
RELATIONSHIP QUALITY, SERVICE QUALITY AND INTERNET ADVERTISING EFFECTIVENESS: MODERATING EFFECTS OF KNOWLEDGE MANAGEMENT

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ABSTRACT

The effectiveness of internet advertising as an outcome to which certain factors contribute still remains under-investigated. The purpose of this study therefore is to examine relationship quality and service quality in relation to internet advertising effectiveness and to evaluate whether knowledge management moderates the relationship between relationship quality and service quality on internet advertising effectiveness. Relationship quality and service quality are each conceptualized as three-dimensional construct while internet advertising effectiveness consists of one-dimensional construct whereas knowledge management as a moderating factor to fill the gap between relationship quality, service quality and internet advertising effectiveness. PLS-SEM technique is deployed to test the hypothesized relationships. Data to all variables of interest studied is collected from a survey using structured questionnaires. A total of 322 sets of structured questionnaires was sent out to 322 CEOs/managers of these advertising companies located in Selangor state and Kuala Lumpur, Malaysia. Of the 322 questionnaires distributed, only 36.3% of them or 117 were returned and usable. Empirical findings have shown that service tangibility and knowledge management have a significant positive relationship with internet advertising effectiveness. Knowledge management however, is found to have not moderated the relationships between relationship quality and service quality on internet advertising effectiveness. This paper also highlights the limitations, managerial implications and conclusion.

KEYWORDS: relationship quality, service quality, knowledge management, internet advertising effectiveness, PLS-SEM

1. INTRODUCTION

While traditional advertising remains useful in the commercialization of products, internet advertising such as to promote products online is increasingly becoming popular among firms in today's fast-changing business environment (Brettel&Spilker-Attig, 2010; Kumar &Reinartz, 2012; Nielson, 2013). A study by Rzemieniakand Iannuli (2015) has suggested that internet advertising as a main channel of marketing communication. In the US, according to IAB/PwC Internet Ad Revenue Report (2014), the importance of internet advertising effectiveness to organizations is evidenced in the rise of internet advertising revenue from \$3 billion in 2005 to \$11.4 billion in 2014. With a rapid growth of internet

advertising of 16.4% annually over the last 10 years from 2005 to 2014 (IAB/PwC Internet Ad Revenue Report, 2014) therefore, it is clear that internet advertising has become an alternative means to traditional methods of advertising for firms to convince their customers in purchasing a particular product or service. It is further reported that in Malaysia, internet advertising is evolving progressively from its old-fashioned media forms to a new emerging media advertising which has the potential to grow and develop in terms of creativity and innovation to maximize the opportunities available in the industry (Malaysian Communications and Multimedia Commission, 2009). Internet advertising has thus become the most attractive medium for commercial acquisition and informative to advertise products and services.

Several scholars such as Peng et al. (2014) recognizes that advertising through internet is rich in content, strong interactivity with precise targeting and low in operating costs. The effectiveness of internet advertising, according to Nikhashemi, Paim and Fard (2013) reflects on how customers often see and interact with the advertised products online as internet advertising is primarily intended to convince customers in purchasing a particular product or service to meet their needs satisfactorily (Yozgat, Demirbag & Sahin, 2013). This not only enhances customer's satisfaction but also solidifies the relationship between the customers and the marketers. Due to lacking experience and expertise in internet advertising however, the advertising practitioners are skeptical of the effectiveness of online advertising and as such, the value of digital advertisements decreases (Tan & Piron, 2003; Goldfarb & Tucker, 2014). Other researchers have also shown that the effectiveness of online advertising is declining which is attributable to less trustworthy of click-through rates coupled with the fear of customers in having bad experience through online purchase (Ha, 2012; Nikhashemi et al., 2013). In this regard, the influence on internet advertising and its effectiveness is dependent upon the relationship quality between the firms and customers as well as its service quality provided within the invisible internet business environment.

On a similar note, researchers such as Kumar and Reitnarz (2012) as well as TutajandvanReijmersdal (2012) posit perceived advertising value as knowledge is indispensable in the case study on the prominence of internet advertising information. They observe the importance of implementing knowledge management through the use of software and hardware management applications, online apps and emailing support besides continuous follow-up to ensure internet advertising effectiveness. In addition, some past studies (Leal-Rodriguez, Leal-Millan, Roldan-Salgueiro & Ortega-Gutierrez, 2013) have also found an increasing number of consumers using internet to carry out research about products or services and hence, the role of knowledge management in the realm of online business is vital to impact the effectiveness of internet advertising.

