Actor Engagement and Platform Performance in the Sharing Economy: A Big Data Approach

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Actor Engagement and Platform Performance in the Sharing Economy: A Big Data Approach

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Submitted in fulfilment of the requirements of the degree of

Doctor of Philosophy

February 2022
Abstract

In recent years, it has become apparent that the sharing economy has become a major business model that has received considerable attention from scholars in various disciplines, especially marketing. Although previous marketing research has focused mainly on the customer side of the sharing economy, current research is pushing into the platform and business model levels. This upgrading helps researchers study the relationship between customer and service provider and the relationship with the platform in the sharing economy. As the sharing economy is an open business model, customers and service providers enter and exit this platform with a lower level of limitation. Thus, a platform’s long-term success depends on the actor’s (service provider and customer) engagement with the platform. Besides that, the literature on engagement has described the “actor engagement” concept to enable research on study engagement in a triadic context, as found in the sharing economy or B2B business models. While customer engagement is a well-established research area, the notion of actor engagement is new in marketing, especially in the sharing economy, and a lack of empirical research in this area exists. Thus, this research sought to examine the role of actor engagement in the sharing economy and how it can influence platform performance. From a theoretical perspective, these findings provide a better understanding of actor engagement formation process and indicate how customer and service provider engagement with other actors leads to platform sales. From practical implication, it guides service providers and especially platforms to manage actor engagement to enhance their performance effectively.

In this regard, four studies were conducted to meet the thesis goal of studying the role of actor engagement on platform performance. The current research used a meta-analysis to review and synthesize findings from customer engagement (first meta-analysis study) and sharing economy literature (second meta-analysis study) to develop a conceptual model of actor engagement formation (first empirical study) and its role on platform performance (second empirical study). The first meta-analysis study presents a comprehensive and generalizable picture of the customer engagement concept. As actor engagement originated from the customer engagement concept, it helps us identify research gaps and develop empirical research frameworks. This study provides a meta-analysis that integrated data of 196 effect sizes of 184 publications with a sample of 146,380. The findings reveal engagement through two pathways: (1) organic as
relationship-oriented (perceived quality, perceived value, and relationship quality) and (2) promoted as firm-initiated (functional and experiential initiatives). Moderator analysis indicates that the influence of the two pathways on engagement depends on engagement context (online versus offline), industry and product types (service versus manufacturing and hedonic versus utilitarian, respectively), and cultural context. Findings support an attitudinal engagement–loyalty and behavioral engagement–firm performance linkage. Study results provide new insight into various engagement approaches and their relationships. The authors offer recommendations to help marketers manage their customer engagement process more effectively.

In the second meta-analysis, a generalizable picture of the relationship formation process between customer, service provider, and platform is provided. This study integrated 214 effect sizes from 192 studies with 88,154 sample sizes. The findings indicate motivators and inhibitors for individuals to join (not join) a platform as a customer or service provider by influencing their attitudinal and behavioral responses to the platform through a two-level relationship quality pathway. Moderator analysis reveals the impact of customer motivators and inhibitors on customer responses to service providers and platforms depending on country-level moderators, such as the Human Development Index (HDI) and cultural context. These results provide insight into relationship formation among actors in the sharing economy. The study also recommends that platform managers manage their users’ relationships more effectively.

The first empirical study examined actor engagement formation and its roles in service provider performance. Research data include text and image from Airbnb in seven countries. Text and image mining and machine learning were used to measure research variables after which partial least squares path modeling (PLS-SEM) was employed to test the research model. Results indicate that for the multidimensional actor engagement concept, actor affective engagement showed a greater impact on actor behavioral engagement than cognitive engagement. Also, service providers’ behavioral engagement influences customer engagement behavior and subsequently, service provider performance. Moderator analysis indicates the complex role of service provider age, gender, and cultural value in actor engagement formation in the sharing economy and highlights differences with findings in the business to customer context.

Finally, the second empirical research studied the actor engagement formation among customers and service providers on sharing economy platform performance in
seven countries. Research data include structured and unstructured data of 159,662 service providers and 2,087,233 customers from Airbnb in seven countries. Text mining and machine learning techniques were used to measure research variables, and multilevel regression was employed to test the research model. Results indicate that efforts to maximize value for money and accuracy of service provider descriptions among service provider engagement behaviours were the main predictor of customer engagement and platform performance. For customer engagement, customer lifetime value and customer referral value (CLV and CRV, respectively) were shown to be among the behaviors that have the highest impact on platform performance. In addition, Airbnb as a genuinely global platform enables the investigation of a range of country-level factors (such as economic, competitiveness, cultural, technological, social, and political factors) on actor engagement, thus providing more comprehensive understanding of this concept from a global perspective. The theoretical and empirical implications of these findings are discussed.

**Keywords:** Sharing economy, actor engagement, customer engagement, service provider engagement, platform, platform performance, unstructured data, big data analytics.
Statement of Originality

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

(Signed) Mojtaba Barari
February 2022

Statement by Supervisors

The research in this thesis was performed under our supervision and to our knowledge is the sole work of Mojtaba Barari

(Signed) Dr Mitchell Ross
February 2022

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February 2022

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Dr Jiraporn Surachartkumtonkun
February 2022
Acknowledgement of Papers Included in This Thesis

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- Acknowledge all those who have contributed to the research, facilities or materials but who do not qualify as authors, such as research assistants, technical staff, and advisors on cultural or community knowledge. Obtain written consent to name individuals.
Declarations of Published and Unpublished Papers included in the Thesis

Four co-authored journal articles are included in Chapters 2, 3, 4 and 5 of this thesis. The co-authors are my thesis supervisors, Dr Mitchell Ross, Dr Sara Thaichon and Dr Jiraporn Surachartkumtonkun. My contribution to each co-authored paper is outlined in the beginning of the relevant chapter. The bibliographic details for these papers including all authors, are:


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Mojtaba Barari

February 2022
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Dr Sara Thaichon
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Dr Jiraporn Surachartkumtonkun
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Chapter 1: Introduction

This chapter provides an overview of the key components of the thesis. In this regard, the background section provides a brief review of the sharing economy and the importance of actor engagement in this business model. The research problem and knowledge gap are discussed in section two. After that, in section three, the research question and objectives are addressed, and the research design explains how the four studies address these objectives. Finally, the theoretical and managerial contributions of this research are discussed.

1.1. Research background

The emergence of new technologies and the economic crises over recent decades have changed consumer behaviour and prompted the development of the sharing economy as new business model (Moorman et al., 2019). This type of business is based on a two-sided market concept (Kumar et al., 2018) in which a technological platform facilitates a customer’s temporary access to the service provider products and services (Lindblom et al., 2018). This type of business transforms the traditional dyadic nature of customer-company to a triadic interaction in which the platform is considered a technological intermediary between two parties (Benoit et al., 2017). It has acquired different names over time, such as “access-based consumption” (Bardhi and Eckhardt, 2012), “collaborative consumption” (Belk, 2014; Botsman and Rogers, 2010a), “commercial sharing systems” (Lamberton and Rose, 2012), “hybrid economies” (Scaraboto, 2015), “gig economy”, (De Stefano, 2015), “peer economy” (Tussyadiah and Pesonen, 2016), and recently a “lateral exchange market” (Perren and Kozinets, 2018). Among these titles, it seems that the term “sharing economy” has become the accepted terminology inside marketing (Eckhardt et al., 2019b; Kumar et al., 2018; Zervas et al., 2017) and also outside marketing (Frenken and Schor, 2019; Hamari et al., 2016a). This revelatory business model extends to various service industries including transportation (e.g., Uber, Ola, DiDi), accommodation (Airbnb), professional skills (TaskRabbit), finance (LendingClub), and so on. The phenomenon is not limited to the service industry, and we can see examples in areas of manufacturing, such as clothing (e.g., Rent the Runway), which have embraced this business model. Given its dramatic expansion, the sharing economy has received much attention from practitioners and scholars both within
and external to marketing (Eckhardt et al., 2019b; Frenken and Schor, 2019; Zhang et al., 2019).

Similar to other two-sided markets, the quality of the relationship between the service provider, customer, and platform determines the platform’s sustainability and success in the sharing economy (Kumar et al., 2018). The platform is responsible for facilitating the exchange between customer and service provider, while the platform does not have any product or service for selling (Eckhardt et al., 2019b). Thus, a sustainable platform has the ability to attract enough users to supply a product and service along with customers who like to temporarily access these products and services (Kumar et al., 2018). More importantly, the increase in the number of users on both sides of a platform indicates its success (Armstrong, 2006, p. 66). This increase in users also leads to a network effect in the platform (Eckhardt et al., 2019b). The network effect explains the competitiveness of one platform over another (e.g., Eisenmann et al., 2006), in which an increase in users on both sides of the platform increases its value and raises the quality of the user’s experience with the platform (Lin et al., 2019). For instance, compared to its competitors, Uber is more successful in attracting more customers and drivers. The increase in the number of users encourages even more drivers and customers to join this platform. Finally, the entire platform enjoys the network effect: for passengers, this is an increase in service quality; for drivers, it means more customers and greater revenue, and for platforms, an increase in profitability (Kumar et al., 2018).

In this regard, the initial research in the sharing economy has focused mainly on the customer and service provider’s platform adoption (Milanova and Maas, 2017; Yang et al., 2017). Several factors, such as economic, hedonic, social and environmental values, are studied to explain the customer and service provider’s behaviours in platform adoption (Bocker and Meelen, 2017; Hamari et al., 2016a; Milanova and Maas, 2017; Zhang et al., 2019). Although the number of users is essential in the network effect, it is necessary to have an engaged service provider and customers to ensure sustainability and success (Yang et al., 2017). In this regard, a recent development in the sharing economy calls for more critical strategy to develop long-term relationships and engagements for a platform’s success (Brodie et al., 2019; Eckhardt et al., 2019b; Lin et al., 2019).
Engagement in marketing primarily tends to focus on customer engagement and can be defined as customer attitudes and behaviours beyond direct transactions (Lemon and Verhoef, 2016). Customer engagement behaviour such as referring a new customer is a valuable resource for companies and is a crucial success factor in the long term (Kumar and Pansari, 2016). In this regard, Gallup (2009) indicates that “fully engaged” and “engaged” customers increase company revenue, 23% and 7%, respectively, while “not engaged” and “actively disengaged” customers decrease company revenue to 1% and 13%, respectively. Furthermore, academic research confirms the essential role of customer engagement on firm performance (Kumar et al., 2010; Kumar and Pansari, 2016). The focus of customer engagement in the B2C context is on the dyadic relationship between customer and company while the sharing economy includes the triadic interaction (Alexander et al., 2018). For instance, in Airbnb, engagement is observed to occur not only between the customer and service provider (i.e., the Airbnb guest and host) but also between the customer or service provider and platform (Airbnb platform).

The concept of actor engagement has recently gained attention in marketing, and extends the dyadic view of engagement on the network micro-level to a view in which engagement takes place on multiple levels among various actors such as customers, service providers and platform (Chandler and Lusch, 2015). This view of engagement adopts a stakeholder theory (Hollebeek et al., 2020) and a service ecosystem approach to describe actor engagement (Brodie et al., 2019). The service ecosystem is a multilevel network that includes micro, meso and macro levels (Alexander et al., 2018). In this network, micro-level engagement both influences and is influenced by other actor engagements (Storbacka et al., 2016). This framework provides a strong opportunity to extend the concept of customer engagement to triadic contexts, such as the sharing economy (Lin et al., 2019), and to demonstrate how engagement influences platform performance. As the sharing economy includes customers, service providers and platforms, actor management considers a potential framework to study engagement in this business network. In this regard, recent studies in actor engagement call for further research about the actor’s engagement in new areas, especially the sharing economy (Brodie et al., 2019; Lin et al., 2019).
1.2. Research gaps

Engagement plays an important role in the B2C context and has an important role in the sharing economy (Alexander et al., 2018; Brodie et al., 2019). In this regard, the quality of actor relationships with each other and platforms determines the relationship quality and platform success (Kumar et al., 2018). However, the triadic nature of the sharing economy limits the application of engagement as a dyadic concept in this context (Brodie et al., 2019). Recently, the actor engagement concept has become an avenue to study engagement in a triadic context, such as B2B and the sharing economy, in which the relationships are dissimilar to traditional business (Alexander et al., 2018; Benoit et al., 2017). Actor engagement extends the customer engagement concept to include the role of various actors in an ecosystem at the micro, meso and macro levels on engagement formation (Storbacka et al., 2016).

Although actor engagement is considered a strong framework by which to study engagement in the sharing economy, this area needs further research attention (Brodie et al., 2019). Storbacka et al. (2016) and Li et al. (2017) provide an initial conceptualization of the actor engagement concept and more recent research calls for further clarification of the concept (Brodie et al., 2019), especially in the sharing economy (Lin et al., 2019). A review of actor engagement literature in the sharing economy reveals a number of research gaps requiring further investigation. First of all, while it appears the concept of customer engagement in B2C and the sharing economy share many similarities, service provider engagement requires greater research attention (Lin et al., 2019). For instance, existing research has failed to respond to questions such as “What are the similarities and differences between service provider engagement and employee engagement in the sharing economy? “What are the similarities and differences between engagement in B2C with engagement in sharing economy?” and “How do customer and service provider engagement relate to the other?” Thus, the current research will undertake a literature review in both customer engagement and employee engagement in order to provide a clear conceptualization of actor engagement and the relationship between actors in the sharing economy.

Secondly, although B2C research indicates engagement has an important role in firm performance (Kumar and Pansari, 2016), it has failed to explore the role of actor
engagement on service-provider performance in the sharing economy. Hence, a conceptual model will be developed to study the relationship between the customer and service provider engagement and their influence on service provider performance in the sharing economy. Finally, while previous research provides evidence regarding customer and employee engagement on focal firm performance (Kumar and Pansari, 2016), there is little evidence of empirical research about the role of actor engagement on platform performance. Moreover, in contrast to the employee-company relationship in a B2C context, service providers and platforms are two distinct economic entities in the sharing economy. Thus, it is important to independently study the role of actor engagement on the performance of the platform. To address these research gaps, a conceptual model will be developed to investigate the role of actor engagement on platform performance.

1.3. Theoretical foundation

The service ecosystem, which is part of service-dominant (SD) logic (Akaka et al., 2013; Vargo and Lusch, 2011) was used to develop actor engagement models and their influence on platform performance. Using the service ecosystem extends SD theory to the broader context of exchange (Chandler and Lusch, 2015; Vargo and Lusch, 2011) and provides a fresh view of the exchange process in markets and marketing (Akaka et al., 2013). The theory explains that all exchanges in the market are considered service exchanges in contrast with the view of the product, which are only service delivery tools (Akaka and Vargo, 2015). From this standpoint, value is not embedded in a product or service but will be created jointly by the customer and company during the use process (Grönroos and Voima, 2013). Recently, SD logic has developed the service ecosystem concept to extend the value of the co-creation concept to the network level (Vargo and Lusch, 2011). The service ecosystem focuses not only on multiple actors and their interactions but also on the importance of sociohistorical contexts that comprise the multiple institutions that guide interactions and value determination through multiple layers (Akaka and Vargo, 2015) with each layer nested within a larger layer (Chandler and Vargo, 2011).

In this ecosystem, the micro-layer includes a dyadic interaction between the individual customer and the company, bringing resources and competencies to co-create
value through resource integration (Chandler and Vargo, 2011). Exchange in the *meso-layer* is triadic as a third party plays an intermediate role to serve the actors’ interests (Vargo and Chandler, 2017). For instance, a platform could mediate the interactions between customer and company during service delivery and eventually impact value co-creation. In the *macro-layer* context, the service ecosystem includes an exchange between triads and creates a complex network of interactions that influence the entire ecosystem (Chandler and Vargo, 2011). From an ecosystem viewpoint, actor engagement occurs at the micro and meso levels, whereas the macro-level context moderates relationships between actors at the micro and meso levels (Vargo and Lusch, 2011). Actor engagement at the micro-level is influenced by and influences actor engagement at a higher level (Akaka et al., 2015). Moreover, previous research addressing actor engagement indicates the effectiveness of service ecosystems to explain actor engagement formation (Alexander et al., 2018). Thus, the ecosystem helps us develop our overall research framework and an understanding of actor engagement formation.

1.4. Research questions and conceptual framework

Several researchers (e.g., Brodie et al., 2019; Lin et al., 2019) argue that a lack of conceptual and empirical research on actor engagement in the sharing economy. Therefore, the result could provide a better picture of actor engagement formation in sharing economy and, more importantly, how engagement could lead to value creation in the sharing economy. To further develop the actor engagement concept, the current study considers the neglected side of this concept, namely, actor engagement in the sharing economy. Therefore, the general research question can be stated as: “What is the role of actor engagement in platform performance in the sharing economy?”

I break down the main question into four specific questions that guide this thesis’s studies. Table 1-1 shows the specific research questions, studies that link to the questions, and the study method. Below is a brief overview of the key findings of each study.
Table 1-1: Thesis structure

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<td>service provider</td>
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<td>performance in the</td>
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<td>sharing economy</td>
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<td>Study four (CH 5):</td>
<td>Q4: What is the influence of the actor’s engagement on the platform’s performance?</td>
<td>Big data analytics (text mining and machine learning) are used to measure research variables and multilevel regression is employed to test the research model.</td>
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<td>Actor engagement and</td>
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<td>in the sharing economy</td>
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**Study one:** The first study addresses the first research question (Q1: What is the customer engagement formation process in the marketing discipline?). Understanding customer engagement plays an essential role in conducting this research. A review of the meta-analytic structural equation modeling was performed to provide a comprehensive and feasible picture of customer engagement in marketing. In this approach, the data collection process and procedure are first defined, and then the effect size of selected empirical research can be calculated. After that, the pool correlation matrix based on effect size was used to test the proposed conceptual model.

**Study two:** The second research question (Q2: What is the relationship between actors in the sharing economy business model in marketing discipline?) is addressed in this study along with a review of the customer, service provider, and platform in the sharing economy. In contrast to customer engagement, employee engagement has well-established published literature. Hence, instead of conducting an independent employee engagement literature review, it is combined with the second study. Similar to the first study, a meta-analytic review was used to synthesize previous empirical models in the
sharing economy literature to illustrate the relationship between actors in this business model.

**Study three:** Study three addresses the third research question (Q3: What is the relationship between the service provider and customer engagement, and how does this impact service provider performance?) and to test the first conceptual model of the research. This model proposes the relationship between service provider engagement, customer engagement, and service provider performance. Kumar and Pansari (2016) behavioral engagement was employed to provide a conceptual and operational definition of customer engagement, and Saks (2006) job engagement concept was used for the service provider engagement. Moreover, variables, such as service provider age, gender, and cultural value were selected as moderators in the model. In response to the recommendation by Brodie et al. (2019) to identify and use an appropriate method to strengthen understanding of actor engagement, this study adopted text and image mining analysis to measure actor engagement and service provider performance (Balducci and Marinova, 2018; Berger et al., 2020) to test the relationship in the model.

**Study four:** This study addresses the fourth research question (Q4: What is the influence of the actor’s engagement on the platform’s performance?) and tests the second conceptual model. The purpose of this model was to show how customer and service provider engagement will impact platform performance. Similarly to the third study, Kumar and Pansari (2016) conceptualisation of behavioral engagement and Saks (2006) employee engagement concept were used to providing conceptual and operational definitions of customer and service provider engagement, respectively. Moreover, metrics and methods outlined by Muñoz-Expósito et al. (2017), Okazaki et al. (2015), and Bijmolt et al. (2010) were employed to measure actor engagement, and models by Ludwig et al. (2013) and (Zhu and Zhang, 2010) were considered for developing the relationship between engagement and platform performance. The data source was big data (numeric, textual, and image) available on the sharing economy platform. Big data analytics (text mining and machine learning techniques) were used to measure research variables, and multilevel regression was employed to test the research model.
1.5. Research contribution

This thesis provides several theoretical and practical contributions. From a theoretical perspective, and to the best of the researcher’s knowledge, this study is among the first to provide theoretical and empirical support for actor engagement in a sharing economy context. While previous research has emphasized actor engagement when studying the engagement concept in a triadic context (Alexander et al., 2018; Brodie et al., 2019; Conduit et al., 2019), the current study used a service ecosystem framework to extend the concept of engagement and performance to the sharing economy context. Moreover, the combination of big data (numeric, textual, and image) and econometrics models was used to empirically study the role of actor engagement on platform performance.

