# Global Readiness for Immersive Virtual Space Adoption: The Case of Ohyay

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Abstract—As the world is wholly dependent on information technology, especially in the era of COVID-19 pandemic, it is expected that hybrid format will become the new norms. This experience indicates that novel ways of combining face-to-face with online activities, including teaching, conferencing, concert, art exhibition and collaborations should be explored. Consequently, a new immersive virtual space known as Ohyay was launched in the summer of 2020. Ohyay is a powerful design platform that lets anyone create immersive virtual spaces unlike other video conferencing platform (e.g., Zoom, Microsoft teams) that have a well-defined and prescribed workflow. Even though the platform has been utilized for series of events and activities, empirical studies to ascertain its adoption rate is lacking. This study therefore employed the UTAUT2 model infused with selfefficacy and readiness construct to investigate the factors that influence users' intention of Ohyay adoption. One hundred and forty-two participants across countries completed an online questionnaire. It was found that Performance Expectancy, Facilitating Conditions, Effort Expectancy, Self-Efficacy, Readiness, and Hedonic Motivation directly predicts the behavioral intention of Ohyay, while Self-Efficacy and Hedonic Motivation indirectly predicts behavioral intention through Effort Expectancy and Readiness. The findings of this study contribute to the research applying the UTAUT2 approach with the self-efficacy and readiness construct, for the exploration of behavioral intention to utilize an emerging technology such as Ohyay in educational and non-educational activities. As a result of the findings, managerial implications were highlighted followed by study limitations and proposal for future studies.

Keywords—Ohyay, Readiness, Technology adoption, Self-efficacy.

#### I. INTRODUCTION

In recent time, there is exponential increase in the rate at which virtual spaces or online environment are adopted in education, businesses, events among other societal activities. This may be unconnected with the COVID-19 pandemic that adversely affects human livelihood globally, and made physical meeting becomes impermissible. Since teaching and learning, work and other life engagements must continue amidst the restriction of movement to mitigate the spread of the virus, alternative approaches must be explored. As a result, several technological platforms keep emerging as well as the rise in the usage of "underutilized" existing resources. Expectedly, there was dramatic increase in the usage of

Zoom, Skype, Slack, Microsoft Teams, cisco Webex, Whova, rocket.chat for varying purposes. For instance, the number of downloads of the video conferencing system Zoom increased by 728% in March 2020 [1] and the number of daily active users of Microsoft Teams grew from 32 million in March to 75 million in April [2]. The usage of the platforms includes for teaching and learning, research, and scientific conferences.

As the world is fully dependent on information technology, it is expected that hybrid format will become the new norms which is an indication that novel ways of combining face-to-face with online teaching, conferencing and research collaboration be explored. Nonetheless, scientific papers have stressed the impact of virtual platforms in enhancing teaching and learning. Such of those studies include investigating the effect of Microsoft Teams, [3] [4], Zoom platform [5], Google classroom and cisco Webex [6]. What is more, [2] asserts that the larger the distance, the more difficult it is to transfer knowledge and experience such as in teaching or research collaboration. This suggest a more robust platform is required that permits immersion of users or participants and relate with their counterparts in the physical world. Especially, that large base of research has confirmed the use of immersive virtual spaces make the learning of complex subjects engaging, motivating, and effective [7]. Consequently, a new immersive virtual space known as Ohyay was launched in the summer of 2020. By using the term "immersive" in the context of this study, we mean new visualization and presentation technologies that allow users to personalize their environment online and create their own spaces, not Virtual Reality, Augmented Reality, or Mixed

Ohyay is a powerful design platform that lets anyone create immersive virtual spaces<sup>1</sup>. Ohyay, a browser-based video platform allows users to define their interactions unlike other video conferencing platform (e.g. Zoom, Microsoft teams) that have a well-defined and prescribed workflow [8]. The novel platform has been adopted to organize live events such as concert, art exhibition, conferences (e.g. IMX 2021) and teaching [9] [10]. Based on experimental teaching sessions, it was concluded that Ohyay has the essential indicators for a good synchronous teaching [10], engaging and as well provides more exciting classroom experience [9]. Even though the platform has been utilized for series of events

and activities, to the best of our understanding, empirical studies to ascertain its adoption rate is lacking. To address this gap and ascertain readiness and intention to use the immersive virtual space, this study investigates the adoption rate of Ohyay. As a potential platform for teaching and other educational or non-educational activities, its relevance may be associated with behavioral intention to use Ohyay. Using the infused theory of Unified Theory of Acceptance and Use of Technology (UTAUT2), Self-efficacy and Readiness to investigate the influential factors affecting behavioral intention towards adopting Ohyay. To achieve the goal, we develop and validate a survey.