This study rationalizes relationship quality, the provision of quality of service and knowledge

management as factors that predict the effectiveness of internet advertising in Malaysia. It therefore aims to investigate the internet advertising effectiveness in association with relationship quality and service quality and to evaluate knowledge management as a moderating factor on the relationships between relationship quality, service quality and internet advertising effectiveness. The next section reviews the past literatures and hypotheses developed for this study. It is followed by an explanation of the research method used and the assessment of measurement and structural models by deploying PLS-SEM technique using SmartPLS 2.0 M3 software. Limitations of the study, managerial implications and some concluding remarks are also highlighted in this paper.

2. LITERATURE REVIEW AND HYPOTHESES

Although a review of past literatures has identified the total readiness of companies to apply technology, the business adoption of web-based marketing practices as well as a need for the government's support in determining the effectiveness of internet advertising (Omar et al., 2011; Yamoah, 2014), there are still limited research studying on which certain factors contribute to internet advertising effectiveness as an outcome and what can influence the effectiveness of internet advertising (Nikhashemi et al., 2013; Mochon et al., 2017). Other researchers such as Kim, Kim and Lee (2011) have evaluated online advertising effectiveness as processes, which is the antecedent that impact organizational outcome. A further study by McDuff (2017) has established new methods in measuring the effectiveness of digital advertising.

According to Bhattacharya and Ruth (2000) and Ogutu et al.(2014), relationship quality is vital in internet advertising to create a new internet relationship in mass market to facilitate customers' attitude topatronize the firm and thereby, increasing more purchases online. From the viewpoint of customers therefore, a better relationship quality with firms is undoubtedly accompanied by greater satisfaction, trust and commitment (Rauyrue& Miller, 2007). The study by Ghzaiel and Akrou (2012) further concurs the importance of relationship trust, commitment and satisfaction in effectively making purchases online and hence, they are related together as the dimensions of relationship quality which are posited to have a positive relationship with internet advertising effectiveness. This paper therefore hypothesizes that:

H1: Relationship trust is positively related to internet advertising effectiveness.

H2: Relationship commitment is positively related to internet advertising effectiveness.

H3: Relationship satisfaction is positively related to internet advertising effectiveness.

Further still, a number of scholars such as De Lone and McLean (2003) and Cenfetelli et al.(2008) have acknowledged the significance of service quality in assessing online advertising, which invariably determines the effectiveness of internet advertising. Internet advertising is unique as the internet provides an easy communication platform for both seller-buyer interaction. Through such interactive

advertising information would enable the buyers to evaluate the quality of service in terms of assurance that their online purchases are reliable and fulfils the requirements promised with satisfaction. According to Ograjensek and Lady (2011), perceived service quality that leads to customer satisfaction essentially forms the customer's judgment about a product or service. Therefore, the service quality and internet advertising effectiveness relationship is relevant in this paper considering the key dimensions of service tangibility, reliability and responsiveness. We hypothesize that:

H4: Service tangibility is positively related to internet advertising effectiveness.

H5: Service reliability is positively related to internet advertising effectiveness.

H6: Service responsiveness is positively related to internet advertising effectiveness.

It follows that knowledge management is an important construct in internet advertising by introducing a right social media platform to improve communication and creating a new network with customers (Karin et al., 2012; Hersi & Aladwan, 2014). With the use of social media tools moreover, internet advertising companies can manage and monitor their performance with a better knowledge management in information technology. This is further supported by David and Quang (2013) that recognize the implementation of knowledge management practices to improve the firm's performance would have a hypothetical positive relationship with the effectiveness of online advertising companies. As such, this paper hypothesizes that:

H7: Knowledge management is positively related to internet advertising effectiveness.

To a large extent, knowledge management has been used as either an independent variable or a dependent variable. There are however, few studies that empirically investigate the potentially moderating effect of knowledge management (Ling, 2011). A review of past literatures has highlighted a significant positive effect of knowledge management as a moderating factor on the global performance of firms (Lestari et al., 2011) nonetheless, there are still inadequate studies examining the role of knowledge management in moderating the relationships between relationship quality and service quality on internet advertising effectiveness. This paper therefore hypothesizes that:

H8: Knowledge management moderates the relationship between relationship trust and internet advertising effectiveness.

