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Factors Affecting Acceptance of E-marketplace Based On Hybrid Model of Modified TAM-TRI

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Abstract-In challenging COVID-19, the tourism sector must conduct digitization due to fulfill "less contact economy" development program. In this pandemic situation, the government of Nusa Dua Bali develops Business Process Reengineering (BPR) of Tourism Activities E-marketplace that involving local entrepreneurs as the user. This paper objective was to determine the factors that were affecting the acceptance of e-marketplace with case study local tourism entrepreneurs in Nusa Dua Bali. The TARIM model used in this research was a modified model of conventional Technology Acceptance Model - Technology Readiness Index (TAM-TRI) model by inserting the Technology Availability and Computer Self Efficacy into the model. The analysis technique used in this research was the Structural Equation Model Using Partial Least Square method. Results showed that the Readiness factor had a significant direct impact on the Acceptance of e-marketplace. While the significant indirect effects were given by Technology Availability and Perceived Usefulness factors.

Keywords—e-marketplace, Acceptance, TARIM, Technology Acceptance Model, Technology Readiness Index

I. INTRODUCTION

COVID-19 presents a new challenge for the world of tourism. Inevitably, now all tourism destinations must conduct digitization due to fulfill "less contact economy" development program. COVID-19 prove that digitization is not a hype. Digitization is about utilizing technological progress mixed with business and sociocultural aspects [1].

Actually, tourism development has led to e-tourism. E-tourism is one component of smart tourism. Smart tourism is a tourism information service that is accepted by tourists everywhere [2]. Seen from ITB World travel trends 2017/2018 that reported the strong development of tourism demands the existence of tourism information services based on e-tourism. ITB World travel trends 2017/2018 also reported that the next big key market is millennial travelers. Millennial travelers are better educated. They are well-informed before traveling and use of more sources of information for travel planning. It's mean they must be utilized in Information, Communication and Technology (ICT) specifically e-tourism in traveling.

The effect of ICT in tourism is increasingly clear. The ability to redevelop the tourism product proactively and reactively is important to face the challenge in future tourism which is focused on consumer-centred technology that supports the organization to interact with their consumer dynamically. The development of ICT application can increase the efficiency both in term of supplier or tourism destination, and also can re-engineer their communication strategy. Innovative technology will support interoperability, personalization, and constant networking [3]. Added by [4] by

using the internet as a marketing tool, the tourism organization will be successful in increasing the profit, reducing cost, developing marketing research and consumer maintenance.

Nusa Dua Bali (Indonesia) is one of the popular tourist destinations in Asia. Nusa Dua Bali often becomes the venue of many international forums. How ever, Nusa Dua Bali does not have its own ICT-based application that can simplify the local people as entrepreneurs of tourism activities and products to sell their products or services. In this pandemic of Covid 19 situation, the government of Nusa Dua develops Business Process Reengineering (BPR) of Tourism Activities E-marketplace that involving local entrepreneurs as the user.

In planning the Bussiness Process Reengineering (BPR) of Nusa Dua Tourism Activities E-marketplace, the diagnosis of factors that affecting the acceptance of e-marketplace in Nusa Dua Bali for local entrepreneurs needs to be done. Thus the new business process that will be produced in BPR design phase will be optimal. The successful of BPR w 124 nelp the local entrepreneur in challenging COVID-19. This paper objective was to determine the factors that were affecting the acceptance of e-marketplace with case study local tourism entrepreneurs in Nusa Dua Bali.

II. CONCEPTS AND RELATED RESEARCHES

Previous studies sho 83 several models that can be used to determine factors affecting the acceptan 52 of new technologies. One of those methods is Technology Acceptance Model (1114). The Technology Acceptance Model (TAM) by [5] is one of the model that attempted to address the process of acceptance 13 he technology and the uses by consumers [6]. This model is one of the most popular research models to predict the use and acceptance of 18 rmation systems and technology by individual user [7]. This model uses five factors, which are perceived ease of use, perceived usefulness, behavioral intention, attitudes and actual usage. The TAM model has already been applied in various research fields, such as the research that had been done by [6] - [12].

The acceptance of new technology can not be separated by the readiness of the users. Technology Readiness Index (TRI) which in 41 ted by [13] is a model that is used to assess people's readiness to adopt new technology. This model has been widely used by n 4 hy researchers [14]. TRI assesses individual's willingness to embrace and use new technologies for accomplishing goals in life and at work [13]. There are 39 main constructs in TRI model, which are innovativeness, optimism, discomfort, and insecurity. Technology readiness thrives on optimism and innovativeness while discomfort and insecurity inhibit people from accepting new technolog 81 Many works of literature have used this model to test the

individual's tendency to use new technologies, such as [15] – [20].