Customer engagement as an area of research has seen a dramatic development in marketing in recent years (Kumar et al., 2019b; Moorman et al., 2019). The emergence of new technologies, especially social media, enriches this research area (Palmatier et al., 2017) resulting in the development of various conceptualizations and engagement models (Kumar et al., 2019b; Pansari and Kumar, 2017). Meta-analytic structural equation modeling was used to synthesize and integrate previous research in this area. This review demonstrates the emergence and evolution of this marketing research area. Moreover, findings from this review provide a comprehensive and generalizable model of customer engagement formation, as well as identify areas for further research.

Despite a considerable body of research on sharing economies in the past decade, debates and disagreements around components of the actor relationships process remain. Therefore, no comprehensive model to include all actors and their relationship formation process in a single framework exists. This research reviews the empirical research concerning the sharing economy to develop an integrated and comprehensive model of the antecedents and to develop mediators, moderators, and actors’ relationship in the sharing economy. This model provides insight into several aspects: (1) customer and service provider motivators and inhibitors to using the sharing economy, (2) the quality of the actor’s relationship with each other, (3) outcome of the relationship quality between customers, service providers and platforms, and (4) role of country-level moderators in
these relationships. This framework provides insight into a unique aspect of relationship formation and development in the sharing economy business model and defines further research areas.

The recent emergence of the actor engagement concept extends the customer engagement concept (Alexander et al., 2018; Storbacka et al., 2016) to facilitate the study of engagement in a triadic context, such as that found in a sharing economy platform (Brodie et al., 2019). As this research area develops it requires further research, especially with regard to actors and their relationship in the triadic context (Lin et al., 2019). Hence, the actor engagement framework provides an opportunity for this research to extend customer and employee engagement concepts to the sharing economy. Moreover, existing actor engagement research fails to conceptualize and measure the relationship between actors engaging in the sharing economy (Lin et al., 2019). As service providers and platforms are two distinct economic actors, a multilevel engagement model is proposed to explain the complexity of engagement formation in this context. Based on this approach, customer and service provider engagement formation happens at two levels. At the first level, service providers engage with their job, and customers engage with service providers, while at the second level, both customer and service engagement occur with the platform. These multilevel approaches to actor engagement provide a clearer understanding of the complex relationship between actors in the sharing economy.

This research contributes to the body of knowledge on evaluating marketing performance by conceptualizing and measuring customer and service provider engagement roles in platform performance. As previously stated, although engagement is considered a non-transactional behavior it has a vital role in a firm’s performance (Eckhardt et al., 2019b; Kumar and Pansari, 2016). Actor engagement primarily has focused on an actor's relationship while paying little attention to its impact on performance (Alexander et al., 2018). Along with the actor engagement multilevel model, in this research platform performance is studied at two different levels, namely the service provider and platforms levels. The findings provide insight into the role of actor engagement behavior in service provider and platform performance enhancement.
Lastly, the theoretical contribution from this research can be found in the measurement of actor engagement in the sharing economy. Although big data analytics is a widely accepted research method in computer science and statistics (Grandjean, 2016; Muñoz-Expósito et al., 2017; Okazaki et al., 2015), it’s use in marketing research is less apparent and in areas such as engagement the survey remains dominant (Kosiba et al., 2018; Prentice et al., 2019; Vohra and Bhardwaj, 2019). Development in social media empowers a customer to quickly become involved in engagement behaviors (Viswanathan et al., 2018). This advancement provides an exciting source of data to analyze engagement behaviors (Schivinski et al., 2016). Moreover, much of the sharing economy platform is based on a “reputation system” in which platform users share their service experience with other potential users (Eckhardt et al., 2019b; Ert et al., 2016). These data provide a significant opportunity to study engagement behaviors in a sharing economy (Grandjean, 2016). In this way, this research adopts big data analytics to measure research variables and an econometric model to test the relationship between these variables during the timeframe. This combined approach provides an analytical approach to study actor engagement behavior in a sharing economy.

From a practical perspective, the current research provides recommendations to actors in this platform. For service providers, the recommendations consider how service providers engage with their job, impact customer engagement and their performance. Moreover, it provides insights for platforms addressing facilitation and encouragement of service providers to engage with their job. At the platform level, the current research offers recommendations for platforms on how customer and service provider engagement can impact platform performance.

1.6. Chapter summary

This chapter presents an overview of the research and its importance. The research background and the knowledge gaps are presented. Based on the primary research objective, four research questions are presented and four studies are developed to address the main objective and associated questions. Finally, the theoretical and empirical contributions of the current research are outlined.
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Botsman, R., & Rogers, R. (2010). What's mine is yours: how collaborative consumption is changing the way we live (Vol. 5): Collins London.


Chapter 2: A Meta-Analysis of Customer Engagement Behaviour


I am the chief investigator. I drafted the literature review section of the paper, collected and analysed the data, and wrote the initial as well as subsequent drafts of the paper. The co-authors of this manuscript are my thesis supervisors. They provided intellectual input for the entire study from conception to completion. They guidance on conceptual model, data analysis and amended early and final drafts of the paper.

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Abstract

Customer engagement behaviour has emerged as an influential concept in marketing and refers to customers’ behavioural manifestation toward a firm originating from motivational drivers. To provide a comprehensive and generalizable picture of this concept, this study provides a meta-analysis integrating data of 196 effect sizes of 184 publications with a sample of 146,380. The findings reveal engagement through two pathways: organic pathway as relationship-oriented (perceived quality, perceived value, and relationship quality) and promoted pathway as firm-initiated (functional and experiential initiatives). Moderator analysis indicates that the influence of the two pathways on engagement depends on engagement context (online vs. offline), industry type (service vs. manufacturing) and product type (hedonic vs. utilitarian), and cultural context. Findings support attitudinal engagement–loyalty and behavioural engagement–firm performance linkage. Study results provide new insight into various engagement approaches and their relationship to each other. The authors offer recommendations to help marketers manage their customer engagement process more effectively.

Keywords customer engagement behaviour, meta-analysis, organic engagement, promoted engagement, engagement marketing, relationship marketing
2.1. Introduction

Both academic research and business practice consider customer engagement behaviour to be a key success factor in the long term (Kumar et al., 2010; Kumar and Pansari, 2016), as the engaged customer is much more profitable for a business than other customers (Pansari and Kumar, 2016). However, firms have conventionally focused on developing a relationship with their current customers to influence purchase and repurchase and firm performance (Kumar et al., 2010; Palmatier et al., 2006), thereby regarding customers with more transactional behaviour as better customers for firm profitability (Kumar and Pansari, 2016). However, from a customer engagement perspective, customer contribution to the firm is not limited to purchase-related metrics, as engagement behaviour results in, for example, new product ideas or referral of new customers (van Doorn et al., 2010). Therefore, customer engagement extends customer valuation from being merely transactional and includes both transactional and non-transactional metrics (Kumar et al., 2010).

A review of customer engagement literature reveals two main approaches to engagement behaviour formation: relationship-oriented (named as organic pathway) and firm-initiated (named as promoted pathway). The first pathway reflects the relationship marketing view, in which customer–firm relationships organically, and over time, result in customer engagement behaviour (Bowden, 2009b; Palmatier et al., 2017), therefore it is named as the organic pathway. The engagement literature extends relationship marketing to include both tangible and intangible results (Vivek et al., 2012) and encompasses interaction with firm touchpoints to develop customer–firm relationship quality (Kumar et al., 2019b; Pansari and Kumar, 2016) and form customer engagement towards a firm or brand (Hollebeek, 2011b).

In contrast to organic engagement, the second pathway relies on firm various initiatives to directly influence customer engagement behaviour (Beckers et al., 2018), thus it is named as the promoted pathway. Using initiatives to leverage engagement behaviour is not new to marketing practice, as financial incentives for referral or customer participation in new product development were employed before the emergence of the customer engagement concept (Ryu and Feick, 2007). However, these techniques are
limited to specific behaviours and are functional and task-oriented in nature (Harmeling et al., 2017). The recent development in firm-initiated engagement literature extends promoted engagement to include both functional and experiential initiatives (Harmeling et al., 2017).

Although customer engagement as an independent concept has a relatively short history (Lemon and Verhoef, 2016; Neulinger et al., 2020), it is actually quite a well-developed concept in marketing literature. In the organic engagement literature, researchers have virtual consensus as to the variables that affect engagement behaviour formation but diverge as to the consequence and importance of the variables (Bowden, 2009a; McNeill and Venter, 2019; Palmatier et al., 2017). Similarly, in promoted engagement, previous research lacks consistency with regard to the effectiveness of direct engagement initiatives (Harmeling et al., 2017). Moreover, previous work has ignored the relationship between promoted and organic pathways and how firm-initiated activities could have both short- and long-term effects on engagement behaviour (Harmeling et al., 2017). In addition, the emergence of new technologies—such as augmented and artificial reality and online social media—provide more diversity to the customer–firm relationship (Steinhoff et al., 2019) and customer engagement models (Hollebeek et al., 2019a; McLean and Wilson, 2019; Wirtz et al., 2019a).

To address these issues, this research takes a meta-analytic approach to conduct a systematic literature review of previous empirical research in customer engagement. The result is an integrated and comprehensive model of customer engagement’s antecedents and outcomes. In this model, the promoted and organic perspectives constitute two distinct approaches to engagement, and the antecedents in the model are categorized on the basis of these pathways. This framework allows us to study previous research in these two approaches separately and provide theoretical and empirical insight into each approach. Moreover, we define how the organic and promoted pathways are related, resulting in a better picture of customer engagement antecedents.

In this research, there is a direct relationship between engagement behaviour and attitudinal engagement, both of which are impacted by organic and promoted pathways.
We include several moderators in the conceptual model to study the relationship between engagement’s direct antecedents and attitudinal and behavioural engagement. The moderator analysis provides great insight into the effectiveness of engagement formation in a different context. Previous research supports the role of engagement in firm outcomes (Kumar and Pansari, 2016). However, as engagement is more than purchase attitude and behaviour, we carefully audit the relationship between engagement and its outcome to provide a more realistic picture of engagement’s role in the enhancement of a firm's performance.

Our meta-analytics research has the following structure. First, we summarize the previous definitions of customer engagement behaviour and distinguish this concept from related concepts. Second, we review the history of customer engagement behaviour to demonstrate its evolution. Third, we provide our meta-analysis framework and related hypothesis to explain and justify the relationship between variables in this model. Fourth, we describe our meta-analysis method to explain data collection and coding procedures, effect size calculation, structural equation modelling, and analysis of moderators. Fifth, we present results of our data analysis. Finally, we discuss our results in terms of theoretical and managerial implications, limitations of our research, and further research directions.

2.2. Understanding customer engagement behaviour

2.2.1. Conceptualization of customer engagement behaviour

Customer engagement behaviour is defined as a behavioural manifestation toward the focal firm, beyond purchase, resulting from motivational drivers (van Doorn et al., 2010). This definition highlights the main characters of this concept. Initially, “behavioural manifestation” reflects a customer’s voluntary resource contributions (mostly operant resources, such as knowledge, experience, energy or time) with both the focal firm and other actors, such as current or prospect customers (Kumar et al., 2010). Although this research focuses on the positive side of engagement behaviour, this behaviour is not always beneficial for the focal firm (Azer and Alexander, 2020b; Naumann et al., 2020). Thus positively and negatively valenced engagement co-exist in the customer relationship with the focal brand (Azer and Alexander, 2018; Bowden et al.,
in which a customer may positively and/or negatively engage with different aspect of the focal firm (Azer and Alexander, 2020a; Naumann et al., 2017). Further, “toward the focal form” suggests that engagement behaviours contribute to a firm’s marketing activities (Harmeling et al., 2017) and exclude customer behaviours such as product consumption or disposal. Moreover, “beyond purchase” reflects the non-transactional nature of engagement which is in contrast to transactional behaviour such as product purchase (van Doorn et al., 2010), while “resulting from motivational drivers” indicates that the engagement behaviour originates from an attitudinal engagement as an antecedent (Lemon and Verhoef, 2016; van Doorn et al., 2010). Although customer engagement behaviour is a distinct concept in marketing, it exhibits similarities with related concepts.

Customer engagement behaviour includes a wide range of behaviours which we classify into three categories. First, resource sharing with a firm in which the customer shares operant resources (knowledge, energy, time) with a firm in the form of suggestions, feedback, complaints, etc, to improve firm marketing functions (Kumar et al., 2010). Second, resource sharing with other actors in which customers share operant resources (knowledge, experience, energy, time) with other actors (such as other customers) in the form of word of mouth, writing a comment, etc, to assist them (Jaakkola and Alexander, 2014; van Doorn et al., 2010). Third, direct influencing in which customers affect other actors’ attitudes or behaviours toward the firm in the form of referring or changing their perception toward the firm (Jaakkola and Alexander, 2014; Kumar et al., 2010).

2.2.2. Evolution of customer engagement behaviour

The current understanding of customer engagement behaviour is a result of the evolution of this concept from a functional to relational approach and subsequently to the transformational approach. The emergence of customer engagement as a unified concept occurred in the early 2010s (Lemon and Verhoef, 2016) and is based on relationship marketing theory (Palmatier et al., 2017). However, the root of this concept lies in initial research on the firm's effort to promote engagement behaviour as a functional approach (Kumar et al., 2010). Recent emergence of new technologies has led to formation of brand communities on social media, revolutionizing customer-company relationship formation (Steinhoff et al., 2019) and firm-initiated engagement (Beckers et al., 2018; Harmeling et
al., 2017) and creating a transformational approach. This evolution is described in Table 2-1.

Table 2-1 Development of customer engagement behaviour concept in marketing

<table>
<thead>
<tr>
<th>Approach to engagement behaviour</th>
<th>Mid-1990s to mid-2000s</th>
<th>Mid-2000s to mid-2010s</th>
<th>Mid-2010s to today</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional</td>
<td>The firm initiated / Short-lived effect</td>
<td>Customer initiated / Long-lived effect</td>
<td>Customer and firm initiated / Dual effect</td>
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<tr>
<td>Relational</td>
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<tr>
<td>Transformational</td>
<td></td>
<td></td>
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<tr>
<td>Theories</td>
<td>Exchange theory, equity theory</td>
<td>Social exchange theory, S-D logic</td>
<td>Social network theory, service ecosystem</td>
</tr>
<tr>
<td>Key trends and disruptions</td>
<td>Customers consider valuable assets and firms try to enjoy this resource for competitive advantage; however, it has a transactional and short-term approach to engagement.</td>
<td>Customers consider value co-creator and relationships facilitate engagement formation; however, it requires a long-term investment in the relationship with customers.</td>
<td>New technologies i.e., social media, mobile apps, augmented and virtual reality transform interactions between customer - firm -other actors in a network of interaction.</td>
</tr>
<tr>
<td>Key insights</td>
<td>Monetary incentives encourage the customer to contribute to firm marketing activities such as referring to a new customer.</td>
<td>Customer-firm dyadic relationships over time encourage the customer to engage with the firm.</td>
<td>Technology empowers the customer to engage with the firm and other actors and enables firms through firm-initiated engagement activities and directly influence an actor’s engagement behaviour.</td>
</tr>
<tr>
<td>Illustrative resources</td>
<td>Buttle (1998); Biyalogorsky et al. (2001); Ryu and Feick (2007).</td>
<td>Bowden (2009a); Kumar et al. (2010); Vivek et al. (2012); Brodie et al. (2011).</td>
<td>Harmeling et al. (2017); Brodie et al. (2013); Brodie et al. (2019).</td>
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2.2.2.1. Functional approach

Marketing’s long-ago shift from a product to a customer orientation acknowledged the customer as a valuable resource for competitive advantage (Verhoef et al., 2010). As a result, firms use monetary incentives such as discounts, vouchers, and gifts to encourage customer participation in engagement behaviours such as new product development, customer referrals, and word of mouth (Biyalogorsky et al., 2001; Ryu and
Feick, 2007). This approach is task-based, with customers completing structured tasks such as referring a new customer for which the firm provides rewards (Harmeling et al., 2017). This view of engagement is based on social exchange (Ryu and Feick, 2007): as long as customers and firms have some sort of benefits for each other, this economic exchange will continue (Guo et al., 2017).

Several studies have examined the functional approach to customer engagement behaviour, such as emphasizing referral programs to harness the power of word of mouth Buttle (1998) and employing various methods from lowering the price to offering rewards as tools to encourage customer engagement behaviour (Biayalogorsky et al., 2001). The main advantage of the functional approach is its direct and immediate impact on customer engagement behaviours (Harmeling et al., 2017). However, as engagement behaviour depends on the presence of economic incentives, the functional approach has a short-lived impact and it is not effective in all situations (Harmeling et al., 2017; Verlegh et al., 2013).

### 2.2.2.2. Relational approach

In contrast to the functional approach, the relational approach has long-term, dynamic, process-oriented views on customer engagement behaviour (Bowden, 2009b; Pansari and Kumar, 2016). In this approach, the customer has moved from being an asset to being a value co-creator with an active role in relationships between the customer and firm (Jaakkola and Alexander, 2014). This approach relies mainly on social exchange theory, in which the focus is on socio-emotional aspects of the customer–firm relationship (Guo et al., 2017). Customers are predicted to reciprocate with positive thoughts, feelings, and behaviours toward the firm after a satisfactory experience with the firm (Pervan et al., 2009). Through the commitment–trust process, satisfactory experience enhances relationship quality and customer engagement behaviour (Bowden, 2009b; Pansari and Kumar, 2016). In addition, service-dominant logic (S-D) has strongly influenced the development of the relational approach to engagement by considering customers’ voluntary resource contribution (e.g., knowledge, experience, and time) in their relationship with a firm (Hollebeek et al., 2016; Jaakkola and Alexander, 2014).
A relational approach is based primarily on the customer’s tendency to develop a relationship and engage with the firm over time. The emergence of the internet and new technology have changed both customer and firm roles in the customer engagement process and have moved engagement study to the transformational level.

2.2.2.3. Transformational approach

The emergence of new technologies such as mobile apps and customized web pages created a platform to develop a personalized relationship with customers (Steinhoff et al., 2019). Moreover, augmented and virtual reality enable firms to add humanized features of interaction, such as appearance or mental processes, to the customer–firm interaction (Steinhoff et al., 2019). Additionally, social media and brand communities foster customer–firm interaction (Blazevic et al., 2013; Brodie et al., 2013; Gummerus et al., 2012a) and include other actors such as other customers in this interaction (Brodie et al., 2019). For the firm, these developments create an opportunity to employ various methods to influence and enhance customer engagement behaviour (Harmeling et al., 2017; Palmatier et al., 2017). For the customer, these developments not only extend the value in their relationship with the brand (Gummerus et al., 2012b) but also allow them to participate in engagement behaviour with others in their social network (Dolan et al., 2019).

