

The Effects of Organizational E-readiness on E-marketing Adoption in Tourism Businesses of Ethiopia: The Mediating Role of Innovation Attributes

Abstract

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The study aims to investigate the effects of organizational e-readiness on e-marketing adoption in tourism businesses of Ethiopia. The paper provides insight understandings on how organizational e-readiness affects e-marketing adoption and innovation attributes and to uncover the mediating effects of ease of use, compatibility and relative advantage to adopt, accept, assimilate and routines e-marketing. Methodologically, the study employed exploratory at the initial stage and descriptive research design at the major part of the research. Being positivist in philosophy, the data were collected based on survey strategy from random samples to conduct regression based parallel mediation analysis. The results revealed that organizational preparedness, capability and willingness significantly affect e-marketing adoption, ease of use, compatibility and relative advantage. Similarly, ease of use, compatibility and relative advantage significantly predicts e-marketing adoption. On the other hand ease of use, compatibility and relative advantage carries the significant influence of organizational e-readiness on e-marketing adoption. Thus, the perceptual characteristics of new innovation partially mediate the relationship between organizational e-readiness and e-marketing adoption.

Keywords: organizational e-readiness, e-marketing adoption

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Introduction

The development of internet technology has unprecedented implications in travel and tourism (Bhatt et al., 2024). Its momentous growth has become instrumental in solving the information and communication functional needs, and it has become a transformational driver that affects the structure, operation and management of tourism businesses (Agag & El-Masry, 2016; Marcin & Stanienwsk, 2016; Sigala, 2018). With the same token, Xiang et al., (2015) and Xiang et al., (2014) underscored how commercialisation of the internet changed the nature of society and laid down important milestones in facilitating unremitting technological innovations, fostering new business practices and restructuring competitive strategies. More importantly, the economic power of the internet has grown and the changes have surmised with new concepts such as ‘Long Tails’ by Anderson (2007) and ‘Wikinomics’ by Tapscott & Williams (2008). More importantly, the new discourse about the impacts of internet on travel and tourism was primarily noted by Poon (1993), Sheldon (1997) and Werthner & Klein (1999). These scholars have reflected on how the internet has brought a new thinking in travel and tourism and proposed normative view on how the sector should progress. Besides, Buhali & Law (2008), Rocha & Victor (2010) and Kim et al., (2011) suggested that the internet has created ubiquitous environment for all tourism businesses without compromising the size, complexity and place and re-engineered the marketing dynamics and conventional marketing rules.

The link between internet utilisation and tourism, both growing, has captured tourism and hospitality scholars. For instance, Mohseni et al. (2018) and Li et al., (2018) emphasised that corresponding to the growth of internet, many people are widely using it to search information, prepare for trip, purchase products and display post purchase behaviour. Sigala (2018) highlighted how the internet fundamentally altered consumer behaviour, decision-making process, design and consumption of tourism products. These studies clarified how tourists (consumers) have become co-designers, co-marketers, co-advertisers, co-promoters and co-distributors of tourism experiences and how the consumers have become micro-entrepreneurs and techno-humans. The uniqueness of tourism as being information-intensive and tech-savvy implies that the internet is far better than any other available technology to provide information relevant to tourism and hospitality marketing (Maswera et al., 2008; Berné et al., 2015). The internet with its interactivity helps customers to get access to quick and precise information about any destination, accommodations or activity. Moreover, Stiakakis & Georgiadis (2011) and Standing et al. (2014) bequeathed how the immediate information has become vital to make purchase decisions. Given the competitive nature of the sector, tourism businesses have shown an increasing desire to accept and implement e-marketing. However, information system researches have received relatively limited and fragmented coverage in sub-Saharan Africa (Mbarik et al., 2005). Regardless of the growing trends of conducting e-marketing-related studies in least developed countries, it is realised that there was few studies conducted in Ethiopia addressing the problem of e-marketing diffusion. The studies conducted by Admassie & Taye (2007), Fekadu (2006), Adam (2012), Elizabeth et al. (2010), Demeke & Olden (2012) and Assegid & Apar (2019) generally revealed that internet-based marketing is at its infant stage. These studies restated lack of legal frameworks for electronic commerce, monopolisation of telecommunication sector, limited internet service and continuously failing but expensive connection as the major factors affecting new technology diffusion. Hence, the study attempted to investigate the effect of organizational e-readiness on e-marketing adoption in tourism businesses of Ethiopia.



