

The Customer Engagement Construct in Hospitality and Tourism Context: A Systematic Literature Review

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Abstract

Marketing is both Arts and Science, which deals regularly with pursuing new customers. These customers have constantly been maintained as long as possible in long-term relationships. As per Customer Engagement, the degree of relationships has gradually developed, profoundly concerned with, Emotional Attachment, trust in brand, organization and loyalty. Consequently, these customers would have been enthusiastic at products' consummings, as long as they could be, along with the willingness to persuade any other individual to become as customers. The customer engagement construct has been widely approached in the marketing literature since 2006. Scholars in hospitality and tourism have constantly perceived the importance of this construct and intentionally offered both a conceptual framework and measurement scale to capture this phenomenon. However, until now, there has been no consensus on a large number of issues, including conceptualization and dimensionality. Moreover, this concept is such a new idea in hospitality and tourism. Hence, the direction for future researches and what had been done in the past are indispensable for researchers since it helps reduce research fragmentations and also facilitates researchers to better understand the past, present, and future state of this concept. The purpose of this study is to use the existing works in hospitality and tourism literature with the systematic literature review to reveal facts and present future researches. SCOPUS and ISI have been employed as the primary databases to search and identify the relevant articles. A total of 19 out of 590 documents was identified and selected to analyze, based on types of research, country, and journal. Furthermore, the issues of theoretical background, conceptual framework, conceptualization, dimensionality, statistical analysis, key contributors are summarized, respectively. Eventually, this study addresses the scope of potential future research in the realm of hospitality and tourism.

Keyword: customer engagement, systematic review, tourism, hospitality

Introduction

Nowadays, the world's marketing scenario has portrayed the vital interest to take advantages in the sustainably extreme competitions as for being Customer Engagement (Brodie, Ilic, Juric and Hollebeek, 2013). Thus, it is such a significant issue to create brand loyalty in order that the customers will hold a long-term relationship, with potentially spending, having high loyalty on brand, consequently, the phenomenon of emotional attachment will advent and trend to promote the brand among their accustoms and families, paving the way to create profound relations as portrating psychological status which leading to sustainably trust in brand loyalty (Thakur, 2018).

Marketing literature has treated the customer engagement construct as an ardently imperative driver to gear up business success. This construct has been tested and verified to engender a positive effect on an analytical performance of a business (Brodie and Hollebeek, 2011; Brodie, Hollebeek, Juri, and Ili, 2011; Kumar et al., 2010; Kumar and Pansari, 2016; van Doorn et al., 2010). Several pieces of literature, for instant point out that customer engagement plays a significant role in increasing firm performance in both direct (e.g., net profit margin, market share, or revenue) and indirect ways (e.g., provide useful feedbacks that firms can use to improve their product or services) (Hollebeek, Conduit, and Brodie, 2016; Hollebeek, Srivastava, and Chen, 2016; Palmatier, Kumar, and Harmeling, 2017; Pansari and Kumar, 2017a, 2017b; So, King, Sparks, and Wang, 2016). Also, it can be discerned as a strategy to strengthen a sustainable competitive advantage (Brodie, Ilic, Juric, and Hollebeek, 2013; van Doorn et al., 2010) as well as an approach to effectively keeping the customer to the firm (Brodie et al., 2013). However, it is relatively a novel concept compared to the traditional key drivers such as customer satisfaction, perceived service quality, perceived value, or trust. Moreover, the customer engagement's effect size tends to be higher when compared with such traditional drivers as demonstrated in the former studies (e.g., So et al., 2016). Therefore, this construct has gained popularity and received much attention to scholars in the marketing literature.

Nevertheless, the concept of customer engagement has been gradually recognized in the context of hospitality and tourism as the main driver for business success since 2013. For example, So et al. (2016), proposed a nomological framework explaining the role of customer engagement to influence the brand loyalty mediated by the service brand evaluation and brand trust. Among the customer engagement, service brand evaluation, service brand evaluation, and brand trust, it is found that the contribution of customer engagement to brand loyalty carries the highest weight. Although the construct has been exploring in recent years, several published articles in the context of hospitality and tourism are relatively thin compared to those published in the general marketing or business subject. For instance, according to the keyword "customer engagement" in the SCOPUS database on December 17, 2017, there are 590 documents related to customer engagement. Among these, thirty-four documents come from the subject of hospitality, tourism, and hotel, but the trend has been

exponentially increased. Trendly, it is predictable that more and more research on this topic will be proliferated in the upcoming years. In this way, it is necessary to know where the direction of future studies should head to in order to reduce future research fragmentations. A systematic literature review, thus, can be a useful tool to accomplish this task.

To the authors' best knowledge, there is no systematic literature review designed explicitly for the context of hospitality and tourism. This study aims to present what has been done and the direction for future research. More specifically, it provides a summary of the current state of customer engagement in terms of types of study and contexts, including the platforms and countries. Furthermore, theoretical background, conceptualization, dimensionality, statistical analysis, and critical contributors are introduced.

The structure of the article is as follows: First, it describes the search process from the two recognized databases, which are ISI and SCOPUS. Second, the analysis of findings is presented in terms of classification based on types of study and context. Third, theoretical perspective, concepts, and frameworks are summarized. Forth, conceptualization, dimensionality, and statistical analysis are presented. Fifth, key contributors are introduced to show how a large number of articles related to customer engagement have been done constantly. Finally, the directions for future research are discussed.