From a theoretical perspective, social network theory and service ecosystem extend the study of engagement to a network level (Lin et al., 2019) in which engagement is not limited to interaction between a customer and focal firm but rather embraces other actors such as other customers (Brodie et al., 2019). Numerous researchers in and outside of the engagement literature have helped the emergence and development of transformational engagement (Brodie et al., 2013; Gummerus et al., 2012a; Steinhoff et al., 2019; Wirtz et al., 2013), and recent research in customer engagement extends this concept to include all actors who have a role in the engagement formation process (Breidbach and Brodie, 2017; Brodie et al., 2019; Storbacka et al., 2016).
2.3. Conceptual framework

Our conceptual framework is rooted in two main perspectives on customer engagement behaviour: organic pathway as relationship-oriented engagement and promoted pathway as firm-initiated engagement. In our conceptual model (Figure 2-1), the organic pathway is developed based on the relationship marketing approach to engagement (Bowden, 2009a) while the promoted pathway reflects the firm-initiated approach to engagement (Harmeling et al., 2017; Palmatier et al., 2017). The organic pathway to engagement is a result of the relationship between customer and firm over time (Palmatier et al., 2017). In this pathway satisfaction, trust, and commitment are the main factors by which new and current customers become engaged customers (Bowden, 2009a). To draw the relationship between variables in this pathway, we draw on Aurier and N’Goala (2010) because it provides a very clear picture of sequences of customer–firm relationship formation. As indicated in Figure 2-2, in this pathway, perceived quality’s impact on perceived value through relationship quality (satisfaction–trust–commitment) influences customer attitudinal and behavioural engagement.

In the promoted pathway, the firm employs various techniques and methods to directly influence customer engagement behaviour (Harmeling et al., 2017). In this regard, a firm’s efforts to influence engagement behaviour fall into two main areas—functional and experiential initiatives (Harmeling et al., 2017). In functional approach, a monetary incentive is used to compensate customers for marketing tasks such as referral of a new customer (Wirtz et al., 2019b). In the experiential approach, initiatives are mostly based on hedonic and social value and are aimed at creating an emotional bond with the customer (Harmeling et al., 2017). This is considered to be an engagement behaviour motivational driver (van Doorn et al., 2010). Figure 2-3 indicates the development of the proposed pathway, in which functional and experiential incentives both directly influence customer engagement (Beckers et al., 2018; Harmeling et al., 2017).

In our framework, we create a connection between organic and promoted pathways through perceived value, in which both customers’ and firms’ efforts influence the engagement formation process. From a firm-initiated engagement perspective, the
firm offers different values to directly influence engagement behaviour (Beckers et al., 2018). Through perceived value, these initiatives influence customers’ long-term relationships with the firm and create a long-lived effect for company engagement efforts. In addition, in both the organic and promoted pathways, customer engagement leads to customer loyalty and firm performance. These two variables are considered to be the main outcome of customer engagement (Harmeling et al., 2017; Kumar and Pansari, 2016; van Doorn et al., 2010).

Moderator selection was based on the importance of explaining the inconsistency in previous engagement models, the emergence in empirical research coding and the number of effect size (i.e. at least 10 effects size) (Gremler et al., 2019; Palmatier et al., 2006). In this regard, engagement formation seems to differ in the online and offline context for both organic and promoted engagement (Harmeling et al., 2017; Wirtz et al., 2019b). Variables such as industry type (service vs. manufacturing) and product type (hedonic vs. utilitarian) constitute important moderators in engagement formation (Kumar and Pansari, 2016; Kumar et al., 2019b). Although the type of market (B2B versus B2C) is an important moderator for customer engagement (Pansari and Kumar, 2016), as empirical studies in B2B are few, we do not include this variable in the model. Furthermore, research in customer engagement indicates that culture has an important role in customer engagement formation (Gupta et al., 2018). Finally, similar to previous meta-analysis variables such as sample composition (student vs. non-student), publication status (published vs. not published) and quality of publication outlet are controlled for this research (Blut and Wang, 2019b; Gremler et al., 2019).
2.3.1. Organic engagement pathway

2.3.1.1. Perceived quality and perceived value

Quality is defined as a customer’s judgment of a firm’s overall excellence or superiority (Parasuraman et al., 1988; Zeithaml, 1988). In our model, quality is not limited to service quality, and it includes both products and services in both online and offline contexts (Carlson et al., 2018). In other words, perceived quality indicates the quality of customer experience of firm offerings (Kumar et al., 2019b; Pansari and Kumar, 2016). In the customer engagement literature, perceived quality is considered to be one of the engagement antecedents (Wirtz et al., 2013). In addition, value is defined as customer judgment of utility of the firm offerings based on a trade-off between what customers
give as cost and what they receive as benefits (Zeithaml, 1988). The firm's ability to deliver superior value as compared to competitors is considered a firm's main competitive advantage (Ravald & Grönroos, 1996). Research in relationship marketing indicates perceived value to be a firm’s opportunity to create and develop a relationship with customers (Palmatier et al., 2006; Ravald and Grönroos, 1996). We propose a direct relationship between perceived quality and perceived value, in which an increase in customer perceived quality of a company offering will improve customer value perception. This relationship between perceived value and perceived quality is supported by previous research (Aurier and N'Goala, 2010; Hu et al., 2009). Thus, we expect:

**H1:** Perceived quality is positively related to perceived value.

### 2.3.1.2. Perceived quality and satisfaction

Satisfaction refers to the customer's overall evaluation of the purchase and consumption experience (Anderson et al., 1994). The fundamental model of satisfaction is the expectancy–disconfirmation model, in which satisfaction is the result of a customer’s comparison between expectation of the firm’s offering and the experienced performance (Oliver, 1980). Satisfaction is an important predictor of customer behavioural response and firm performance (Anderson et al., 2004; Gupta and Zeithaml, 2006). The relationship between quality and satisfaction has been widely studied (Anderson et al., 1994; Orel and Kara, 2014), especially in service marketing (McDougall and Levesque, 2000; Olorunniwo et al., 2006). Moreover, the customer engagement literature research supports the direct impact of perceived quality on satisfaction (Verleye et al., 2013). Thus, we expect:

**H2:** Perceived quality is positively related to satisfaction.

### 2.3.1.3. Perceived value and satisfaction

Customers’ motivation to engage with a firm depends on the benefits they expect to receive from their relationship with the firm (Vivek et al., 2012). Value is considered to be the main predictor of customer satisfaction and the emergence of long-term relationships (Barari et al., 2020; Ravald and Grönroos, 1996), and the linkage between perceived value and customer satisfaction is supported in the relationship marketing
literature (Anderson et al., 1994; Woodruff, 1997). In the customer engagement literature, customers’ perceived value is considered the customer-based antecedent of the engagement (van Doorn et al., 2010) in which an increase in perceived value enhances customer engagement through customer satisfaction (Hapsari et al., 2017; Kim et al., 2013). Thus, we expect:

**H₃**: Perceived value is positively related to satisfaction.

### 2.3.1.4. Satisfaction, trust, and commitment

Satisfaction, trust, and commitment constitute relationship quality as an overarching construct (Kevin Kam Fung et al., 2016; Lemon and Verhoef, 2016). Relationship quality is defined as a customer’s overall evaluation of the strength of the relationship with a firm (Palmatier et al., 2006). As noted earlier, satisfaction is related to customers’ overall evaluation of their experience of firm offerings (Anderson et al., 1994). Trust is defined as “customer willingness to rely on an exchange partner with whom a certain level of confidence has been built” (Moorman et al., 1993). Trust is a necessary condition of customer commitment to the firm and, along with commitment, is placed at the centre of the relationship marketing framework (Palmatier et al., 2017). Trust in the relationship arises from partner reciprocity and non-opportunistic behaviour (Vivek et al., 2012). Commitment is defined as a customer’s “enduring desire to maintain a valued relationship” (Moorman et al., 1993) and indicates the nature of the relationship (Palmatier et al., 2007). An increase in customer commitment will affect customer willingness to maintain valued relationships with the firm (Watson et al., 2015). Satisfaction in relationship marketing is considered to be a fundamental precondition of the customer–firm long-term relationship and a precondition of trust and commitment (Aurier and N’Goala, 2010; Hennig-Thurau and Klee, 1997). Similarly, in customer engagement models, customer satisfaction is considered to be a direct predictor of trust and commitment in the relationship between customer and firm (Bowden, 2009a). Thus, we expect:

**H₄**: Satisfaction is positively related to (a) trust and (b) commitment.
Trust and commitment are at the heart of relationship marketing and are necessary for developing and maintaining a successful relationship between customer and firm (Morgan and Hunt, 1994; Palmatier et al., 2006). In this regard, research in relationship marketing empirically supports the influence of trust on commitment in developing relationships (Aurier and N’Goala, 2010; Hennig-Thurau and Klee, 1997). Similarly, in customer engagement models trust and commitment play an essential role in engagement development (Hollebeek, 2011b), in which trust influences customer commitment in the engagement formation process (Bowden, 2009a). Thus, we expect:

**H5: Trust is positively related to commitment.**

2.3.1.5. Commitment and customer engagement

Research in relationship marketing indicates that customer trust and commitment to a relationship have a direct impact on customers’ transactional behaviour such as repurchase (Aurier and N’Goala, 2010; Palmatier et al., 2006). For instance, trust and commitment influence customer tendency to stay with the firm and repurchase from it (Palmatier et al., 2006). Customer engagement comprises attitudes and behaviours that go beyond purchase (Dessart et al., 2016; Lemon and Verhoef, 2016) and reflect our two-dimensional view of customer engagement. In contrast to the relationship marketing literature, customer engagement research indicates that among the relationship quality components, only commitment is a direct predictor of customer engagement (Bowden, 2009a). In contrast to transactional behaviour, although in non-transactional behaviour satisfaction and trust are necessary to develop a relationship, they are not sufficient to directly influence customer attitudinal and behavioural engagement. Thus, we expect:

**H6: Commitment is positively related to (a) attitudinal and (b) behavioural engagement.**

2.3.2. Promoted engagement pathway

2.3.2.1. Functional and behavioural initiatives

Firms employ various forms of economic incentives as a reward to promote customer engagement behaviour (Beckers et al., 2018; van Doorn et al., 2010). These incentives are mainly extrinsic and utilitarian rewards (Vivek et al., 2012), in the form of money, discounts, and information to compensate customers who contribute to the firm’s
marketing function (Harmeling et al., 2017). These incentives encourage customers to refer a new customer, support other customers or provide positive comments about the firm (Kumar et al., 2010; Kumar and Pansari, 2016). Research indicates a significant direct impact of these incentives on engagement behaviours (Ryu and Feick, 2007; Wirtz et al., 2019b). Thus, we expect:

**H7**: Functional initiative is positively related to behavioural engagement.

### 2.3.2.2. Experiential initiative and attitudinal engagement

Firm activities that are mostly based on multisensory, hedonic, and social benefits create customer attitudinal engagement with the firm (van Doorn et al., 2010). Here, the firm employs various programs, events, or activities to directly influence customer engagement (Vivek et al., 2012) and, cover the deficiencies of functional initiatives by providing a pleasant experience for customers (Harmeling et al., 2017) and influence customers’ attitudinal engagement with firms. Thus, we expect:

**H8**: Experiential initiative is positively related to attitudinal engagement.

### 2.2.3. Organic and promoted pathways association

#### 2.3.3.1. Functional and experiential initiative and perceived value

Functional and experiential initiatives also have an indirect effect on engagement. We define the indirect effect for these two variables as they facilitate instant short-term customer engagement and also create long-term customer engagement (Harmeling et al., 2017). Although research in firm-initiated engagement is limited to the direct influence of these initiatives on customer engagement (Ryu and Feick, 2007; Wirtz et al., 2019b), we predict that through perceived value, functional and experiential initiatives will indirectly influence customer engagement over time. Functional and experiential initiatives can be utilitarian and hedonic, increasing customers’ received value of their relationship and influencing customers’ perceived value. Thus, we expect:

**H9**: (a) Functional and (b) experiential initiative are positively related to perceived value.
2.3.4. Customer engagement and outcomes

2.3.4.1. Attitudinal and behavioural engagement

As noted earlier, customer engagement comprises attitudes and behaviours that go beyond purchase (Dessart et al., 2016; Lemon and Verhoef, 2016). While customer engagement behaviour definition indicates attitudinal engagement as a driver of behavioural engagement (van Doorn et al., 2010), the relationship between them has not been sufficiently studied. In a related area, employee engagement studies show that attitudinal engagement occurs before behavioural engagement and is the prerequisite of the behavioural component (May et al., 2004; Saks, 2006). It seems unwise for an organization to start developing behavioural engagement when attitudinal engagement is not present (Shuck and Wollard, 2010). Thus, we expect:

\[ H_{10}: \text{Attitudinal engagement is positively related to behavioural engagement.} \]

2.3.4.2. Attitudinal engagement and loyalty

Loyalty is defined as a customer's positive attitude and behaviour toward a brand, and it is manifested in a customer’s tendency to repurchase a preferred brand (Oliver, 1999). The loyalty chain holds that customer loyalty starts from cognitive loyalty as an information component, then turns to affective loyalty and finally leads to behavioural loyalty (Oliver, 1999). In this chain, only attitudinal engagement, through cognitive and affective loyalty, could influence loyalty. In other word, attitudinal engagement enhances favourable attitudes toward a firm or accelerates the transition from attitudinal to behavioural loyalty (Harrigan et al., 2018; So et al., 2016). In this regard, research has shown how higher brand engagement in self-concept as an attitudinal component of customer engagement leads to higher customer loyalty (Sprott et al., 2009). Thus, we expect:

\[ H_{11}: \text{Attitudinal engagement is positively related to loyalty.} \]

2.3.4.3. Behavioural engagement and firm performance

Firm performance comprises a firm’s actual and objective performance enhancement such as sales, profit, and share of wallet (Palmatier et al., 2006) and
originates from customer–firm long-term relationships (Palmatier et al., 2007; Sin et al., 2002) and firm engagement activities (Beckers et al., 2018; Harmeling et al., 2017). Business performance indicates firm financial improvement, while engagement behaviour is related to non-financial and non-transactional attitude and behaviour (van Doorn et al., 2010). In contrast to the engagement–loyalty relationship, behavioural engagement has the potential to directly influence firm performance (Verhoef et al., 2010). In this sense, engagement behaviours such as referral of a new customer or providing positive reviews in social media enhance firm performance (Kumar and Pansari, 2016). Thus, we expect:

**H12:** Behavioural engagement is positively related to performance.

### 2.3.4. Potential moderators

#### 2.3.4.1. Engagement context: online versus offline

The emergence of internet-based channels extends customer–firm interaction from face to face and in a physical store to an online context (Steinhoff et al., 2019; Verma et al., 2016). In both organic and promoted pathways, new technologies have empowered customers and facilitate customer participation in engagement behaviours (Wirtz et al., 2013). However, compared to the face to face context, the online context is not effective for creating an emotional bond between customers and the company (Steinhoff et al., 2019). In contrast, direct and face to face interaction with customers is a wide-ranging opportunity for firms to develop long-term relationships with customers and enhance their attitudinal engagement (Palmatier et al., 2006). Thus, we expect:

**H13:** The positive effects of (a) commitment and (b) experimental initiative on attitudinal engagement are stronger in an offline than online context.

**H14:** The positive effects of (a) commitment and (b) functional initiative on behavioural engagement are stronger in an online than offline context.

#### 2.3.4.2. Industry type: service versus manufacturing

This variable moderates the direct antecedent of engagement and attitudinal and behavioural engagement differently in organic and promoted pathways. For the organic
pathway, a customer in service contexts has an important role in the service production and delivery process (Kumar et al., 2019b; Vargo and Lusch, 2008). In contrast, recent development in e-commerce have diminished the interaction between customers and firms in goods-based industries and customers are able to buy products with one click (Steinhoff et al., 2019). Hence, in an organic engagement pathway customers are more involved with service-based firms than with manufacturing (Kumar and Pansari, 2016; Kumar et al., 2019b), and this direct interaction with a customer provides numerous opportunities for firms to enhance their relationship with the customer and enhance customer engagement (Pansari and Kumar, 2016). However, in contrast to goods, services are intangible and inconsistent (Berry, 1995; Bowen, 1990). Therefore, it could be harder for firms to convince and encourage customer attitudinal and behavioural engagement directly and in a short time. The tangible and persistent nature of goods facilitates customer attitudinal and behavioural engagement formation. Thus, we expect:

**H15:** The positive effects of commitment on (a) attitudinal and (b) behavioural engagement are stronger in the service than in the manufacturing industries.

**H16:** The positive effects of (a) experiential initiative on attitudinal engagement and (b) functional initiative on behavioural engagement are stronger in the manufacturing than in the service industries.

### 2.3.4.3. Product type: hedonic versus utilitarian

Although all products have both hedonic and utilitarian characteristics, products can be categorized as primarily hedonic or utilitarian (Dhar and Wertenbroch, 2000). Utilitarian products such as banking products and services are mostly functional and instrumental, while hedonic products such as theme parks have experiential and sensorial value (Babin et al., 1994). Customers’ tendency to develop and maintain their relationship is higher for hedonic than utilitarian products (Bowden et al., 2014). Therefore, in the organic pathway, customer engagement formation is easier for hedonic than for utilitarian products (Hollebeek, 2013). For promoted pathways, past studies show the customer has a higher tendency toward hedonic than utilitarian products and it has higher protentional to influence customer attitudinal and behavioural response (Barari et al., 2020; Chitturi et al., 2007, 2008). Therefore, customer attitudinal and behavioural engagement in the
promoted pathway would be stronger for the hedonic than for the utilitarian product. Thus, we expect:

**H17**: The positive effects of commitment on (a) attitudinal and (b) behavioural engagement are stronger for hedonic than utilitarian products.

**H18**: The positive effects of (a) experiential initiative on attitudinal engagement and (b) functional initiative on behavioural engagement are stronger for hedonic than utilitarian products.

### 2.3.4.4. Cultural context

**Power distance**: It is the amount of individual acceptance of inequality in power, authority, or status in society (Hofstede et al., 2005). In countries with high power distance, hierarchy and distribution of power among people are important and accepted (Hofstede, 2001). In contrast, people in low power distance cultures do not accept and support hierarchy and power distribution in society (Hofstede, 2001). Hence, in high power distance countries, people like to find a way to send a signal to other people to show their status or power. Therefore, in both the organic and promoted pathways, customers with high power distance are expected to participate in attitudinal and behavioural engagement more than customers in low power distance countries (Gupta et al., 2018), because customers in high power distance cultures consider engagement as a way to send the signal of reputation and status to other customers (Samaha et al., 2014). Thus, we expect:

**H19**: The positive effects of commitment on (a) attitudinal and (b) behavioural engagement are stronger in cultures with higher power distance.

**H20**: The positive effects of (a) experiential initiative on attitudinal engagement and (b) functional initiative on behavioural engagement are stronger in cultures with higher power distance.

**Individualism**: It reflects the extent to which individuals’ priority is their personal goal, motivation, or desire, whereas collectivism gives priority to the group (Hofstede et
People in individualistic cultures act on the basis of their personal needs whereas in collectivistic cultures behaviour is shaped by group goals rather than personal goals (Hofstede, 2001). In this regard, research in relationship marketing shows developing a customer–firm relationship is easier and more profitable in a collectivist culture than in an individualistic culture (Samaha et al., 2014). Although individualism could present difficulties in developing a long-term relationship, the relationship between the direct antecedent of engagement and customer engagement is stronger in an individualistic than in a collectivist culture in both organic and promoted pathways. In an individualist culture, customers base action on their personal goals, and when the relationship meets their needs, they like to do something to compensate for the direct and indirect benefits of their relationship with a firm. In this regard, previous research shows that customer engagement is more common in an individualistic culture than in a collectivistic culture (Gupta et al., 2018; Pick and Eisend, 2013). Thus, we expect:

H21: The positive effects of commitment on (a) attitudinal and (b) behavioural engagement are stronger in cultures with higher individualism.

H22: The positive effects of experiential and functional initiative on (a) attitudinal and (b) behavioural engagement respectively are stronger in cultures with higher individualism.

