

PAPER • OPEN ACCESS

Factors that influencing the usage of global distribution system

To cite this article: I M Budiasa *et al* 2018 *J. Phys.: Conf. Ser.* **953** 012053

View the [article online](#) for updates and enhancements.

You may also like

- [Optically Faint Massive Balmer Break Galaxies at \$z > 3\$ in the CANDELS/GOODS Fields](#)
Belén Alcalde Pampiega, Pablo G. Pérez-González, Guillermo Barro et al.
- [On the AGN Nature of Two UV-bright Sources at \$z_{\text{spec}} \sim 5.5\$ in the CANDELS Fields: An Update on the AGN Space Density at \$M_{1450} < -22.5\$](#)
A. Grazian, E. Giallongo, F. Fiore et al.
- [Carbon dioxide removal to combat climate change? An expert survey on perception and support](#)
Christoph Kerner, Annina Thaller and Thomas Brudermann



The Electrochemical Society

Advancing solid state & electrochemical science & technology

DISCOVER
how sustainability
intersects with
electrochemistry & solid
state science research



Factors that influencing the usage of global distribution system

I M Budiassa¹, I K Suparta¹, and N M Nadra¹

¹ Politeknik Negeri Bali, Jalan Kampus Bukit Jimbaran Bali Indonesia

E-mail: madebudiasa@pnb.ac.id

Abstract. The advancement of Tourism is supported by Information and Communication Technology (ICT) innovation and changes. The use of GDS (Global Distribution System) i.e. Amadeus, Galileo, Sabre, and Worldspan in the tourism industry can increase the availability, frequency and speed of communication among the companies in providing services to potential tourists. This research is to investigate the factors that influence the actual use of GDS in the tourism industry especially travel agents, airlines and hotels in Bali. This research employed a mixed method of quantitative and qualitative approaches. Field surveys were conducted and 80 valid questionnaires were received and analyzed by using SPSS 17.0; descriptive, correlation, factor analysis and regression tests were conducted. The variables used are *Perceived Ease of Use* and *Perceived Usefulness* (Technology Acceptance Model); *Awareness*, *Perceived Risk* and *Communication Channels* are examined. This research revealed that *Perceived Ease of Use*, *Perceived Usefulness*, *Awareness*, and *Communication Channels* influence the Behavioural intention to use GDS, whereas *Perceived Risk* were found not significant influence the use of GDS. These findings enable travel agent, airline and hotel companies to make provision decision with respect to the actual use of GDS.

Keywords: ICT adoption, Use of Global Distribution System, Technology Acceptance Model, Tourism Industry

1. Introduction

Travel & Tourism is a key sector for economic development and job creation throughout the world. In 2016, Travel & Tourism directly contributed US\$2.3 trillion and 109 million jobs worldwide. Taking its wider indirect and induced impacts into account, the sector contributed US\$7.6 trillion to the global economy and supported 292 million jobs in 2016. This was equal to 10.2% of the world's GDP, and approximately 1 in 10 of all jobs [33]. International tourist arrivals worldwide grew by 6% in January-April of 2017 compared to the same period last year, with business confidence reaching its highest levels in a decade with Asia and the Pacific (6%) continued to enjoy robust growth [34]. The biggest challenge imposed upon the tourism industry in adopting technology is the lack of accurate education of the 'right' technology that is suitable for their business [25]. The advancement of Tourism is supported by Information and Communication Technology (ICT) innovation and changes. Information and Communication Technologies (ICTs) and tourism distribution system development have transformed the competitive environment of the tourism industry within a brief span of time [10]. The use of GDS (Global Distribution System) i.e. Amadeus, Galileo, Sabre, and Worldspan in the tourism



industry can increase the availability, frequency and speed of communication among the companies in providing services to potential tourists.

There is a lack of research found on GDS adoption/ usages. This research is aim to investigate the factors that influence the usage of GDS in the tourism industry especially travel agents, airlines and hotels in Bali.