Search Process

Articles were systematically drawn from ISI (www.webofscience.org) and SCOPUS (www.scopus.com) databases to investigate the existing research area in the context of hospitality or tourism and summarize the gaps for future studies in the domain of customer engagement. The WOS (Web Of Science), for example, is created by Institute for Scientific Information (ISI), providing reference cross-disciplinary research with multiple databases (Lankes, 2004) while SCOPUS is a well-recognized citation database created by Elsevier. SCOPUS is spreadly used because it includes various ranges of the journal, and all of them are reviewed annually.

The search process, spanning from 1990 to 2017, was started with using keywords "customer engagement" or "tourist engagement" to screen the available articles. This initial search resulted in 423 and 590 articles available in ISI and SCOPUS, respectively. To narrow down, additional criteria were introduced to limit the subject to "hospitality" or "tourism" or "hotel" A total of 69 articles were identified and reexamined for duplication, thus leaving 34 articles to survive. After removing duplication, two researchers reread the abstracts. In the case that the abstracts did not provide adequate information, both researchers independently investigated contents in details to ensure that the articles were relevant to this current study. Eventually, nineteen articles were used as inputs for the subsequent analysis.

Analysis and results

Research type

Table 1: Type of studies

Year	Author (s)	Type	Methods
2013	Wei, Miao, and Huang (2013)	Quantitative/ Qualitative	Content analysis and Full factorial MANOVA
2013	Torres and Kline (2013)	Qualitative	Content analysis with the aim to propose a conceptual framework
2014	So, King, and Sparks (2014)	Quantitative	Scale development (EFA/CFA)
2014	Yoshida, Gordon, Nakazawa, and Biscaia (2014)	Quantitative	Scale development and test theory (EFA / CFA / SEM)
2014	P. K. Chathoth et al. (2014)	Qualitative	Content analysis
2014	Cabiddu, De Carlo, and Piccoli (2014)	Qualitative	Inductive Case studies
2015	Dijkmans, Kerkhof, and Beukeboom (2015)	Quantitative	Correlation, Regression, two way ANOVA, and mediator analysis with bootstrapping
2015	Kandampully, Zhang, and Bilgihan (2015)	Qualitative	Content analysis with the aim to propose a framework to explain customer loyalty; CE is treated as an antecedent
2015	Organ, Koenig-Lewis, Palmer, and Probert (2015)	Qualitative / Quantitative	Scale development and test theory (EFA / CFA / SEM)
2015	Zhang, Kandampully, and Bilgihan (2015)	Qualitative	Content analysis with the aim to propose the conceptual framework
2016	So et al. (2016)	Quantitative	Test theory (CFA / SEM / HOLS)
2016	P. K. Chathoth, Ungson, Har- rington, and Chan (2016)	Qualitative	Content analysis with the aim to propose the dynamic co-creation framework
2016	Oyner and Korelina (2016)	Qualitative	Content analysis with the aim to define relevant forms of co-creation activities and customer engagement in value co-creation geared toward increasing customer satisfaction and loyalty

Year	Author (s)	Type	Methods
2017	Harrigan, Evers, Miles, and Daly (2017)	Quantitative	Scale development and Test theory (EFA / CFA / SEM)
2017	E. Kim, Chiang, and Tang (2017)	Quantitative	Test theory (CFA / SEM)
2017	Li, Cui, and Peng (2017)	Quantitative	Panel data (Econometrics)
2017	Buonincontri, Morvillo, Okumus, and van Niekerk (2017)	Quantitative	Test theory (EFA / CFA / SEM)
2017	Romero (2017)	Quantitative	Test theory (PLS)
2017	Lei, Pratt, and Wang (2017)	Quantitative	Negative binomial regression

Table 1 exhibits the type of research based on time spanning from 2013 to 2017, indicating that qualitative type of research played an essential role in the studying until 2016 whereas the quantitative type of research proliferated in 2017. Overall, the most popular type of research is quantitative analysis (n =12), followed by qualitative analysis (n=9), respectively.

Context of study

Customer engagement has been studied across platforms and businesses. Hence, it is useful to perceive the distribution of studied platforms because it helps determine the unexplored area where it should be taken into account for the upcoming studies, and it also helps researchers to see the trend on each platform.

Table 2: Platform used in the article

Time	Author(s)	General	Online	Offline
2013	Torres and Kline (2013)			Yes
	Wei et al. (2013)		Yes	
2014	Cabiddu et al. (2014)		Yes	
	P. K. Chathoth et al. (2014)	Yes		
	So et al. (2014)	Yes		
	Yoshida et al. (2014)			Yes
2015	Dijkmans et al. (2015)		Yes	
	Kandampully et al. (2015)	Yes		
	Organ et al. (2015)			Yes
	Zhang et al. (2015)		Yes	
2016	P. K. Chathoth et al. (2016)	Yes		
	Oyner and Korelina (2016)		Yes	
	So et al. (2016)	Yes		

Time	Author(s)	General	Online	Offline
2017	Buonincontri et al. (2017)			Yes
	Harrigan et al. (2017)		Yes	
	E. Kim et al. (2017)			Yes
	Lei et al. (2017)		Yes	
	Li et al. (2017)		Yes	
	Romero (2017)		Yes	
Total	19	5	9	5

Unsurprisingly, the trend of the online platform, according to Table 2, has increased from one study in 2013 to four studies in 2017, partly due to the popularity in using technology in daily life. The increasing popularity of the Internet using, for example, is perceived as a precious opportunity for firms to interact with their potential customers (So et al., 2016) rather than depending on the capital spending on the conventional advertising. Overall, the most popular platform is the online platform (n=9), followed by general (both online and offline) platform (n=5) and offline platform (n=5).