Masculinity: It refers to the extent to which “tough” (masculine) values rather than “tender” (feminine) values direct people's behaviour in society (Hofstede et al., 2005). While the dominant value in a masculine culture is rationalism, relational values are prevalent in the feminine culture (Hofstede, 2001). The focus in the masculine culture is on competitiveness and achievement, whereas in the feminine culture reciprocity, mutuality, and benevolence guide people's behaviour (Hofstede et al., 2005). From this view, customer commitment to the relationship is higher in feminine cultures than in masculine cultures (Pick and Eisend, 2013) and feminine values encourage customers to reciprocate the direct or indirect benefits they received from their relationship with the firm (Samaha et al., 2014). The relationship between direct antecedents of engagement and attitudinal and behavioural engagement in both the promoted and organic pathways is expected to be higher in a feminine culture than in a masculine culture. Thus, we expect:
The positive effects of commitment on (a) attitudinal and (b) behavioural engagement are stronger in cultures with lower masculinity.

The positive effects of (a) experiential initiative on attitudinal engagement and (b) functional initiative on behavioural engagement are stronger in cultures with lower masculinity.

Uncertainty avoidance: It refers to the extent to which people in a culture tolerate an unknown or uncertain future (Hofstede et al., 2005). Individuals with high uncertainty avoidance avoid unpredictability and ambiguity because they feel this situation will threaten them (Hofstede, 2001). In contrast, people from low uncertainty countries have a more relaxed attitude toward unknown situations (Hofstede, 2001). It is expected that high uncertainty increases customers’ tendency to develop a long-term and stable relationship with the firm to decrease the future unpredictability (Samaha et al., 2014). In contrast, engagement attitude and behaviour encourage the customer to engage in some behaviour that may increase future uncertainty. For instance, referring a new customer or writing a comment about firm performance may increase future unpredictability. The relationship between direct antecedents of engagement and attitudinal and behavioural engagement in both the promoted and organic pathways is expected to be higher in a lower uncertainty avoidance culture than in a higher uncertainty avoidance culture. Thus, we expect:

The positive effects of commitment on (a) attitudinal and (b) behavioural engagement are stronger in cultures with lower uncertainty avoidance.

The positive effects of (a) experiential initiative on attitudinal engagement and (b) functional initiative on behavioural engagement are stronger in cultures with lower uncertainty avoidance.

2.3.4.5. Control variables

We define several control variables to ensure that the heterogeneity of the result is not because of these variables (Gremler et al., 2019). For sample characteristics, we
control student versus non-student samples. Student samples are more homogenous than non-student samples, creating a bigger effect size and lower error variance (Blut and Wang, 2019b). We also control the quality of the journal in which the article is published, because a high-quality journal has a rigorous process to ensure the quality of the publications (Hunter and Schmidt, 2004). Finally, we assess the publication status to control the difference between published and unpublished research. Researchers prefer to publish significant effects rather than insignificant effects (Hunter and Schmidt, 2004) and this preference may affect the meta-analysis results.

2.4. Methods

Systematic review papers can be of several types, namely – structured review focusing on widely used methods, theories and constructs (Canabal and White III, 2008; Kahiya, 2018; Paul and Singh, 2017; Rosado-Serrano et al., 2018), framework-based (Paul and Benito, 2018), hybrid-narrative with a framework for setting future research agenda (Dabić et al., 2020; Kumar et al., 2019a; Paul et al., 2017), theory-based review (Gilal et al., 2019; Paul and Rosado-Serrano, 2019), meta-analysis (Knoll and Matthes, 2017), bibliometric review (Randhawa et al., 2016), and review aiming for model/framework development (Paul and Mas, 2019). This research adopted a meta-analysis approach to review customer engagement behaviours literature which is considered an effective way to expand the boundaries of a research domain (Grewal et al., 2018). In contrast to narrative literature review methods, meta-analysis allows us to statically integrate and synthesise previous researches in customer engagement behaviour to resolve inconsistency and create accumulate knowledge in this area (Palmatier et al., 2018).

2.4.1. Data collection and coding

To collect the required data, we followed several approaches. First, to identify relevant studies, we selected several electronics databases: ABI/INFORM Global, Business Source Complete, ProQuest Digital Dissertations, Scopus, SSRN, and Google Scholar. For the search terms we used the keywords “customer engagement,” “brand engagement,” “consumer engagement,” and “user engagement” to include all research
related to customer engagement literature. These key terms were combined with related keywords such as “brand community,” “fan page,” “social media,” “Facebook,” “mobile,” “virtual,” “gamification,” “artificial intelligence,” “augmented reality,” “event marketing,” “referral marketing,” and “engagement marketing” to cover related research in this area. Moreover, we included in our search process all types of empirical publications, such as peer review research, book chapters, dissertations, conference papers, and working papers. We also did manual searches using the title and abstract of articles published in top journals in marketing and management. Finally, we checked the reference list of articles related to customer engagement in top journals and articles that have a high citation rate in Google Scholar to find articles related to our research (Frigerio et al., 2020).

After completing the search process, we applied some inclusion and exclusion criteria to restrict our research. First, we considered only research that studied antecedents and consequences of individual (i.e., customer, consumer, or user) engagement with a firm/brand or related touchpoints (i.e., brand community, mobile application) that resulted in customer engagement with a firm. Thus, we excluded individual engagement with objects that were not related to customer engagement (student engagement, employee engagement) or customer engagement with specific firm (i.e., place engagement, city engagement). Second, as the term “engagement” is very common in various research areas, we included only research that provides solid conceptual and operational definitions of the customer engagement concept to assess their relevancy to our research. Third, we included only empirical research report correlation matrices or other statistical information (e.g., standardized regression coefficients, t-values) that we could use to calculate a correlation coefficient. Therefore, we excluded theoretical papers, qualitative investigations, and quantitative studies that did not report findings of antecedents or outcomes of customer engagement. Applying research criteria led to 184 records with 196 effect sizes that meet all our criteria.

To code these studies, we developed a coding protocol that included a detailed coding manual with descriptions of each variable (Table 2). An independent coder who was an expert in the engagement area and not involved in this research was hired to check the quality of the coding. Overall inter-coder agreement is higher than 95%, confirming
coding quality. Differences in coding were resolved through discussion. When a single study used the same sample to provide more than one effect size for the same relationship, we used an average to calculate the effect size. When a study reported multiple effect sizes for the same relationship, but these were independent, we included them as separate effect sizes.

Table 2-2 Constructs definition and aliases

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Definitions</th>
<th>Common aliases</th>
<th>Representative papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived quality</td>
<td>Customer’s judgment of a firm offering’s overall excellence or superiority.</td>
<td>Product and service perception, product quality, service quality, experience quality.</td>
<td>Zeithaml et al. (1996)</td>
</tr>
<tr>
<td>Perceived value</td>
<td>Customer’s perceived positive benefits from the firm offering.</td>
<td>Hedonic value, utilitarian value, social value, economic value, experiential value, perceived value.</td>
<td>Zeithaml et al. (1996)</td>
</tr>
<tr>
<td>Functional initiative</td>
<td>The firm-initiated activities in which various economic incentives are employed to promote customer engagement behaviour.</td>
<td>Referral program, referral campaign, word of mouth program.</td>
<td>Beckers et al. (2018); Harmeling et al. (2017)</td>
</tr>
<tr>
<td>Experiential initiative</td>
<td>The firm-initiated activities in which various hedonic and social benefits are employed to enhance attitudinal engagement.</td>
<td>Experiential marketing, event marketing, gamification</td>
<td>Harmeling et al. (2017)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>The positive affective or emotional state resulting from the appraisal of the firm offering.</td>
<td>Satisfaction with the relationship, product or service.</td>
<td>Geyskens and Steenkamp (2000)</td>
</tr>
<tr>
<td>Trust</td>
<td>Confidence in the reliability and integrity of a service provider.</td>
<td>Trustworthiness, credibility, benevolence, honesty.</td>
<td>Morgan and Hunt (1994)</td>
</tr>
<tr>
<td>Commitment</td>
<td>Desire and willingness to maintain a valued relationship with the firm in different touchpoints.</td>
<td>Affective and behavioural commitment, obligation, normative commitment.</td>
<td>Morgan and Hunt (1994)</td>
</tr>
<tr>
<td>Attitudinal</td>
<td>A customer’s level of brand-related thought processing and/or brand-related effect in a particular consumer/brand interaction elaboration.</td>
<td>Cognitive and emotional engagement, emotional bonding and emotional attachment.</td>
<td>Hollebeek et al. (2014)</td>
</tr>
<tr>
<td>Behavioural</td>
<td>Engagement behaviours, customer referral, word of mouth, user-generated content.</td>
<td>Hollebeek et al. (2014)</td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td>Loyalty</td>
<td>Brand loyalty, attitudinal loyalty, purchase intention, re-purchase intention</td>
<td>Oliver (1999)</td>
<td></td>
</tr>
<tr>
<td>Firm</td>
<td>Sales, market share, the share of wallet, profitability.</td>
<td>Watson et al. (2015)</td>
<td></td>
</tr>
<tr>
<td>performance</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 2.4.2. Effect size calculation

As most research in customer engagement reports the correlation matrix, the correlation coefficient is used to calculate the effect size. If the publication did not report this coefficient, the regression coefficient and Peterson and Brown (2005) formula are used to transform the beta coefficients to the correlation coefficient. The Hunter and Schmidt (2004) approach and random-effects model are employed to calculate the effect size. In the first step, effect sizes were corrected for measurement error. Each correlation was divided by the square root of the product of the reliabilities of the independent and dependent variables, and after adjustment of the correlation for measurement error, the sample size was used to weight correlations (Iyer et al., 2019) (Appendix C). The reliability-adjusted and sample size-weighted correlation is used to pool the correlation matrix for the structural equation model and moderator analysis. Q-statistic test and $I^2$ statistics are used to test the homogeneity of effect sizes. The significance of Q-statistic and the percentage higher than 75% of $I^2$ statistics indicate the variance in effect size distribution (Rana and Paul, 2020). Finally, to address the file-drawer problem, Rosenthal (1979) formula is used to calculate fail-safe Ns (FSNs).
2.4.3. Structural equation modelling

We used the meta-analytic structural equation modelling procedure to assess the research framework and test the hypotheses, except the moderator analysis. As the sample size in the individual research is not large enough, the statistical power of rejecting incorrect models in structural equation modelling is not high. Thus, reported models in the literature may not be the correct models or the best models (Grewal et al., 2018). Meta-analytic structural equation modelling helps researchers to test different models and demonstrate the superiority of one type of process or mechanism over another (Grewal et al., 2018). All effect sizes (k = 196) considered in this analysis and reliability-adjusted and sample size-weighted correlations (N = 146,380) are used to create the pooled correlation matrix as input for structural equation model. Similar to previous meta-analysis procedures (Blut and Wang, 2019b), missing correlations, especially the correlations between functional and experiential initiatives and service quality and relationship quality components, were filled by correlations of related researches.

2.4.4. Moderator analysis

Following previous research (Iyer et al., 2019; Samaha et al., 2014), we employed a random-effects regression model to study the role of moderators in our model. Hence, reliability-adjusted and sample size-weighted correlations are considered as dependent variables and moderator variables as independent variables to explain the variability in the effect sizes. On the basis of our conceptual model, we conduct two separate regression models for attitudinal and behavioural engagement. In both models, engagement context (1 = face to face, 0 = online), industry type (1 = service vs. 0 = manufacturing), and product type (1 = hedonic, 0 = utilitarian) were defined as dummy variables. The cultural context is considered a continuous variable. Hofstede et al. (2005) score of cultural dimensions (power distance, individualism, masculinity, uncertainty avoidance) is used to measure cultural context as a moderator (ranging from 1 to 100).
2.5. Results

2.5.1. Descriptive statistics

Table 3 provides the descriptive analysis. Attitudinal and behavioural engagement both have a positive correlation with antecedents, meditators, and outcome variables. Most correlations are stronger for attitudinal engagement than for behavioural engagement. The result of the Q-test for all pair correlations is significant, which indicates heterogeneity among effect sizes. Similarly, the I² test for all pair correlations is higher than 75%, which shows heterogeneity between studies. The analysis shows that all FSNs for all pairs’ correlations are higher than Rosenthal (1979) suggested threshold (5k + 10) and assures the robustness of the findings against publication bias. In addition, the symmetric funnel plot analysis indicates that publication bias is unlikely. Finally, the exclusion of sample size and effect size outliers does not affect the study results.

Table 2-3 Descriptive statistics for customer engagement framework

<table>
<thead>
<tr>
<th>Relationship</th>
<th>k</th>
<th>N</th>
<th>r_{cw}</th>
<th>LCI</th>
<th>UCI</th>
<th>Q</th>
<th>I²</th>
<th>FSN</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attitudinal engagement (AE)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived quality ←→ AE</td>
<td>16</td>
<td>6,436</td>
<td>.46</td>
<td>.43</td>
<td>.57</td>
<td>208*</td>
<td>93%</td>
<td>7794</td>
</tr>
<tr>
<td>Perceived value ←→ AE</td>
<td>49</td>
<td>32,619</td>
<td>.60</td>
<td>.47</td>
<td>.59</td>
<td>2220*</td>
<td>98%</td>
<td>7034</td>
</tr>
<tr>
<td>Satisfaction ←→ AE</td>
<td>23</td>
<td>10,317</td>
<td>.52</td>
<td>.44</td>
<td>.59</td>
<td>625*</td>
<td>96%</td>
<td>516</td>
</tr>
<tr>
<td>Trust ←→ AE</td>
<td>20</td>
<td>7,325</td>
<td>.48</td>
<td>.42</td>
<td>.59</td>
<td>454*</td>
<td>96%</td>
<td>892</td>
</tr>
<tr>
<td>Commitment ←→ AE</td>
<td>22</td>
<td>7,534</td>
<td>.60</td>
<td>.54</td>
<td>.69</td>
<td>565*</td>
<td>96%</td>
<td>2068</td>
</tr>
<tr>
<td>Experiential ←→ AE</td>
<td>11</td>
<td>1,331</td>
<td>.51</td>
<td>.42</td>
<td>.65</td>
<td>47*</td>
<td>89%</td>
<td>722</td>
</tr>
<tr>
<td>Loyalty ←→ AE</td>
<td>63</td>
<td>25,492</td>
<td>.52</td>
<td>.51</td>
<td>.59</td>
<td>1652*</td>
<td>96%</td>
<td>9267</td>
</tr>
<tr>
<td><strong>Behavioural engagement (BE)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived quality ←→ BE</td>
<td>30</td>
<td>59,640</td>
<td>.27</td>
<td>.37</td>
<td>.49</td>
<td>828*</td>
<td>96%</td>
<td>4892</td>
</tr>
<tr>
<td>Perceived value ←→ BE</td>
<td>72</td>
<td>41,164</td>
<td>.50</td>
<td>.43</td>
<td>.52</td>
<td>2229*</td>
<td>97%</td>
<td>7671</td>
</tr>
<tr>
<td>Satisfaction ←→ BE</td>
<td>42</td>
<td>66,089</td>
<td>.57</td>
<td>.40</td>
<td>.50</td>
<td>1388*</td>
<td>97%</td>
<td>914</td>
</tr>
<tr>
<td>Trust ←→ BE</td>
<td>25</td>
<td>8,791</td>
<td>.44</td>
<td>.39</td>
<td>.54</td>
<td>513*</td>
<td>95%</td>
<td>3630</td>
</tr>
<tr>
<td>Commitment ←→ BE</td>
<td>26</td>
<td>9,082</td>
<td>.53</td>
<td>.53</td>
<td>.56</td>
<td>815*</td>
<td>97%</td>
<td>1868</td>
</tr>
<tr>
<td>Functional ←→ BE</td>
<td>16</td>
<td>5,329</td>
<td>.36</td>
<td>.36</td>
<td>.40</td>
<td>298*</td>
<td>95%</td>
<td>3017</td>
</tr>
<tr>
<td>Performance ←→ BE</td>
<td>11</td>
<td>3,116</td>
<td>.48</td>
<td>.40</td>
<td>.79</td>
<td>760*</td>
<td>99%</td>
<td>4556</td>
</tr>
<tr>
<td>AE ←→ BE</td>
<td>56</td>
<td>23,855</td>
<td>.56</td>
<td>.52</td>
<td>.60</td>
<td>1365*</td>
<td>96%</td>
<td>3009</td>
</tr>
</tbody>
</table>
2.5.2. Results of a structural equation modelling

In accordance with prior work (Pick and Eisend, 2013), we employed a chi-square difference test ($\Delta \chi^2/df$) to reach an optimal model. To do so, we developed alternative models based on our framework in Figure 2-5 and compared the results with the original model. First, we created a direct relationship between perceived quality and perceived value with attitudinal and behavioural engagement to test their direct effect on customer engagement. The result indicates a decrease in chi-square in comparison to the original model ($\Delta \chi^2/df = -1519.62$). Moreover, we put all relationship quality dimensions (satisfaction, trust, and commitment) as a direct mediator between antecedents and both attitudinal and behavioural engagement. Again, the result indicates a decrease in chi-square compared to our original model ($\Delta \chi^2/df = -361.367$). Finally, the result of our customer engagement behaviour framework testing is presented in Figure 2-6.

Figure 2-7 Path model results (Note: ***p < .01)
2.5.3. Organic pathway

As can be seen in Table 4, in the organic pathway perceived quality has a direct and significant impact on both perceived value (H1; $\beta = .29$) and satisfaction (H2; $\beta = .22$). However, this effect is higher for the perceived quality–value linkage than the perceived quality–satisfaction linkage ($\beta_{\text{quality-value}} = .29 > \beta_{\text{quality-satisfaction}} = .22$). In addition, perceived value has a significant effect on customer satisfaction (H3; $\beta = .44$), and compared to perceived quality, it is a better predictor of customer satisfaction ($\beta_{\text{value-satisfaction}} = .44 > \beta_{\text{quality-satisfaction}} = .22$). For relationship quality components, satisfaction is a significant predictor of both trust (H4a; $\beta = .57$) and commitment (H4b; $\beta = .17$), and this effect is higher for satisfaction–trust than for satisfaction–commitment ($\beta_{\text{Satisfaction-trust}} = .57 > \beta_{\text{Satisfaction-commitment}} = .17$). Like satisfaction, trust has a significant effect on commitment (H5; $\beta = .50$). However, trust is a much better predictor of commitment than satisfaction ($\beta_{\text{Trust-commitment}} = .50 > \beta_{\text{Satisfaction-commitment}} = .17$). Among the relationship quality components, only commitment has a direct and significant effect on both attitudinal (H6a; $\beta = .51$) and behavioral engagement (H6b; $\beta = .30$), and this effect is stronger for the commitment–attitudinal engagement linkage than for the commitment–behavioral engagement linkage ($\beta_{\text{commitment-attitudinal}} = .51 > \beta_{\text{commitment-behavioral}} = .30$).