2. Literature Review

In this research, the constructs were developed from the related literature and modified for the context of GDS usage when needed. Perceived ease of use and perceived usefulness variables were taken from a number of sources [14]; [23]; [29]; [20]; [31]; [8]. Awareness variable [26] & [5]; [13] and [2], perceived risk variable were derived from other previous studies [35]; [28], and Communication Channels are adapted from [9]. Behavioural intention variable were taken from [30], [29] and [31].

2.1. Global Distribution System (GDS)

Global Distribution System is "A worldwide computerized reservation network used as a single point of access for reserving airline seats, hotel rooms, rental cars, and other travel related items by travel agents, online reservation sites, and large corporations. The premier global distribution systems are Amadeus, Galileo, Sabre, and Worldspan. They are owned and operated as joint ventures by major airlines, car rental companies, and hotel groups. Also called automated reservation system (ARS) or computerized reservation system (CRS)" [16]. GDS is "The name for a computer (computerized) travel and tourism reservation system operating worldwide. GDSs provide a speedy, efficient, and secure means of access to travel and tourism information and booking via the Internet or a direct connection. Their services are provided for consumer end users, bricks and mortar travel agencies, and OTAs (Travel Management companies are merely a specialized type of travel agent)" [17].

2.2. Perceived Ease of Use (PEU)

According to [14] perceived ease of use is the extent to which a person believes that using a particular system will be free of effort [4]. Perceived ease-of-use is a person's subjective perception of the effortlessness of a computer system, which affects the PU thus having an indirect effect on a user's technology acceptance [24]. The easier it is for a user to interact with a system, the more likely he or she will find it useful. There is substantial empirical support for this view [6,10,19,24].

2.3. Perceived usefulness (PU)

Perceived usefulness is one of the components of Technology Acceptance Model (TAM), which has been widely used by information system researchers. According to [6] "PU is the extent to which a person believes that using a particular system will enhance his or her performance" [4]. [21] defined PU as the extent to which a person deems a particular system to boost his or her job performance. It is the primary prerequisite for mass market technology acceptance, which depends on consumers' expectations about how technology can improve and simplify their lives [3]. Empirical studies on TAM have suggested that PU has a positive effect on the adoption of information technology [32].

2.4. Awareness (AW)

According to [26] & [5], awareness of service has direct influence on user intention to use the technology. Furthermore, behavioral intentions depend not only on personal characteristics, but also on the level of awareness as stated by [13] and [2].

2.5. Perceived risk (PR)

This construct reflects an individual's subjective belief about the possible negative consequences of some type of planned action, due to inherent uncertainty which is likely to negatively influence usage

intentions. Recent research indicates that trust has a critical influence on users' willingness to engage in online exchanges of money and sensitive personal information [4]. Trust refers to an expectation that others will not behave opportunistically [3, 24].

2.6. Communication channels (CC)

[9] stated that *Communication Channels* have a significant and high relationship and effect or influence on the actual use of internet as the form of technology. In case of the effect or influence on the actual use of technology, *Communication Channels* have contributed to the variations in actual usage of the technology.

2.7. Behavioural intention (BI)

[21] and [11] refer to the Theory of Reasoned Action (TRA), which is among the most popular belief models [1]. They stated that an individual's intention to perform or not to perform a given task is determined by their attitude towards behavior. Furthermore, behavioral intentions depend not only on personal characteristics, but also on the level of awareness as stated by [13] and [2].

3. Research Model and Hypotheses

The proposed research model is described below in Figure 1.