Literature review, research model and hypothesised relationships

The new perspective on organizational e-readiness-e-marketing adoption nexus has become an indispensable part in today's unpredictable tourism marketing environment. The notion steered to investigate how the advancement of information and communication technologies impeded the competitive position of tourism organizations. Organizational e-readiness and innovation have evolved from the readiness of the organization to endure an innovation and diffuse or facilitate innovation. But the concept of organizational e-readiness for innovation has received limited attention in contemporary research works. Lokuge et al., (2018) defines organizational readiness for digital innovation "as an organization's assessment of its state of being prepared for effective production or adoption, assimilation and exploitation of digital technologies for innovation" (Lokuge et al., 2018, p. 6). This definition highlights the importance of organizational readiness such as the continuous changes of its resources, procedures and strategies. According to readiness theories, organizational readiness for change is a precursor for successful implementation of complex technological changes. It is circumscribed by the organizational members' changes commitment, change efficacy, a state of being psychologically and behaviourally ready to take action (willing and able). In this sense organizations adopt, assimilate and exploit innovations if the changes are perceived as necessary (willingness) and organizations have required capabilities (ability) (Lokuge et al., 2018). Molla and Licker (2005) perceived organizational e-readiness as the organizations' preparedness, readiness and willingness to adopt e-commerce in developing countries. Organizational e-readiness factors are originated from the internal organizational readiness and often seen as a predictor of new technology adoption. Organisational e-readiness reflects firms' technological resources and capabilities, the level of use of innovative knowledge and IT skills and financial resources at the disposal of the firm to adopt. Organisations without such capacity lack readiness and will be less likely to adopt new innovation (Saffu et al., 2008). Organizational e-readiness is also implied to indicate the organization's overall strategic perspectives and philosophies to new technology and innovation (Leung et al., 2015; Abou-Shouk et al., 2016). Marketing and management literatures widely discussed innovation, customer and market orientations as the dominant organizational philosophies apparent to their resources, products, technologies and management. Innovation oriented firms value about the suppressed needs of the current and potential customers and focuses on inventing superior products and services and create needs for its current and potential customers. In contrast, customer-oriented firms focus on identifying the needs of its existing customers and delivering products and services that satisfy those needs (Andreu et al., 2010; Herrero et al., 2018). Thus, the hypothesized relationships between organizational e-readiness and e-marketing adoption, ease of use, compatibility and relative advantage were postulated as:

- H₁: The effect of organizational e-readiness on e-marketing adoption was positive and significant
- H₂: Organizational e-readiness significantly and positively affects e-marketing ease of use
- H₃: The effect of organizational e-readiness on e-marketing compatibility is significant
- H₄: Organizational e-readiness affects e-marketing relative advantage positively