The combination of TAM and TRI model has already been done before in the last decade, one of them was [14]. In their research, they hybridized an extended Technology Readiness Index with Technology Acceptance Model (TAM) to predict E-payment Adoption in Ghana. Another similar research was done by [15]. In their paper entitled "Understanding adoption of new technology readiness and technology acceptance as an integrated concept", they stated that 17te paradigm in technology adoption and acceptance was system-specific and focused on how a technology's attributes affect an individual's perception on technology. In this para 6 gm, the TAM model is the most widely used. While the other paradigm focuses on latent personality dimensions to explain the use and acceptance of new technologies, or in other words, an individual's personality influences the potential acceptance of technology in general. The Technology Readiness Index (TRI) follows this approach. That two paradigms should be integrated in one model [15]. Another integrated TAM and TRLinone model was also done by [16] – [18].

In this study, the TAM model was modified by inserting the factor of Technology Availability, Computer Self Efficacy, and also TRI factors into the model. Thus this model was called a hybrid model of modified TAM-TRI, which will be called 68 RIM Model. The detail of TARIM model described in the third section (research model and hypotheses).

III. RESEARCH MODEL AND HYPOTHESES

Based on the above analysis, the core of research model is established integrated model called TARIM, which include 10 ren (10) latent variables: Technology Availability, Computer Self Efficacy, Perceived Credibility, Perceived Usefulness, Perceived Ease of Use, Optimism, Innovation, Uncomfortability, Insecurity, Readiness, and Acceptance. The model that is used in this research is shown by Fig. 1.

side, [23] on his research about examining the effect of computer self-efficacy and system c 19 lexity on technology acceptance had a conclusion that the impact of Computer Self Efficacy on Perceived Usefulness was significant in the negative direction. Based on those studies, the first hypothesis in this research was stated as follow:

HI: Computer Self Efficacy has a significant impact to Perceived Usefulness

The availability of technology such as a computer or smartphone can make people use technology more often than the people who don't have technology with them. Empirical evidence indicates the availability of technology (computer/smartphone/internet experience) leads to the formation of positive attitudes toward technology [24] – [27]. When people use technology more often, they will feel that technology can be mastered and they will feel the usefulness of technology. Thus, H2 and H2 were stated as follow:

H2: Technology Availability has a significant impact on the Perceived Usefulness

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H3: Technology Availability has a significant impact on the

Perceived Ease of Use

hypothesis was built as foll 21:

Some additional variables were suggested in TA 12 odel by many researchers [28]. According to them, it was required to drive a better understanding of determinant factors influencing the decision of people to use new technology. Thus, Perceived Credibility needs to be added into T 65 classical model [29] – [31]. Many studies have found out that Perceived Credibility has a significant impa 21 on the acceptance of the new technology toward people's perception of the ease of use of the new technology. Therefore, a

H4: Perceived Credibility has a significant impact on the Perceived Ease of Use

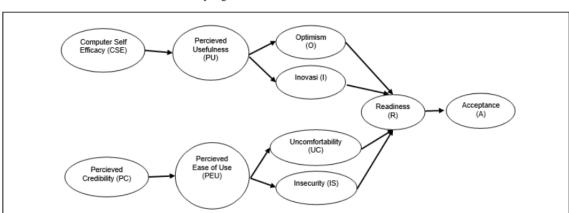


Fig. 1. TARIM Model

of the relationship between Computer self-efficacy and Perceived Usefulness, such as to 19 tudy that had been done by [19], [20]. They found out that Computer Self Efficacy had a significant positive impact on Percei 63 Usefulness. While, other studies conducted by [21], [22] stated that there was no significant effect between the two constructs. On the other

In other researches, the relationship that had been studied were the effects of people behavioral factor (optimism, innovativeness, unco 56 tability, and insecurity) to the people's perception in new technology (perceived use 57 less and perceived ease of use) [14], [15], [32]. But in this research, we tried to conduct a different approach. The effects

that will be tested are the people's perception of new technology on their behavioral. Therefore, the hypotheses are:

H5: Perceived Usefulness has a significant impact on Optimism

H6: Perceived Usefulness has a significant impact on Innovation

[9] argued that perceived ease of use also influences, in a significant way, the attitude of the individual.

H7: Perceived Ease of Use has a significant impact on Uncomfortability

H8: Perceived Ease of Use has a significant impact on Insecurity

As the collaboration of TAM-TRI model, we include the four constructs of TRI into the factors that possible to have an impact on the readiness and acceptance of the tourism activities e-marketpla 77 in Nusa Dua Bali. Technology readiness thrives on optimism and innovativeness, while uncomfortability and inse 32 ty inhibit people from accepting new technologies [14]. The correlation between people's technology readiness and acceptance to their propensity to employ new technologies are empirically confirmed by [13]. Another previou 33 ludy held by [33], [34] showed the result that individuals with high optimism and innovativeness, also low discomfortability and insecurity are more likely to use and accept new technologies. Therefore the Hypothesis 9 to 12 in this research were stated as follow:

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H9: Optimism has a significant impact on Readiness

H10: Innovation has a \$22 ificant impact on Readiness

H11: Uncomfortability has a significant impact on Readiness

H12: Insecurity has a significant impact on the Readiness

A final hypothesis is to know the effect of people's readiness of new technology (tourism of e-marketplace in Nusa Dua, Bali) into people's acceptance of that technology. The hypothesis is:

H13: Readiness has a significant impact on the Acceptance

In addition, there are also indirect effects based on that model. Some of those effects were tested using the hypothesis:

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H14: Computer Self Efficacy has a significant indirect effect on the Acceptan 26

H15: Computer Self Efficacy has a significant indirect effect on the Readiness 79

H16: Technology Availability has a significant indirect effect on the Acceptance

H17: Technology Availability has a significant indirect effect on the Readiness

H18: Perceived Credibility has a significant indirect effect on the Acceptance

H19: Perceived Credibility has a significant indirect effect on the R 24 ness

H20: Perceived Usefulness has a significant indirect effect on the Acceptance

H21: Perceived Usefulness has a significant indirect effect on the Readiness

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H22: Perceived Ease of Use has a significant indirect effect on the Acceptance

H23: Perceived Ease of Use has a significant indirect effect on the Readiness

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IV. RESEARCH METHOD

This research was a case study of quantitative research. The subject of this research was tourism entrepreneurs located in Nusa Dua Bali, while the object was the acceptance of the tourism entrepreneurs. The research was held from March until June 2020 after COVID-19 attacked the tourism economy. The 20 a collection of this research was using a questionnaire. The sampling technique used in this research was simple random sampling where all of the tourism entrepreneurs in Nusa Dua had the same probability of being research samples. The number of samples used is 100 entrepreneurs.

The analytical method was Structural Equation Modeling using Partial Least Square (PLS). The evaluation phase of the model was:

- Create a path diagram. The path diagram in this research contained ten (10) latent variables and forty (40) indicators. The latent variables were drawn as a rectangular shape, and the indicators were drawn as ellipse shape. The path diagram in this research is shown in Fig. 1.
- Evaluation of measurement models is carried out using the indicator validity criteria (loading factor must be greater than 0.4), Construct validity (composite reliability vill and cronbah's alpha must be greater than 0.6), convergent validity (value of Average Variance Extracted (AVE) must be greater than 0.5)
- 3. Evaluation of structural models using the criteria of R-square, F-Square, and Square.
- Hypothesis testing the effect of exogenous latent variables on endogenous latent variables in the model.

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V. RESULT AND DISCUSSION

In this section, some main data analysis results will be presented, including: (1) descriptive statistics of sample, (2) evaluation of measurement model using Composite Reliability, Cronbach Alpha test, Average Variance Extracted, (3) evaluation 1 structural model using F square and Q square criteria, (4) the hypothesis and model test using Structural Equation Model Analysis, (5) readiness and acceptance level and finally (6) result discussion.

A. Sample Description

The survey was conducted in Nusa Dua, Bali, Indonesia from March to June 2020 using an online method in data collecting, The questionnaire had three parts: (1) basic information of respondents, (2) the characteristic of respondents according to their internet and colouter using, and (3) main factors of the research model. The sampling technique used in this research was simple random sampling where all of the tourism entrepreneurs in Nusa Dua Bali had the same probability of being research samples.

There are 100 collected samples in this research which are valid for the analysis. In 100 respondents, there were 29 % female and 47% male. The youngest respondent was 16 years old, and the oldest one was 61 years old. The average age of the respondents was 34 years old. According to the education background, there were 19% of respondents who had Junior High School as latest education level, 53% had Senior High School degree, 18% were from third diploma graduated, 9% were forth Diploma or bachelor degree, and 1% of the respondents had a Doctoral Degree. Based on their business, the average number of running a business was 6 years. The newest business was 1 year, and the oldest was 20 years. The minimum time of respondents' internet accessing was 0 hour and a maximum of 14 hours a day, while the average time of internet accessing was 9 hours a day. About e-marketplace, 66% of respondents answered they have already known about e-marketplace, while 34% other did not know about emarketplace.

B. Validity and Reliability Testing

Before collecting the sample data using a questionnaire, the questionnaire itself was tested by validity and reliabil 44 test. A validity test was performed on each item of the questionnaire questions to determine the validity of the items in the questionnaire. The test statistic used in the valid test was r-value. The r-value was compared with the r-table obtained from the r (Pearson Product Moment) table with degrees of freedom (df) of n-2 where n was the number of respondents used. In this research, the number of respondents was 100, hence the r-table for 98 degrees of freedom was 0.1966. The items of the questionnaire that had r-value higher than 0.1966 were stated as valid items. In addition to the validity test, the questionnaire must also be tested for reliability. The reliability test was used to measure if the questionnaire can be trusted. The vale used as a reliable benchmark on the reliability test is the Cronbach's Alpha value. The questionnaire would be declared as reliable if the Cronbach's Alpha value was greater than 0.6.

71 The result of validity testing is all of the indicators has r value grea 23 han 0.1966, and the cronbach's alpha value for reliability test is 0.895, this value is greater than 0.6. Thus, the questionnaire is stated as valid and reliable.

C. Evaluation of Measurement Model

Evaluation 48 measurement models is represented in Table I with Average Variance Extracted (AVE) value, Composite Reliability va 72 and also Cronbach's Alpha value. Tab 36 shows that all the variables have Cronbach's Alpha and Composite Reliability greater than 0.6 and AVE are greater than 0.4. Thus, all the variables used in this model stated reliable.