H9: Knowledge management moderates the relationship between relationship commitment and internet advertising effectiveness.

H10: Knowledge management moderates the relationship between relationship satisfaction and internet advertising effectiveness.

H11: Knowledge management moderates the relationship between service tangibility and internet advertising effectiveness.

H12: Knowledge management moderates the relationship between service reliability and internet advertising effectiveness.

H13: Knowledge management moderates the relationship between service responsiveness and internet advertising effectiveness.

3. METHODOLOGY

A survey method using structured questionnaires as a tool to collect quantitative data for the variables of interest studied. The measurement items are adapted from previously validated scales. Both relationship quality and service quality are three-dimensional constructs measured on a 7-point Likert scale. Relationship quality has 19 measurement items, whereby its dimension of relationship trust has 5 items adapted from Ivens and Pardo (2007) and Hsieh, Li and Li (2008), relationship commitment has 5 items adapted from Werner (1997) and relationship satisfaction has 9 measurement items adapted from Gauzente (2003). Based on the context of this research, the dimensions of service tangibility, reliability and responsiveness that measure service quality from the SERVQUAL model are deemed more appropriate and normal, although different researchers in their studies have employed SERVQUAL dimensions in different manners so as to retain the information of both expectation and perceived performance (Jiang & Klein, 2009). Service tangibility has 10 measurement items adapted from Zeithaml et al. (2006). Service reliability comprises 5 items adapted from the study of Parasuraman et al. (1988) and service responsiveness has 3 items adapted from Bitner (1990). As a moderating variable, knowledge management is measured by 10 items on a 7-point Likert scale and is adapted from Kumar and Ganesh (2011). In this present study, internet advertising effectiveness as one-dimensional construct is referred to attitude towards ads which consists of 4 items measuring on a 7-point Likert scale and is adapted from Mackenzie and Lutz (1989).

In this study, the targeted population is 322 advertising companies from the state of Selangor and Kuala Lumpur, Malaysia. This is because Selangor state and Kuala Lumpur are held to have a majority of advertising companies which are experienced in making and producing online advertisements for years in Malaysia. In ensuring that sample is sufficient and relevant to address the purpose of this study, a set of 322 questionnaires was mailed out to the entire study population. Unit of analysis is at organizational level (i.e. the advertising company). The respondent participating in this survey is the CEOs/managers of these 322 advertising companies identified from the Malaysian online advertising business directory. Of the 322 questionnaires sent out to 322 CEOs/managers of these advertising companies, 117 or 36.3% of them were returned and usable. This response rate of 36.3% was significantly higher than the acceptable standard of approximately 20% in the mail survey in Malaysia (Hilman & Kaliappen, 2014). Since the respondent for this study is a key person in the advertising firm, he or she as a person in general population has fewer possibilities to reply to mailed questionnaires (Hunt & Chonko, 1987). As such, the response rate achieved is adequately reflected to draw conclusions about the Malaysian media

and advertising industry. PLS-SEM method using SmartPLS (M2) is deployed to analyze the data collected.

4. Results of Measurement and Structural Models

To begin the data analysis, common method variance bias is checked using Harman's single factor test since the data was collected from a single source of information through a single questionnaire. According to Podsakoff, MacKenzie and Lee (2003), common method variance bias becomes problematic when a single latent factor accounted for the majority of the variance explained. The un-rotated factor analysis has shown that the first factor is only accounted for 11.35% of the total 75.28% variance. This shows a latent variable is not accounted for the majority of the total variance explained. Further, the results from the principal component analysis (PCA) have shown 11 factors with eigenvalues greater than 1, which suggests that the variables studied are clearly factorizable, as is indicated by KMO Measures of Sampling Adequacy is 0.885 (larger than 0.6) with a significant Barlett's Test of Sphericity result (Sig. = 0.000). Therefore, the results have highlighted that common method variance bias is not a serious problem in our study.