Since e-marketing is viewed as a new philosophy and modern business practice, the emerging theories into its adoption in tourism businesses are more general. It is relatively new concept for tourism businesses operating in developing countries that have limited resources, poor infrastructures and strong competition and cannot afford to make wise investment. This implies there are much synchronized problems in e-marketing adoption and implementation for organizations (El-Gohary 2012). Moreover, high number researches were conducted in western perspective primarily due to the high use of internet. E-marketing researchers noted that the findings and theoretical models from developed countries may not necessary be applicable to developing countries. Since the business organizations in developing countries are facing different array of problems than developed countries, the theoretical applications and the inferebality of the findings based on certain common theoretical foundation has become the point of discourse (Ahamd et al., 2015). On the other hand, tourism and hospitality literatures have used many theoretical models to investigate and interpret how individuals and organizations behave while adopting new technology (Wang & Qualls 2007; Abou-Shouk et al., 2016). However, most innovation adoption theories explain that behavioural intention is a key to adoption of new technology (Agarwal & Prasad 1998). Molla & Licker (2005) found that innovation adoption models most often focused on individuals' innovation acceptance than the entire organization. This is because organization technology adoption is more complex and sophisticated and became the concern of the top management than an individual and claimed to fall under mandatory setting. Organisations are usually adopting innovations for organizational benefits than individuals. Organizations fell under different pressures that can possibly force them to adopt new innovations than individuals. For instance, the tourism industry comprised several interrelated sub-sectors, such as travel agents, airlines, hotels, car rental agencies and tour providers (Wang & Qualls, 2007; Dhaigude et al., 2016). The firms of these sub-sectors are bound to accept change through market pressures such as competition, customer demand and technological change. Understanding the technology adoption becomes more complex than merely investigating the attributes of innovations. Regardless of e-marketing as it occurs as a result on adoption of new innovations that changes most marketing functions, it is sensible to consider e-marketing as organizational adoption of innovation (Shaltoni & West, 2010; Lin, 2017). Having examined the numerous innovation adoption theories, the researcher has adopted significant constructs from diffusion of Innovation (DOI), Technology Adoption Model (TAM) and Perceived E-Readiness Model (PERM) to propose the conceptual framework for this research. This is because though Rogers's perceived characteristics of innovation is expanded to include other variables, Moore & Benbast (1991), Tornatzky et al. (1990) identified compatibility, relative advantage and complexity as the good predictors of adoption behaviour. However, compatibility and relative advantage are the most consistent variables widely observed to explain the behavioural intention of new technology adoption. Likewise, though perceived ease of use and

perceived usefulness become the crucial determinants of technology adoption, perceived ease of use may have more important impact on technology acceptance than perceived usefulness in mandatory settings (Agag & El-Masry, 2016). Since, this study aimed to test the effect of attributes of innovation on e-marketing adoption under mandatory settings; those predictors that have been consistent and parsimonious were adopted and hypothesised as follows:

- H₅: E-marketing ease use significantly affects e-marketing adoption
- H₆: E-marketing compatibility positively and significantly affects e-marketing adoption
- H₇: E-marketing relative advantage positively and significantly affects e-marketing adoption

On the other hand all new innovations and ideas do not diffuse quickly and easily. Some new innovations diffuse so quickly and easily while others do not. Perceived attributes of innovations is very useful to provide justification for this question (Ekdale et al., 2015). The positive or negative attitudes developed by the decision-making units towards new innovation significantly affects the adoption of new innovation. In this case El-Gohary (2012) have identified how the effects of internal factors on e-marketing adoption was mediated by ease of use, compatibility and relative advantage. Hence, to test the influences of ease of use, compatibility and relative advantage in mediating the relationship between organizational e-readiness and e-marketing adoption, the following hypotheses were postulated.

- H₈: Ease of use carries the influence of organizational e-readiness on e-marketing adoption
- H₉: Compatibility mediates the relationship between organizational e-readiness and e-marketing adoption
- H₁₀: Relative advantage carries the influence of organizational e-readiness on e-marketing adoption

Molla & Licker (2005) argued that though difficult to develop a complete theory of innovation adoption, they suggested the need to propose tailored type of innovation and its adoption context. The authors contend the applicability of earlier theories due to the time period before the wide spread of internet marketing took off or to the specific context of businesses of developing countries. They argued that there is a clear lack of appropriate model to investigate e-commerce adoption in developing countries and proposed Perceived E-Readiness Model (PERM). PERM has found to be the good predicator of organizational, external and innovation imperatives perspectives in investigating innovation adoption. Up on this model, to test the mediating role of innovation attributes, the following hypothesis was formulated.

H₁₁: The effect of organizational e-readiness is partially mediated by innovation attributes.