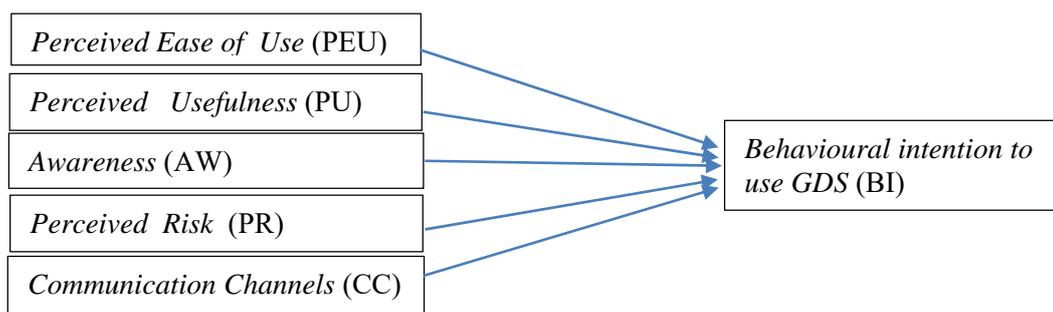


Figure 1. Proposed Research Model

Hypotheses for this research are formulated as follows:

H1: Perceived ease of use has a positive effect on behavioral intention to use GDS

H2: Perceived usefulness has a positive effect on behavioral intention to use GDS

H3: Awareness has a positive effect on behavioural intention to use GDS

H4: Perceived risk has a negative effect on behavioral intention to use GDS

H5: Communication channels has a positive effect on behavioural intention to use GDS

4. Research Methodology

The aim of this research is to examine the hypothetical relationships presented and to validate the proposed model. A cross-sectional survey was conducted in tourism industries in Bali i.e. travel agents, airlines and hotel companies by developing a questionnaire. This questionnaire, as an information-gathering tool, is divided into two sections. The first section is about the demographic characteristics, including gender, age, and level of education, while the second part relates to the proposed model constructs of perceived ease of use, perceived usefulness, awareness, perceived risk and communication channels and behavioral intention. The questionnaire used 1 to 5 Likert Scales to study the respondents' behaviour for these factors, where 1 indicates "strongly disagree" and 5 indicates "strongly agree".

The data for this research was obtained through the use of an questionnaire survey of industrial in tourism industries in Bali i.e. travel agents, airlines and hotel companies. The samples was selected using snowball/networking sampling. The respondent would then complete the questionnaires and the data were collected and analyzed to test the validity and reliability. After some

revision, the questionnaires were continued to be distributed until the total of 80 valid and reliable questionnaires were collected.

The collected data were analysed by using Statistic Package for Social Science (SPSS) version 17.0. Descriptive analysis was conducted to describe the respondents 'profile, Pearson Correlation was to test the relation amongst all variables, factor analysis was done to confirm the reliability of the construct and regression tests were conducted to examine the influence of the independent variables (PEU, PU; AW, PR and CC) towards the dependent variable (BI).

5. Results and discussion

5.1. Respondents profile

Table (1) below shows that the sample size consists of 80 respondents in tourism industries i.e. travel agents, airlines and hotels in Bali: 42,5% (34) of the respondents are men and 58,5% (46) are women. Most of respondents (32 or 40,0%) are aged between 30 and 39 years; 24 (30,0%) are between 20 and 29; 16 (20,0%) are between 40 and 49, and 8 (10,0%) are in the age range 50 plus years. The majority (62,5%) of respondents hold a Diploma until Strata 1; 37,5% are high school or below; and no Master's degrees or higher education. The vast majority (26) of respondents have been working for 5 - 10 years, (24) of respondents have been working for 0 - 4 years, (20) of respondents have been working for 11-19 years, while (10) of respondents have been working for 20 - up years.

Table 1: Respondents' profile

Characteristics	Frequency	%
<u>Gender:</u>		
Male	34	42,5
Female	46	58,5
<u>Age group:</u>		
20-29	24	30,0
30-39	32	40,0
40-49	16	20,0
50-up	8	10,0
<u>Education level:</u>		
High school or below	30	37,5
Diploma – S1	50	62,5
Master degree or higher	-	-
<u>Length of working:</u>		
0-4 years	24	30,0
5-10 years	26	32,5
11-19 years	20	20,0
20-up years	10	10,0
N=80	80	100%

