364	0.393	0.375	0.422	0.606	0.385
H 1	0.727	0.267	0.395	0.919	0.646	0.561	0.495	0.542	0.734
H 2	0.655	0.255	0.359	0.885	0.558	0.442	0.438	0.479	0.657
H 3	0.792	0.192	0.400	0.925	0.586	0.530	0.484	0.544	0.808
HM 1	0.483	0.460	0.446	0.573	0.906	0.612	0.452	0.528	0.502
HM 2	0.497	0.410	0.406	0.571	0.931	0.633	0.461	0.513	0.562
HM 3	0.580	0.335	0.413	0.647	0.907	0.601	0.520	0.525	0.639
PE1	0.495	0.391	0.411	0.500	0.616	0.898	0.416	0.487	0.511

PE2	0.499	0.360	0.405	0.487	0.598	0.913	0.435	0.489	0.508
PE3	0.562	0.324	0.462	0.544	0.615	0.910	0.460	0.569	0.574
PV 1	0.486	0.265	0.482	0.446	0.445	0.413	0.907	0.503	0.489
PV 2	0.496	0.378	0.474	0.461	0.531	0.485	0.887	0.481	0.500
PV 3	0.558	0.201	0.491	0.501	0.452	0.415	0.920	0.537	0.533
SI 1	0.377	0.281	0.502	0.313	0.392	0.434	0.404	0.789	0.359
SI 2	0.431	0.346	0.560	0.407	0.403	0.411	0.434	0.817	0.406
SI 3	0.670	0.164	0.535	0.617	0.568	0.538	0.524	0.866	0.670
UB 1	0.735	0.109	0.378	0.743	0.514	0.499	0.495	0.557	0.892
UB 2	0.705	0.209	0.404	0.699	0.615	0.556	0.541	0.520	0.893
UB 3	0.763	0.155	0.384	0.749	0.569	0.536	0.487	0.591	0.921

Source: SmartPLS 3.2.9 result proceeded by the author

Table 4.1 shows the value all of cross loading of each result is higher than the other construct. The table above indicate a positive result there is no indication problem.

c. Composite Reliability

If the Cronbach's Alpha coefficient is at least 0.7 or greater than that, the reliability is considered reliable. The most common technique is Alpha Cronbach's alpha.

Table 4. 2 Composite Realibility Result

Variable	Cronbach's Alpha	Composite Reliability
Behavioral Intention	0.957	0.972
Effort Expectancy	0.882	0.923
Facilitating Condition	0.827	0.897
Habit	0.896	0.935
Hedonic Motivation	0.903	0.939
Performance Expectancy	0.893	0.933
Price Value	0.889	0.931
Social Influence	0.777	0.864
Use Behaviour	0.886	0.929

Source: SmartPLS 3.2.9 result proceeded by the author

2. Inner Model

Following the outer model test, the inner model test is the next stage in data processing using PLS. Inner model testing is required to determine the influence of the independent variable on the dependent variable

a. T-Statistical Result

4. 3 T-Statistical Result

No	Path Diagram	Path Coefficient	t-Value	Conclusion
1	BI -> UB	0.453	10.405	Accepted
2	EE -> BI	-0.118	3.390	Rejected
3	FC -> BI	0.095	2.359	Accepted
4	FC -> UB	0.021	0.681	Rejected
5	H -> BI	0.603	13.325	Accepted

6	H -> UB	0.438	10.138	Accepted
7	HM -> BI	-0.047	0.924	Rejected
8	PE -> BI	0.123	2.874	Accepted
9	PV -> BI	0.124	3.112	Accepted
10	SI -> BI	0.146	3.251	Accepted

Source: SmartPLS 3.2.9 result proceeded by the author

This research used a 5% significance level, so if the t-value is greater than 1.65, it means that there is a significant relationship between the independent and dependent variables. There are seven of ten hypotheses were accepted, while three of ten hypotheses were rejected.

b. R Square Test

The influence on dependent latent variable is presented by R square. In this research. The R square is shown in the table below:

Table 4.4 R Square Result

Latent Variable	R Square
Behavioral Intention	0,714
Use Behavior	0,733

Source: SmartPLS 3.2.9 result proceeded by the author

From the data above the R square on BI construct 0,714, means Behavioral Intention is 71,4% influenced by Performance Expectancy, Social Influence, Facilitating Condition, Price Value, and Habit while the rest 38,6% are influenced by the other factors that is not studied in this research. It also indicates on UB the R square is 0,733, means Use Behavior is 73,3% influenced by Behavioral Intention and Habit while the rest of 26,7% are influenced by the other factors that is not studied in this research.

V. CONCLUSION

According to UTAUT2 model, factors that influencing Behavioral Intention of consumers toward premium service Bumble application in Indonesia are Habit (13.325), Social Influence (3251), Price Value (3112), Performance Expectancy (2874) and Facilitating Condition (2.359). While factors that influencing Use Behavior are Behavioral Intention (10.405) and Habit (10.138). The influence on Behavioral Intention is 71,4% while, the influence of Use Behavior is 73,3%. Since the R Square of the dependent variables in this study is moderate, which Behavioral Intention score is 0,714 and dependent variable Use Behavior is 0,733. As a result, it can be concluded that the proposed model in this study can be used to predict the behavioral intention of premium service dating applications in Indonesia.

VI. SUGGESTION

A. Suggestion for Company

The findings of this study can suggest beneficial insights for managerial application. Five factors influence Bumble users' towards Behavioral Intention namely Habit, Social Influence, Price Value, Performance Expectancy, and Facilitating Condition. Because Habits are the most influential variable in Bumble app adoption, service providers should make an effort to understand potential users' habits and position the app within or near theirs, so that potential users will have the intention to use, then use and reuse the app. More marketing communications efforts are needed to strengthen both potential intentions and their influence on behavior. Second largest is Social Influence, this indicates that there are a group of people who use this application together, it is better if the company develops more places where it can become an association of fellow users, so that in the future it will be able to create large groups so that it continues to influence insiders. keep using the Bumble app.

B. Suggestion for Future Research

Because of its high explanatory power, the model of antecedents and consequences used in this study can be used in future research. The results of this study show a high level of Behavioral Intention as an intervening variable with a score of 71.4% and a score of 73.3% for the dependent variable Use Behavior. Other unexplored factors can be used to further this research. For example, the addition of quality aspects/indicators based on the website and the company. It is also hoped that future researchers will add more questions to the questionnaire column in order to obtain better results.

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