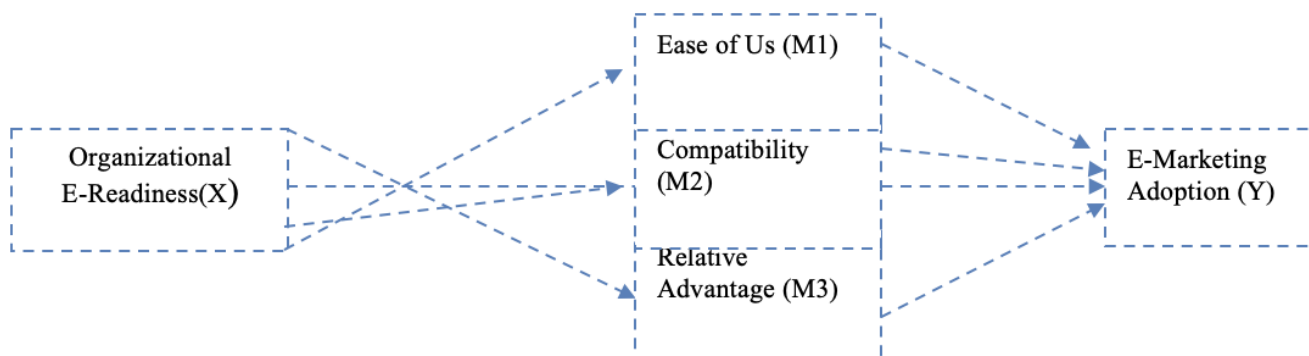


Figure 1: Research model

Material and methods

To validate the research model, positivist research paradigm was used with quantitative approach. The quantitative data were collected based on survey strategy through questionnaire from random samples of tourism businesses. Since the approach is widely accepted among social science researchers because it considered confidence level, confidence interval, sampling error and population characteristics, Aaker and Day's (1986) sample determination approach was adopted to determine sample size

$$S = z \sqrt{\frac{P(1-P)}{n}} \sqrt{\frac{N-n}{N-1}}$$

Where Z= Confidence Interval= 1.96, S= Sample error (5%) = 0.05, P= Ratio of Population characteristics (50% in social sciences) = 0.5, N= Total population and n= sample size. The primary data were collected by questionnaire. The survey questionnaires were targeted to 561 tourism businesses from a total of 340 questionnaires were collected (191 responses from star rated hotels; international and local brands) and 149 from three travel and tourism business organizations (travel agency, tour operation and travel agency and tour operation). Most of the respondents were employees, the top managements, owners, marketing/sales managers and by the individuals who were in charge of the e-marketing activities within the organization. To test the research hypotheses, regression based parallel mediation analysis was used. With regard to measurement and scaling, the measures in this study were either adapted from established scales or developed from prior established studies. Participants



were asked to express the extent of their agreement or disagreements using a seven Likert scale, ranging from (1) strongly disagrees to (7) strongly agree. The e-marketing adoption scales were formulated and adapted from El-Gohary(2012), Abou-Shouk et al.(2016), Ease of use, compatibility and relative advantage measurement scales were adapted from Davis(1989), Zhu & Kraemer(2015), Moore & Benbasat (1991), Rogress (2003), Al-Qirim (2005), Lee et al. (2003) and El-Gohary (2012). Whereas organizational e-readiness measurement scales were adapted from Molla & Licker (2005), Fathian et al. (2008), Fuchs et al. (2010) and El-Gohary(2012).

Results

Background information of tourism businesses of Ethiopia

The survey done on tourism businesses showed that 60% of the participants were from hotels and 42% were from travel and tour operation businesses. When we see specific participation, the participants from tour operators and travel agency constituted about 24.4%, followed by those from three star hotels (19.3%), four star hotels (16.6%), tour operators (13.2%), two star hotels (9.8%), five star hotels (7.8%), one star hotels (4.4%) and travel agency (4.4%). With regard to individual participants, it was found that almost 85% of the respondents were managers (marketing, sales, reservation and general managers). Also, the remaining 15 participants were owners and employees who were active in conducting e-marketing. The findings also indicated that 98% of tourism businesses have company websites and are connected to the internet system. In terms of the practices of e-marketing, 92.9% of them have the experience of at least one form of e-marketing. Nevertheless, the results of the adopters' categories indicated that 24.7% (73) of them accepted e-marketing 10 years ago, 22% (65) accepted it between 5 and 10 years and 53.3% (157) adopted it between 1 and 5 years. This means in spite of the boom in technology-based marketing in travel and tourism since the 1990s, Ethiopian tourism businesses are laggards in accepting e-marketing. Moreover, in terms of the specific implementation of e-marketing forms, 90.5% of the tourism businesses used e-mail marketing, 68.2% used the company websites to market their products and services and 60.02% used social media as the marketing medium. But the utilisation of mobile, blog, and YouTube and other user-generated contents as a marketing tool was low (about 35.3%, 21.7% and 18%, respectively).