5.2. Scale reliability

SPSS (Statistic Package for Social Science) version 17.0 is used to analyse the data to obtain descriptive statistics, and the reliability of the questionnaire was tested using Cronbach’s alpha measurements. The reliability coefficients alpha of all variables range from 0.642 to 0.995, we used the criteria of Cronbach’s alpha for establishing the internal consistency reliability: Excellent ($\alpha > 0.9$), Good ($0.7 < \alpha < 0.9$), Acceptable ($0.6 < \alpha < 0.7$), Poor ($0.5 < \alpha < 0.6$), Unacceptable ($\alpha < 0.5$) [18]; [15]; [25]. The following are described in table (2): BI (0.642); PEU (0.982); PU (0.995); AW (0.919), PR (0.982); CC (0.988).

Table 2: Scale Reliability

Construct name	Number of items	Cronbach’s alpha
Behavioral intention to use GDS (BI)	3	0.642
Perceived ease of use (PEU)	4	0.982
Perceived usefulness (PU)	4	0.995
Awareness (AW)	3	0.919
Perceived risk (PR)	3	0.982
Communication channels (CC)	3	0.988

5.3 Correlation analysis:

A compute variable was used, based on the average score of multi-items for the constructs in the framework, as each construct was measured by several items in the questionnaire. This will be used in further analysis, such as regression and correlation (Wang and Benbasat, 2007; Wei et al, 2009). Person r correlation was run to determine the relationship between independent variables (PEU, PU, AW, PR, and CC) and the dependent variable (BI). [12] suggests that the correlation coefficient value (r) range from 0.10 to 0.29 is considered weak, from 0.30 to 0.49 is medium, and from 0.50 to 1.0 is strong. Results show that there was a strong, positive correlation and statistically significant between Perceived ease of use ($r = .524, n=80, p < 0.00$), Perceived usefulness ($r = .594, n=80, p < 0.00$), and Behavioural Intention to use GDS; and a medium, positive correlation and significant statistically between Awareness ($r = .479, n=80, p < 0.00$), Communication channel ($r = .337, n=80, p < 0.01$) and Behavioural Intention to use GDS), However, Perceived risk ($r = .023, n=80, 418 > 0.05$) was weakly correlated and statistically not significant to Behavioural intention to use GDS, as shown in table (3).

Table 3: Correlation Matrix

		Correlations					
		BI	PEU	PU	AW	PR	CC
Pearson Correlation	BI	1,000					
	PEU	,524	1,000				
	PU	,594	,535	1,000			
	AW	,479	,149	,165	1,000		
	PR	,023	,076	-,214	,053	1,000	
	CC	,337	-,200	-,124	,225	-,001	1,000
	Sig. (1-tailed)	BI	.	,000	,000	,000	,418
PEU		,000	.	,000	,093	,252	,038
PU		,000	,000	.	,071	,029	,137
AW		,000	,093	,071	.	,319	,023
PR		,418	,252	,029	,319	.	,497
CC		,001	,038	,137	,023	,497	.
N	BI	80	80	80	80	80	80
	PEU	80	80	80	80	80	80
	PU	80	80	80	80	80	80
	AW	80	80	80	80	80	80
	PR	80	80	80	80	80	80
	CC	80	80	80	80	80	80

5.4. Normality, multicollinearity and heteroskedastic

Table (4) shows that the Sig value $0.313 > 0.05$ means that data distribution is normal and it can be analysed further to multiple regression.

Table 4: Normality test result

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		80
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	,62365878
Most Extreme Differences	Absolute	,108
	Positive	,108
	Negative	-,075
Kolmogorov-Smirnov Z		,962
Asymp. Sig. (2-tailed)		,313

a. Test distribution is Normal.

b. Calculated from data.

Table (5) shows that all the Tolerance value = $p > 0.01$ and VIF value $p < 10$ means that data can be analysed further to multiple regression.

Table 5: Multicollinearity test result

Coefficients^a

Model		Collinearity Statistics	
		Tolerance	VIF
1	PEU	,653	1,533
	PU	,637	1,569
	AW	,893	1,119
	PR	,898	1,113
	CC	,892	1,122

a. Dependent Variable: BI

Table (6) shows that all the Sig value $p > 0.05$ means that data is free from heteroskedastic and it can be analysed further to multiple regression.