Fig. 1. Ohyay Platform Interface https://ohyay.co/ 1

This paper introduces Ohyay and related concept in section I. Section 2 present the theoretical framework and developed the hypotheses. Section 3 describes the method including data collection, participant and ethics, measurement model and data analysis process. The result was presented in section 4. Section 5 discusses the findings and concludes the paper with limitations and recommendations for future research.

## II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

#### A. Performance Expectancy

The performance Expectancy (PE) construct is used in several studies to determine the adoption and consequent use of relevant technology. PE refers to the extent to which an individual believes that using a platform such as Ohyay will help him/her to attain gains in job performance (Venkatesh, Morris, Davis & Davis, 2003). PE is further defined by Oechslein, Fleischmann and Hess (2014) as the degree to which using technology will provide benefits to the consumers in performing certain activities. In the case of the Ohyay platform, its PE elements are the relative advantages and its importance for teaching, learning and video conferencing amongst others. Within the context of this study, PE is the extent to which participants believe that the Ohyay platform will help them carry out their activities and improve their performance (Nikolopoulou, Gialamas & Lavidas, 2021). PE is justified in studies by (Nikolopoulou et al., 2021; Venkatesh et al., 2003) as the strongest predictor of Behavioral Intention (BI) to use a technology of which Ohyay platform is an example. Performance expectancy has shown a positive effect on behavioural intention in a study by (Sung, Jeong, Jeong & Shin, 2015).

H1: Performance Expectancy will positively influence behavioral intention to use Ohyay

## B. Facilitating Condition

Facilitating conditions (FC) explains the degree to which a person believes that the existing organizational and technical infrastructure can support him/her to use the technology (Ambarwati, Harja & Thamrin, 2020; Chan et al., 2010; Hamzat & Mabawonku, 2018). FC are perceived enablers or barriers in the environment that influence a person's perception of ease or difficulty of performing a task (Teo, 2010). In this context, facilitating conditions can be described as the extent to which research participants believe that technical infrastructure exists to enhance the use of Ohyay platforms. The facilitating conditions of Ohyay platforms can be the internet connectivity, the knowledge necessary to use Furthermore, the compatibility of the available technology with Ohyay and the support system should the user need help in using the Ohyay platform. The availability of such resources and support will determine if the user is willing to use Ohyay platforms. Lack of assistance, lack of timely support, lack of information, and limited resources are some FC to prevent or motivate individuals from accepting the technology in question (Kamaghe, Luhanga & Michael, 2020). Some recent studies by (Catherine, Geofrey, Moya, & Aballo, 2018; Asenso, Asamoah & Agyei-Owusu, 2021) has reported a significant positive effect or relationship between FC and users behavioural intention to use technology. However, Venkatesh, Thong and Xu (2012) state that FC does not affect behavioural intention, but affect user behaviour.

H2: Facilitating Condition will positively influence behavioral intention to use Ohyay

## C. Effort Expectancy

Venkatesh, Morris, Davis and Davis (2003) defined Effort expectancy (EE) as the degree of ease of use associated with the use of an information system.EE is further explained by Onaolapo and Oyewole (2018) as a construct of the UTAUT model that measures the level of ease of use associated with the use of information technology. According to Ghalandari (2012) and Onaolapo and Oyewole (2018), EE describes the link between the effort put forth at work, the performance achieved from that effort, and the rewards received from the effort. The EE concerns of Ohyay depend on how the users evaluate its ease or complexity in using it within the shortest time possible. Thus, if Ohyay users realise that is very easy to use the platform to perform their tasks they may not refuse to use it. Also, if users become accustomed to the technology, the perceived ease of use becomes stronger (Khechine, Lakhal, Pascot & Bytha, 2014). Thus, EE is used in this study to predict the users' Behavioral Intention (BI) to utilise Ohyay platforms. Effort expectancy had a positive and significant effect on users' behaviour and intention to use e-banking services in a study by (Ghalandari, 2012). Also, Jamaludin and Mahmud (2011) reported EE to have shown a positive relation to the intention to use the digital library. While in their study Chutimaskul, Chongsuphajaisiddhi Boontarig, Papasratorn (2012) EE reported the least amongst other constructs to show a strong significant effect on the elderly's intention to use a smartphone, EE construct did not predict users intentions to use Elluminate webinar system (Khechine et al., 2014).