Evaluation of the measurement model

To test the normality of residuals, histogram and normal probability plot were employed. When we looked at the histogram and probability plot of data, the histogram was symmetrical and approximately bell shaped. To determine whether univariate normality exists or not, the researchers examined the distribution of each observed variable for skewness and kurtosis. Thus, the absolute values of Z-scores were >1.96 and significant at $p < 0.05$, 2.58 and significant at $p < 0.01$, and >3.29 and significant at $p < 0.001$ and the data looked to fall in the normal distribution. This is consistent with the suggestions made by Hu & Bentler (1999), Hoyle (1995), Byrne (2010) and Field (2013). The composite reliability (CR) and average variance extracted (AVE) were computed for all variables. Hence, the CR and AVE of organizational e-readiness was .84 and .63 respectively. While we see the CR and AVE of Ease of use (CR=.904, AVE=.704), Compatibility (CR=.928, AVE=.648), Relative Advantage (CR=.904, AVE=.658) and E-marketing adoption (CR=.905, AVE=.578), the values demonstrating the admissibility of reliability and validity of the measurement scales. Thus, consistent with the cut off points suggested by Fornell & Larcker (1981), the measurement scales do not have the reliability, convergent and discriminant validity problems. As preliminary part of the mediation analysis, multicollinearity assessment was performed among all independent variables based on three criteria. First Pearson's bivariate correlation was checked among all independent variables. In this case the magnitudes of the correlation coefficients were less than .80 signifying the less likelihood of multicollinearity problem. Second, the influence of one independent variable on all other independent variables was measured by tolerance statistics. The tolerance statistics of this model was all above .2. Third, since the VIFs indicates the degree that variances in the regression estimates are increased due to multicollinearity, estimating VIF is very important to identify the state of multicollinearity of the model. For the current model the VIF of all values were below 10 and the tolerance statistics was well above .1. Thus, it is safe to conclude that there is no multicollinearity problem with the data. Moreover, Durbin-Watson was used to check whether the residuals in the model were independent. For this data Durbin-Watson statistics was 1.588, closer to 2 demonstrating that the assumption has almost certainly been met. Moreover, the linearity of the model was evaluated using P-P plot of residual and predicted values. When we see the diagonal line with the bunch of little circles, it is high to conclude that linearity assumption was maintained. For the sake of checking the homoscedasticity, the scatter plot of the standardized residual of and regression standardized predictive value were estimated. In this case if the estimation errors are relatively equal across the predicted values, the model does not exhibit the homoscedasticity issue whereas if it varies, there is heteroscedasticity, which affects the standard error of the regression coefficients (Hayes, 2013). Hence, when we examine the scatter plot of the data, it looks spread consistently in a vertical range across the X axis and relatively equally across the Y axis resembling the rectangle.

Testing the causal and hypothesised relationships

In order to test whether the effect of organizational e-readiness was transmitted through ease of use, compatibility and relative advantage, regression based parallel mediation analysis was performed. The regression results revealed that with a high significant F (4,290), 33.8654, $P < .001$, the independent and intervening variables significantly predict the dependent variable. The model also explained 39.0% of the variance in e-marketing adoption as shown on Table 1