Table 2-4 Hypothesis testing results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Structural paths</th>
<th>$\beta$-value</th>
<th>p-value</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>Perceived quality $\rightarrow$ Perceived value</td>
<td>.29</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>Perceived quality $\rightarrow$ Satisfaction</td>
<td>.22</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>Perceived value $\rightarrow$ Satisfaction</td>
<td>.44</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H4a</td>
<td>Satisfaction $\rightarrow$ Trust</td>
<td>.57</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H4b</td>
<td>Satisfaction $\rightarrow$ Commitment</td>
<td>.17</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>Trust $\rightarrow$ Commitment</td>
<td>.50</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H6a</td>
<td>Commitment $\rightarrow$ Attitudinal engagement</td>
<td>.51</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H6b</td>
<td>Commitment $\rightarrow$ Behavioural engagement</td>
<td>.30</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H7</td>
<td>Functional initiative $\rightarrow$ Behavioural engagement</td>
<td>.01</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H8</td>
<td>Experiential initiative $\rightarrow$ Attitudinal engagement</td>
<td>.40</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H9a</td>
<td>Functional initiative $\rightarrow$ Perceived value</td>
<td>.42</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H9b</td>
<td>Experiential initiative $\rightarrow$ Perceived value</td>
<td>.28</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H10</td>
<td>Attitudinal engagement $\rightarrow$ Behavioural engagement</td>
<td>.37</td>
<td>***</td>
<td>Supported</td>
</tr>
<tr>
<td>H11</td>
<td>Attitudinal engagement $\rightarrow$ Loyalty</td>
<td>.52</td>
<td>***</td>
<td>Supported</td>
</tr>
</tbody>
</table>
2.5.4. Promoted pathway

From table 4, in the promoted pathway, functional and experimental initiatives have dual functions in our model. The functional initiative has a direct and significant effect on behavioural engagement (H7; β = .01) and the experiential initiative has a direct and significant impact on attitudinal engagement (H8; β = .24). However, the relationship between experimental initiative and attitudinal engagement is much stronger than that for functional initiative and behavioural engagement (βExperiential-attitudinal = .40 > βFunctional-behavioural = .01). For the indirect effect in the promoted pathway, the effect of both functional initiative (H9a; β = .42) and experimental initiative (H9b; β = .28) on perceived value is significant. In contrast to the direct effect, in the indirect effect the experimental initiative–attitudinal engagement linkage is stronger than the functional initiative–behavioural engagement linkage (βFunctional-value = .42 < βExperiential-value = .28).

2.5.5. Engagement and its consequences

As predicted in the research framework, table 4 indicates attitudinal engagement has a significant effect on behavioural engagement (H10; β = .37). and this effect is higher than the impact of commitment on behavioral engagement (βattitudinal-behavioral = .37 > βcommitment-behavioral = .30). Moreover, attitudinal engagement is a significant driver of customer loyalty (H11; β = .52) and behavioural engagement has a significant effect on firm performance (H12; β = .48).

2.5.6. Results of moderator analysis

Table 5 indicates the influence of moderator variables on linkages between attitudinal and behavioural engagement and its direct drivers.
Table 2-5 Results of moderator analysis

<table>
<thead>
<tr>
<th>Moderators</th>
<th>Organic pathway</th>
<th>Promoted pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Commitment → AE</td>
<td>Commitment → BE</td>
</tr>
<tr>
<td>Engagement context</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online (vs. offline)</td>
<td>-.026*</td>
<td>.397**</td>
</tr>
<tr>
<td>Industry type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services (vs. manufacturing)</td>
<td>.049</td>
<td>.102</td>
</tr>
<tr>
<td>Product type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedonic (vs. utilitarian)</td>
<td>.311**</td>
<td>.325**</td>
</tr>
<tr>
<td>Cultural context</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power distance</td>
<td>-.002</td>
<td>.074**</td>
</tr>
<tr>
<td>Individualism</td>
<td>.0118**</td>
<td>.088**</td>
</tr>
<tr>
<td>Masculinity</td>
<td>-.055**</td>
<td>-.185**</td>
</tr>
<tr>
<td>Uncertainty avoidance</td>
<td>-.0206**</td>
<td>-.042**</td>
</tr>
<tr>
<td>R-Square</td>
<td>46%</td>
<td>49%</td>
</tr>
</tbody>
</table>

AE (Attitudinal engagement) and BE (Behavioural engagement)

Note: *p < .1, **p < .05, ***p < .01

2.5.7. Engagement context

As expected, for engagement context, the relationships between commitment and attitudinal engagement (H13a; β = -.026) and experiential and attitudinal engagement (H14a; β = -.132) are significantly stronger in the offline than the online context. In contrast, the commitment behavioural engagement (H13b; β = .397) and functional behaviour engagement (H14b; β = .205) relationships are significantly higher in the online than the offline context. Therefore, the online context is more effective in behavioural engagement formation and the offline context is more effective for attitudinal engagement development.
2.5.8. Industry type

In the organic pathway, the linkages between commitment and attitudinal engagement (H15a; $\beta = .049$) and commitment and behavioural engagement (H15b; $\beta = .102$) are higher for the service industry than for manufacturing, although they are not significant. In the promoted pathway, both experiential and attitudinal engagement (H16a; $\beta = -.0212$) and functional and behavioural engagement (H16b; $\beta = -.351$) linkages are significantly higher in manufacturing than in the service industry. The result indicates that industry type as a moderator is only significant in promoted engagement and its effectiveness is higher in the manufacturing than in the service industries.

2.5.9. Product type

The relationships between commitment and attitudinal engagement (H17a; $\beta = .311$) and commitment and behavioural engagement (H17b; $\beta = .325$) in the organic pathway are positive and significant. In the promoted pathway, the linkages between experiential and attitudinal engagement (H18a; $\beta = .0564$) and functional and behavioural engagement (H18b; $\beta = .0303$) are higher among hedonic than utilitarian products. Patterns are consistent in the product type moderation effect in both the organic and promoted pathways, indicating that customer engagement is greater for hedonic products than utilitarian products. Also, these relationships are much stronger in the organic than the promoted pathway.

2.5.10. Cultural context

In the organic pathway, power distance significantly and positively moderates the relationship between commitment and behavioural engagement (H19b; $\beta = .074$), but this relationship is not significant for commitment and attitudinal engagement (H19a; $\beta = -.002$). Similarly, in the promoted pathway, the relationship between functional initiatives and behavioural engagement (H20b; $\beta = .010$) is significantly moderated by power distance, but moderation is not significant for the experiential and attitudinal engagement linkage (H20a; $\beta = -.001$). Therefore, power distance as a moderator is the only effect for the relationships between direct antecedent of engagement and behavioural engagement. In the organic pathway, individualism significantly and positively moderates the relationships between commitment and attitudinal engagement (H21a; $\beta = .0118$) and
commitment and behavioural engagement (H21b; $\beta = .088$). Similarly, in the promoted pathway, experimental and attitudinal engagement relationships (H22a; $\beta = .132$) and functional and behavioural engagement relationships (H22b; $\beta = 0.080$) are significantly and positively moderated by individualism. The result indicates that in both pathways, customer engagement formation is more effective in individualistic countries than in collectivistic countries. In the organic pathway, an increase in masculinity’s negative moderation of the relationships between commitment and attitudinal engagement (H23a; $\beta = -.055$) and behavioural engagement (H23b; $\beta = -.185$). Similarly, in the promoted pathway, individualism significantly and negatively moderates the relationship between experiential initiatives and attitudinal engagement (H24a; $\beta = -.0876$) and functional initiatives and behavioural engagement (H24b; $\beta = -.022$). These results confirm that in both promoted and organic pathways, attitudinal and behavioural engagement formation is more effective in a feminine than in a masculine culture. Finally, in both the organic and promoted pathways, uncertainty avoidance significantly and negatively moderated relationships between commitment and attitudinal engagement (H25a; $\beta = -.0206$), commitment and behavioural engagement (H25b; $\beta = -.042$), experimental initiatives and attitudinal engagement (H26a; $\beta = -.0342$), and functional initiatives and behavioural engagement (H26b; $\beta = -.010$). This result indicates that customer engagement formation in both the organic and promoted pathways is more effective in countries with a low uncertainty avoidance context than in countries with a high uncertainty context.

2.5.11. Control variables

The analysis of the control variables indicates there is no significant difference between student and non-student samples. Furthermore, publication outlet quality does not moderate the relationship between the direct antecedent of engagement and both attitudinal and behavioural engagement. Finally, the result of the publication status as the third control variable shows that this variable does not have a significant moderation effect. In conclusion, we did not find any particular pattern for the defined control variables.
2.6. Discussion

Our research has several theoretical implications and contributes notably to the customer engagement literature. Additionally, our findings have implications for marketing managers. We summarize our main research findings and theoretical and managerial implications in Table 2-6.

Table 2-6: Summary of research findings and implications

<table>
<thead>
<tr>
<th>Key findings</th>
<th>Research and managerial implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Organic pathway</strong></td>
<td>Customer engagement formation in organic pathway requires a long-term investment in which only customer commitment in this process is a direct predictor of attitudinal and behavioural engagement.</td>
</tr>
<tr>
<td>Perceived quality and value indirectly and through relationship quality influence customer engagement. Satisfaction and trust as two relationship quality components through commitment influence attitudinal and behavioural engagement.</td>
<td></td>
</tr>
<tr>
<td><strong>Promoted pathway</strong></td>
<td>Direct firm-initiated engagement is more effective in attitudinal than behavioural engagement formation. Evaluating functional and experiential initiatives effectiveness require to consider their dual effect on customer engagement.</td>
</tr>
<tr>
<td>Functional and experiential initiatives have a direct and indirect effect on customer engagement. Experiential initiatives have mostly direct while functional initiatives have a mostly indirect (through perceived value) influence on customer engagement.</td>
<td></td>
</tr>
<tr>
<td><strong>Attitudinal and behavioural engagement</strong></td>
<td>Customer engagement is a multidimensional concept and engagement formation requires a focus on both components especially attitudinal engagement.</td>
</tr>
<tr>
<td>Customer engagement includes attitudinal and behavioural engagement in which attitudinal engagement is a direct predictor of behavioural engagement.</td>
<td></td>
</tr>
<tr>
<td><strong>Outcome</strong></td>
<td>The relationship between engagement and its outcomes is limit to attitude-loyalty and behaviour-performance linkage.</td>
</tr>
<tr>
<td>Attitudinal engagement influence loyalty and behavioural engagement impact on firm performance.</td>
<td></td>
</tr>
<tr>
<td><strong>Moderator</strong></td>
<td>Customer engagement formation in online and offline context completes each other to optimizing engagement formation.</td>
</tr>
<tr>
<td>In both organic and promoted pathway, behavioural engagement formation is more effective in online but attitudinal in the face to face context. Although industry type is not an effective moderator for organic pathway, surprisingly promoted engagement is more effective in manufacturing than service context. Customer engagement formation in both promoted and organic pathways is higher in hedonic than utilitarian products and services.</td>
<td>In promoted strategy, compare to manufacture, direct engagement strategies less effective for service providers</td>
</tr>
<tr>
<td>Focusing on the hedonic characteristics of products and services is a great opportunity for firms to develop customer engagement.</td>
<td></td>
</tr>
</tbody>
</table>

64
In both promoted and organic pathways, customer engagement will increase in cultures with higher power distance, higher individualism, lower masculinity, and lower uncertainty distance.

Cultural context considers as important customer engagement moderator in which people from different countries have various tendencies to engage with the firm.

2.6.1. Theoretical implications

Testing our conceptual model revealed several important implications for customer engagement behaviour literature, especially with respect to organic and promoted engagement pathways.

In the organic pathway, engagement formation takes place over time and is the result of a high-quality relationship between customer and firm. These findings align with results of prior research (Bowden, 2009a; Hollebeek, 2011b) on the role of relationship quality (satisfaction, trust, and commitment) as a mediator of customer engagement. Moreover, our model supports previous models (Pansari and Kumar, 2016), in which customer experience and satisfaction are important predictors of customer engagement. However, we covered all relevant variables as antecedents and mediators in the model to provide a more comprehensive view of this concept in organic pathway. In contrast to Vivek et al. (2012), we include perceived value, trust, and commitment as antecedents of customer engagement behaviour and not as the outcome of engagement. However, customer engagement behaviour formation is an ongoing process (Bowden, 2009a; Sashi, 2012), and perceived quality, perceived value, and relationship quality could be considered to be an antecedent of customer engagement. Moreover, the model has similarities to relationship marketing models (Aurier and N’Goala, 2010; Palmatier et al., 2006), in which variables such as satisfaction, trust, and commitment directly influence customer purchase-related behaviour. However, in our model, only commitment as a component of relationship quality has a direct impact on engagement as customer non-purchase attitude and behaviour (Brodie et al., 2011; Hollebeek, 2011b).

In the promoted engagement pathway, functional and experiential initiatives influence customer engagement directly and indirectly through perceived value. Previous research in firm-initiated engagement has merely focused on the direct impact of firm-initiated activities on engagement (Ryu and Feick, 2007; Tafesse, 2016; Wirtz et al., 2019b). However, the current research indicates that the effect of functional and
experiential initiatives is not limited to direct effects and that they are connected to the organic pathway through perceived value. Moreover, the direct effect of experiential initiatives is much stronger than functional initiatives. Functional initiatives are short-lived and sometimes are not cost-effective for directly influencing engagement behaviours, leaving the experimental initiative as more effective in engagement formation (Harmeling et al., 2017). In contrast to the direct effects, the indirect effect of functional initiative is more effective than experiential initiatives. Compared to the intangible nature of experiential initiatives, the tangible and utilitarian nature of functional initiatives has a higher impact on customer perceived value. These findings provide a better picture of the dual impact of firm-initiated engagement activities on attitudinal and behavioural engagement.

This study also provides insight into attitudinal and behavioural components of customer engagement and the relationship between them. Although the customer engagement behaviour literature supports the motivational driver of engagement behaviour (Lemon and Verhoef, 2016; van Doorn et al., 2010), the importance of behavioural engagement for firm performance encourages researchers to focus primarily on this component (Kumar and Pansari, 2016; Pansari and Kumar, 2016). While we confirm the importance of behavioural engagement, attitudinal engagement seems critical to engagement formation. In both organic and promoted engagement, the relationship between commitment and experimental initiatives with attitudinal engagement is much stronger than the commitment and functional–behavioural engagement linkage. Engagement formation seems to require more focus on attitudinal components than on behavioural components. Moreover, research in customer engagement has not studied the relationship between engagement components. Much as in employee engagement (Saks, 2006; Shuck and Wollard, 2010), attitudinal engagement is an important pre-condition of behavioural engagement. Again, these findings highlight the influential role of attitudinal engagement in customer engagement formation.

Our results confirm that the relationships between attitudinal and behavioural engagement and its outcomes (e.g., customer loyalty and firm performance) are limited to attitudinal engagement–loyalty and behavioural engagement–firm performance. On the basis of the cognitive–affective–behaviour hierarchy (Oliver, 1999), we confirmed only
attitudinal engagement as a logical predictor of customer loyalty. Similarly, for the relationship between engagement and firm performance, our findings indicate that only behavioural engagement has the potential to directly influence firm performance (Beckers et al., 2018; Kumar and Pansari, 2016) and the impact of attitudinal engagement on performance is indirectly through behavioural engagement. These findings provide a better picture of the relationship between engagement and its outcomes.

Furthermore, the moderator analysis indicates that the majority of the defined variables significantly moderated the relationship between the direct antecedent of engagement and customer engagement in both the organic and promoted pathways. Our research provides important insights into the effectiveness of engagement formation in an online compared to offline context, indicating that in both the organic and promoted pathways, a face to face context is more effective for developing attitudinal engagement but the online context is more suitable for behavioural engagement. The online context is less effective than face to face interaction to create an emotional bond with a customer (Steinhoff et al., 2019; Verma et al., 2016). In contrast, new technologies, especially social media, empower the customer to participate in engagement behaviours (Brodie et al., 2013; Dass et al., 2019).

For industry type as moderator, in contrast to research in customer engagement (Kumar et al., 2019b; Pansari and Kumar, 2016), we found no significant differences between service and manufacturing industries in engagement formation. This finding indicates an organic pathway, as service industries have no advantage over manufacturing in customer engagement formation. In the promoted pathway firm-initiated engagement activities are more effective in manufacturing than in the service industry. In contrast to goods, the intangible and inconsistent nature of service (Berry, 1995; Bowen, 1990) seems to impede the influence of functional and experimental initiatives on customer engagement formation. For product type as moderator, in both organic and promoted pathways, product type significantly moderates the relationship between direct antecedents of engagement and customer engagement, in which engagement is much stronger in hedonic than utilitarian products. These results confirm research findings of the role of hedonic products in enhancing customer–firm relationships (Barari et al., 2020; Chitturi et al., 2007, 2008) and customer engagement (Hollebeek, 2013).
The result of examining cultural context as a moderator provides great insight into customer engagement from a cross-cultural perspective. In both organic and promoted pathways, an increase in power distance scores will strengthen the influence of direct antecedents of engagement and customers’ tendency to participate in engagement behaviours. This finding confirms the role of engagement behaviour as a signal of expertise and status to others (Gupta et al., 2018; Samaha et al., 2014). Moreover, in both organic and promoted pathways, engagement is higher in individualism than collectivism. These relationships differ from relationship marketing findings, in which developing and maintaining the relationship with the customer is easier in the collectivist than in the individualistic culture (Samaha et al., 2014). Customers in individualistic cultures seem to have a trade-off view of their interaction with the firm (Pick and Eisend, 2013). Therefore, when they have a high-quality relationship with a firm (i.e., an organic pathway) or have received benefits from the firm (i.e., the promoted pathway), their tendency to engage is higher than in collectivist cultures. For masculinity, in both the organic and promoted pathways, the relationships between attitudinal and behavioural engagement and their antecedents are stronger in feminine than in masculine cultures. In a feminine culture, people are more reciprocal and more relationship-oriented than in a masculine culture (Pick and Eisend, 2013), boosting the role of relationship quality and firm initiatives in engagement formation. Finally, engagement is higher among low uncertainty cultures in both the organic and promoted pathway. Although the relationship marketing literature indicates that relationship development reduced customer future uncertainty (Samaha et al., 2014), engagement seems to increase customer uncertainty. Customer engagement requires risky attitudes and behaviour, such as referring a new customer or writing a comment on social media. Therefore, an increase in uncertainty avoidance will decrease effectiveness of engagement formation.

2.6.2. Managerial implications

Our customer engagement behaviour model provides some key insights for marketing managers to consider in developing and implementing their engagement strategy (Table 2-6). For practitioners, the findings reveal two main strategies to influence customer engagement: organic and promoted strategies. The organic strategy considers the firm’s long-term investment in its relationship with the customer to form attitudinal and behaviour engagement. In this strategy, marketing managers should be aware of the
role of offering quality in customer perceived value and the effect of these two aspects of their value proposition on customer satisfaction. Marketing managers could employ technological advancement, especially in a social media brand community, to enhance customer perceived quality and value of the firm’s value proposition. For instance, the online brand community provides diverse unique benefits that improve customers’ experience of the firm’s product and services (Gummerus et al., 2012a; Wirtz et al., 2013). However, perceived quality and value are not sufficient for engagement formation, which requires enhancing relationship quality. In this regard, previous research in relationship marketing (Aurier and N’Goala, 2010; Palmatier et al., 2006) and online relationship marketing (Steinhoff et al., 2019; Verma et al., 2016) provides guidelines for developing and maintaining customer relationships. Also, marketing managers should be aware that only commitment has a direct impact on customer engagement (Brodie et al., 2011; Hollebeek, 2011b). Therefore, marketing managers should have a detailed plan for choosing appropriate customer segments for engagement formation over time.

In the promoted strategy, the marketing manager has the ability to influence customer engagement directly by employing functional and experiential initiatives. While experiential initiatives are quite effective in creating attitudinal engagement, functional initiatives have a very weak influence on behavioral engagement. If marketing managers evaluate their promoted strategy on the basis of short-term influence, they should invest more in experiential initiatives in the form of a game or event, especially in social media, to indirectly and through attitudinal engagement influence customer engagement behaviour. Moreover, in organic pathways functional and experiential initiatives through perceived value influence customer engagement. Therefore, marketing managers could combine their organic and promoted engagement strategies in which they target their current customers with a well-established relationship. This approach could create synergy between these two engagement strategies and optimize customer engagement attitude and behaviour.