D. Evaluation of Structural Model

Eva 5 tion of structural models is carried out using the criteria of R Square and Q Square. The value of R Square and Q Square which approa 70 s 1 indicates the strength of a good model. Table II shows the R-Square and Q-Square values.

TABLE I. EVALUATION OF MEASUREMENT MODELS VALUES

Variable	Composite Reliability	Cronbach's Alpha	AVE
Acceptance (A)	0,964	0,994	0,900
Computer Self Efficacy (CSE)	0,976	0,957	0,953
Innovation (I)	0,938	0,869	0,884
Insecurity (IS)	0,957	0,932	0,800
Optimism(O)	0,954	0,928	0,873
Precived Credibility (PC)	0,965	0,945	0,903
Perceived Ease of Use (PEU)	0,954	0,944	0,750
Perceived Usefulness (PU)	0,962	0,954	0,785
Readiness (R)	0,966	0,929	0,934
Technology Availability(TA)	0,943	0,919	0,805
Uncomfortability (UC)	0,959	0,936	0,886

TABLE II. EVALUATION OF STRUCTURAL MODELS VALUES

Variable	R-Square	Q Square
Acceptance (A)	0,780	
Innovation (I)	0,601	
Insecurity (IS)	0,444	
Optimism(O)	0,575	0.000
Perceived Ease of Use (PEU)	0,635	<mark>0</mark> ,999
Perceived Usefulness (PU)	0,429	
Readiness (R)	0,666	
Uncomfortability (UC)	0,367	

The result on Table II shows that the model built with Acceptance as an endogenous latent variable has R-square value as 0.78 or 78% (categorized as a strong model). While the model with Innovation (I) as endogenous latent variable had R-value as 58 %, Insecurity (IS) as 44.4%, Optimism (O) as 57.5%, Perceived Ease of Use (PEU) as 63.5%, Perceived Usefulness (PU) as 41.9%, Readiness as 66.6% and Uncomfortability (U) as 36.7%. Those models are categorized as moderate models.

Q-square value of 0.999 or 99.9% indicated that the variance of the endogenous latent variable Acceptance of 34 e-marketplace had been well explained by 99.9% by the exogenous latent variable used in the model, the remaining 0.1% is explained by the variable others are not included in the model. On the other word, the acceptance of e-marketplace in Nusa Dua Tourism has already been explained by 99.9% by the exogenous variables in the model, which are Technology Availability (TA), Computer Self Efficacy (SE), Innovation (I), Insecurity (IS), Optimism (O), 49 ceived Ease of Use (PEU), Perceived Usefulness (PU), Uncomfortability (UC) and Readiness (R).

E. Hypotheses Testing

The hypothesis testing was done us 5 g t-statistics, where the criteria to H0 rejection is when the t-value is greater than t-table or p-value is less than alpha (0.05). The general form of H0 and its alternative are as follow:

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H0: $\gamma i = 0$ (The i-th exogenous latent variable does not have a significant effect on endeagenous latent variables)

H1: $\gamma i \neq 0$ (The i-th exogenous latent variable have a significant effect on endogenous latent variables)

If H0 is rejected and H1 50 ccepted, it can be stated a significant path coefficient or exogenous latent variables that 43 e a significant effect on endogenous latent variables [37]. Table III shows the result 69 the hypothesis testing of the direct effect that happened in the TARIM model,

TABLE III. HYPOTHESIS TESTING OF DIRECT EFFECT RESULT

No	DIRECT EFFECT	ORIGINAL SAMPLE	T STATISTICS
1	CSE -> PU	0,038	0,401
2	TA -> PU	0,663	7,076*
3	TA -> PEU	0,370	3,178*
4	PC -> PEU	0,489	3,875*
5	PU -> O	0,763	12,263*
6	PU -> I	0,779	13,772*
7	PEU -> UC	-0,623	6,203*
8	PEU -> IS	-0,673	6,553*
9	O -> R	0,327	1,331
10	I-> R	0,284	0,872
11	UC -> R	-0,051	0,405
12	IS -> R	-0,265	1,404
13	R -> A	0,885	24,06*

^{*}Significant at 5% level

According to the result on table III, there were some significant effects, whi 76 are the effect of Technology Availability (TA) to Perceived Ease of Use (PEU); Technology Availability (TA) 28 Perceived Usefulness (PU); Perceived Credibility (PC) to Perceived Ease of Use (PEU); Perceived Ease of Use (PEU) to Insecurity (IS); Perceived Ease of Use (PEU) to Uncomfortability (UC); Perceived Usefulness (PU) to Innovation (I); Perceived Usefulness (PU) to Optimism (O); and Readiness (R) to Acceptance (A);

These results indicate that the perception of local tourism entrepreneur in Nusa Dua (later we mentioned as people), namely:

- The higher the credibility of people about e-marketplace, the easier it was for the people to use the e-marketplace. This result extends previous studies that the E-marketplace should be referred on the credibility-based trust transferred [18]. It also strengthens the previous study that the perceived source credibility in a communication process where the transmitters are anonymous was very important [39].
- 2. If the people feel the ease of using e-marketplaces, the sense of public's insecurity will be reduced. The ease of e-marketplace that people feel makes the people understand the security of e-marketplace so they don't feel afraid that their data will be lost or stolen in the e-marketplace. In addition, the ease that people feel about

- e-marketplace will make people feel comfortable to use e-marketplace as marketing tools. As shown in [40], [41], [42] that the security was the main focus in the online transaction. This 84 ult also extends previous studies [43], [44] where the perceived ease of use and convenience factor has yet become the main driver for online purchase.
- 3. If people increasingly feel the benefits of e-marketplaces, people tend to feel innovations in e-marketplace and are willing to continue and develop these innovations. If people feel the benefits of e-marketplace, the public will be more optimistic in using e-marketplace. This result extends previous studies that perceived usefulness had positive effects on trust [43].
- 4. If people are more ready to use e-marketplace, people will be more accepting to use the e-marketplace in their businesses. This result supports the previous study of [45] that it needed to provide support to SMEs to adopt and use e-commerce.
- If people have good technology available, people will find the e-marketplace easier and more 27 eful. This result extends previous studies that technological factors like technology availability and technology usage can contribute to e-business development in a nation [46], [47].

In table III, it is also found that public's self efficiation about computer did not affect the usefulness of e-marketplace significantly. This happened because not all the people who were able to operate computer and internet used e-marketplace as marketing technology in daily life. It is also indicated from the result in this research questionnaire that some respondents who were able to operate computer and internet, but did not know the existing e-marketplace (34% of respondents did not know about e-marketplace (34% of respondents use computer and internet more in social media such as facebook, instagram, twitter, etc. The insecurity, uncomfortability, optimism, and perception of innovation did not have a significant effect on public's readiness in using e-marketplace.

In addition to direct effects, there were also exist some indirect effect on the model of TARIM. The hypothesis testing of indirect effects was also done begin the same criteria of H0 rejection. The results of the indirect effect hypothesis testing are shown in Table IV.

Table IV shows that Perceived Usefulness (PU) and Technology Avaliability (TA) had a significan 10 lirect effect to Readiness (R) and Acceptance (A). While Computer Self Efficacy (CSE), Perceived Credibility (PC), Perceived Ease of Use (PEU) do not have significant indirect effect to Readiness (R) and Acceptance (A).

The insignificant indirect effect of Computer Self Efficacy (CSE) to Readiness and Acceptance (A) indicated that even though people in Nusa Dua Bali were able to operate computer and internet, it did not always mean that people were ready and accepted the e-marketplace in their business. This phenomenon happened because most of the

people used computer and internet only for social media things and did not use the e-marketplace as their marketing tools. Another insignificant indirect effect that happened in the TARIM model was the effect of Perc 3 ed Credibility (PC) on Readiness (R) and Acceptance (A) of e-marketplace in Nusa 3 ua Bali tourism. This result showed that although people in Nusa Dua Bali considered the e-marketplace credible, it did not affect their readiness and acceptance to e-marketplace as marketing tools in their business significan 15 The ease of use of e-marketplace also did not affect the readiness and acceptance of people in Nusa Dua Bali in using e-marketplace.

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TABLE IV. Hypotheses Testing of Indirect Effect

No	INDIRECT EFFECT	ORIGINAL SAMPEL	T STATISTICS
1	CSE-> A	0,016	0,350
2	CSE -> R	0,018	0,353
3	TA -> A	0,345	4,460*
4	TA -> R	0,390	4,459*
5	PC -> A	0,091	1,293
6	PC -> R	0,103	1,321
7	PU -> A	0,416	2,749*
8	PU-> R	0,471	2,746*
9	PEU > A	0,186	1,399
10	PEU -> R	0,210	1,423

*Significant at 5% level

In the other hand, the significant indirect effect of Perceived Usefulness (PU) to Readiness (R) and Accellance (A) indicated that the usefulness of e-marketplace that people in Nusa I 15 Bali felt in using e-marketplace was a driving factor for the readiness and acceptance of the people in Nusa Dua Bali in using e-marketplace. Many benefits that people felt in using e-marketplace (like reducing cost, faster marketing, effectiveness, also increasing productivity and marketing performance) drove the people in Nusa Dua Bali to be ready and accept the using of e-marketplace in their business. As an addition, the availability of technology that was specifically for their business needs showed that people in Nusa Dua were ready to do online marketing, including e-marketplace in Nusa Dua Bali tourism.

VI. FINDINGS AND MANAGERIAL IMPLICATION

This section will summarize some main findings of the research, and it will provide some managerial implications based on analysis results for the factors that were affecting the acceptance of e-marketplace with case study local tourism entrepreneurs in Nusa Dua Bali.

A. Findings

In general, some main findings of the research could be summarized as follows:

 The hybrid model of TAM-TRI can be modified by inserting additional variables such as Technology Availability and Computer Self Efficacy. The modified model is called TARIM model that was the novelty of the research.