PLS algorithm is subsequently run to assess reliability and validity of the reflective measurement model using four main criteria, which are internal consistency reliability, indicator reliability, convergent validity and discriminant validity. Referring to Table 1 below, one of the criteria to be assessed here is internal consistency reliability using the measure of composite reliability (CR). The results show that the values of composite reliability ranged from 0.880 to 0.939 which are above the recommended threshold value of 0.8 (Hair, Anderson & Tatham, 1998; Chin, 2010). This has indicated the measures used to represent the constructs have achieved internal consistency reliability. The use of Cronbach's alpha however, tends to underestimate the internal consistency reliability as it assumes all indicators loadings are equal (Hair et al., 2014). The measurement model has also demonstrated adequate indicator reliability when each indicator's outer loading exceeds 0.708 (Bagozzi, Yi & Phillipps, 1991; Gefen & Straub, 2000). Convergent validity of the measurement model is established when all the latent variables have average variance extracted (AVE) values ranging from 0.618 to 0.781 and all are above the minimum criteria of 0.5 (Rodgers & Pavlou, 2003; Henseler, Ringle & Sinkovics, 2009). In addition, all the t-values are statistically significant at 0.05 levels and hence, all the measurement items are significantly explaining the research constructs.

Table 1: Measurement Model Evaluations

Construct	Items	Loadings	AVE	Composite Reliability (CR)	T-Statistics	Cronbach's Alpha
Trust	RQT1	0.8003	0.686	0.897	20.362	0.847
	RQT3	0.8575			34.366	
	RQT4	0.8829			50.552	
	RQT5	0.7681			21.714	
Commitment	RQC1	0.8916	0.735	0.932	55.207	0.909
	RQC2	0.9198			61.751	
	RQC3	0.8435			32.757	
	RQC4	0.7896			22.778	
	RQC5	0.8349			33.018	
Satisfaction	RQS1	0.8052	0.661	0.939	37.039	0.927
	RQS2	0.8015			32.950	
	RQS3	0.8025			24.078	
	RQS4	0.8920			41.421	
	RQS5	0.7421			19.450	
	RQS6	0.8695			45.224	
	RQS7	0.7572			20.881	
	RQS8	0.8213			29.325	
Tangibility	SQT2	0.7829	0.664	0.922	31.444	0.901
	SQT3	0.7829			22.742	
	SQT4	0.8224			20.724	
	SQT5	0.8489			33.018	
	SQT6	0.8702			42.213	
	SQT7	0.7757			17.360	
	Reliability	SQR1			0.8967	
SQR2		0.8238	29.692			
SQR3		0.8832	53.807			
SQR4		0.8933	64.144			
SQR5		0.8425	28.399			
Responsiveness	SQre1	0.8925	0.781	0.934	66.503	0.907
	SQre2	0.9394			111.810	
	SQre3	0.9161			66.577	
	SQre4	0.7783			17.885	
Knowledge Management	KMC1	0.7628	0.618	0.907	18.674	0.880
	KMC2	0.8346			31.440	

E-Advertising Effectiveness	KMC3	0.7826			17.004	
	KMC4	0.7613			15.232	
	KMP1	0.7615			19.841	
	KMP2	0.8119			27.720	
	eATTads1	0.8481	0.710	0.880	49.680	0.795
	eATTads2	0.8651			53.371	
	eATTads3	0.8130			24.949	

Discriminant validity of the constructs is evaluated using two measures which are i) Cross-Factor Loadings and ii) Fornell-Larcker’s Criterion. The measurement model exhibits discriminant validity when i) the indicator’s loadings on the respective construct are highest compared to all of its loadings on other constructs and ii) the square root of each construct’s AVE exceeds the correlations between the construct and all other constructs in the model. The results of all the constructs discriminant validity are presented in the following Table 2 and Table 3 respectively.