Table 3: Classified by business

Author(s)	Brand	Hotel	Airline	Others
Wei et al. (2013)		X		
Dijkmans et al. (2015)	X			
Kandampully et al. (2015)	X	X	X	X
Torres and Kline (2013)		X		
So et al. (2014)		X	X	
So et al. (2016)		X	X	
Yoshida et al. (2014)				X
P. K. Chathoth et al. (2014)		X		
Organ et al. (2015)				X
Cabiddu et al. (2014)		X		
P. K. Chathoth et al. (2016)	X	X	X	X
Zhang et al. (2015)	X			
Harrigan et al. (2017)	X			
Oyner and Korelina (2016)		X		
E. Kim et al. (2017)		X		
Li et al. (2017)		X		
Buonincontri et al. (2017)				X
Romero (2017)	X			
Lei et al. (2017)		X		
Total	6	12	4	5

Apart from the business platform, Table 3 portrays that twelve articles concentrate on the hotel business, and four articles focus on airline business. Among six articles focusing on brand study, there are four articles specifically studied customer engagement in terms of generic brand and two articles investigated generic brands of the hotel, airline, and other hospitality-related. Apart from the brand, hotel, and airline business, five studies concentrated on customer engagement on sport (Yoshida et al., 2014), general hospitality and tourism business (P. K. Chathoth et al., 2016; Kandampully et al., 2015), gastronomy (Organ et al., 2015), and destination (Buonincontri et al., 2017).

Classification by country

Table 4: Articles classified by studied countries

No	AUS	HK	JP	MAC	TWN	ITA	NET	RUS	SPN	WAL	USA
1		X									X
2	X										
3			X								
4		X									
5						X					
6							X				
7										X	
8	X							X			
9											X
10											
11					X						X
12											
13						X					
14									X		
15				X							
Total	2	2	1	1	1	2	1	1	1	1	3

One of the desirable properties of the positivism paradigm is generalizability (Cheng, Dimoka, and Pavlou, 2016). To make the findings generalizable, multiple studies of customer engagement across the world are the pre-requisite. In response to the increasing trend of customer engagement, various pieces of literature have spread across countries recently. According to Table 4, the most outstanding studied country is in the United States (n=3), followed by Australia (n=2), Hong Kong (n=2), and Italy (n=2). With the current distribution, Asia (n=7) has been studied the most, followed by Europe (n=6), and the United States (n=3) respectively. Compared with the mature constructs that have been investigated throughout

the globe such as brand equity (Theurer, Tumasjan, Welp, and Lievens, 2016) or brand loyalty (Cengiz and Akdemir-Cengiz, 2016), there are much more rooms for increasing or replicating the studies of customer engagement to strengthen the external validity of findings.

Classification by journal

Table 5: Articles classified by journal (ISI and SCOPUS)

Journal	2013	2014	2015	2016	2017	Total
ATR		Cabiddu et al. (2014)				1
APJTR					Lei et al. (2017)	1
IJCHM	Torres and Kline (2013), Wei et al. (2013)		Kandampully et al. (2015)	P. K. Chathoth et al. (2016)		3
JHTR		So et al. (2014)				1
JHTT			Zhang et al. (2015)			1
JSM		Yoshida et al. (2014)				1
JHMM					Romero (2017)	1
JTTM					E. Kim et al. (2017)	1
JTR				So et al. (2016)		1
TM		P. K. Chathoth et al. (2014)	Dijkmans et al. (2015), Organ et al. (2015)		Buonincontri et al. (2017), Harrigan et al. (2017), Li et al. (2017)	6
WHTT				Oyner and Korelina (2016)		1
Total	2	4	4	3	6	19

*ATR = *Annals of Tourism Research*; APJTR = *Asia Pacific Journal of Tourism Research*; IJCHM = *International Journal of Contemporary Hospitality and Management*; JHTR = *Journal of Hospitality and Tourism Research*; JHTT = *Journal of Hospitality and Tourism Technology*; JSM = *Journal of Service marketing*; JHMM = *Journal of Hospitality Management*; JTTM = *Journal of Travel and Tourism Marketing*; JTR = *Journal of Travel Research*; TM = *Tourism Management*; WHTT = *Worldview Hospitality, Travel, and Tourism*

This kind of classification facilitates stakeholders to know where the topic has been published (Schibrowsky, Peltier, and Nill, 2007) and to identify and select where to hand-in

their manuscripts (Islam and Rahman, 2016). According to Table 5, twelve peer-reviewed journals published 19 articles associated with customer engagement, particularly in hospitality and tourism context. It reveals that the Tourism Management (TM) is the dominant journal containing six articles, followed by the International Journal of Contemporary Hospitality Management (IJCHM) publishing three articles. In 2017, all published articles employed only quantitative methodology to investigate the cause and effect as well as empirically testing the relationship on this construct. It is worth noting that all qualitative articles are published in the IJCHM.