From an empirical perspective, customer engagement is equal to behavioural engagement. However, the marketing manager should know that complete and sustainable customer engagement requires a focus on both components of engagement, but especially attitudinal engagement, because in both organic and promoted pathways it
is easier to form attitudinal rather than behavioural engagement. Moreover, attitudinal engagement is a very good predictor of behavioural engagement. Therefore, the marketing manager should invest more in attitudinal engagement to influence customer engagement behaviours. In addition, our findings indicate that behavioural engagement influences only business performance, whereas achieving customer loyalty requires investment in attitudinal engagement. All of these findings indicate to marketing managers that engagement is a two-dimensional concept in which attitudinal engagement has a critical role in engagement formation.

Moderator analysis indicates that several context variables play a critical role in engagement formation. Marketing managers should understand that in both organic and promoted engagement, the online and offline context complement each other, and both are important to achieve optimal customer engagement. For instance, face to face events and especially customer–employee interactions are important in creating an emotional bond with customers, whereas in an online context feature such as social media are effective in fostering customer participation in engagement behaviours. Furthermore, a promoted engagement strategy is more effective for tangible products than services. Therefore, to optimize their engagement efforts, marketing managers in service industries should focus on organic rather than promoted engagement. Additionally, this research indicates that marketing managers should focus on the hedonic character of their offering to facilitate customer attitudinal and behavioural engagement formation, and they should consider the role of culture in engagement formation in both the organic and the promoted strategy. For instance, engagement strategy is more effective in cultures with a higher power distance, individualism, feminine character, and lower uncertainty avoidance, which mostly reflects that engagement is more effective in western than eastern cultures. Hence, especially in multinational firms, marketing managers should consider these differences between countries in their engagement strategy development.

2.6.3. Limitations and further research

Although meta-analysis provides a comprehensive and generalizable view of previous research in an area, it has some limitations. As our conceptual model is developed on the basis of previous empirical research on engagement, the model is
limited to variables studied in previous research. Previous research has mostly studied customer engagement as a positive concept while engagement behaviour includes both positive and negative dimension. Besides, as previous research has focused mainly on firm-related antecedents and outcomes of engagement, our model suffers from customer-related factors. For instance, the psychological differences among customers will affect customer relationship formation and customer response to promoted engagement initiatives. Similarly, our outcome is only reflective of the benefits of customer engagement for the firm, as it lacks customer-related outcomes. Moderator analysis is a very important part of meta-analysis and allows the researcher to explain heterogeneity in effect sizes. As customer engagement is an emerging research area, empirical research in this area is limited. Therefore, we could not include B2B versus B2C as important moderators in our moderator analysis.

Our review and synthesis of the customer engagement literature allow us to recommend several areas for further study. Digital engagement, especially in social media, is a quite new and growing area. The nature of the online context provides added value for the customer and additional channels for customers’ engagement behaviour. As our generic engagement model does not consider all of these complexities, digital engagement literature is a worthwhile venue in which to conduct an independent meta-analysis to show the nature and mechanism of online engagement. Moreover, our review indicates the relationship between engagement and its outcome needs more consideration, especially in social media. As engagement comprises non-transactional attitude and behaviour, future research requires investigation of how these factors influence customer value and firm performance. Furthermore, customer engagement behaviour research is limited to the dyadic relationship between customer and firm, whereas in the new business models, such as the sharing economy, engagement emergence and manifestation take place in a complex network of interaction between different actors. As previously mentioned in the transformational approach to engagement, actor engagement is a promising area in which customer engagement extends to consider the role of other actors. Thus, we call for further research to extend the understanding of engagement behaviour by studying this concept in new contexts such as the sharing economy.
References


Chapter 3: Relationships among actors within the sharing economy:
Meta-analytics review


I am the chief investigator. I drafted the literature review section of the paper, collected and analysed the data, and wrote the initial as well as subsequent drafts of the paper. The co-authors of this manuscript are my thesis supervisors. They provided intellectual input for the entire study from conception to completion. They guidance on conceptual model, data analysis and amended early and final drafts of the paper.

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Abstract

The sharing economy has emerged as an influential research area in which a platform mediates customers’ temporary access to service provider resources. To provide a generalizable picture of the platform’s customer and service provider relationship formation process, we integrate effect sizes from 192 studies, including 214 independent samples (N=88,154). The findings indicate there are motivators and inhibitors for individuals to join a platform as a customer or service provider and that these influence attitudinal and behavioral responses toward the platform through a two-level relationship quality pathway. Moderator analysis reveals that the impact of customer motivators and inhibitors on customer response to service providers and platforms depends on country-level moderators and cultural context. These results provide insight into relationship formation among actors in the sharing economy. The study also makes recommendations for platform managers, especially in hospitality and tourism, to more effectively manage their relationships with their users.

Keywords Sharing economy, Platform, Business model, Peer relationship, Meta-analysis
3.1. Introduction

The sharing economy business model became popularized with two Silicon Valley start-ups, Airbnb and Uber (Eckhardt et al., 2019). The economic situation in most countries, changes in consumer behavior, and rapid development in technology have accelerated the success of the sharing economy (Benoit et al., 2017) and encouraged the purveyors of various products and services to adopt this business model (Kumar et al., 2018). Given the impressive growth of the sharing economy, it is not surprising that this business model has been heralded as a global transformation that has a significant influential impact on the global economy (Eckhardt et al., 2019).

With regards to its importance, many researchers have studied the different aspects of relationship formation in the sharing economy (Hamari et al., 2016). Initial research on the sharing economy focused on factors that motivate individuals as customers (e.g., guests of an Airbnb) and service providers (e.g., host of an Airbnb) to join the sharing economy and on risks related to participation in the sharing economy (Benoit et al., 2017). A review of sharing economy literature indicates that authors have proposed a wide range of factors that facilitate or impede customers and service providers regarding joining a sharing platform (Kumar et al., 2018). However, there is no agreement about the number and nature of these motivators and inhibitors (Cheng, 2016; Hamari et al., 2016).

Another research area requiring further attention in the sharing economy is relationship quality (Breidbach and Brodie, 2017). Some studies have examined relationship quality at the platform level (Arteaga-Sánchez et al., 2018; Lee Zach et al., 2018), comparing it to customer-firm relationships in the traditional business model, looking at the relationship developed by both customer and service provider with the platform. While the sharing economy is a triadic business model, there is a dual interaction among customers, service providers, and platforms (Apte and Davis, 2019; Mittendorf et al., 2019). Therefore, relationship quality in the sharing economy requires study at both the customer-service provider (Mao et al., 2020; Zhang et al., 2018) and platform levels (Yang et al., 2019).
As platforms mediate exchanges between customer and service provider, and their existence depends on customer and service provider loyalty, loyalty is considered a critical research area in the sharing economy (Akhmedova et al., 2020; Arteaga-Sánchez et al., 2018). However, the literature presents a diverse view of customer and service provider loyalty and their intention to remain with a platform. For instance, some researchers studied loyalty at the customer and service provider level (Yang et al., 2017), whereas others investigated loyalty at the platform level (Kumar et al., 2018).

Despite a considerable body of research on the sharing economy in the past decade, there remain debates and disagreements around components of the actor-relationships process (Eckhardt et al., 2019; Perren and Kozinets, 2018). No comprehensive model has been developed to include all actors and their relationship formation process. This study aims to review empirical research on the sharing economy to develop an integrated and comprehensive model of the antecedent, mediators, moderators, and actors’ relationship development in the sharing economy. As such, service ecosystem model used for this study includes micro, meso, and macro levels to investigate actor relationship formation in the sharing economy (Akaka et al., 2015; Breidbach and Brodie, 2017). In this model, actors’ actions and interactions (i.e., customer and service provider) at the individual level are mediated by an actor at the meso level (i.e., platform), and the macro-level context moderates relationships among actors at micro and meso levels. This model will provide insight into (i) customer and service provider motivators and inhibitors to use the sharing economy, (ii) customer and service provider relationship quality formation at the micro level, (iii) the outcome of the relationship quality among customers, service providers, and platforms at the meso level, and (iv) the role of country-level moderators in these relationships at the macro level. This model will provide theoretical and empirical insight into a unique aspect of relationship formation and development in the sharing economy business model and define areas requiring further research. The following section outlines the model in greater detail.

3.2. Conceptual framework

In contrast to traditional business, the sharing economy is a triadic business model that includes three actors, i.e., customer, service provider, and platform (Benoit et al., 2016).
In this business model, the service provider delivers underutilized resources for customers’ temporary access to these resources for a fee (Eckhardt et al., 2019). In this process, a technology intermediary, in the form of a platform, mediates the exchange between two other actors (customer and service provider) for a fee (Kumar et al., 2018). In addition, there are different levels of interaction between actors in this business model. Customer and service provider interactions are mediated through the platform, and institutional logic governs and guides interactions among all these actors.

As there are multiple and multilevel interactions among actors in this triadic business model, we developed the Service Ecosystem model to combine and synthesize diverse research in the sharing economy (Akaka et al., 2015; Breidbach and Brodie, 2017). As shown in Figure 3-1, this model is a multilevel network that includes micro, meso, and macro levels (Alexander et al., 2018) in which the service exchange between customer and service provider at the micro level is mediated by the platform at the meso level (Breidbach and Brodie, 2017). In addition, contextual factors at the macro level moderate these interactions at the micro and macro levels (Storbacka et al., 2016).

At the micro level, the sharing economy is considered a network of strangers (i.e., customers and service providers), bringing benefits (motivators) and risks (inhibitors) for its users. Motivators suggest that customers and service providers expect benefits from a sharing economy (Benoit et al., 2017), while inhibitors suggest a perceived risk related to using the sharing economy (Lee, 2020; Lee Zach et al., 2018; So et al., 2018). Over time these antecedents constitute customer and service provider relationship quality (i.e., satisfaction and trust) (Hamari et al., 2016).

While some researchers have considered relationship quality as a general construct, similar to a customer-firm relationship (Arteaga-Sánchez et al., 2018; Lee Zach et al., 2018), triadic interaction among actors allows us to study relationship quality at two levels, micro and meso (Apte and Davis, 2019). As indicated in Figure 1, customer and service provider relationship quality at the micro level is the predictor of relationship quality with the platform at the meso level (Mittendorf, 2017; Yang et al., 2018). Moreover, at the meso level, customer and service provider relationship quality
components influence their positive responses toward the platform (Yang et al., 2019), such as customer loyalty (Breidbach and Brodie, 2017) and service provider retention (Hua et al., 2020).

Figure 3-1: Service ecosystem model

In the service ecosystem model, moderators at the macro level are contextual variables that can explain inconsistencies in relationships between actors in the micro and meso levels. It is important that there are adequate effect sizes for moderators to be included (Palmatier et al., 2006). Thus, the moderators that have been included in the service ecosystem model are country-level moderators such as Gross Domestic Product (GDP) per capita, Human Development Index (HDI), and culture. Variables such as sample characteristics (student vs. non-student) and document status (published vs. unpublished) are considered as control variables in the model to ensure the variabilities
in effect sizes are not because of these variables (Blut & Wang, 2019; Gremler et al., 2019). The following section considers each level of the service ecosystem model in greater detail.

3.2.1. Micro level

3.2.1.1. Customer motivators and inhibitors

Traditionally, hedonic and utilitarian values are considered the customer’s expected benefits from interaction with a firm (Babin et al., 1994; Gremler et al., 2019; Hennig-Thurau et al., 2002). However, prior research indicates that customer benefits of the sharing economy are not limited to this value (Kumar et al., 2018). Although there is no overarching agreement among researchers, hedonic, utilitarian, social, and environmental factors are considered customer motivators to use the sharing economy (Benoit et al., 2017; Hamari et al., 2016).

The utilitarian or economic value indicates product and service ability to satisfy fundamental customer needs in the exchange (Babin et al., 1994; Holbrook and Hirschman, 1982; Voss et al., 2003). As the sharing economy allows a customer to satisfy basic needs at a lower price (Kim and Jin, 2020), it is considered the main customer driver for using a sharing economy service (Benoit et al., 2017; Trenz et al., 2018). Hedonic value is considered as customer pleasure and fun during the purchase and consumption process (Babin et al., 1994; Holbrook and Hirschman, 1982; Voss et al., 2003). In addition to utilitarian value, hedonic value is essential for customers to participate in the sharing economy (Hamari, 2017). Moreover, the sharing economy also provides an opportunity for the customer to meet new people and interact with them (Eckhardt et al., 2019). Interactions between customers and service providers are at the heart of many sharing economy platforms such as Uber, Airbnb, and TaskRabbit (Benoit et al., 2017). Finally, the environmental value represents customer sustainable resource consumption through access instead of ownership (Hamari et al., 2016). Increasing customer awareness of environmental issues encourages customers to use a sharing economy model rather than traditional business models to protect the environment (Cohen and Kietzmann, 2014).

While a considerable body of research has focused only on the perceived benefits of the sharing economy (Hamari et al., 2016; Kumar et al., 2018), this business model
also has its own perceived risks. In this case this indicates a customer’s subjective belief that there is some probability of suffering a loss in pursuit of the desired outcome (Mittendorf, 2017). A service provider as a stranger is an independent actor in the sharing economy who is not a trained employee. This can lead to higher service variability and inconsistency in this business model (Lee, 2020). Therefore, risk is an integral part of the sharing economy business model and is a customer inhibitor to joining and using platform services (Lutz et al., 2018).

3.2.1.2. Customer trust of and satisfaction with service provider

Relationship quality in the sharing economy is derived from customer evaluation of the benefits compared to the risks (i.e., satisfaction and trust) (Benoit et al., 2017) and is studied at both micro and meso levels. At the micro level, customers evaluate satisfaction and trust by comparing what a service provider promised and what they received (Oliver, 1980). While prior research mainly has focused on customer expected benefits from the sharing economy (i.e., utilitarian, hedonic, social, and environmental) as customer satisfaction and trust drivers (Arteaga-Sánchez et al., 2018; Möhlmann, 2015), perceived risk plays an essential role in the customer relationship quality formation (Mao et al., 2020). Customers in the sharing economy not only receive services from a service provider as a stranger but also interact with a potentially different service provider in each interaction (Huurne et al., 2017). Therefore, received benefits could enhance the quality of customer relationships with service providers, while the perceived risk is considered an inhibitor for customer relationship formation (Eckhardt et al., 2019).

3.2.1.3. Service provider motivators and inhibitors

There is no agreement in prior research about the benefits of the sharing economy for service providers (Hua et al., 2020). Some research has pointed to the same benefits for customers and service providers (Hamari et al., 2016). However, a service provider is an independent economic actor in the sharing economy who likes to exchange resources on a platform for a fee (Benoit et al., 2017; Kumar et al., 2018). In this regard, prior research indicates that economic value, work flexibility, and social value are the service provider’s primary motivators to join and stay with a platform (Benoit et al., 2017; Hua et al., 2020; Trenz et al., 2018; Yeager et al., 2020).
Economic value is the service providers’ initial motivation for joining the sharing economy (Trenz et al., 2018). For example, a service provider may seek to get extra income from sharing their underutilized resources, such as a room, car, skills, or tools (Benoit et al., 2017). From this view, the sharing economy turns individuals into micro-entrepreneurs to make money from their resources (Shiu-Li and Shu-Yu, 2020). A second benefit for a service provider is work flexibility, defined as arrangements that help service providers adjust their volume, timing, and location of work (De Menezes and Kelliher, 2017). The sharing economy as an open business model allows service providers to plan different aspects of their work (Nawaz et al., 2019) and enjoy the flexibility and autonomy of working as a freelancer (Benoit et al., 2017; Shiu-Li and Shu-Yu, 2020). Social interaction and networking with other people are also benefits for service providers participating in the sharing economy (Nawaz et al., 2019). For example, the sharing economy provides an opportunity for service providers to meet new people (customers) and enjoy the social benefits of interactions with their customers (e.g., Airbnb guests or their Uber passengers) (Benoit et al., 2017; Shiu-Li and Shu-Yu, 2020).

Sharing underutilized resources in the sharing economy also brings potential risks that act as inhibitors for service providers (Teubner and Flath, 2019). For instance, with Uber or Airbnb, service providers need to furnish services to a stranger in their own house or car, which may cause damage or create losses (Chen et al., 2020). Furthermore, service providers need to share their personal information and information about their resources on public platforms, which creates risk for them (Teubner and Flath, 2019). Thus, perceived risk plays a vital role in the service provider experience of working in a sharing economy (Teubner and Flath, 2019).

3.2.1.4. Service provider relationships quality

Service provider relationship quality in our model is reflected by service providers’ satisfaction with the sharing economy, which indicates their evaluation of benefits and risks related to working in the sharing economy (Gleim et al., 2019). Prior research in the sharing economy has mainly focused on the benefits of the sharing economy for a service provider (i.e., economic, flexibility, and social value) that determine service provider satisfaction with the sharing economy (Bucher et al., 2016;
Hua et al., 2020). However, the sharing economy brings benefits and risks for service providers who share their resources with customers as strangers (Benoit et al., 2017). Therefore, the risks are considered service provider inhibitors that negatively impact their satisfaction toward the sharing economy.

### 3.2.1.5. Customer and service provider relationship

Based on partner effects theory, individuals are verbally and nonverbally influenced by other people’s characteristics, behavior, or perceptions (Van Dolen et al., 2002). Research in the traditional business model indicates interactions between customers and front-line employees play an essential role in customer perception and further behavioral intention toward an employee (Kumar and Pansari, 2016). This is because employees who are happy with their work tend to deliver excellent service to customers and share their positive emotions (Brown and Lam, 2008; Hogreve et al., 2017). While this is an undeveloped research area in the sharing economy, service provider satisfaction with the sharing economy is manifested in provider behavior with customers, influencing customer satisfaction with service providers and the platform (Ruan, 2020). It is worth mentioning, based on partner effects theory, there are two-way relationships between customer and service provider satisfaction. However, there is not sufficient effect size for customer satisfaction on service provider satisfaction relationship. Therefore, we did not include this direction in our model. The following section explores the meso level.

### 3.2.2. Meso level

#### 3.2.2.1. Customer relationships with platform

While the relationship quality in traditional business models is studied at the firm level (Hennig-Thurau and Klee, 1997), the triadic nature of relationships in the sharing economy allows researchers to study relationship quality at both micro and meso levels (Ta et al., 2018; Yang et al., 2019). While a two-level customer relationship quality and the relationship between the levels has not been granted much consideration in sharing economy research (Mao et al., 2020), we consider it a unique feature of this business model. From this view, customers interact with different service providers, and their
satisfaction and trust over time spills over to the platform and determines the quality of customers’ relationships with the platform (Eckhardt et al., 2019; Moon et al., 2019).

Customers’ relationship quality with the platform determines their loyalty toward the platform (Möhlmann, 2015). Although it is possible to study customer loyalty at both service provider and platform levels, customers receive services from different service providers for each service encounter in a platform such as Airbnb, but they cannot specifically request the same service provider again in a platform such as Uber (Eckhardt et al., 2019). In this regard, loyalty has been studied at the platform level in the sharing economy, in which customers’ relationship quality with the platform influences their tendency to use the platform again in the near future (Kong et al., 2020; Ye et al., 2019).

3.2.2.2. Service provider relationships with platform

Service providers’ retention indicates their tendency to stay with a platform and continue working in it (Hogreve et al., 2017; Shiu-Li and Shu-Yu, 2020). While the relationship between service provider and platform has not received considerable attention from researchers, some studies have considered the service provider to be an employee of the platform (Hua et al., 2020). In contrast to traditional business models, a service provider could work through several platforms at the same time. For instance, a driver could work on Uber and/or Didi and/or Ola simultaneously. As service providers are independent actors, their satisfaction with other actors (i.e., customers) spills over to the platform and determines their tendency to stay with it (Lin et al., 2020). The final level to consider is macro.