H3: Effort Expectancy will positively influence behavioral intention to use Ohyay

## D. Self-Efficacy

The construct of Self-Efficacy (SE) was firstly introduced by Bandura (1977). Since then, Self-efficacy has gained popularity in contemporary motivation research and has been applied across various domains of behaviour (Pajares, 1997). Perceived self-efficacy has to do with people's beliefs in their abilities to produce given attainment (Bandura, 2006; Bandura, 1997). Depending on the personal set goals, selfefficacy is one of the most powerful motivational predictors of how well a person will perform the behaviour in question (Heslin & Klehe, 2006). Thus, a user's self-efficacy is used in this study as a determinant of their effort, confidence, persistence, strategizing to use Ohyay platforms. Self-efficacy expectations significantly added to the prediction of intention and reported to have a direct effect on behaviour (de Vries, Dijkstra & Kuhlman, 1988). SE influenced behavioural intentions and emerged as a distinctive predictor of users' intentions (Terry & O'Leary, 1995). In a study on students' level of mobile learning acceptance, students scored high in SE and Effort Expectancy (SE) (Irby & Strong, 2013). A different study examined the structural relationship between SE and EE among other constructs on mobile learning services, SE showed a positive effect on EE based on the extended technology acceptance model (Sung et al., 2015).

H4: Self-Efficacy positively influence Effort Expectancy to use Ohyay

H5: Self-Efficacy positively influence behavioral intention to use Ohyay

#### E. Readiness

Parasuraman (2000) defined the technology-readiness (RE)construct as people's propensity to embrace and use new technologies for accomplishing goals in home life and at work. RE explains the users' interactions with new technologies and simultaneously present different views including beliefs, perceptions, feelings, and motivations (Chiu & Cho, 2020; Parasuraman, 2000). The construct can be viewed as an overall state of mind resulting from a gestalt of mental enablers and inhibitors that jointly determine a person's tendency to use new technologies such as Ohyay (Parasuraman, 2000). RE assures if the new technology such as Ohyay will integrate smoothly and perform as expected in the user's environment. In this study, RE is assessing the users' convenience, confidence, and opportunity to create immersive virtual space to use Ohyay platforms. In addition, RE tests the user's preference to use Ohyay over other platforms and how it allows the users to tailor things to fit his/her own needs. Clausing and Holmes (2010) emphasised that if RE is not assessed, unpredictable performances may disrupt at later stages while the users are exploiting the said technology. Rahardjo (2018) states that user's positive conviction pushes them towards new technology, while negative belief might hold them back. RE in this case reveals the user's willingness, readiness to accept and adapt the Ohyay platforms (Tahar, Riyadh, Sofyani & Purnomo, 2020). The level of students' readiness to use Online Tutorials revealed that student motivations and the anticipations of successes in utilizing online tools were the utmost strong indicators of their intentions (Rahardjo, 2018). Both the (RE) and (SE) constructs have been studied independently to predict technology usage; nonetheless, (Chan & Lin, 2009) did not figure out the one that has a stronger linkage with the behavioural intentions to use self-service technology.