Table 6: Heteroskedastic test result

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-,115	,324		-,355	,724
	PEU	-,003	,015	-,031	-,218	,828
	PU	,016	,013	,171	1,204	,232
	AW	-,006	,017	-,046	-,386	,701
	PR	,017	,011	,185	1,539	,128
	CC	,006	,012	,061	,504	,616

a. Dependent Variable: Abres

5.5. Factor analysis and multiple regression

In this research, construct validity is assessed by factor analysis, and principal components extraction with varimax rotation was run on 17 items. The Kaiser-Meyer-Olkin (KMO) value of 0.714 and significance of Bartlett's statistic Chi-Square = 1995.310 ($p < 0.001$) confirm the suitability of the factor analysis for the data set.

Tables (7) and (8) illustrate the factor loading for every item. All 17 items are clustered into five factors: Factor 1 (PEU), Factor 2 (PU), Factor 3 (AW), Factor 4 (PR), and Factor 5 (CC). The Eigenvalue for each factor is greater than 1.0 (7.576, 3.234, 1.785, and 1.616). The cumulative percentage of variance explained by the four factors is 83.315 per cent.

Additionally, Multiple regression analysis is applied to investigate the association between a single dependent variable and number of independent variables (Hair et al., 2005; Pallant, 2010).

The results in Table (9) show that PEU ($p < 0.05$), PU ($p < 0.05$), AW ($p < 0.05$) and CC ($p < 0.05$) all significantly affect the behavioural intention to use GDS. However, PR ($0.239 > 0.05$) was found not to be significantly linked to the behavioural intention to use GDS in tourism industries in Bali.

Table 7: Factor Analysis

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,714
Bartlett's Test of Sphericity	Approx. Chi-Square	1995,310
	df	136
	Sig.	,000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7,514	44,202	44,202	7,514	44,202	44,202	3,873	22,779	22,779
2	3,360	19,767	63,969	3,360	19,767	63,969	3,454	20,318	43,098
3	2,168	12,752	76,721	2,168	12,752	76,721	3,036	17,858	60,956
4	1,707	10,043	86,764	1,707	10,043	86,764	2,893	17,018	77,974
5	1,225	7,208	93,972	1,225	7,208	93,972	2,720	15,998	93,972
6	,336	1,974	95,946						
7	,155	,913	96,859						
8	,142	,838	97,696						
9	,105	,619	98,316						
10	,092	,541	98,857						
11	,077	,452	99,309						
12	,057	,338	99,647						
13	,045	,264	99,912						
14	,009	,052	99,964						
15	,006	,036	100,000						
16	-1,7E-016	-1,00E-015	100,000						
17	-2,4E-016	-1,39E-015	100,000						

Extraction Method: Principal Component Analysis.

Table 8: Factor Loading

Rotated Component Matrix(a)					
Factors	Component				
	1	2	3	4	5
PEU1		0.8993			
PEU2		0.8735			
PEU3		0.8284			
PEU4		0.7981			
PU1	0.8817				
PU2	0.8919				
PU3	0.9170				
PU4	0.9179				
AW1					0.9065
AW2					0.9193
AW3					0.9694
PR1			0.9403		
PR2			0.9403		
PR3			0.9403		
CC1				0.9804	
CC2				0.9828	
CC3				0.9448	