Conceptualization and dimension

Table 6: Conceptualization of customer engagement in the context of tourism

Author(s)	Conceptualization or operationalization
Wei et al. (2013)	Customer engagement behavior (CEB) represents the behavioral dimension of CE
Dijkmans et al. (2015)	Consumers familiarity with a company's social media activities and the online following of these activities
So et al. (2014)	A customers personal connection to a brand as manifested in cognitive, affective, and behavioral actions outside of the purchase situation
So et al. (2016)	Customer personal connection to a brand as manifested in cognitive, affective, and behavioral responses outside of the purchase and conceptualized CE as a higher-order construct with 5 factors
Yoshida et al. (2014)	Sports consumers extra-role behaviors in non-transactional exchanges to benefit his or her favorite sports team, the teams' management, and other fans
Organ et al. (2015)	A behavioral action encompassing interactive customer experiences
Cabiddu et al. (2014)	Interaction between customers and organizations (Brodie, Roderick, Illic, Juric, and Hollebeek, 2011)
Harrigan et al. (2017)	The same as So et al. (2014)
Oyner and Korelina (2016)	Interactive process characterized by different intensities of customer engagement, occurring at different stages of the customer company interaction (Brodie et al. 2011)
E. Kim et al. (2017)	The state of being involved with and dedicated to a specific offering at a tourism destination, and includes the qualities

Author(s)	Conceptualization or operationalization
	of attachment, emotional connection, and devotion (Taheri, Jafari, and OGorman, 2014)
Li et al. (2017)	Customer engagement behaviors focus on Content creating in social media
Romero (2017)	Study the influence of customer-based factors on two important customer engagement behaviors for the hospitality industry: word-of-mouth and co-creation.
Lei et al. (2017)	Interaction with the brand directly through actions

Table 7: Dimensionality of customer engagement

Author(s)	Cognitive	Emotional	Behavioral
Wei et al. (2013)			X
Dijkmans et al. (2015)	X		X
So et al. (2014)	X	X	X
So et al. (2016)	X	X	X
Yoshida et al. (2014)			X
Organ et al. (2015)			X
Cabiddu et al. (2014)			X
Harrigan et al. (2017)	X	X	X
Oyner and Korelina (2016)			X
E. Kim et al. (2017)	X		X
Li et al. (2017)			X
Romero (2017)			X
Lei et al. (2017)			X
Total	5	3	13

It is found that scholars have defined customer engagement in different ways, namely pure behavior and the mixed of behavioral and psychological constructs. On the one hand, the behavioral dimension has been proposed (Cabiddu et al., 2014; Lei et al., 2017; Li et al., 2017; Organ et al., 2015; Oyner and Korelina, 2016; Romero, 2017; Wei et al., 2013; Yoshida et al., 2014) with the reason that the conceptualization of psychological deviates from that of behavioral, which can negatively affect the results (Romero, 2017). Furthermore, the lack of consensus complicates its conceptualization (Dijkmans et al., 2015; Romero, 2017). Furthermore, other intricate dimensions within the concept of customer engagement such as identification (cognitive dimension) might be used by other constructs within the same nomological network, thus confusing the results (Romero, 2017). On the other hand, scholars believe that customer engagement needs to go beyond behavioral manifestation because the

reason that customers decide to participate might be for gathering more information to make their decisions, not because they want to engage with the firm (So et al., 2014, 2016). Engagingly, the customers must have a persisting emotional connection rather than participation (Harrigan et al., 2017; So et al., 2014, 2016). More specifically, So et al. (2014, 2016) conceptualized customer engagement as “a customer’s personal connection to a brand as manifested in cognitive, affective, and behavioral responses outside of the purchase.” From a summarized review shown in Table 6, eight (Cabiddu et al., 2014; Lei et al., 2017; Li et al., 2017; Organ et al., 2015; Oyner and Korelina, 2016; Romero, 2017; Wei et al., 2013; Yoshida et al., 2014)) out of 13 studies conceptualize customer engagement as only behavioral responses. Table 7 summarizes the dimension of customer engagement conformed to the original general dimensions proposed in the marketing and psychology literature.

According to the marketing literature, customer engagement is treated as a second-order multi-dimensional construct (Bowden, 2009; Brodie et al., 2013; Dwivedi, 2015; Hollebeek, 2011). So et al. (2014, 2016) proposed and validated the customer engagement measurement scale based on the previous works in the marketing literature, but specifically designed to fit the tourism context with second-order five-dimensions, which are identification, attention, enthusiasm, absorption, and interaction. According to So et al. (2014, 2016), enthusiasm represents the vigor’s level of a customer while attention is the attentiveness’ level of customers. Absorption refers to the customers’ level of happiness, and identification is the customers’ perception of belongingness. Finally, interaction is behavioral transactions (e.g., participation). Classifying customer engagement into five dimensions is consistent with the original three dimensions proposed in marketing literature, comprising cognitive, emotional, and behavioral dimensions (Bowden, 2009; Brodie et al., 2013).

Interestingly, Harrigan et al. (2017) tested the validity of the proposed instrument (5 dimensions with 25 items) in the United States with 195 observations and found that the parsimonious version (3 dimensions, which are identification, interaction, and absorption with 11 items) is preferred. However, the sample size in the study of Harrigan et al. (2017) was small (195 observations) for the structural equation modeling analysis requirement and could yield an inaccurate result (Fan, Thompson, and Wang, 1999; Hoyle and Gottfredson, 2015; Reinartz, Haenlein, and Henseler, 2009; Westland, 2010). In a nutshell, the customer engagement construct in the context of tourism is still young. Measurement model explicitly designed for tourism context needs to be extensively developed and validated across context (e.g., cruise tourism, sustainable tourism, or medical tourism).