- The factors that were affecting the acceptance of tourism e-marketplace in Nusa Dua Bali are Technology Availability and Perceived Usefulness.
- Personality paradigm factors (optimism, innovation, uncomfortability and insecurity) do not have a significant impact on Acceptance of tourism emarketplace in Nusa Dua Bali.

B. Managerial Implication

From the findings, some managerial implications for Nusa Dua government in planning BPR of Nusa Dua Tourism Activities E-marketplace could be suggested as follows:

- The local entrepreneur could be involved as a user with role seller in the e-marketplace.
- The e-marketplace should be designed to be run in a common technology, so the technology availability aspect could be facilitated. For example, the emarketplace is designed to be run in a browser.
- The e-marketplace should be design ease of use like social media nuances, so it will need less effort of the local entrepreneur in using the new system as the solution to support them who did not know about emarketplace yet.
- The e-marketplace should have many features that supported their business, so the local entrepreneur will be optimism in using the system.

VII. .CONCLUSIONS AND FUTURE WORKS

A. Conclusions

Based on TARIM model, it can be concluded that the acceptance of e-marketplace (case study local tourism entrepreneurs in Nusa Dua Bali) was affected directly by Readiness of the local entrepreneurs. If the local entrepreneurs in Nusa Dua Bali feel ready about the e-marketplace, they tend to accept that technology. In addition, the Acceptance was also affected indirectly significant by the Technology Availability and Perceived Usefulness. If people have enough technology to run their business, they will tend to be ready and accept the new technology, in this case, the tourism e-marketplace. So did Perceived Usefulness, the people who already knew and convinced about the usefulness of e-marketplace tend to be ready and accept the tourism e-marketplace in Nusa Dua Bali.

A signif 59 It impact also happened on Technology Availability to Perceived Usefulness and Perceived Ease of Use. People in Nusa Dua Bali who a 60 provided by enough technology in running their business, have a positive thought on the usefulness and the ease of use of tourism emarketplace. Perceived Usef 61 css impact Optimism and Innovativeness significantly. On the other side, Perceived Ease of Use affects the Uncomfortability and Insecurity. The tourism entrepreneur in Nusa Dua who found out that the emarketplace is easy to use, tend to have a negative feeling that their data and account in e-marketplace probably can be hacked by other people.

B. Limitations and Future Works

Some limitations in this research can be summarized as (1) small sample size and limited only in a small area of

tourism in Bali; (2) the indirect effects were not specific using which paths; and (3) there was no study on mediating or moderating variables which might be happening on the relationship between variables.

Thus, some future researches can do (1) take a larger sample size and apply the model in a larger tourism area; (2) indirect effects should be more specific; and (3) take a focus on mediating or moderating variables that might be happening.

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REFERENCES

- C Gellweiler and L Krishnamurthi, Editorial: How Digital Innovators Achieve Customer Value, Journal of Theoretical and Applied Electronic Commerce Research, vol.15, no.1, 2020.
- [2] C Li, L Feng, and L Ma, Business Process Reengineering for Better Sale of China Lubricant Enterprises. International Conference on Computational Intelligence and Communication Networks, 2013.
- [3] D Buhalis and R Law, Progress in information technology and tourism management: 20 years on and 10 years after the Internet—The state of cTourism research, Tourism Management, vol. 29, pp 609–623, 2008.
- [4] I Condratov, E-Tourism: Concept and Evolution. ECOFORUM, vol. 2, no.1 (2), 2013.
- [5] F. D. Davis, Perceived usefulness, perceived ease of use, and user acceptance of information technology, MIS Quarterly, vol. 13, no. 3, pp. 319–340, 1989.
- [6] M.J. Alsamydai, Adaptation of the TAM to the use of mobile banking services, International Review of Management and Business Research, vol. 3, no 4, pp. 2016-2028, 2014.
- [7] P. Surendran, Technology Acceptance Model: A survey of Literature, International Journal of Business and Social Research, vol, 2, no. 4, pp. 175-178, 2012.
- [8] Gelik, H. Eray and Y. Veysel, Extending the technology acceptance model for adoption of Eshopping by consumers in Turkek, Journal of Electronic Commerce Research, vol. 12, no. 2, pp. 154, 2011.
- [9] I.M Klopping, and E. McKinney, Extending the Technology Acceptance Model and the Task-Technology Fit Model to Consumer E-commerce, Information Technology, Learning, and Performance Journal, vol. 2004: 22, no.1, pp. 35, 2004.
- [10] R.H. Shroff, C.C. Deneen, and E.M.W. Ng, Analysis of the technology acceptance model in examining students' behavioural intention to use an e-portfolio system, Australasian Journal of Educational Technology, vol. 27, no. 4, pp. 600-618, 2011.
- [11] S. Alharbi, Using the Technology Acceptance Model in Understanding Academics' Behavioural Intention to Use Learning Management Systems, International Journal of Advanced Computer Science and Applications, pp. 143-155, 2014.
- [12] P.C. Lai, The Literature Reiew of Technology Adoption Models and Theories for the novelty Technology, 2017.
- [13] Parasuraman and Ananthanarayanan, Technology Readiness Index (TRI) a multiple-item scale to measure readiness to embrace new technologies, Journal of service research, vol. 2, no.4, pp. 307-320, 2000
- [14] P. Acheampong, L. Zhiwen, H.A. Antwi, A.A. Otto, W.G. Mensah, and P.B. Sarpong, Hybridizing an Extended Technology Readiness Index with Technology Accepance Model (TAM) to Predict E-Payment Adoption In Ghana, American Journal of Multidisciplinary Research, vol 5, no. 2, pp 172-184, 2017.
- [15] P. Godoe and T.S. Johansen, Understanding adoption of new technologies: Technology readiness and technology acceptance as an integrated concept, Journal of European Psychology Students, vol. 3, no. 1, pp. 38–52, 2012.