Table: 1 Model summary



Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Change Statistics					Durbin-Watson
						R Square Change	F Change	df1	df2	Sig. Change	
1	.625 ^a	.390	.382		.76701	.390	46.360	4	290	.000	1.588

a. Predictors: (Constant), CM, EU, OER, RA
 b. Dependent Variable: EM

Table 2. Regression Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	109.095	4	27.274	46.360	.000 ^b
	Residual	170.608	290	.588		
	Total	279.703	294			

a. Dependent Variable: EM
 b. Predictors: (Constant), CM, EU, OER, RA

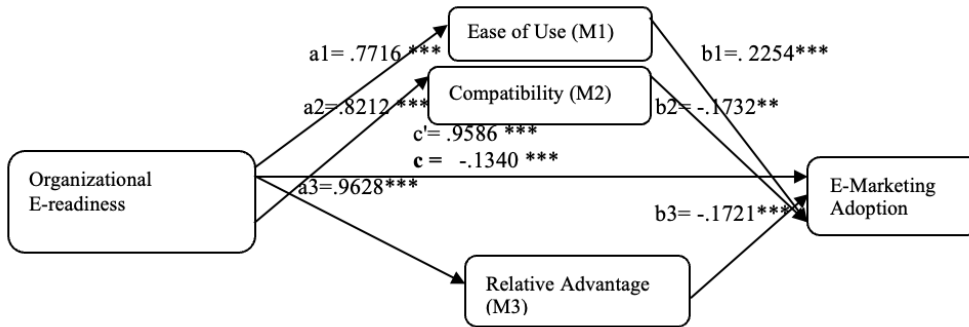


Figure 2: Path mode

Significant at .001, * * significant at .01, *significant at .05

Where c' and c represents the direct and indirect effects of organizational e-readiness on e-marketing adoption respectively. Figure 2 shows the path diagram of the research model which reflected the coefficients for the paths and their level of significances. The results indicated that organizational e-readiness significantly and positively affects e-marketing adoption (coefficient=.9586, p<.001), ease of use (coefficient=.7716, p<.001), compatibility (coefficient =.8212, p<.001) and relative advantages (coefficient=.9628, P<.001). With regard to the effects of innovation attributes, ease of use significantly and positively affects e-marketing adoption (coefficient=.2254, p<.001). Nevertheless, compatibility (coefficient = -.1732, p<.01) and relative advantage (coefficient =-.1721, p<.01) significantly but negatively affects e-marketing adoption. The highest effect was occurred by organizational e-readiness on relative advantage (coefficient=.9628) while the lowest effect occurred due to the effect compatibility on e-marketing adoption (coefficient = -.1732).

As observed from figure 2 and table 3, the hypothesised relationships represented by H₁, H₂, H₃, H₄, H₅, H₆ and H₇ were supported by the data.

Table 3: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t-Values	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.892	.300		6.300	.000***
	OER	.959	.084	.667	11.363	.000***
	RA	-.172	.061	-.202	-2.799	.005**
	EU	.225	.050	.276	4.508	.000***
	CM	-.173	.069	-.171	-2.496	.013*

a. Dependent Variable: EM

The results of parallel mediation analysis shown on Table 4 shows that the specific indirect effects of organizational e-readiness through ease of use, compatibility and relative advantage were .1739, -.1422 and -.1657 respectively. A 95% bias-corrected confidence interval based on 5000 bootstrap samples indicated that the indirect effect through ease of use (a1b1=.1739), holding all other mediators constants was above zero (.0891 to .2965). Likewise the indirect effect of organizational e-readiness through compatibility (a2b2=-.1422) was different from zero CI (-.2438 to -.0364) and through relative advantage (a3be=-.1657) was different from zero CI (-.2973 to -.0561). Whereas the total indirect effect of organizational e-readiness through innovation attributes was -.1340 and different from zero CI (-.2618 to -.0173). Thus, the hypothesised relationships represented by H₈, H₉, H₁₀ and H₁₁ were supported by the data. This means ease of use, compatibility and relative advantage carries the significant influences of organizational e-readiness on e-marketing adoption. When we analyze the specific indirect effects of organizational e-readiness on e-marketing adoption through the intervening variables such as ease of use, compatibility and relative advantage, the effects were (effect=.1739, p<.001, effect =-.1422, p<.01 and effect=-.1657, p<.01) demonstrating that the effects were significantly different from 0 at p=.05. Thus, innovation attributes mediated the relationship between organizational e-readiness and e-marketing adoption.