To sum up, to make it mutually exclusive and collectively exhaustive, customer engagement could be conceptualized to have both behavioral and non-behavioral (psychological) dimensions to ultimately reflect the underlying psychological construct which helps researchers to distinguish engagement from other activities such as involvement or participation. Future research should pay attention to test the validity of the existing scale

development in different settings in order to strengthen the internal validity and generalize the results across contexts. Besides, a longitudinal study should be introduced because it helps reflect the enduring trait, which is a crucial characteristic of customer engagement.

Theories or framework related to customer engagement

Table 8: Theories, frameworks, and concepts related to the study of CE

Related theory/framework	Study	Total
Adaptive Structuration theory	Cabiddu et al. (2014)	1
Affordance theory	Cabiddu et al. (2014)	1
Co-creation framework	P. K. Chathoth et al. (2014), P. K. Chathoth et al. (2016), Oyner and Korelina (2016), Zhang et al. (2015)	4
Exchange theory of interpersonal communication	Li et al. (2017)	1
Experience marketing framework	P. K. Chathoth et al. (2016)	1
Open innovation	Oyner and Korelina (2016)	1
Regulatory engagement theory	So et al. (2014)	1
Relationship marketing	Oyner and Korelina (2016)	1
SD logic	P. K. Chathoth et al. (2014), P. K. Chathoth et al. (2016), Organ et al. (2015)	3
Signaling theory	Li et al. (2017)	1
Social exchange theory	Harrigan et al. (2017), So et al. (2016)	2
Social identity theory	Harrigan et al. (2017), So et al. (2014), Zhang et al. (2015)	3
Team identification theory	Yoshida et al. (2014)	1
Theory of belief updating	Zhang et al. (2015)	1
Theory of Planned behavior	Organ et al. (2015)	1
Theory of subjective norms	Zhang et al. (2015)	1
Value-in-use	P. K. Chathoth et al. (2014), Organ et al. (2015)	2

Various theoretical perspectives, concepts, or frameworks have been extensively employed to investigate customer engagement in the context of hospitality and tourism. Based on the 12 articles, seventeen concepts have been used as a background to support examining customer engagement or its nomological network. Not surprisingly, most of them were borrowed from the previous works in the marketing literature, especially the Service-Dominant (SD) logic and its relation. The SD logic is the aggregate framework explaining the

value creation through actors' contribution in views of service-for-service exchange. It contains five axioms and 11 foundational premises that links many customers and service-oriented framework. For instance, according to the axiom two and foundational premises 6: "value is co-created by multiple actors, always including the beneficiary," value-in-use, value-in-context, and co-creation framework can be viewed subset of SD logic. However, it is worth remarking that the SD logic will be considered suitably if the characteristic of customer that are highly interactive by nature is presupposed. Table 8 exhibits that the most popular framework used in the context of hospitality and tourism to form customer engagement is the co-creation framework, which it has been exerted for four studies, followed by the SD logic (n=3) and the social identity theory (n=3) respectively.

According to the level classification, all of these theoretical perspectives, concepts, or frameworks from Table 8 can be divided into 3 levels, consisting of the (1) individual level (e.g., Theory of Belief Updating (Zhang et al., 2015), Theory of Planned Behavior (Organ et al., 2015), or Affordance theory (Cabiddu et al., 2014)), (2) social-level (e.g., Social Exchange theory (Harrigan et al., 2017; So et al., 2016), social identity theory (Harrigan et al., 2017; So et al., 2014; Zhang et al., 2015), team identification theory (Yoshida et al., 2014), exchange theory of interpersonal communication (Li et al., 2017)), and (3) firm-level (e.g., co-creation framework (P. K. Chathoth et al., 2014, 2016; Oyner and Korelina, 2016; Zhang et al., 2015), experience marketing framework (P. K. Chathoth et al., 2016), open innovation (Oyner and Korelina, 2016), relationship marketing theory (Oyner and Korelina, 2016), SD logic (P. K. Chathoth et al., 2014, 2016; Organ et al., 2015), or the value-in-use (P. K. Chathoth et al., 2014; Organ et al., 2015)). It is evident that previous literature has employed theoretical perspective s separately to study the customer engagement construct. Given that customer engagement is a complex construct relating to all level of stakeholders, combining information from different but interrelate level such as individual level, social level, and the firm level is indispensable for researchers to understand better and disentangle this complicated construct. Consequently, future researches should pay more attention to the multilevel study also.