- [16] C. H. Lin, H. Y. Shih, P. J. Sher, and Y. L. Wang, Consumer adoption of e-service: Integrating technology readiness with the technology acceptance model, Proceedings of PICMET '05: Technology Management: A Unifying Discipline for Melting the Boundaries, Portland, Oregon, USA, pp. 483-488, 2005.
- [17] C. H.Lin, H. Y. Shih, and P. J. Sher, Integrating technology readiness into technology acceptance: The TRAM model. Psychology and Marketing, vol. 24, no. July 2007, pp. 641–657, 2007.
- [18] R. Walczuch, J. Lemmink, and S. Streukens, The effect of service employees' technology readiness on technology acceptance, Information & Management, vol. 44, pp. 206-215, 2007.
- [19] S. Y. Hung and T. P. Liang, Effect of computer self-efficacy on the use of executive support systems, Industrial Management and Data Systems, vol. 101, no. 5, pp. 227-237, 2001.
- [20] C. S. Ong, J. Y. Lai, and Y. S. Wang, Factors affecting engineers' acceptance of asynchronous one e-learning systems in hightechcompanies, Information & Management, vol. 41, no. 6, pp. 795– 804, 2004.
- [21] P. Y. K. Chau, Influence of computer attitude and self-efficacy on IT usage behavior, Journal of End User Computing, vol. 13, no. 1, pp. 26-33, 2001.
- [22] M. Igbaria and J. Iivari, The effects of selfefficacy on computer usage, Omega International Journal of Management Science, vol. 23, no.6, pp. 587-605, 1995.
- [23] B. Hasan, Examining the effect of Computer Self-Efficacy and System Complexity on Technology Acceptance, Infomation Resources Management Journal, vol. 20, no. 3, pp. 76-88, 2007.
- [24] A. M. Colley and T. M. Gale, Effects of gender role identity and experience on computer attitudes, Journal of Educational Computing Research, vol. 10, no. 2, pp. 129–137, 1994.
- [25] S. Conger and D. K. Loch, Ethics and information technology use a factor-analysis of attitudes to computer use, Information Systems Journal, vol. 5, no. 3, pp. 161–183, 1995.
- [26] D. McIlroy and D. Bunting, The relation of gender and background experience to self-reported computing anxieties and cognitions, Computers in Human Behavior, vol. 17, pp. 21–33, 2001.
- [27] R. G. Saade and D. Kira, Mediating the impact of technology usage on perceived ease of use by anxiety, Computer and education, vol. 49, pp. 1189-1204, 2007.
- [28] M. S. Ariff, S. M. Yeow, N. Zakuan, A. Jusoh, and A. Z. Bahari, The Effoct of Computer Self Efficacy and Technology Acceptance Model on Behavioral Intention in Internet Banking Systems, International Conference on Asia Pacific Bussiness, Innovation, and Technology Management, Procedia- Social and Behavioural Science, vol. 57, pp. 448-452, 2012.
- [29] Y. S. Wang, H. H. Lin, and T. I. Tang, Determinants of user acceptance of Internet banking: An empirical study, International Journal of Service Industry Management, vol. 14, no. 5, pp. 501–519, 2003
- [30] T. Pikkarainen, K. Pikkarainen, H. Karjaluoto, and S. Pahnila, Consumer acceptance of online banking: an extension of the technology acceptance model, Electronic Networking Applications and Policy, vol. 14, no. 3, pp. 224-235, 2004.
- [31] H. Amin, Internet banking adoption among young intellectuals, Journal of Internet Banking and Commerce, vol. 12, no. 3, pp. 1-13, 2007
- [32] N. Larasati, Widyawan, and P. I. Santosa, Technology Readiness and Technology Acceptance Model in New Technology Implementation Process, in Low Technology SMEs, International Joural of Innovation, Management, and Technology, vol. 8, no. 2, pp. 113-117, 2017.
- [33] M.G. Aboelmaged, Predicting ereadiness at firm-level: An analysis of technological, organizational and environmental (TOE) effects on emaintenance readiness in manufacturing firms, International Journal of Information Management, vol. 34, no.5, pp. 639-651, 2014.
- [34] R. Shambare, Technology readiness and EFTPoS usage in Zimbabwe, International Journal of Business and Economic Development (IJBED), vol. 1, no. 1, 2013.
- [35] W. W. Chin, The partial least squares approach for structural equation modelling, Modern methods for bussiness research, London: Lawrence earlbaum associates, pp. 295-236, 1998.