Table 2: Output of Cross-Factor Loadings

	RQC	eATT	KMGT	SQR	SQre	RQS	SQT	RQT
KMC1	0.2663	0.1476	0.7628	0.4427	0.4981	0.3555	0.3741	0.3069
KMC2	0.4025	0.2651	0.8346	0.4583	0.5069	0.3963	0.3568	0.4263
KMC3	0.2839	0.1342	0.7826	0.4032	0.4295	0.3518	0.3608	0.3085
KMC4	0.2851	0.1538	0.7613	0.3179	0.4067	0.3567	0.3283	0.3077
KMP1	0.3347	0.2622	0.7615	0.4037	0.4674	0.4122	0.4724	0.4691
KMP2	0.3363	0.2848	0.8119	0.4422	0.4931	0.4206	0.4632	0.4100
RQC1	0.8916	0.3143	0.3599	0.5009	0.5492	0.5818	0.4364	0.6604
RQC2	0.9198	0.2326	0.3494	0.5136	0.5479	0.6339	0.5452	0.6828
RQC3	0.8435	0.2806	0.3072	0.4874	0.4655	0.5778	0.3956	0.5652
RQC4	0.7896	0.2104	0.4811	0.5436	0.5611	0.6858	0.5946	0.6912
RQC5	0.8349	0.3156	0.3235	0.4295	0.4852	0.6448	0.5291	0.6670
RQS1	0.5818	0.3153	0.4293	0.5926	0.5643	0.8052	0.5983	0.6264
RQS2	0.5973	0.2331	0.2991	0.6101	0.5249	0.8015	0.5218	0.5973
RQS3	0.6130	0.1659	0.4636	0.6095	0.5850	0.8025	0.5536	0.5689
RQS4	0.6644	0.1889	0.4584	0.7086	0.6743	0.8920	0.6580	0.6978
RQS5	0.5604	0.1563	0.3679	0.5679	0.6256	0.7421	0.5140	0.6088
RQS6	0.6227	0.2530	0.4119	0.6540	0.6612	0.8695	0.5974	0.6547

RQS7	0.5203	0.2154	0.3592	0.5063	0.5656	0.7572	0.4888	0.5231
RQS8	0.5574	0.2221	0.4305	0.6508	0.5742	0.8213	0.5596	0.6048
RQT1	0.5910	0.2962	0.3390	0.4215	0.4613	0.5438	0.5181	0.8003
RQT3	0.6801	0.3351	0.4611	0.5426	0.5383	0.6287	0.6873	0.8575
RQT4	0.6826	0.3655	0.4808	0.5834	0.5647	0.7140	0.6437	0.8829
RQT5	0.5539	0.3243	0.3393	0.5326	0.5022	0.5909	0.6138	0.7681
SQR1	0.5374	0.3408	0.5315	0.8967	0.7485	0.7146	0.6059	0.6076
SQR2	0.5539	0.1897	0.4473	0.8238	0.6531	0.6585	0.6092	0.5650
SQR3	0.5464	0.2250	0.4459	0.8832	0.7425	0.7220	0.6114	0.5898
SQR4	0.4633	0.2827	0.4338	0.8933	0.7378	0.6016	0.5114	0.5146
SQR5	0.3972	0.2368	0.4188	0.8425	0.6619	0.5769	0.5025	0.4672
SQT2	0.4886	0.3952	0.4160	0.3910	0.3960	0.4965	0.7829	0.5999
SQT3	0.4727	0.2803	0.3883	0.6098	0.6507	0.6421	0.7829	0.6352
SQT4	0.5177	0.1640	0.4540	0.5559	0.5825	0.6302	0.8224	0.6230
SQT5	0.4888	0.3001	0.3627	0.5908	0.5745	0.5870	0.8489	0.6394
SQT6	0.4609	0.3049	0.4829	0.5699	0.5292	0.5490	0.8702	0.5890
SQT7	0.3383	0.1600	0.4048	0.5150	0.4739	0.5250	0.7757	0.5459
SQre1	0.5289	0.3118	0.5917	0.7704	0.8925	0.6777	0.5759	0.5865
SQre2	0.5368	0.3771	0.5147	0.7720	0.9394	0.6616	0.6048	0.6140
SQre3	0.6000	0.2736	0.5348	0.7040	0.9161	0.6811	0.5974	0.5739
SQre4	0.4842	0.1952	0.4872	0.6346	0.7783	0.5551	0.4963	0.3926
eATTads1	0.2751	0.8481	0.2562	0.2657	0.2856	0.2847	0.2982	0.3753
eATTads2	0.2974	0.8651	0.2560	0.2531	0.2999	0.2325	0.2864	0.3579
eATTads3	0.2423	0.8130	0.2116	0.2512	0.2740	0.1921	0.3280	0.2732

Table 3: Fornell-Larcker’s Criterion

	Commitment	E-Advt Effectiveness	KMGT	Reliability	Responsiveness	Satisfaction	Tangibility	Trust
Commitment	0.8571							
E-Advt Effectiveness	0.3236	0.8424						
KMGT	0.4170	0.2874	0.7863					
Reliability	0.5718	0.3045	0.5286	0.8684				
Responsive-ness	0.6048	0.3404	0.5989	0.8191	0.8838			
Satisfaction	0.7240	0.2817	0.4940	0.7528	0.7298	0.8128		
Tangibility	0.5748	0.3596	0.5112	0.6499	0.6453	0.6935	0.8146	
Trust	0.7591	0.4003	0.4933	0.6319	0.6260	0.7520	0.7464	0.8284

Note: The Square Root of AVE in bold

Overall, the measurement model of this study is satisfactory as it has shown sufficient evidence in terms of reliability, convergent validity and discriminant validity of the measurement scales.