H6: Readiness will positively influence behavioral intention to use Ohyay

#### F. Hedonic Motivation

Hedonic motivation (HM) refers to the willingness to initiate behaviour that enhances the positive, pleasant or good experience and behaviours that decrease negative experience (Venkatesh, Thong & Xu, 2012; Venkatesh et al. 2012). The hedonic motivation system has shown a strong positive relationship with using information systems and assist in determining adoption for using digital technologies (Kim & Hall, 2019). Hedonic or pleasure-oriented motivation focuses on providing self-fulfilling, fun-aspect of using information systems both at home and during leisure activities (Van der Heijden, 2004). Researchers modified the TAM to be more appropriate in explaining the adoption of mainly hedonic motivation systems (Kim & Hall, 2019). In this study, HM is used to test the fun, enjoyment, excitement, and entertainment levels of Ohyay platforms to its users. Hedonic motivation is an important predictor of users' intention towards technology acceptance (Venkatesh et al. 2012) which in this case is Ohyay platforms. A significant impact of hedonic motivation, technology readiness was reported on user's continuance intention towards personal cloud services (Chen et al., 2021). Based on findings, there is a positive and significant relationship between HM and the student's intention to use online tutorials, with the mediating role of e-learning readiness (Rahardjo, 2018). HM affect consumer shopping intention (Chang & Chen, 2021). In their study Chang and Chen(2021), technology readiness reported a positive significant influence on smart shopping intention. This implies that when the users have a high level of technology readiness, there is a high possibility for them to use the technology in question. Hedonic motivation showed a significant effect on behavioural intention of using e-money through payment habit as a mediator (Khatimah, Susanto & Abdullah, 2019. Hedonic motivation has a direct influence on behavioural intentions as reported in a study by (Venkatesh et al. 2012).

H7: Hedonic Motivation will positively influence Readiness to use Ohyay

H8: Hedonic Motivation will positively influence behavioral intention to use Ohyay

## G. Behavioural Intention

The Theory of Planned Behaviour (TPB) of Ajzen (1985) is an extension of the Theory of Reasoned Action (TRA) of Fishbein & Ajzen (1975) (Ajzen, 1991). TPB has been the leading theoretical approach on behaviour related research for the past decades (Sniehotta, Presseau & Araújo-Soares, 2014). Behavioural Intentions (BI) are assumed to capture the motivational factors that influence a person's behavior (Ajzen, 1991; Khechine et al., 2014). Behavioral intention refers to a person's level of intention to use technology ( Ambarwati et al., 2020; Venkatesh et al., 2012) which in this study is Ohyay platform. Additionally, the Unified Theory of Acceptance and Use of Technology (UTAUT) model has demonstrated the influencing factors for basic information systems use such as tablet personal computer (TPC) and mobile communication (Jamaludin & Mahmud, 2011). The UTAUT model has been widely used to explain user acceptance and use of technology (Khechine et al., 2014). BI in this study focuses on the users' intentions to use the Ohyay platforms. The BI construct also

focuses on its relationship with PE, FC, EE, SE, RE and HM constructs as predictors of BI. Ajzen and Fishbein (1969) states that prediction based on Fishbein's model found that BI for single acts as well as for acts in dichotomous and multiple-choice situations are a function not only of attitudes toward the acts but also of normative beliefs with respect to the behaviour.

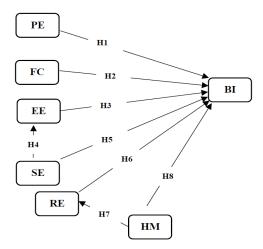


Fig. 2. Hypothesis Development

#### III. METHODOLOGY

To investigate the global readiness of different stakeholders embracing a new immersive virtual space (Ohyay) for collaboration, teaching, learning, and other general purposes, this study adopted the partial least squares structural equation modeling (PLS-SEM) approach to analyze quantitative data collected from users and prospective users of the platform.

#### A. Data Collection and Instrument

Question items used to collect data for this study were adapted from the unified theory of acceptance and use of technology 2 (UTAUT2) instrument (Bower, DeWitt, & Lai, 2020), including self-efficacy (Bandura, 2005) and RE (Chai, et. al., 2021) with minor adjustments of rewording to fit the specific technology (Ohyah virtual platform). The survey was designed on a 5-point Likert scales ranging from 1 (strongly disagree) to 5 (strongly agree) to measure the seven constructs utilized in the study and presented in Figure 1: Performance Expectancy (PE), Effort Expectancy (EE), Self-Efficacy (SE), Facilitating Conditions (FC), Hedonic Motivation (HM), Readiness (RE) and Behavioural Intention (BI). The targeted group for this survey were the researchers, educators, students, and working-class people. Understandably, while it was anticipated that not all participants may be aware or even have used Ohyay platform since it was developed recently, a short video about Ohyay was provided as part of the first content in the online survey. Participants were asked to first watch the video before attempting to respond to the questions if they are not aware of the platform.