Table 4: Process macro output

Where	Y= E-Marketing Adoption X= Organizational E-readiness M1 = Ease of Use M2 = Compatibility M3 = Relative Advantage
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Total, Direct and Indirect Effects						
Total effect of OER on EM						
Effect	SE	t	p	LLCI	ULCI	
.8246	.0770	10.7114	.0000	.6731	.9762	
Direct effect of OER on EM						
Effect	SE	t	p	LLCI	ULCI	
.9586	.1029	9.3166	.0000	.7561	1.1611	
Indirect effect of OER on EM						
Effect	Boot SE	Boot LLCI	Boot ULCI			
TOTAL	-.1340	.0603	-.2618	-.0173		
EU	.1739	.0520	.0891	.2965		
CM	-.1422	.0530	-.2438	-.0364		
RA	-.1657	.0615	-.2973	-.0561		
(C1)	.3161	.0795	.1741	.4850		
(C2)	.3396	.0988	.1658	.5526		
(C3)	.0235	.0906	-.1352	.2250		
Ratio of indirect to total effect of OER on EM						
Effect	Boot SE	Boot LLCI	Boot ULCI			
TOTAL	-.1625	.0738	-.3181	-.0194		
EU	.2109	.0682	.1052	.3742		
CM	-.1724	.0650	-.2979	-.0405		
RA	-.2010	.0789	-.3720	-.0629		
Ratio of indirect to direct effect of X on Y						
Effect	Boot SE	Boot LLCI	Boot ULCI			
TOTAL	-.1398	.0555	-.2413	-.0191		
EU	.1814	.0638	.0897	.3406		
CM	-.1483	.0525	-.2451	-.0382		
RA	-.1729	.0653	-.3192	-.0589		
Normal theory tests for specific indirect effects						
Effect	se	Z	p			
EU	.1739	.0527	3.3008	.0010		
CM	-.1422	.0538	-2.6435	.0082		
RA	-.1657	.0613	-2.7032	.0069		

Discussions

Organizational e-readiness e-marketing adoption nexus

The theoretical perspective of organizational e-readiness was driven from the handy boundaries of the Ethiopian tourism businesses to integrate, assimilate and adopt e-marketing. These boundaries involve the capabilities of the staff (Human resource e-readiness), top management attitude, commitment and knowledge about e-marketing (top management characteristics) and the technological capacity of these businesses to adopt new technology. Accordingly, organizational e-readiness dimension was seen as combined effects of human e-readiness, technological e-readiness and top management commitment/support on e-marketing adoption. The results indicated that organizational e-readiness positively and significantly affect e-marketing adoption. Consistent with the works of Molla & Licker (2005), Abou-Shouk et al. (2016), Dalvi-Esfahani et al. (2018), Lokuge et al. (2018) and Rondović et al. (2019) changes on technological capital, human resource readiness and top management e-readiness resulted in simultaneous changes in e-marketing adoption. Thus, organizations that have the accumulation of human, technological and financial resources and top management commitment have more likely to moved to the adoption of new technologies. Since in organizations, multiple stakeholders are affected by the changes associated with e-marketing adoption, there is a general perception that the less complicated e-marketing is, the more likely that the adoption projects accomplished and generate the expected results. In other words perceived ease of use of e-marketing may be affected by the perceived benefits of the adoption since the adoption process may determine the actual realization of the expected results. Thus, the relationship between organizational e-readiness and e-marketing ease of use strongly supported the fact that changes in the availability of human resources with IT skills and knowledge, IT base and extent of computerization and experience with the network application resulted in changes on e-marketing to use. Because e-marketing adoption is a process of introducing changes into tourism businesses, the impacts of the changes was determined by the nature of the organization to the extent that extensive changes might be compatible with the existing business practices or accepted. That means organizational e-readiness has made e-marketing more compatible to organizational values, cultures, working habit and technological infrastructure. Moreover, the perceived benefits of e-marketing highly affect the assimilation and adoption e-marketing. This means since e-marketing was perceived advantages by reducing operation costs, expanding market reach, increase customer base, increasing sales and revenue and creating new mechanism for the promotion for organizational products and services, there was high likely to be adopted into the operation of tourism businesses. Perhaps such benefits have been also influenced by the readiness and preparedness of organization to assimilate and integrate new technologies into their business operations. Thus, significant changed in organizational e-readiness resulted in significant changes in e-marketing adoption, e-marketing ease of use, e-marketing compatibility and e-marketing relative advantage.