Table 9: Multiple Regression Analysis Results

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3,215	,840		3,829	,000
	PEU	,152	,038	,319	4,000	,000
	PU	,191	,035	,446	5,526	,000
	AW	,167	,043	,264	3,878	,000
	PR	,034	,028	,081	1,187	,239
	CC	,180	,031	,396	5,812	,000

a. Dependent Variable: BI

6. Conclusion

It can be concluded that this research describes the results of testing GDS acceptance in the tourism industry in Bali by appointing technology acceptance theory as a base for this study integrated with other constructs such as awareness, perceived risk, and communication channel. This research revealed that *Perceived Ease of Use*, *Perceived Usefulness*, *Awareness*, and *Communication Channels* influence the Behavioural intention to use GDS, whereas *Perceived Risk* were found not significant influence the use of GDS. The relatively small size of samples in this research limits generalization of the outcome for the study. This study was conducted to explore the factors influencing the GDS usage

in the tourism industries in Bali. As such, there is still room for further investigation into the adoption of GDS usage in the tourism industries on a wider scale in different time periods, it would provide more insight into the phenomenon of the GDS usage.

7. References

- [1] Ajzen I., (1991), The theory of planned behavior, *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- [2] Akman I., Yazici A., Mishra A., Arifoglu A., (2005), e-Gov: a global perspective and an empirical assessment of citizens' attributes, *Government Information Quarterly*, 22, 239-257.
- [3] Al-maghrabi, T & Dennis, C., "Driving online shopping: Spending and behavioral differences among women in Saudi Arabia," *International Journal of Business Science and Applied Management*, vol. 5, no. 1, pp. 30-47, 2010.
- [4] Alsajjan, B & Dennis, C., "Internet Banking Acceptance Model: Cross-Market Examination," *Journal of Business Research*. 2009.
- [5] Al-Somali, S, Gholami, R & Clegg, B., "An Investigation into the Acceptance of Online Banking in Saudi Arabia," *Technovation*, vol. 29, pp. 130–141, 2009.
- [6] Amin, H., "An Analysis of Online Banking Usage Intentions: An Extension of the Technology Acceptance Model," *International Journal of Business and Society*, vol. 10, no. 1, pp. 27-40, 2009.
Amin, H., "Internet Banking Adoption among Young Intellectuals," *Journal of Internet Banking and Commerce*, vol. 12, no. 3. 2007.
- [7] Algethmi, M., & De Coster, R. (2012) Factors affecting consumer acceptance of mobile services in the airline sector: the case of Saudi Arabia. *International Journal of Management and Marketing Academy*, Vol. 1, No. 1, pp. 32-49.
- [8] Ali Salman, Mohd Yusof Hj. Abdullah, Zamaluddin Aziz, Abdul Latiff Ahmad and Chang Peng Kee. Remodelling Technology Acceptance Model (TAM) in explaining user Acceptance Towards Information and Communication Technology. *International of Art and Science*, 7(1):159-171 (2014).
- [9] Berné, Carmen, Gómez-Campillo, María, and Orive, Víctor. Tourism Distribution System and Information and Communication Technologies (ICT) Development: Comparing Data of 2008 and 2012. *Modern Economy*, 2015, 6, 145-152.
- [10] Chau, P., "Influence of Computer Attitude and Self-Efficacy on It Usage Behavior," *Journal of End User Computing*, vol. 13, no. 1, pp. 26-33, 2001.
- [11] Chow S.W., Chen Y., (2009), Intended belief and actual behavior in green computing in Hong Kong, *Journal of Computer Information Systems*, 50, 136-141.
- [12] Cohen, J.W. (1988) *Statistical power analysis for the behavior science*. (2nd edn). Hillsdale, NJ: Lawrence Erlbaum Associates.
- [13] Cronan T.P., Leonard L.N.K., Kreie J., (2005), An empirical validation of perceived importance and behavior intention in IT ethics, *Journal of Business Ethics*, 56, 231—238.
- [14] Davis, F.D., "Perceived Usefulness, Perceived Ease of Use and User Acceptance of Information Technology," *MIS Quarterly*, pp. 318-340, 1989.
Davis, F. D. (1993) User acceptance of information technology: System characteristics, user perception and behavioral impact. *International Journal of Man-Machine Studies*, 38, 475–487.
- [15] George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference 11.0 update* (4 th ed.). Boston: Allyn & Bacon.
- [16] <http://www.businessdictionary.com/definition/Global-Distribution-System-GDS.html>.
- [17] <http://www.oxfordreference.com>
- [18] Kline, p. (2000). *The handbook of psychological testing* (2 ed.). pp.13. London: Routledge.