The invitation to participate in this study containing the link to the online survey was sent to participants across the globe through various online communication medium such as email, skypes, WhatsApp, LinkedIn, and Facebook. Convenient sampling was used to select participants, which leveraged the networks of the authors. The information in this invitation included a brief explanation on the rationale behind the study, instruction on how to participate, and a clear

information about the intention to use the data anonymously only for research purpose. Besides, the participants were informed of their right to decline from participating in the study at any stage since participation is voluntary.

#### B. Participant and Ethics

The invitation to participate in this study containing the link to the online survey was sent to participants across the globe through various online communication medium such as email, skypes, WhatsApp, LinkedIn, and Facebook. Convenient sampling was used to select participants, which leveraged the networks of the authors. The information in this invitation included a brief explanation on the rationale behind the study, instruction on how to participate, and a clear information about the intention to use the data anonymously only for research purpose. Besides, the participants were informed of their right to decline from participating in the study at any stage since participation is voluntary.

#### C. Data Analysis

To test the hypothesis formulated in this study which are demonstrated in the PLS-SEM conceptual framework shown in Figure 1, we utilized the WarpPLS 7.0 software (Kock, 2020). WarpPLS software is suitable for analyzing both factor-based SEM and non-leaner analysis of structurally linked variables in path models. (Kock, 2019). Table I shows the demographic characteristics of the participants where 142 participants completed the survey. Out of this total number of participants, male and female were represented equally (49%) while 2% preferred not to disclose their gender. The majority of the participants (56%) are between the ages of 26 to 35 years, whereas, bachelor and master students formed the larger chunk of the participants.

TABLE I. DEMOGRAPHIC CHARACTERISTICS

Classification	Frequency	Percentage%
Gender		
Female	70	49 %
Male	69	49 %
Prefer Not to Say	3	2 %
Age		
Less than 17	2	1 %
18-25	17	12 %
26-35	79	56 %
36-45	35	25 %
46 and above	9	6 %
Education		
Diploma	20	14 %
Bachelor	56	39 %
Masters	45	32 %
PhD	13	9 %
No formal Education	8	6 %
Level of Awareness		
Low	25	18 %
	16	11 %
Neutral	49	35 %
	30	21 %
High	22	15 %
Accuracy of		
Responses		
Completely accurate	98	69 %
Partially accurate	42	30 %
Neither	2	1 %

Classification			Frequency	Percentage%		
Interest Ohyay	to	Use				
Yes			137	96 %		
No			5	4 %		

#### D. Measurement Model

The study conducted the reliability and validity of the constructs for measurement model. Besides, the model fit was assessed as seen in Table II, which shows that the model measurement is satisfied based on the criterial for conducting SEM with WarpPLS (Kock, 2019).

Moreover, the assessment of the composite reliability (CR) coefficients in Table V provides details that delineate the model's internal consistency and reliability. In addition, the average variance extracted (AVE) which determine the convergent validity of the constructs (Ifinedo et al. 2020) shows that each construct value is greater than 0.5. According to Hair et al. (2011), AVE values greater or equals 0.5 is recommended. Regarding the CR, we assessed the constructs and obtained values that were greater than the recommended threshold values of 0.7 according to literature (Ifinedo et al. 2020; Olaleye et al., 2020). In addition, the standardized loading of indicators for each construct depicts that the items' reliability to load on their theoretical constructs were satisfactory since their values are all greater than the acceptable threshold of 0.7 (Ifinedo et al. 2020).