Antecedents and consequences

Table 9: Antecedents for customer engagement

Study	(Proposed) Antecedents
Dijkmans et al. (2015)	Intensity of participants social media use
So et al. (2014)	The authors adapted from Hollebeek (2011); van Doorn et al. (2010): Involvement, Interactivity, Rapport for existing customers, Commitment of existing customers, Brand attachment, Trust, Brand performance perception
Yoshida et al. (2014)	Team identification

Study	(Proposed) Antecedents
	Positive affect
	Impression-management behaviours
P. K. Chathoth et al. (2014)	Organizational Barriers to consumers Organizational Barriers to technology Organizational Barriers to strategy Organizational Barriers to management structure and culture
Organ et al. (2015)	Local food involvement
Cabiddu et al. (2014)	Recognition of potential affordance
	Realized affordances
Zhang et al. (2015)	Brand equity
	Sense of community
	Monetary incentive
Harrigan et al. (2017)	Customer involvement
Oyner and Korelina (2016)	Customer effort in the value co-creation process
	Personalization of value created
E. Kim et al. (2017)	Motivation
Li et al. (2017)	Response frequency Response speed Response length
Romero (2017)	Relationship quality Company identification Self enhancement
	Social integration
Lei et al. (2017)	Media-type factors: Vividness, Interactivity
	Content-type factors: Retail, FandB, Accommodation, Property, Entertainment, Promotion

Table 10: Consequences for customer engagement

Study	(Proposed) Antecedents
Dijkmans et al. (2015)	Consumers perception of corporate reputation
Kandampully et al. (2015)	Customer loyalty
So et al. (2014)	The behavioral intention of loyalty (BIL) (tested)
	The authors adapted from Hollebeek (2011); van Doorn et al. (2010): Co-created value, Brand experience, Satisfaction, Trust, Commitment, Customer value, Brand loyalty, Customer Equity, Firm reputation, Brand recognition, Financial outcomes
So et al. (2016)	Brand trust
	Brand loyalty

Study	(Proposed) Antecedents
	Service Brand Evaluation: Service quality, Perceived value, Customer satisfaction
Yoshida et al. (2014)	Purchase intention Referral intention
Organ et al. (2015)	Positive emotions Negative emotions Satisfaction Behavioral intentions
Harrigan et al. (2017)	Behavioral intentions of loyalty
Oyner and Korelina (2016)	Customer satisfaction with hotel Customer loyalty
E. Kim et al. (2017)	Destination loyalty toward welling-tourism

According to the analysis of previous studies shown in Table 9 and 10, a large number of constructs were treated as either antecedents or consequences. Customer involvement (Harrigan et al., 2017; Organ et al., 2015), for instance, is the behavioral manifestation that researchers treated as an antecedent while customer perception or attitudes such as positive affect (Yoshida et al., 2014), impression-management behaviors (Yoshida et al., 2014), or relationship quality (Romero, 2017) seems to be diverse. However, marketing metrics such as brand or customer loyalty (Harrigan et al., 2017; Kandampully et al., 2015; E. Kim et al., 2017; Oyner and Korelina, 2016; So et al., 2014, 2016), brand trust (So et al., 2016), satisfaction (Organ et al., 2015; Oyner and Korelina, 2016; So et al., 2016), behavioral intentions (Harrigan et al., 2017; Organ et al., 2015; So et al., 2014, 2016; Yoshida et al., 2014) were introduced as consequences of the customer engagement by many scholars. Additionally, some constructs such as relationship quality (Romero, 2017; So et al., 2016) which included trust and commitment of existing customers have been proposed to be as both antecedent and consequence of the customer engagement because its nature is dynamic, complex, and interactive. Future studies should expand this nomological network by introducing the reciprocal relationship among those constructs, consequently helping scholars to realize their relationship deeper. By introducing the reciprocal relationship, researchers increase the level of internal validity of their findings because it dwindles the degree of model misspecification when conducting the structural equation modeling analysis.

Statistical analysis used in the studies

Table 11: Statistical analysis used in the study of customer engagement

Study	EFA	CFA	SEM	PLS	MANOVA	HOLS	PANEL DATA
Wei et al. (2013)					X		
So et al. (2014)	X	X					

Study	EFA	CFA	SEM	PLS	MANOVA	HOLS	PANEL DATA
Yoshida et al. (2014)	X	X	X				
Dijkmans et al. (2015)					X	X	
Organ et al. (2015)	X	X	X				
So et al. (2016)		X	X			X	
Harrigan et al. (2017)	X	X	X				
E. Kim et al. (2017)		X	X				
Li et al. (2017)						X	X
Buonincontri et al. (2017)	X	X	X				
Romero (2017)				X			
Lei et al. (2017)						X	
Total	5	7	6	1	2	4	1

Marketing literature has started developing the theories, concepts, and frameworks of customer engagement since 2005 (Bijmolt et al., 2010; Bowden, 2009; Brodie et al., 2013; Hollebeek, 2011; Kumar et al., 2010; Sawhney, Verona, and Prandelli, 2005; van Doorn et al., 2010; Verhoef, Reinartz, and Krafft, 2010; Vivek, Beatty, Dalela, and Morgan, 2014; Vivek, Beatty, and Morgan, 2012), thus yielding the plenty of theories for researchers in other fields to rely upon. Scholars in tourism have developed the nomological network based on the previous frameworks such as co-creation framework (Yoshida et al., 2014) or Service-Dominant logic (P. K. Chathoth et al., 2014, 2016; Organ et al., 2015). As a result, recent articles, especially in 2017, have approached the positivist paradigm to test such theory in the context of tourism and hospitality using specific sets of statistical analysis. Table 11 summarizes the statistical technique used for evaluating customer engagement in tourism research.