Having examined the measurement model, the researchers proceed to test the hypothesized relationships between latent constructs within the structural model. In examining the structural model with proposed hypotheses, this present study bootstraps a total of 500 resamples from 117 observed cases originally used with ‘no sign change option’ to generate the path-model coefficients, their standard errors (SE) of the estimate and t-values. The diagram below illustrates the results of the PLS pathanalysis.

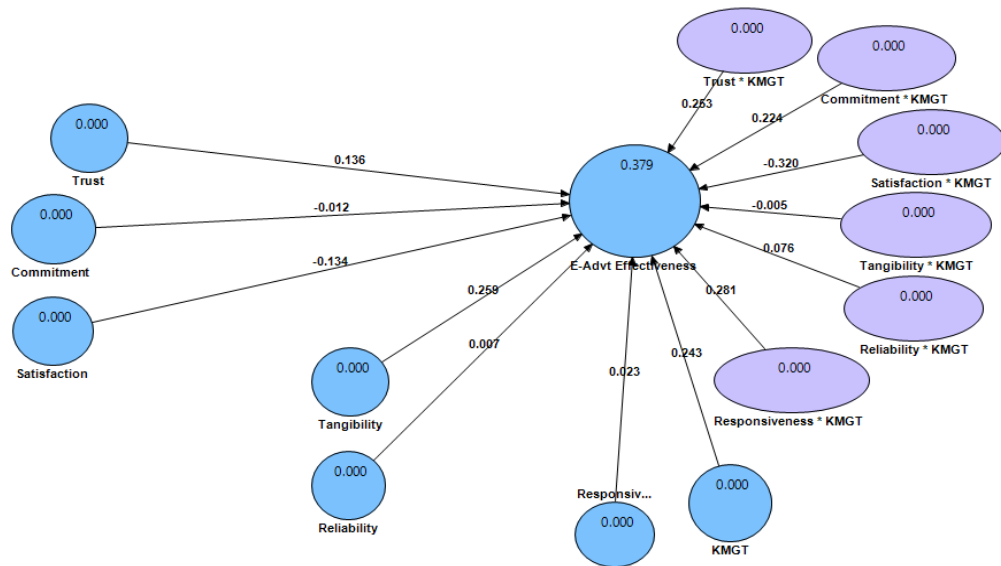


Figure 1: Results of the PLS path analysis

The following Table 4 presents the results of hypotheses testing. The results highlight a significant positive relationship between service tangibility and internet advertising effectiveness and therefore, the proposed hypothesis H4 is supported. Additionally, knowledge management (KMGT) is shown to have a significant positive relationship with internet advertising effectiveness and hence, supporting the proposed hypotheses H7. The findings further summarize that service tangibility and knowledge management are significant predictors contributing to the effectiveness of internet advertising.

It is however, found that relationship quality such as trust, commitment and satisfaction are not significantly related with internet advertising effectiveness. The proposed hypotheses H1, H2 and H3 are not supported. The results also show that service quality such as reliability and responsiveness do not have a significant relationship with internet advertising effectiveness. The proposed hypotheses H5 and H6 are thus not supported.

Table 4: Hypotheses Testing Results and Path Coefficients

Hypothesis	Relationship	Path-Coefficient, β	Standard Error (SE)	t-value	Decision
H1	Trust -> E-Advt Effectiveness	0.1359	0.1716	0.792	Not Supported
H2	Commitment -> E-Advt Effectiveness	-0.0122	0.1330	0.092	Not Supported

H3	Satisfaction -> E-Advt Effectiveness	-0.1340	0.1621	0.827	Not Supported
H4	Tangibility -> E-Advt Effectiveness	0.2591	0.1427	1.816*	Supported
H5	Reliability -> E-Advt Effectiveness	0.0075	0.1613	0.046	Not Supported
H6	Responsiveness -> E-Advt Effectiveness	0.0230	0.1703	0.135	Not Supported
H7	KMGMT -> E-Advt Effectiveness	0.2433	0.1169	2.081*	Supported