TABLE II. MODEL FIT AND QUALITY INDICES

Ouality			
indices	Criterion	Result	Interpretation
APC	P value $\leq \alpha$ (5%)	P<0.001	Acceptable
ARS	P value $\leq \alpha$ (5%)	P<0.001	Acceptable
AARS	P value $\leq \alpha$ (5%)	P<0.001	Acceptable
AVIF	A if <=5, ideally <= 3.3	3.347	Acceptable
AFVIF	A if <=5, ideally <= 3.3	2.945	Acceptable
	Small>=0.1, Medium >=0.25,		
FoF	Large >=0.36	0.700	Large
SPR	A if $\geq 0.7$ , ideally = 1	1.000	Acceptable
RSCR	A if $>= 0.9$ , ideally $= 1$	1.000	Acceptable
SSR	A if $>= 0.7$	1.000	Acceptable
NLBCDR	A if $ > = 0.7 $	1.000	Acceptable

APC=Average path coefficient, ARS= Average R-squared, AARS= Average adjusted R-squared, AVIF= Average block VIF, AFVIF= Average full collinearity VIF, FoF= Tenenhaus GoF, SPR= Sympson's paradox ratio, RSCR= R-squared contribution ratio, SSR= Statistical suppression ratio, NLBCDR=Nonlinear bivariate causality direction ratio, A=Acceptable

Moreover, the assessment of the composite reliability (CR) coefficients in Table V provides details that delineate the model's internal consistency and reliability. In addition, the average variance extracted (AVE) which determine the convergent validity of the constructs (Ifinedo et al. 2020) shows that each construct value is greater than 0.5. According to Hair et al. (2011), AVE values greater or equals 0.5 is recommended. Regarding the CR, we assessed the constructs and obtained values that were greater than the recommended threshold values of 0.7 according to literature (Ifinedo et al. 2020; Olaleye et al., 2020). In addition, the standardized loading of indicators for each construct depicts that the items' reliability to load on their theoretical constructs were satisfactory since their values are all greater than the acceptable threshold of 0.7 (Ifinedo et al. 2020).

TABLE III. CORRELATIONS AMONG LATENT VARIABLES WITH SQ.RTS OF AVES

Items	НМ	EE	PE	FC	SE	RE	BI
HM	0.929	0.635	0.659	0.711	0.681	0.647	0.670
EE	0.635	0.919	0.707	0.699	0.683	0.689	0.668
PE	0.659	0.707	0.947	0.672	0.693	0.623	0.759
FC	0.711	0.699	0.672	0.854	0.634	0.615	0.710
SE	0.681	0.683	0.693	0.634	0.944	0.698	0.682
RE	0.647	0.689	0.623	0.615	0.698	0.903	0.728
BI	0.670	0.668	0.759	0.710	0.682	0.728	0.932

Square roots of average variances extracted (AVEs) shown on diagonal.

TABLE IV. STANDARDIZED PATH COEFFICIENT FOR TESTED MODEL

Нур	Path Links	β	T Ratio	P-value	Result
H1	$PE \rightarrow BI$	0.34	4.43	< 0.001	Significant
H2	$FC \rightarrow BI$	0.24	3.08	< 0.001	Significant
Н3	$EE \rightarrow BI$	0.04	0.49	< 0.05	Not Significant
H4	$SE \rightarrow EE$	0.72	10.18	< 0.001	Significant
H5	$SE \rightarrow BI$	0.08	0.92	< 0.05	Not Significant
Н6	$RE \rightarrow BI$	0.34	4.40	< 0.001	Significant
H7	$HM \rightarrow RE$	0.66	9.15	< 0.001	Significant
Н8	$HM \rightarrow BI$	0.01	0.12	< 0.05	Not Significant

Square roots of average variances extracted (AVEs) shown on diagonal

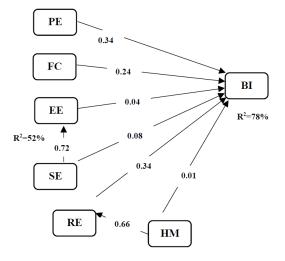


Fig. 3. Hypothesis Development Tested

#### IV. RESULT

This study explained the quality criteria for the chosen variables and all the factors, and their items conform to their specific thresholds. Eight hypotheses were formulated based on the existing literature to understand the direction of this study better. The proposed Ohyay behavioral intention model reflects the direct and indirect path coefficient of the variables. Performance Expectancy, Facilitating Conditions, Effort Expectancy, Self-Efficacy, Readiness, and Motivation directly predicts the behavioral intention of Ohyay, while Self-Efficacy and Hedonic Motivation indirectly predicts behavioral intention through Effort Expectancy and Readiness. The results show that H1: performance expectancy -> behavioural intention ( $\beta = 0.34$ , t = 4.43, p < 0.001). H2: facilitating conditions -> behavioural intention ( $\beta = 0.24$ , t = 3.08, p < 0.001). H3: effort expectancy -> behavioural intention ( $\beta = 0.04$ , t = 0.49, p > 0.05). H4: self-