The effects of innovation attributes on e-marketing adoption

The three constructs of empirically interrelated but conceptually distinct innovation attributes were tested to examine how far the perceptual characteristics of innovation influenced tourism businesses of Ethiopia to make e-marketing adoption decision. These constructs were drawn based on the frequency of application and testability on an extant of literatures focusing on technology adoption and it parsimonious to predict adoption behaviour at organizational level. Hence, the effects of ease of use, compatibility and relative advantage on e-marketing adoption were tested to investigate how far these attributes shaped the e-marketing adoption decision. The hypothesised tests results revealed that there was a significant and positive relationship between ease of use and e-marketing adoption. This means e-marketing ease of use, simplicity, convenience, interactivity and



less complexity to learn significantly affect e-marketing adoption. The result is consistent to the works El-Gohary (2012), Aye (2015), Huang et al. (2016) and Agag & El-Masry (2016). These scholars highlighted that the ease of use of new technology, the better chances for organizations to make adoption decision. Similarly, the test results of the effects of compatibility and relative advantage on e-marketing adoption were significant but negative. Lueng et al. (2015) on their exploratory studies on the influential determinants of travel app adoption has underlined the positive and significant effects of compatibility on the intention to adopt travel app. Similarly, Wang et al. (2016) strengthened the fact that compatibility significantly predicts the effect of hotels' mobile reservation system. Leung et al. (2015) pointed that Hong Kong Hotels adopted ICT because they expected the new technology to reduce the operational costs, anticipated to achieve marketing efficiency and expected to improve customer experiences by enhancing convenience and facilitating constant communication. Similarly, El-Gohary (2012) in his empirical study on factors affecting e-marketing adoption in small Egyptian tourism business identified the positive relationship between relative advantage and e-marketing adoption.

The mediating roles of ease of use, compatibility and relative advantage

E-marketing adoption by tourism businesses of Ethiopia was directly and indirectly affected by organizational e-readiness factors. The findings indicated that while the direct effect of organizational e-readiness on e-marketing adoption was positive and strong, the indirect effect was small and weak. When we analyze the specific indirect effects of organizational e-readiness on e-marketing adoption through the intervening variables such as ease of use, compatibility and relative advantage, the effects were (effect=.1739, $p < .001$, effect=-.1422, $p < .01$ and effect=-.1657, $p < .01$) demonstrating that the effects were significantly different from 0 at $p = .05$. Thus, innovation attributes mediated the relationship between organizational e-readiness and e-marketing adoption.

Conclusions

The adoption of e-marketing by organizations is significantly influenced by a combination of factors, including human e-readiness, technological e-readiness, and top management commitment/support. Organizations with the necessary human, technological, and financial resources, as well as strong top management commitment, are more likely to adopt new technologies like e-marketing. Changes in the availability of IT-skilled human resources, IT infrastructure, and experience with network applications result in changes in the perceived ease of use of e-marketing. Organizational e-readiness also makes e-marketing more compatible with the organization's values, culture, work habits, and technological infrastructure. The perceived benefits of e-marketing, such as reduced operational costs, expanded market reach, increased customer base, higher sales and revenue, and new promotional mechanisms, positively influence e-marketing assimilation and adoption. The readiness and preparedness of the organization to integrate new technologies into their operations also contribute to the perceived benefits of e-marketing. The ease of use, compatibility, and relative advantage of e-marketing mediate the relationship between organizational e-readiness and e-marketing adoption. While the indirect effects of organizational e-readiness on e-marketing adoption through these innovation attributes are significant, they are relatively small and weak, in addition to the strong direct effect.

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