3.2.3. Macro level

3.2.3.1. Gross national product

As the gross national product (GDP) reflects people’s purchasing power, it may have an impact on customer decision-making (Berry et al., 2010). Customers in countries with a lower level of GDP have less disposable income and seem to prefer the sharing economy as a cost-effective way to access products and services rather than buying them (Blut and Wang, 2019). Therefore, it is expected that the relationship between customer motivators for the sharing economy and customer responses is stronger in countries with a lower level of GDP than those with a higher GDP level (Parente et al., 2018). From a
risk perspective, customers from countries with a higher level of GDP are more sensitive to risk in the sharing economy, and, therefore, GDP has a higher impact on customer response (Blut and Wang, 2019).

3.2.3.2. Human Development Index

The Human Development Index (HDI) measures country achievements in different areas such as long and healthy life, education, and standard of living (Nations, 2018). From a consumption perspective, countries with a higher level of HDI have more knowledge of and experience with new technologies, such as the sharing economy platforms, compared to countries with lower levels of HDI (Blut and Wang, 2019). This knowledge and experience helps customers in countries with a higher level of HDI enjoy sharing economy benefits, which has an impact on customer attitudinal and behavioral responses to the sharing economy services. In contrast, a lack of knowledge of and experience with the sharing economy in countries with a lower level of HDI increases customers’ perceived risk of the sharing economy service usage.

3.2.3.3. Cultural context

Hofstede et al. (2005) have developed a popular approach for studying differences between countries from a cultural perspective. Based on this approach, cultural difference is reflected in four important dimensions: power distance, individualism, masculinity, and uncertainty avoidance. Culture plays an important role in the entire customer shopping process and is considered an important moderator in meta-analysis studies (Orsingher et al., 2010; Van Vaerenbergh et al., 2018). In this regard, previous research indicates that people from different cultures have differing views on the sharing economy’s expected values and potential risks, and these differences influence customer responses to these motivators and inhibitors (Albinsson et al., 2019). Following previous meta-analyses (Blut et al., 2016; Pick and Eisend, 2016), cultural dimensions (i.e., power distance, individualism, masculinity, and uncertainty avoidance) have been selected as cultural moderators.
3.3. Method

3.3.1. Data collection and coding

Similar to prior meta-analyses (Gui et al., 2020; Park and Min, 2020), we followed a comprehensive approach to identify all potential publications in the field of hospitality and business. We used keywords such as “sharing economy,” “access-based consumption,” “collaborative consumption,” “peer to peer consumption,” “peer to peer lending,” “peer to peer economy,” “access economy,” “collaborative economy,” and “peer economy” in popular online databases including ABI/INFORM Global, Business Source Complete, ProQuest Digital Dissertations, Scopus, SSRN, Emerald, Springer, ISI Web of Science, and Taylor & Francis. We selected 2010 to the present as the time frame as the appearance of the sharing economy in hospitality and business publications predominantly occurs from 2010 onwards (Botsman and Rogers, 2010). Moreover, to ensure all related articles were included in our data set, we manually checked the titles and abstracts of articles published in top journals in the hospitality industry (e.g., International Journal of Hospitality Management, International Journal of Contemporary Hospitality Management) and in business (e.g., Academy of Management Journal, Journal of Applied Psychology). Finally, 875 publications were considered for further analysis.

In the next step, we defined several inclusion criteria for empirical research studies in our meta-analysis. First, the sharing economy is a common research area in different disciplines, and its definition may differ. Thus, we excluded empirical research in which the sharing economy is related to not-for-profit platforms (e.g., Couchsurfing) and research featuring buying and selling platforms (e.g., eBay.com) as part of the sharing economy, which led to the exclusion of 236 studies. In addition, we included only empirical research that reported correlation matrices or other statistical information (e.g., standardized regression coefficients, t-values) that we could use to calculate a correlation coefficient for a desired relationship (Paul and Barari, 2022). In this step, we excluded 447 publications. Also, researchers may conduct several studies in a single research endeavor to analyze the same relationship in their conceptual models and report multiple effect sizes for this relationship. If these effect sizes are from independent samples, we included them as separate effect sizes; otherwise (Hunter and Schmidt, 2004), a procedure was used to calculate a composite correlation. Therefore, the final data set included 192
studies with 214 independent samples and a total sample size of 88,154 that met all our criteria.

The coding manual was first developed for coding studies to provide the details of the main and moderator variables in our conceptual model (see Table 3-1) and reduce the discrepancy in the coding process. Two people were involved in the coding process: one of the authors and an independent coder. The first coder was responsible for coding the studies, and an independent coder who is an expert in the sharing economy area and not involved in this research checked the coding quality. In this regard, 20% of studies were randomly selected, and each coder coded them separately. The overall inter-coder agreement was higher than 95%, confirming coding quality. Differences in coding were resolved through discussion.
Table 3-1: Constructs definitions and aliases

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Definitions</th>
<th>Common aliases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilitarian value</td>
<td>Functional and practical benefit of product and service consumption</td>
<td>Functional, economic value or benefit</td>
</tr>
<tr>
<td>Hedonic value</td>
<td>Pleasure and fun of product and service consumption</td>
<td>Experiential, enjoyment value or benefit</td>
</tr>
<tr>
<td>Social value</td>
<td>Benefits of interacting with other people</td>
<td>Interpersonal value or benefit, social reward</td>
</tr>
<tr>
<td>Environmental value</td>
<td>Sustainable resource consumption through access-based consumption</td>
<td>Sustainable, environmental value or benefit</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>Prediction and uncertainty about the outcome of a purchase decision</td>
<td>Privacy, physical, functional, financial, and psychological risks</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Positive affective or emotional state resulting from the appraisal of an offering</td>
<td>Satisfaction with the relationship, product, or service</td>
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<tr>
<td>Trust in the service provider</td>
<td>Confidence in the reliability and integrity of a service provider</td>
<td>Trustworthiness, credibility, benevolence, honesty toward a service provider</td>
</tr>
<tr>
<td>Trust to platform</td>
<td>Confidence in the reliability and integrity of a platform</td>
<td>Trustworthiness, credibility, benevolence, honesty toward a platform</td>
</tr>
<tr>
<td>Loyalty to platform</td>
<td>Attitude and behavior to choose one platform over competitors</td>
<td>Repurchase intention, attitudinal and behavioral loyalty, customer retention</td>
</tr>
<tr>
<td>Service provider</td>
<td></td>
<td></td>
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<tr>
<td>Economic value</td>
<td>Monetary earning from the exchange of underutilized resources in a platform</td>
<td>Monetary value or benefit</td>
</tr>
<tr>
<td>Flexibility value</td>
<td>Benefits of having flexible amount, timing, or location of working arrangement</td>
<td>Flexible working arrangement, work flexibility</td>
</tr>
<tr>
<td>Social value</td>
<td>Benefits of interactions with other people</td>
<td>Social bonds, interpersonal relationships, social rewards</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>Prediction and uncertainty about the outcome of work in the sharing economy</td>
<td>Privacy, physical, functional, financial, and psychological risks</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Individuals’ satisfaction with different aspects of their work on a platform</td>
<td>Positive affect, job satisfaction</td>
</tr>
<tr>
<td>Retention</td>
<td>Behavioral intentions to stay, attitudes, commitment, or actual (switching) behavior of service provider</td>
<td>Commitment, intentions to leave, intention to stay</td>
</tr>
</tbody>
</table>

3.3.2. Meta-analytic procedures and analysis

A random-effect meta-analysis method was conducted to synthesize effect sizes (Hunter and Schmidt, 2004). As most empirical studies in the sharing economy report
correlation, correlation coefficients were used to calculate the effect size. For studies that did not report the correlation coefficient, the data available in the study (e.g., standardized regression coefficients or t-values) was used to calculate the correlation coefficient (Peterson and Brown, 2005). In the next step, correlations were corrected for measurement error: each correlation was divided by the square root between variables of interest reliabilities (Hunter and Schmidt, 2004). Then, the reliability-adjusted correlations of each study were weighted with their corresponding sample size. Also, we calculated the 95% confidence intervals to determine the statistical significance of effect size and the 80% credibility intervals to measure the variability of effect size across studies (Park and Min, 2020). In addition, Hedges’s Q statistic was used to test effect size homogeneity. Significant Q-statistics indicate variance in effect size distribution and point to the necessity for moderation analysis (Grewal et al., 2018).

To test the study’s conceptual model, we employed meta-analysis structural equation modelling (SEM), allowing the researchers to assess different conceptual models to find the superior model in a domain (Grewal et al., 2018). Reliability-adjusted and sample size–weighted correlations from 192 studies with 214 samples were used to create a pooled correlation matrix (Barari et al., 2021). Then, the matrix was used as a SEM input to simultaneously test the relationships between research variables in our conceptual model (Grewal et al., 2018).

A multilevel meta-regression approach was employed to test the role of moderators in our conceptual model (Hox, 2010), because this method accounts for the dependency between effect sizes from the same sample (Blut and Wang, 2019) and provides a more accurate estimation (Gremler et al., 2019). Following Hox's (2010) guidelines, effect sizes were considered as the dependent variable while mediators and outcome variables were predictors in level 1. Independent variables for level 2 included moderators and control variables. For moderators, HDI (Nations, 2018), GDP per capita (Fund, 2020), and the four cultural values (Hofstede et al., 2005) were used as continuous values for the model. Control variables including sample type (student sample = 1 versus non-student = 0) and publication status (published research = 1 versus unpublished = 0) were entered in the model as dummy coded variables.
3.4. Results

3.4.1. Descriptive statistics

Descriptive analysis of the relationship between research variables is illustrated in Table 3-2. The results indicate that there are positive and significant correlations between research variables in our model, with the exceptions of customer perceived risk-satisfaction with a service provider ($\rho = -.34$), customer perceived risk-trust of service provider ($\rho = -.35$), and service provider perceived risk-satisfaction with sharing economy ($\rho = -.31$) where there are negative and significant correlations. For most correlations, Hedges’s Q statistic results are significant, indicating the heterogeneity between effect sizes. In addition, the wide difference between the lower and upper bounds of the 80% credibility intervals shows the variance in effect size. Hedges’s Q statistic and 80% credibility intervals findings emphasize the necessity of moderator analysis to explain these heterogeneities.

Table 3-2: Descriptive statistics for the relationship between variables

<table>
<thead>
<tr>
<th>Antecedents</th>
<th>K</th>
<th>N</th>
<th>R</th>
<th>P</th>
<th>SD $\rho$</th>
<th>Q</th>
<th>95% CI</th>
<th>80% CrI</th>
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<tbody>
<tr>
<td><strong>Customer</strong></td>
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<td>Satisfaction with service provider</td>
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<td></td>
</tr>
<tr>
<td>Utilitarian value</td>
<td>57</td>
<td>19,497</td>
<td>.48</td>
<td>.56</td>
<td>.21</td>
<td>1614*</td>
<td>[.50, .66]</td>
<td>[.37, .67]</td>
</tr>
<tr>
<td>Hedonic value</td>
<td>35</td>
<td>13,721</td>
<td>.45</td>
<td>.50</td>
<td>.18</td>
<td>1344*</td>
<td>[.47, .57]</td>
<td>[.34, .60]</td>
</tr>
<tr>
<td>Social value</td>
<td>26</td>
<td>10,115</td>
<td>.34</td>
<td>.40</td>
<td>.10</td>
<td>618*</td>
<td>[.34, .50]</td>
<td>[.23, .66]</td>
</tr>
<tr>
<td>Environmental value</td>
<td>19</td>
<td>6,263</td>
<td>.28</td>
<td>.32</td>
<td>.16</td>
<td>478*</td>
<td>[.23, .46]</td>
<td>[.12, .65]</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>25</td>
<td>8,769</td>
<td>-.30</td>
<td>-.34</td>
<td>.19</td>
<td>1062*</td>
<td>[-.50, -.26]</td>
<td>[-.61, -.20]</td>
</tr>
<tr>
<td>Service provider satisfaction with sharing economy</td>
<td>3</td>
<td>995</td>
<td>.40</td>
<td>.45</td>
<td>.11</td>
<td>28*</td>
<td>[.31, .62]</td>
<td>[.20, .72]</td>
</tr>
<tr>
<td><strong>Trust of service provider</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilitarian value</td>
<td>31</td>
<td>10,451</td>
<td>.45</td>
<td>.52</td>
<td>.21</td>
<td>739*</td>
<td>[.40, .56]</td>
<td>[.32, .60]</td>
</tr>
<tr>
<td>Hedonic value</td>
<td>17</td>
<td>5,291</td>
<td>.40</td>
<td>.48</td>
<td>.20</td>
<td>340*</td>
<td>[.42, .60]</td>
<td>[.35, .69]</td>
</tr>
<tr>
<td>Social value</td>
<td>20</td>
<td>6,471</td>
<td>.39</td>
<td>.43</td>
<td>.16</td>
<td>235*</td>
<td>[.35, .49]</td>
<td>[.24, .64]</td>
</tr>
<tr>
<td>Environmental value</td>
<td>7</td>
<td>1,995</td>
<td>.31</td>
<td>.37</td>
<td>.15</td>
<td>95*</td>
<td>[.24, .54]</td>
<td>[.10, .57]</td>
</tr>
<tr>
<td>Perceived risk</td>
<td>13</td>
<td>4,774</td>
<td>-.39</td>
<td>-.35</td>
<td>.22</td>
<td>277*</td>
<td>[-.50, -.27]</td>
<td>[-.66, -.13]</td>
</tr>
<tr>
<td>Satisfaction with service provider</td>
<td>16</td>
<td>5,993</td>
<td>.44</td>
<td>.51</td>
<td>.12</td>
<td>378*</td>
<td>[.46, .63]</td>
<td>[.39, .69]</td>
</tr>
<tr>
<td><strong>Satisfaction with platform</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with service provider</td>
<td>3</td>
<td>1,016</td>
<td>.57</td>
<td>.64</td>
<td>.20</td>
<td>8</td>
<td>[.59, .69]</td>
<td>[.44, .77]</td>
</tr>
<tr>
<td>Service provider satisfaction with sharing economy</td>
<td>3</td>
<td>980</td>
<td>.30</td>
<td>.36</td>
<td>.11</td>
<td>13*</td>
<td>[.30, .42]</td>
<td>[.24, .57]</td>
</tr>
<tr>
<td><strong>Trust of platform</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust to service provider</td>
<td>16</td>
<td>5,337</td>
<td>.49</td>
<td>.58</td>
<td>.10</td>
<td>234*</td>
<td>[.54, .67]</td>
<td>[.38, .56]</td>
</tr>
<tr>
<td>Satisfaction with Platform</td>
<td>28</td>
<td>8,906</td>
<td>.46</td>
<td>.52</td>
<td>.09</td>
<td>743*</td>
<td>[.48, .63]</td>
<td>[.39, .78]</td>
</tr>
<tr>
<td><strong>Loyalty to platform</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with platform</td>
<td>69</td>
<td>27,232</td>
<td>.52</td>
<td>.60</td>
<td>.18</td>
<td>2967*</td>
<td>[.59, .68]</td>
<td>[.49, .72]</td>
</tr>
</tbody>
</table>
3.4.2. Results of SEM

The results of testing the conceptual model indicate a good fit of data, i.e., $\chi^2(14) = 115.99$, $p < .001$; composite fit index (CFI) = .96, root mean square error of approximation (RMSEA) = .05, goodness of fit index (GFI) = 0.95. The results of our testing the sharing economy framework are demonstrated in Figure 2. The results for customer relationships indicate customer motivators, i.e., utilitarian ($\beta = .30$, $p < .001$, hedonic ($\beta = .22$, $p < .001$), social ($\beta = .07$, $p < .001$), and environmental value ($\beta = .01$, $p <.001$), have significant impacts on customer satisfaction. Moreover, as expected, perceived risk had negative and significant ($\beta = -.14$, $p < .001$) impacts on customer satisfaction with the service provider. Moreover, customer motivators, utilitarian ($\beta = .20$, $p <.001$), hedonic ($\beta = .17$, $p < .001$), social ($\beta = .12$, $p < .001$), and environmental value ($\beta = .08$, $p <.001$), had significant and positive impacts, while perceived risk had a significant and negative impact on customer trust of a service provider ($\beta = -.18$, $p < .001$). In addition, the result shows customer satisfaction with a service provider significantly influenced both customer satisfaction with a platform ($\beta = .60$, $p < .001$) and customer trust of a service provider ($\beta = .18$, $p < .001$). For customer trust of a platform, both customer trust of a service provider ($\beta = .43$, $p < .001$) and customer satisfaction with a platform ($\beta = .31$, $p <.001$) were significant predictors of this variable. Customer loyalty was significantly predicted by customer satisfaction with a platform ($\beta = .45$, $p < .001$) and trust of a platform ($\beta = .29$, $p < .001$).
For the service provider, the data analyses indicated that service provider motivators such as economic ($\beta = .24, p < .001$), flexibility ($\beta = .13, p < .001$), and social value ($\beta = .09, p < .001$) have significant and positive impacts while perceived risk ($\beta = -.24, p < .001$) has a significant and negative influence on service provider satisfaction with the sharing economy. In addition, service provider satisfaction with the sharing economy significantly influenced service provider retention in a platform ($\beta = .43, p < .001$). Finally, results indicated that service provider satisfaction with the sharing economy is a significant predictor of both customer satisfaction with a service provider ($\beta = .20, p < .001$) and customer satisfaction with a platform ($\beta = .08, p < .001$).
3.4.3. Results of moderator analysis

Table 3-4 shows the results of the moderator analysis between motivators and inhibitors with level one and two variables.

**GDP.** The result indicates the impacts of motivators, i.e., utilitarian ($\gamma = -.002$, $p > .1$), hedonic ($\gamma = -.003$, $p > .1$), social ($\gamma = .021$, $p > .1$), and environmental value ($\gamma = -.019$, $p > .1$) on customer responses are higher among customers from higher GDP levels, while the influence of perceived risk ($\gamma = .012$, $p > .1$) on customer response is higher in countries with lower GDP levels. However, the moderator role of GDP was not significant.

**HDI.** As predicted, HDI positively and significantly moderated the relationship between motivators and customer responses. Compared to countries with lower levels of HDI, the influence of utilitarian ($\gamma = .813$, $p < .001$), hedonic ($\gamma = .712$, $p < .001$), social ($\gamma = .083$, $p < .10$) and environmental ($\gamma = .194$, $p < .05$) values on customer responses are higher among customers from countries with higher HDI levels. In contrast, the impact of inhibitors, i.e., perceived risk ($\gamma = -.595$, $p < .01$), on customer response is stronger for countries with a lower level of HDI.