TABLE V. STANDARDIZED LOADING AND CONSTRUCT RELIABILITY

Items	HM	EE	PE	FC	SE	RE	BI	P-Value
HM1	0.929	0.542	0.563	0.612	0.646	0.605	0.594	< 0.001
HM4	0.929	0.637	0.662	0.709	0.620	0.597	0.651	< 0.001
EE1	0.601	0.919	0.623	0.676	0.648	0.633	0.645	< 0.001
EE4	0.566	0.919	0.678	0.609	0.607	0.634	0.583	< 0.001
PE1	0.641	0.677	0.947	0.628	0.658	0.586	0.728	< 0.001
PE4	0.607	0.662	0.947	0.644	0.654	0.594	0.709	< 0.001
FC1	0.558	0.523	0.498	0.854	0.458	0.437	0.537	< 0.001
FC4	0.658	0.672	0.650	0.854	0.626	0.614	0.676	< 0.001
SE1	0.656	0.686	0.658	0.620	0.944	0.632	0.637	< 0.001
SE4	0.629	0.602	0.649	0.577	0.944	0.686	0.650	< 0.001
RE3	0.631	0.647	0.588	0.593	0.658	0.903	0.662	< 0.001
RE4	0.536	0.598	0.537	0.518	0.602	0.903	0.653	< 0.001
BI1	0.665	0.603	0.714	0.667	0.648	0.651	0.932	< 0.001
BI2	0.583	0.642	0.701	0.655	0.622	0.706	0.932	< 0.001
CR	0.926	0.916	0.945	0.844	0.942	0.898	0.929	
AVE	0.926	0.916	0.945	0.844	0.942	0.898	0.929	
VIF	3.373	4.318	3.182	3.228	3.959	2.024		

efficacy -> effort expectancy ( $\beta = 0.72$ , t = 10.18, p < 0.001). H5: self-efficacy -> behavioural intention ( $\beta = 0.08$ , t = 0.92, p >0.05). H6: readiness -> behavioural intention ( $\beta = 0.34$ , t = 4.40, p < 0.001). H7: hedonic motivation -> readiness ( $\beta$  = 0.66, t = 9.15, p < 0.001). H8: hedonic motivation -> behavioural intention ( $\beta = 0.01$ , t = 0.12, p > 0.05). Out of the eight hypotheses proposed, only five were significant (H1-H2, H4, H6-H7), while three were insignificant (H3, H5, and H8). For indirect path-coefficient, self-efficacy is the highest predictor of effort expectancy, followed by hedonic motivation as the predictor of readiness, but readiness is the highest predictor of behavioral intention (Table IV). The R<sup>2</sup> for the path-coefficient self-efficacy and effort expectancy accounts for 52%. Also, the R<sup>2</sup> for the path-coefficient between hedonic motivation and readiness accounts for 44%. The overall model R<sup>2</sup> is 78%, and 22% of the variance could be explained, indicating that more variables can make the proposed model robust (Figure 2). The R<sup>2</sup> reveals the strength of the model as near moderate, moderate, and substantial criteria as against the thresholds of 0.25 (weak), 0.50 (moderate), and 0.75 (substantial) as proposed by (Henseler, Ringle & Sinkovics, 2009).

## V. DISCUSSION

This study applied the UTAUT2 model with the SE and RE factor in order to investigate specific constructs-factors predicting potential users and users Behavioral Intention to use Ohyay. Investigating users' intention to use ohyay virtual space is relevant since successful adoption and use of a new technology depends on users' beliefs (Olaleye and Sanusi, 2019). When users perceive that ohyay has a value, they are more likely to use it for educational purposes and or relevant activities or practices. It was found that PE, FC, and RE affected significantly users' BI to use Ohyay, SE influences EE and HM positively affects RE to adopt Ohyay. However, EE, SE and HM had no significant effect on BI. RE was the most significant predictor of behavioural intention to use Ohyay while for the indirect effect, SE is the highest predictor of EE followed by HM that predicts RE (see Table IV). The findings revealed that PE affects users' BI to use Ohyay. The use of Ohyay is therefore perceived as useful, relevant and valuable. There is not in tandem with previous research that utilized UTAUT to understand BI to use specific technologies (Chao, 2019; Adov, 2020; Nikolopoulou, 2021). RE strongly