Note: Significant at *p < 0.05 and **p < 0.01

5. Moderation Effects Analysis

This paper proceeds to investigate the hypothesized moderating effects of knowledge management on relationship quality and service quality in relation to internet advertising effectiveness. According to Chin, Marcolin and Newsted (2003), partial least squares (PLS) approach to SEM provides more accurate estimates of moderation effects by accounting for the error that attenuates the estimated relationship. To test moderating effects in PLS-SEM therefore, two approaches are available: (1) the product term approach and (2) the group comparison approach. Following Chin et al.(2003), this present study examines moderation effects using the product term approach, in which the researchers have to create 6 interaction terms to the interaction effect model given that in our model has 6 predictor variables.

The empirical results of the analysis of interaction effect is highlighted in Table 5. Knowledge management (KMGMT) is found to have not moderated the relationship between relationship trust, commitment and satisfaction with internet advertising effectiveness. The proposed hypotheses H8, H9 and H10 are rejected. Similarly, the findings have also shown that the relationship between service tangibility, reliability and responsiveness with internet advertising effectiveness is not moderated by knowledge management and as a result, the proposed hypothesis H11, H12 and H13 are not supported. Overall, this study suggests that knowledge management (KMGMT) does not moderate the relationships between relationship quality and service quality on the effectiveness of internet advertising.

Table 5: Analysis of the Moderating Effects

Hypothesis	Relationship	Path-Coefficient,β	Standard Error (SE)	t-value	Decision
H8	Trust * KMGMT -> E-Advt Effectiveness	0.2529	0.2004	1.262	Not Supported
H9	Commitment * KMGMT -> E-Advt Effectiveness	0.2236	0.2658	0.841	Not Supported
H10	Satisfaction * KMGMT -> E-Advt Effectiveness	-0.3198	0.2302	1.389	Not Supported
H11	Tangibility * KMGMT -> E-Advt Effectiveness	-0.0052	0.2347	0.022	Not Supported

H12	Reliability * KMGT -> E-Advt Effectiveness	0.0762	0.2581	0.295	Not Supported
H13	Responsiveness * KMGT -> E-Advt Effectiveness	0.2814	0.2979	0.944	Not Supported

Note: Significant at *p < 0.05 and **p < 0.01

6. LIMITATIONS

One of the limitations to this study is a larger sample size with multiple responses from different individuals such as front-line staff that interacts directly with customers and suppliers who understand their needs better is required in order to be more generalized to the media and advertising industry. Another limitation is that other dimensions of both relationship quality and service quality should not be excluded to examine the association with internet advertising effectiveness. This study can also be done by including other mediator or moderator variables.

7. MANAGERIAL IMPLICATIONS

The empirical findings of this study is beneficial to both policymakers and industrial practitioners. It contributes to managerial implications by revealing that internet advertising would be more effective when service tangibility in terms of customized web-based ads services is implemented. The provision of a personalized web-based service driven by informative ads content therefore allows flexibility to click-through the advertised products online. As tangible service includes the presence of physical facilities and equipment in addition to staff appearance (Parasuraman et al., 1988), marketing practitioners are also encouraged to employ innovative web-based technology to showcase functionalities of the products and their features to effectively draw the attention of mass market from traditional means of advertising, in particular the internet-savvy consumers into making purchases online. Coupled with service quality to influence internet advertising, the establishment of knowledge management best practices through the use of software and hardware applications management, videos and podcasts are imperative for firms to effectively advertise their products and services via internet in today's competitive business environment.

8. CONCLUSION

This present study has investigated the effectiveness of internet advertising in association with relationship quality and service quality and the role of knowledge management in moderating the relationship between relationship quality and service quality on internet advertising effectiveness. Our findings have revealed that service tangibility and knowledge management are significant predictors to influence internet advertising effectiveness in Malaysia. Interestingly, relationship quality through trust, commitment and satisfaction are not significantly related to internet advertising effectiveness, which implies a client-agent relationship quality might have exerted an influence over the traditional non-online advertising. Knowledge management is nevertheless shown to have not moderated relationship

quality and service quality in relation to internet advertising effectiveness. Towards this end, the study further recommends other moderating variables such as company size, organizational experience or even the readiness of applying Internet-based technology in understanding the relationships between relationship quality, service quality and internet advertising effectiveness.