- [19] Lee, M., "Factors Influencing the Adoption of Internet Banking: An Integration of TAM and TPB with Perceived Risk and Perceived Benefit," *Electronic Commerce Research and Applications*, vol. 8, pp. 130–141, 2009.
- [20] Mallat, N., Rossi, M., and Tuunainen, V. K., Öörni, A. (2006) The Impact of Use Situation and Mobility on the Acceptance of Mobile Ticketing Services. In Proceedings of the 39th Hawaii International Conference on System Sciences, Hawaii.
- [21] Mathwick, C, Rigdon & Malhotra,, N., "The Effect of Dynamic Retail Experiences on Experiential Perceptions of Value:an Internet and Catalog Comparison," *Journal of Retailing*, vol. 78, no. 1, pp. 51–60., 2001.
- [22] Mishra, Alok and Akman, Ibrahim. (2014). Green Information Technology (Git) And Gender Diversity. *Environmental Engineering and Management Journal*, December 2014, Vol.13, No. 12, 2999-3007.
- [23] Moore, G.C. and Benbasat, I. (1991) Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information System Research*, Vol. 2 No. 3, pp. 192-222.
- [24] Rigopoulos, G & Askounis, D., "A TAM Framework to Evaluate Users' Perception towards Online Electronic Payments," *Journal of Internet Banking and Commerce*, vol. 12, no. 3. 2007.
- [25] Sakulsureeyadej, Apichai. How technology is changing global tourism, World Tourism Organization (UNWTO) Affiliate Members AM-reports–Technology in Tourism (Vol. 1, 2011).
- [26] Sathye, M., Adoption of Internet Banking by Australian consumer: an empirical investigation. *International Journal of Bank Marketing* 17(7), pp. 324-334, 1999.
- [27] Sekaran, Uma. (1992). *Research Method for Business, A Skill Building Approach* (2nd ed). New York: John Wiley n Sons.
- [28] Sweeney, J. C., Soutar, G. N., & Johnson, L. W. (1999) The role of perceived risk in the quality–value relationship: A study in a retail environment. *Journal of Retailing*, 75(1), 77–105.
- [29] Taylor, S. and Todd, P. (1995) Assessing IT usage: the role of prior experience. *MIS Quarterly*, Vol. 19 No. 4, pp. 561-70.
- Taylor, S. and Todd, P.A. (1995) Understanding Information Technology Usage – a Test of Competing Models. *Information Systems Research*, 6, 2, 144-176.
- [30] Thompson, R., Higgins, C., and Howell, J. (1994) Influence of Experience on Personal Computer Utilization: Testing a Conceptual Model. *Journal of Management Information Systems*, 11(1) 167-187
- [31] Venkatesh, V., Morris, M.G., Davis, G.B. and Davis, F.D. (2003) User acceptance of information technology: toward a unified view. *MIS Quarterly*, Vol. 27 No. 3, pp. 425-78.
- [32] Yiu, C, Grant, K & Edgar, D., "Factors Affecting the Adoption of Internet Banking in Hong Kong- Implications for the Banking Sector," *International Journal of Information Management*, vol. 27, pp. 336–351, 2007.
- [33] World Travel & Tourism Council. (2017). Travel & Tourism Global Economic Impact & Issues 2017. <https://www.wttc.org/-/media/files/reports/economic-impact-research/2017-documents/global-economic-impact-and-issues-2017.pdf>
- [34] UNWTO. (2017). UNWTO World Tourism Barometer, Volume 15, June 2017. http://cf.cdn.unwto.org/sites/all/files/pdf/unwto_barom17_03_june_excerpt_1.pdf
- [35] Zhang, X., & Prybutok, V. R. (2005) A consumer perspective of e-service quality. *IEEE Transactions on Engineering Management*, 52(4), 461–477.