predicted users' BI to use Ohyay; it means that increased willingness and determination to embrace new technology such as Ohyay results in higher level of intention to utilize this tool for any activity. This finding of RE impact is in line with earlier studies (Rahardjo, 2018; Tahar, Riyadh, Sofyani & Purnomo, 2020). FC was also shown to have impact on BI; it means that users' believe that technical and infrastructure to adopt the use of Ohyay is available. Similar result was revealed by Bower, et. al (2020).

The insignificant effect of HM on BI was also shown, and this disagrees with earlier studies of Chao (2019), Bower, et al. (2020) and Nikolopoulou (2021). This simply translate to mean that the fact that users perceived an enjoyable experience while using Ohyay is not a pointer to its adoption for either educational or non-educational activity. It is expected that users will experience a high level of enjoyability when using Ohyay and by so doing increase engagement and benefits of its adoption. This finding suggests further investigation as to why HM has no influence on BI to use Ohyay. While earlier studies (e.g., Chan & Lin, 2009; Adov, 2020) found that SE predicts technology usage intention, this study shows that SE has no influence on the intention to use Ohyay. EE was also not found significant in the study; it shows that the respondents identified that Ohyay was not quite easy to use. Earlier studies (Sung et al., 2015; Bower, 2020) have emphasized the influence of EE on technology adoption which is an indication that EE is a strong determinant the use of Ohyay.

The findings suggest that the UTAUT2 approach with the SE and RE factor can be implemented to identify certain constructs affecting users' and potential users' intentions to adopt an emerging technology such as Ohyay for educational or non-educational activities.

#### A. Implication

This study shows that the Ohyay platform is advantageous, and its performance is enhancing to the users. It also shows that the level of easiness of the Ohyay platform can be possible through self-efficacy, while hedonic motivation is crucial for using the Ohyay platform. It is believed that the Ohyay platform will be interoperable with other existing platforms and that there will be support to use the Ohyay platform. Based on the earlier premise, this study offers four managerial

implications. First, the immersive virtual space managers should pay attention to four pillars of sustainability (human, social, economic, and environmental sustainability) as Ohyay begins to diffuse globally. The managers should seek to maintain and improve the human capital in the society and shared ideas of equality and rights. They should also showcase how Ohyay can improve the standard of living of its users and showcase a green label on their platform. Second, the immersive virtual space managers should build the confidence of Ohyay users and assure them of the platform's easiness. Since it is an emerging immersive platform, the managers should think beyond the technophile and simplify some processes on the Ohyay platform that can put off the technophobe. This development will give an equal chance to technophile and technophobe. Third, the managers should add more features on the Ohyay platform to make it more interoperable with multiple existing platforms. This effort will add value to the Ohyay platform as many users will be added to the platform. Lastly, the immersive virtual space managers should enhance the hedonic features of the Ohyay platform because this will increase the readiness index of the Ohyay platform. This study shows that users are ready to maximize the Ohyay platform's potential, and this study suggests that managers introduce different pricing accommodate affluent and non-affluent customers.

## B. Limitation and future research

This study is not without limitations. The Ohyah virtual platform is targeted at a global audience, with users worldwide accessing the platform through the internet. Consequently, this study should collect data from a global audience to arrive at more factual findings regarding users' behavioral intentions. However, our current study did not cover the entire globe. That is, the number of participants and the study context limits the generalizability of the study findings. In addition, this study analyzed the quantitative data of participants, limiting the extent to the understanding of the findings can be interpreted. Mixed-method research that combines both the quantitative and qualitative analysis could have provided a better insight regarding specific reasons why users have responded the way they did. Despite these limitations, notwithstanding, this study provided initial findings that have created an opportunity for future research to embark on cross-country analysis of Ohyah adoption rate. The authors would seize this opportunity in the future to carry out an extensive study that addresses other aspects of interest, including these limitations. Since Ohyay possibilities are endless, future research will explore its usefulness for specific and across sectors other than educational activities

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