REFERENCES

- Bhattacharya, C.B., & Bolton, R.N. (2000). Handbook of relationship marketing. Thousand Oaks, CA: Sage Publications
- Brettel, M., &Spilker-Attig, A. (2010). Online advertising effectiveness: A cross-cultural comparison. *Journal of Research in Interactive Marketing*, 4(3), 176-196.
- David, H.M., &Quang, L.H. (2013). Complicated relationship among audit committee independence, non-financial and financial performance. *Journal of Knowledge Management, Economics and Information Technology*, 3(5), 1-19.
- Goldfarb, A., & Tucker, C.E. (2014). Standardization and the effectiveness of online advertising. *Management Science*, 61(11), 2707-2719.
- Ha, L. (2012). Online advertising research in advertising journal: A review. *Journal of Current Issues and Research in Advertising*, 30(1), 31-48.
- Interactive Advertising Bureau. (2014). Internet Advertising Revenue Report. Retrieved from <http://www.iab.net>
- Kim, Y.K., Kim, Y.B., Lee, Y.I. (2011). Perceived service quality for South Korean domestic airlines. *Total Quality Management and Business Excellence*, 22(10), 1041-1056.
- Kumar, J.A., & Ganesh, L.S. (2011). Balancing knowledge strategy: Codification and personalization during product development. *Journal of Knowledge Management*, 15(1), 118-135.
- Kumar, V., &Reinartz, W. (2012). Customer relationship management. Berlin: Springer.
- Leal-Rodriguez, A., Leal-Millan, A., Roldan-Salgueiro, J.L., & Ortega-Gutierrez, J. (2013). Knowledge management and the effectiveness of innovation outcomes: The role of cultural barriers. *Electronic Journal of Knowledge Management*, 11(1), 62-71.
- Malaysian Communications and Multimedia Commission. (2009). MCMC Annual Report. Retrieved from <https://www.skmm.gov.my>.
- Mochon, D., Johnson, K., Schwartz, J., &Ariely, D. (2017). What are likes worth? A Facebook page field experiment. *Journal of Marketing Research*, 54(2), 306-317.
- McDuff, D. (2017). Digital advertising: Theory and research. New York, NY: Routledge
- Nielson, A.C. (2013). What's next: Making advertisement more of a science than an art. Retrieved from <http://www.nielson.com>
- Nikhashemi, S.Y., &Paim, L., &Fard, S.S. (2013). The effectiveness of e-advertisement towards customer purchase intention: Malaysian perspective. *Journal of Business and Management*, 93-104.
- Ogutu, R.P., Ogutu, M., &Njanja, L. (2014). The moderating effect of subjective norms, perceived

- behavioural control and gender on the relationship between attitude towards internet advertising and purchase intention of university students in Kenya. *European Journal of Business Management*, 2(1), 1-37.
- Omar, A., Ramayah, T., Lin, L.B., Mohamad, O., &Marimuthu, M. (2011). Determining factors for the usage of web-based marketing applications by small-and-medium enterprises in Malaysia. *Journal of Marketing Development and Competitiveness*, 5(2), 70-86.
- Peng, J., Zhang, G., Zhang, S., Dai, S., & Li, J. (2014). Effects of online advertising on automobile sales. *Journal of Management Decision*, 52(5), 834-851.
- Rzemieniak, M., &Iannuli, F. (2015). The effectiveness of online advertising of companies in Poland. *Polish Journal of Management Studies*, 12(2), 130-138.
- Tan, D.S., &Piron, F. (2003). Advertising agencies and advertisers' perception of internet advertising: The review of marketing communications. *International Journal of Advertising*, 21(3), 381-397.
- Tutaj, K., &vanReijmersdal, E.A. (2012). Effects of online advertising format and persuasion knowledge on audience reactions. *Journal of Marketing Communications*, 18(1), 5-18.
- Yamoah, E.E. (2014). Small and medium scale enterprises and internet marketing in Ghana. *European Journal of Business and Management*, 6(18), 179-186.
- Yozgat, U., Demirbag, O., &Sahin, S. (2013). The impact of knowledge sharing and partnership quality on outsourcing success. *IPEDR*, 63(10), 50-54.