Seven popular techniques were introduced in past studies. The most outstanding technique is the confirmatory factor analysis (Buonincontri et al., 2017; Harrigan et al., 2017; E. Kim et al., 2017; Organ et al., 2015; So et al., 2014, 2016; Yoshida et al., 2014), followed by the structural equation modeling (Buonincontri et al., 2017; Harrigan et al., 2017; E. Kim et al., 2017; Organ et al., 2015; Romero, 2017; So et al., 2014, 2016; Yoshida et al., 2014) and the exploratory factor analysis (Buonincontri et al., 2017; Harrigan et al., 2017; Organ et al., 2015; So et al., 2014; Yoshida et al., 2014) respectively. As expected, most studies focused extensively on testing the customer engagement measurement model (Buonincontri et al., 2017; Harrigan et al., 2017; E. Kim et al., 2017; Organ et al., 2015; So et al., 2014, 2016; Yoshida et al., 2014) because the underlying theories of customer engagement have been consecutively developed since 2005 in the general marketing literature. Moreover, tourism and hospitality researchers tend to bypass the development stage and applied these theories and concepts (e.g. SD-logic or Relationship marketing theory) directly to the context of tourism and hospitality.

Interestingly, the partial least square (PLS) modeling has been introduced in the study of customer engagement in the tourism context since 2017 by Romero (2017). This technique is very well-known in the general marketing literature (Groß, 2018; Merz, Zarantonello, and Grappi, 2018; Wang, Wu, and Yang, 2013) because the PLS assumptions are much more realistic than those on the traditional structural equation modeling required. (Hair Jr, Hult, Ringle, and Sarstedt, 2016). The traditional structural equation modeling, for instance, requires normality distribution of dataset and error term while the partial least square modeling is distribution-free (Hair Jr et al., 2016). Moreover, the traditional structural equation modeling is methodologically designed for testing theory while the partial least square modeling is suitable in exploring and forecasting (Hair Jr et al., 2016). With this regards, future research can use the partial least square technique to forecast the effect size of customer engagement drivers rather than testing the existing theory or expanding the nomological network.

Recently, other fields such as psychology (Patrick, Hicks, Nichol, and Krueger, 2007), education (Lombardi, Freeman, and Rifenbark, 2017; Rijmen, 2010; Silvia, Thomas, Nusbaum, Beaty, and Hodges, 2016), or health science (Reise, Morizot, and Hays, 2007) have applied the so-called bifactor technique in factor analysis to fit the empirical data. Future research is persuaded to apply the bifactor confirmatory factor analysis (Canivez, 2017; Chen, West, and Sousa, 2006; Gignac, 2008) rather than the traditional second-order factor analysis because the bifactor technique has been widely employed to mitigate the confounding effect and increase model fit from the overlapping dimensions in the nomological network (e.g., Gignac 2008). Other novel techniques related to structural equation modeling can also be applied in the tourism context to improve the performance of traditional EFA, CFA, or SEM (e.g. Bayesian structural equation modeling (Asparouhov, Muthén, and Morin, 2015; Chatterjee, 2014; Shi, Song, Liao, Terry, and Snyder, 2017), multilevel structural equation modeling (Depaoli and Clifton, 2015; Rush, Rast, and Hofer, 2014), or latent growth curve modeling (Brailean et al., 2017; Schaubroeck, Lam, and Peng, 2016; Söller, Pavlou, and Leimeister, 2016; Yerdelen, McCaffrey, and Klassen, 2016)).

Key contributors

Table 12: Key contributors to the customer engagement area

Leading author(s)	Studies	Total	Area
Hollebeek, L.D.	Baumööl et al. (2016), Brodie and Hollebeek (2011), Brodie et al. (2011), Groeger et al. (2016), Hollebeek (2011, 2013), Hollebeek, Conduit, and Brodie (2016), Hollebeek, Sri-vastava, and Chen (2016), Viswanathan et al. (2017)	9	General business

Leading author(s)	Studies	Total	Area
Kumar, V.	Kumar et al. (2010), Kumar and Pansari (2016), Kumar et al. (2017), Kumar and Reinartz (2016), Pansari and Kumar (2017b)	5	General business
King, C. and So, K.K.F.	So et al. (2014, 2016)	2	Tourism
Chathoth, P.K. and Ungson, G.R.	P. Chathoth et al. (2014, 2016)	2	Tourism

Even though a body of customer engagement knowledge has been developed since 2005 (Islam and Rahman, 2016), continuous efforts to the topic are scarce. Table 12 exhibits the list of researchers who constantly work on the customer engagement topic. It is found that Hollebeek, L.D. has published 9 articles (Baumöl, Hollebeek, and Jung, 2016; Brodie and Hollebeek, 2011; Brodie et al., 2011; Groeger, Moroko, and Hollebeek, 2016; Hollebeek, 2011, 2013; Hollebeek, Conduit, and Brodie, 2016; Hollebeek, Srivastava, and Chen, 2016; Viswanathan et al., 2017), followed by Kumar, V. of 5 articles (Kumar et al., 2010; Kumar and Pansari, 2016; Kumar, Rajan, Gupta, and Pozza, 2017; Kumar and Reinartz, 2016; Pansari and Kumar, 2017b).