- [36] W. W. Chin, How to write up and report PLS analysis. Handbook of partial least squares: concepts, methods, and application in marketing and related fields, Berlin: Springer, pp. 655-690, 2010.
- [37] J. F. Hair, C. M. Ringle, and M. Sarsted, PLS-SEM: Indeed a silver bullet, Journal of Marketing Theory and Practice, vol. 19, no. 2, pp. 139-150, 2011.
- [38] J. F. Hair, M. Sarsted, C. M. Ringle, and J. A. Mena, An Assessment Of The Use Of Partial Least Square Structural Equation Modelling In Marketing Research, Journal Of The Academy Of Marketing Science, vol. 40, no. 1, pp. 414-433, 2012.
- [39] M López and M Sicilia, Determinants of E-WOM Influence: The Role of Consumers' Internet Experience, Journal of Theoretical and Applied Electronic Commerce Research, vol. 9, no. 1, pp. 28-43, 2014
- [40] M. Mujinga, M. M. Eloff and J. H. Kroeze, Perceptions of Online Banking Custodians on System Development and User Behaviour: An Empirical Study, 2018 IST-Africa Week Conference (IST-Africa), Gaborone, pp. 1-9, 2018.
- [41] M. R. Shihab, S. Wahyuni and A. N. Hidayanto, Analysis of trust presence within e-commerce websites: A study of Indonesian ecommerce websites, 2014 International Conference on Advanced Computer Science and Information System, Jakarta, pp. 133-138, 2014
- [42] N Vasić, M Kilibarda, and T Kaurin, The Influence of Online Shopping Determinants on Customer Satisfaction in the Serbian Marke, Journal of Theoretical and Applied Electronic Commerce Research, vol. 14, no. 2, pp. 70-89, 2019.

- [43] Sfenrianto, T Wijaya, and G Wang, Assessing the Buyer Trust and Satisfaction Factors in the E-Marketplace, Journal of Theoretical and Applied Electronic Commerce Research, vol. 13, no. 2, pp. 43-57, 2018.
- [44] C. Shia, M. Chen, A. D. Ramdansyah, and S. Wang, Comparison of decision making in adopting ecommerce between Indonesia and Chinese Taipei (case study in Jakarta and Taipei City), American Journal of Industrial and Business Management, vol 5, no. 12, pp. 748-768, 2015.
- [45] N C Astuti and R A Nasution, Technology Readiness and E-Commerce Adoption among Entrepreneurs of SMEs in Bandung City, Indonesia, Gadjah Mada International Journal of Business, vol. 16, no. 1, pp. 69-88, 2014.
- [46] S. Srivastava and T. Teo, Determinants and impact of e-government and e-business development: A global perspective, International Conference on Information Systems, Wisconsin, pp. 365-378, 2006.
- [47] V Vijay, K Durbhakula, and J. Kim, E-business for Nations: A Study of National Level E-business Adoption Factors Using Country Characteristics-Business-Technology-Government Framework, Journal of Theoretical and Applied Electronic Commerce Research, vol. 6, no. 3, pp. 1-12, 2011.

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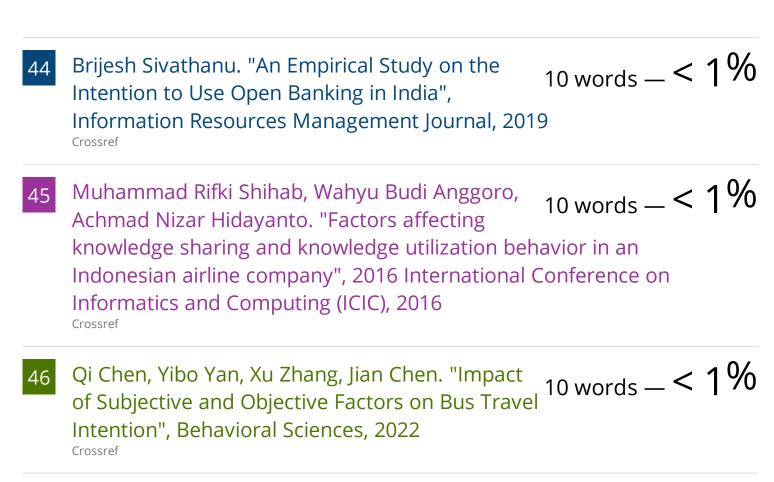
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- Saade, R.G.. "Mediating the impact of technology usage on perceived ease of use by anxiety", Computers & Education, 200712

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- Oostrom, Janneke K., Dimitri van der Linden, Marise Ph. Born, and Henk T. van der Molen. "New technology in personnel selection: How recruiter characteristics affect the adoption of new selection technology", Computers in Human Behavior, 2013.
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