In tourism and hospitality, So, K.K.F. and King, C. have published 2 articles (So et al., 2014, 2016) dealt closely with scale development (So et al., 2014) and the nomological network exploration (So et al., 2016) while Chathoth, P.K., and Ungson, G.R. have published 2 articles related to conceptual framework specially designed for tourism service industry (P. Chathoth et al., 2014; P. Chathoth, Ungson, Harrington, and Chan, 2016). Specifically, So et al. (2016) compared the effect size between service brand evaluation, comprising customer satisfaction, perceived value, and perceived service quality and the customer engagement construct to the brand loyalty and found that customer engagement outperformed the traditional measurement in forming brand loyalty.

Discussion and future research

Scholars in the subject of hospitality and tourism have acknowledged the importance of studying customer engagement as a core of driving brand loyalty (Brodie et al., 2013; So et al., 2016) as well as forming effective brand strategy (Brodie et al., 2013; van Doorn et al., 2010). However, unexplored area and some cautions from the previous literature of customer engagement in the context of tourism can be used as a guide to effectively investigate the construct in future research. To the best of authors' knowledge, there is no summarized review of customer engagement particularly focus on the context of hospitality and tourism. More specifically, this study informs readers what has been done about the customer engagement

such as the theoretical background, antecedents, consequences, statistical issues, dimensionality, conceptualization, and critical contributors related to the construct.

Table 13: Major gaps identified for future research

No	Major gaps identified	Study
1	Extending the presented nomological network	Buonincontri et al. (2017), Dijkmans et al. (2015), E. Kim et al. (2017), Romero (2017), So et al. (2014), Torres and Kline (2013), Wei et al. (2013), Zhang et al. (2015)
2	Employing a longitudinal design to capture the enduring aspect of customer engagement	E. Kim et al. (2017), Lei et al. (2017), Romero (2017), So et al. (2016)
3	Developing a reliable and valid measurement for reflecting customer engagement	Harrigan et al. (2017), E. Kim et al. (2017)
4	Examining the validity of customer engagement across settings	Cabiddu et al. (2014), Harrigan et al. (2017), E. Kim et al. (2017), So et al. (2016), Wei et al. (2013)

Table 13 identifies the major gaps researchers need to take into considerations when performing future research in customer engagement.

Extending the presented nomological network: Even though scholars have recommended various factors that might perform as customer engagement's antecedents or consequences, most of these proposed factors have been separately presented. Hence, future research should pay attention to (1) creating a unified conceptualized based on these proposed factors or (2) testing and validating the conceptually proposed frameworks for a further breakthrough of this context. Moreover, scholars are recommended to take the demographic variables into their considerations.

Employing longitudinal design to capture the enduring aspect of customer engagement: To the authors' best knowledge, all studies about customer engagement related to hospitality and tourism using only cross-sectional design, which cannot fully reflect the causal relationship (Romero, 2017; So et al., 2016). A causal relationship can be enabled through the execution of longitudinal analysis. Unlike experimental research design, the longitudinal analysis enables researchers to distinguish between customer participation and customer engagement. Consequently, researchers can identify the authentic customer engagement since behavioral manifestation without psychological investment reflected by long-term connection cannot be categorized as customer engagement. Hence, future research

should distribute the journey from cross-sectional research to longitudinal study (E. Kim et al., 2017; Lei et al., 2017; Romero, 2017; So et al., 2016).

Developing a reliable and valid measurement for reflecting customer engagement: In general, customer engagement measurement scale in the context of hospitality and tourism is adapted from marketing journal, consisting of three factors, which are cognitive, emotional, and behavioral dimensions. However, customer engagement measurement scale, specifically in a tourism context, is proposed by So et al. (2014) with five dimensions, which are attention, absorption, enthusiastic, identification, and interaction. One study tried to validate this instrument and found that three factors, comprising identification, absorption, and interaction, are parsimonious (Harrigan et al., 2017), signifying that there is a need to correctly develop and test the measurement to ensure that the instrument can be confidently used to capture the customer engagement construct accurately.

Rather than the measurement model per se, scholars can gain benefit from using the advanced statistical analysis to improve the quality of their findings. More specifically, researchers can apply the novel techniques used in other subjects such as approximation near-zero confirmatory factor analysis (Heerwegh, 2014; Kurz, Flynn, and Bordieri, 2016; Moore, Reise, Depaoli, and Haviland, 2015) bifactor confirmatory factor analysis (Canivez, 2017; Chen et al., 2006; Gignac, 2008), or multilevel confirmatory factor analysis (Andrade, 2014; Cho, Lee, Moore, Norman, and Ramshaw, 2017; Hirschmann and Swoboda, 2017; E. S. Kim and Cao, 2015) to the subject of hospitality or tourism to increase the internal validity of findings.

Examining the validity of the developed instruments across settings: After developing the measurements specifically for hospitality and tourism context, testing these instruments is necessary because it would tell researchers why the results are similar or different across settings, which, in turn, would increase the effectiveness of the developed instruments (So et al., 2014, 2016).

Limitations and future research

Two significant limitations, related to the research design and the database, need to be addressed. Concerning the database, the choice of samples relies heavily on the selected keyword, which inevitably affects the study scope. Although sample's scope can be enhanced by reconfiguring keywords differently, scholars will have a tendency to encounter the risk of irrelevant literature. Future research might introduce peer-reviewed books or book chapters to increase the sample.

For the research design, the current study systematically approaches to summarize key issues of customer engagement based on content analysis. To fully reflect the systematic literature review, future research should apply a set of meta-analytic approach and data science to quantitatively reveal effect sizes and detect some hidden association by using the association rule, for instance, from machine learning.

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