Table 3-3: Results of moderator analysis

<table>
<thead>
<tr>
<th></th>
<th>Utilitarian</th>
<th>Hedonic</th>
<th>Social</th>
<th>Environmental</th>
<th>Risk$^1$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Moderators</strong></td>
<td>$\gamma$</td>
<td>S.E</td>
<td>$\gamma$</td>
<td>S.E</td>
<td>$\gamma$</td>
</tr>
<tr>
<td><strong>Level 1 variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with service provider</td>
<td>.064**</td>
<td>.023</td>
<td>.047*</td>
<td>.044</td>
<td>-.029</td>
</tr>
<tr>
<td>Satisfaction with platform</td>
<td>.057*</td>
<td>.039</td>
<td>.032</td>
<td>.037</td>
<td>-.015</td>
</tr>
<tr>
<td>Trust of service provider</td>
<td>-.082*</td>
<td>.015</td>
<td>-.024*</td>
<td>.028</td>
<td>.027*</td>
</tr>
<tr>
<td>Trust of platform</td>
<td>-.116*</td>
<td>.032</td>
<td>-.018</td>
<td>.026</td>
<td>.026*</td>
</tr>
<tr>
<td>Loyalty to platform</td>
<td>-.013*</td>
<td>.026</td>
<td>-.023*</td>
<td>.035</td>
<td>-.016</td>
</tr>
<tr>
<td><strong>Level 2 variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP</td>
<td>-.006</td>
<td>.024</td>
<td>-.005</td>
<td>.034</td>
<td>.021</td>
</tr>
<tr>
<td>HDI</td>
<td>.812**</td>
<td>.512</td>
<td>.711**</td>
<td>.456</td>
<td>.082+</td>
</tr>
<tr>
<td>Culture context</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power distance</td>
<td>-.097*</td>
<td>.017</td>
<td>-.087*</td>
<td>.015</td>
<td>-.065+</td>
</tr>
<tr>
<td>Individualism</td>
<td>.007</td>
<td>.015</td>
<td>.025</td>
<td>.001</td>
<td>-.021</td>
</tr>
</tbody>
</table>
To create consistency in the interpretation, the perceived risk effect size was reversed. ** p < .01. * p < .05. + p < .10

Power distance. The result indicated that with the exception of environmental value (γ = .094, p < .01), power distance negatively and significantly moderated the relationships between utilitarian (γ = -.098, p < .05), hedonic (γ = -.078, p < .05), social (γ = -.065, p < .10), and customer responses, while power distance positively and significantly impacted perceived risk (γ = .083, p < .10) and customer response.

Individualism. Results indicated that the influence of utilitarian (γ = .008, p > .01), hedonic (γ = .025, p > .01), and environmental value (γ = .029, p > .01) was higher in countries with higher levels of individualism. The opposite patterns were found for social value (γ = .008, p > .01) and perceived risk (γ = -.073, p > .01). However, the moderator role of individualism is not significant.

Masculinity. Moderator analysis indicated utilitarian (γ = .002, p > .01), environmental value (γ = .029, p > .01), and perceived risk (γ = .003, p > .01) are stronger in countries with higher levels of masculinity, while masculinity negatively moderated the relationship between hedonic (γ = -.006, p > .01) and social value (γ = -.018, p > .01).

Uncertainty avoidance. As predicted, with the exception of environmental value (γ = -.024, p > .1), uncertainty avoidance negatively and significantly moderated the relationship between motivators, including utilitarian (γ = -.131, p < .001), hedonic (γ = -.098, p < .05), and social value (γ = -.103, p < .05) on customer responses and positively moderated the relationship between perceived risk and customer responses (γ = .143, p < .01).

Control variables. The control variables analysis indicated no significant patterns for the study characteristics. The student sample does not moderate the relationship
between motivators and inhibitors and customer responses. Similarly, publication status did not significantly moderate any relationships.

3.5. Discussion

Testing our conceptual model allowed us to make several contributions to the sharing economy literature. Additionally, our findings have implications for service providers and platforms marketing managers. We summarize our main research findings and theoretical and managerial implications in Table 3-5.

Table 3-4: The study key findings and their implications

<table>
<thead>
<tr>
<th>Key findings</th>
<th>Research and managerial implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sharing economy and platform</strong></td>
<td>As customers and service providers are independent actors, in contrast to B2C business models, platforms require managing their relationships with both customers and service providers.</td>
</tr>
<tr>
<td>In sharing economy as a triadic business model, the relationship between customer and service provider at the micro level spills over to the platform at the meso level.</td>
<td>Platforms require to provide enough benefits for customers, especially in the form of hedonic and utilitarian values, to compensate customer risk of receiving service from service providers to enhance their relationship with service providers.</td>
</tr>
<tr>
<td><strong>Customer</strong></td>
<td>Platforms’ relationship formation with customers is more complex than B2C business models, where platforms do not have enough control over customer-service provider relationships.</td>
</tr>
<tr>
<td>Among customer motivators, utilitarian and hedonic values have the highest impact on customer-service provider relationship quality. Also, the negative impact of perceived risk is larger than the positive effect of both social and environmental value in relationship quality.</td>
<td>The nature of customer relationships in the sharing economy limits customer loyalty to the platform.</td>
</tr>
<tr>
<td>Customer relationship quality occurs in two levels: micro level as customer-service provider relationship quality and meso level as customer-platform relationship quality.</td>
<td></td>
</tr>
<tr>
<td>Customer-service provider relationship quality through customer-platform relationship quality influences customer loyalty to the platform.</td>
<td></td>
</tr>
<tr>
<td><strong>Service provider</strong></td>
<td>Service providers are main drivers of sharing economy business models. Thus, platforms need to define enough benefits, mainly economic, for them to recompense the risk of working in this business model.</td>
</tr>
<tr>
<td>Among sharing economy benefits, economic value has the highest impact on service provider satisfaction. The negative impact of perceived risk is larger in magnitude than the positive effect of both flexibility and social value. Service provider satisfaction plays an important role in customer satisfaction, more important than social and environmental values. Also, their</td>
<td>Platforms need to pay close attention to service providers’ satisfaction because it has a dual impact on the sharing economy. It enhances both service</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The intention to work in the platform is the main driver of their satisfaction with the sharing economy.

**Moderators**

The influence of motivators on mediators and outcome variables is stronger in countries with a higher HDI level, while this is the opposite for perceived risk. The role of motivators on customer relationships and their outcomes is more effective in countries with lower power distance and uncertainty avoidance.

Platforms should focus more on customer knowledge and experience in countries with lower HDI levels to facilitate customer relationships. To enhance customer relationship formation, platforms need to consider customer risk of receiving service in countries with higher power distance and uncertainty avoidance levels.

### 3.5.1. Theoretical implications

Our service ecosystem model includes three actors (i.e., customers, service providers, and platforms) to illustrate the multi-actor nature of the sharing economy business model and the multilevel relationships among actors in the sharing economy ecosystem (Breidbach and Brodie, 2017; Fehr et al., 2018; Storbacka et al., 2016). Our model confirms that customer and service provider relationships at the micro level in this ecosystem influence customer and service provider relationships with a platform at the meso level. These relationships impact customer and service provider responses to the sharing economy platform (Storbacka et al., 2016). Moreover, contextual moderators at the macro level moderate the relationships among actors at the micro and meso levels.

For the customer, the findings confirm the role of the motivators and inhibitors as customer relationship formation initiators in the sharing economy (Benoit et al., 2017; Hamari et al., 2016; Möhlmann, 2015). For motivators, utilitarian, hedonic, social, and environmental values determine the level of customer relationship quality with a service provider. While the relative importance of these values in previous studies are diverse and contradictory (Arteaga-Sánchez et al., 2018; Hamari et al., 2016; Hwang and Griffiths, 2017; Lee Zach et al., 2018), the results indicate that utilitarian and hedonic values have a higher impact on customer satisfaction with, and trust in, the service provider than do social and environmental values (Eckhardt et al., 2019). Besides that, customer motivators studies indicate that hedonic value has a higher impact on customer responses to a firm than do utilitarian values (Barari et al., 2020; Chitturi et al., 2008), and our findings confirm the dominant role of utilitarian value for the customer in the
sharing economy (Eckhardt et al., 2019). Similarly, our results support the negative impact of perceived risk as an essential inhibitor on customer relationship formation with service providers as strangers in the sharing economy (Lee Zach et al., 2018; Lutz et al., 2018; Yang et al., 2019). While many sharing economy models focused merely on the benefits of the sharing economy for customers (Hamari et al., 2016; Kumar et al., 2018), our analysis highlights that perceived risk has a destructive role in customer satisfaction and trust in a service provider (Mittendorf et al., 2019; Teubner and Flath, 2019). Moreover, its negative impact on customer satisfaction and trust is larger in magnitude than the positive effect of both social and environmental value.

Our model highlights the difference between the relationship formation process in the sharing economy and customer-firm relationships in traditional business models (Aurier and N’Goala, 2010; Palmatier et al., 2006). The key difference is the duality of relationship quality (i.e., satisfaction and trust) between actors in the sharing economy (Lin et al., 2019; Mao et al., 2020; Mittendorf et al., 2019; Yang et al., 2019) in which customer–service provider relationship quality spills over to the platform and results in high-quality relationships between customers and the platform (Mittendorf et al., 2019; Ta et al., 2018). Also, a high-quality relationship between customers and the platform leads to customer loyalty toward a platform (Lee Zach et al., 2018). Finally, some studies considered customer loyalty with both service providers and platforms. However, the nature of the relationship between customer and service provider (e.g., the matching system in Uber) limits the loyalty study to the platform level (Eckhardt et al., 2019). In this regard, customer-platform relationship quality determines customer tendency to use a platform again (Lee Zach et al., 2018).

As with customer relationships, there are both motivators and inhibitors for service providers to join and use sharing economy platforms (Benoit et al., 2017; Kumar et al., 2018). While there is no agreement in prior research about the benefits of the sharing economy for service providers, our findings confirm the positive effects of economic, flexibility, and social value on service provider satisfaction with the sharing economy (Benoit et al., 2017; Hua et al., 2020). The results indicate economic benefits have the primary role in service provider satisfaction with the sharing economy, while flexibility and social value are less critical in this relationship (Kumar et al., 2018). Also,
findings confirm the negative influence of perceived risk on service provider satisfaction with the sharing economy (Arteaga-Sánchez et al., 2018). Perceived risk is a strong predictor for individual satisfaction with working in a platform where the negative impact on service provider satisfaction is larger than the positive effect of flexibility and social values. Moreover, our results indicate that service providers’ satisfaction with the sharing economy determines their retention with a platform (Hamari et al., 2016; Mittendorf, 2017). As the sharing economy is an open business model, service providers’ tendency to continue working in a platform is an important issue. Our results confirm the crucial role of service provider satisfaction on providers’ intention to stay with a platform (Eckhardt et al., 2019).

Although investigations into the relationship between service providers and customer relationship quality are limited our findings highlight the influence of service provider satisfaction on customer satisfaction with service providers and platforms. This aligns with research on the customer-employee relationship in which employee satisfaction with the job is a significant predictor of positive customer response (Hogreve et al., 2017). In the customer-firm relationship, employee satisfaction is the main predictor of overall customer satisfaction (Brown and Lam, 2008; Jeon and Choi, 2012). However, service providers are independent of the platform and other service providers, and their satisfaction influences customer satisfaction with both the service provider and the platform (Moon et al., 2019).

Moderator analysis provides some insight into the role of context in the relationship between customer motivators and inhibitors and customer responses in the sharing economy. Our findings show that, in contrast to GDP, HDI significantly moderates relationships in the sharing economy. In this regard, the influence of motivators on mediators and outcome variables is higher in countries with a higher level of HDI, while this is the opposite for perceived risk. These results suggest that the role of motivators on customer response is stronger for countries with higher levels of HDI, where people have enough experience and knowledge to utilize sharing economy services with a lower level of risk (Pick and Eisend, 2016). Moreover, a higher level of technical infrastructure and regulation to support sharing economy ecosystems in countries with
higher levels of HDI facilitates motivators on customer response and reduces the negative role of risk (Parente et al., 2018).

Our findings also show that power distance and uncertainty avoidance, among cultural components, significantly moderate relationships in our conceptual model. These findings confirm the role of cultural differences in customer response in the sharing economy (Albinsson et al., 2019; Gupta et al., 2019). While these studies mainly focused on the role of culture on customer intention to choose a sharing economy platform, our results show the role of motivators and inhibitors on customer responses in different cultural contexts. Our findings indicate that an increase in the power distance and uncertainty avoidance weaken the relationship between motivators and customer response and strengthen the role of risk in these relationships.

3.5.2. Managerial Implications

The sharing economy has become a popular business model among different industries, with many entrepreneurs and start-ups adopting this model (Huang and Kuo, 2020). However, only a small number of these platforms succeed in attracting enough customers and service providers to become a sustainable business (Täuscher and Kietzmann, 2017). Our conceptual model provides several insights for platform marketing managers to better understand and manage their relationships with customers and service providers. First, in contrast to traditional business models such as B2C, the sharing economy requires platforms to pay equal attention to customers and service providers. Therefore, it is important for a marketing manager who works in this type of business model to develop an ecosystem that is appealing for both supply and demand sides. This could be a challenging task for a platform. For instance, in ridesharing platforms, lower prices encourage more customers to use a platform because they boost customer utilitarian benefits. However, lower prices for customers mean lower economic value for drivers, and this may encourage drivers to switch to a competitor’s platform.

Further, for marketing managers our findings highlight the need to consider the complexity of relationship formation with customers in the sharing economy. First, using the sharing economy brings benefits and risks for customers, and managers need to ensure their platform provides enough benefits for customers to compensate for risk. Also,
managers should develop a system to maximize customer expected value, especially hedonic and utilitarian, to facilitate customer–service provider relationship quality. For instance, Airbnb enables customers to rate their received value from the service provider, and this rating is reflected on the service provider profile. This system forces service providers to enhance their service values and helps customers choose optimal service providers. Moreover, marketing managers need to be aware that risk plays an important and dysfunctional role in customer satisfaction and trust of a service provider as a stranger. Thus, as with motivators, a mechanism is required to help customers minimize their risk and enhance their relationship with service providers. For instance, Uber allows customers to share their trips, including driver details, with family and friends to reduce their risk. In addition, based on a two-level relationship quality, a platform needs to make sure customers form a high-quality relationship with service providers. For instance, in the Airbnb platform, customers can share different aspects of their experiences with others. This facilitates customer bonds with service providers and improves the quality of their relationship with platforms over time. This is important because platforms cannot increase customer loyalty without having a strong relationship with customers.

Service providers play an essential role in the sharing economy, especially in industries where several platforms compete. Our findings advise platforms to focus mainly on economic value, then flexibility and social value, to satisfy service providers’ expected values of working on a platform. For instance, in the ridesharing industry, several platforms such as Uber, Didi, and Ola compete to attract more drivers to their ecosystem to increase their network and profitability. Thus, a platform in this industry requires the development of a payment system to optimize service provider income by considering platform profits and customer service prices. Moreover, marketing managers should pay close attention to service providers’ satisfaction as it has a dual impact on the sharing economy ecosystem. For service providers, a higher level of satisfaction means an increase in their tendency to stay with a platform in the future. More importantly, service provider satisfaction has a direct impact on customer relationship quality with both service providers and platforms.

In the international context, our findings provide insights to marketing managers about their relationship with customers. Our findings indicate marketing managers should
consider HDI and adjust their marketing strategy in different countries. For countries in which there is platforms need to focus more on customer knowledge and experience to enhance the role of motivators and diminish the impact of inhibitors on customer attitudinal and behavioral responses. Also, platforms should consider the role of cultural context when seeking to expand their business to new countries. From this angle, platforms need to pay further attention to their relationships with their customers who have a higher level of power distance and uncertainty avoidance in countries where the role of motivators on customer relationship and its outcomes is less effective.

**3.5.3. Limitations and further research**

Like other research methods, our meta-analysis suffers from some limitations that open avenues for future research. The sharing economy conceptual model relies on prior empirical research on the sharing economy. Studies on the sharing economy mostly take the customers’ view and consider their relationships with service providers and platforms. For a service provider, there are a limited number of studies on service provider relationships with customers and platforms; thus, this research area requires further study. For instance, in the relationship between customer and service provider satisfaction, this research only studied the role of service provider satisfaction on customer satisfaction. As there is a two-way relationship between the two actors' satisfaction, future research could investigate the complex relationship between these two actors' satisfaction. As the sharing economy is a triadic business model, it is possible to define two-level relationship quality for both customers and service providers. As there was limited available empirical research on the service provider relationship with customers and platforms, we could not test two-level relationship quality for a service provider. Thus, future research should empirically cover this important research area in the sharing economy.

Moreover, most previous research in the sharing economy studied the relationship between customer and service provider and their relationship formation with each other and platform. Although the platforms depend on service provider resources, they are responsible for a different aspect of the marketing mix. Therefore, platform marketing activities have an essential role in the actor relationship formation. In this regard, several research areas require further research in future research. For instance, a platform is responsible for advertising to create brand awareness to attract more customers and
service providers to join a platform. However, we do not know how platform-level advertising could impact customer and firm relationships with each other and platform. In addition, there are differences between platforms in the pricing system. While a service provider is responsible for pricing in the Airbnb platform, Uber is responsible for pricing for service delivered to customers. However, the impact of different pricing systems, especially at the platform level, require further attention and investigation.

Reference


Chapter 4: Using Text and Image Mining to Study How Actor Engagement Creates Value in the Sharing Economy


I am the chief investigator. I drafted the literature review section of the paper, collected and analysed the data, and wrote the initial as well as subsequent drafts of the paper. The co-authors of this manuscript are my thesis supervisors. They provided intellectual input for the entire study from conception to completion. They guidance on conceptual model, data analysis and amended early and final drafts of the paper.

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Using Text and Image Mining to Study Role of Actor Engagement on Value Creation in the Sharing Economy

Abstract
Recently literature on customer engagement has proposed the ‘actor engagement’ concept to enable the researcher to study engagement in an innovative business model such as the sharing economy. Therefore, this research studies the relationship between actor engagement (customer and service provider engagement) on value co-creation (service provider performance) in the sharing economy platform. Text and images from the Airbnb platform, including 1,482 service providers and their customer comments have been gathered. Additionally, text and image mining are used to measure the research variables. Next, PLS-SEM is employed to test the relationship between the research variables. The result indicates that service providers’ engagement influences customer engagement and subsequently, customer engagement directly impacts their performance. Moreover, gender moderates the relationship between service providers’ engagement and customer engagement and performance. The theoretical and empirical implications of these findings are discussed.

Keywords: Actor engagement, sharing economy, customer engagement, service provider engagement, Airbnb.
4.1. Introduction

The sharing economy as an innovative and revolutionary business model (Benoit, Baker, Bolton, Gruber, & Kandampully, 2017; Eckhardt et al., 2019) has emerged from new technologies and economic crises over recent decades (Moorman, van Heerde, Moreau, & Palmatier, 2019). The rapid growth of this business model has resulted in it becoming the central factor of the global economy (Fehrer et al., 2018) receiving growing attention from practitioners and scholars (Eckhardt et al., 2019; Frenken & Schor, 2017; Zhang, Gu, & Jahromi, 2019). This business model is based on a two-sided market concept (Kumar, Lahiri, & Dogan, 2018) in which a technological platform (e.g. Uber) facilitates a customer’s (e.g. passenger in Uber) temporary access to a service provider’s (e.g. driver in Uber) products and services (Lindblom, Lindblom, & Wechtler, 2018). As the sharing economy is an open business model, customers and service providers enter and exit this platform without limitation (Kumar et al., 2018). For instance, drivers and passengers could use different platforms such as Uber, Ola, or Didi. Thus a platform’s long-term success depends on developing a longer-lasting relationship between actors and platform (Conduit, Karpen, Plewa, & Kleinaltenkamp, 2019).

Customer engagement has been developed to study its conceptual roots in relationship marketing (Barari, Ross, Thaichon, & Surachartkumtonkun, 2020; Katsifaraki & Theodosiou, 2020), customer engagement has been developed to study the enduring relationship between customer and company beyond the financial transactions involved (Conduit et al., 2019). This concept indicates that the customer’s voluntary resource contribution to the firm (Jaakkola & Alexander, 2014) is beyond the purchase and results from motivational drivers (van Doorn et al., 2010). Although customers’ non-purchase attitude and behavior manifest engagement, customers bring valuable resources such as knowledge, skills or time to their interaction with a firm, leading to value co-creation for both the customers and the focal firm (Jaakkola & Alexander, 2014). For instance, previous research indicates that customers’ referral behavior directly influences firm performance, and customers’ positive reviews about the firm’s products and services indirectly influence firm performance (Jaakkola & Aarikka-Stenroos, 2019; Jaakkola & Alexander, 2014). Although customer engagement is a well-established concept in a customer-firm dyadic relationship, it fails to capture the dynamics of engagement in
complex contexts such as the sharing economy (Alexander, Jaakkola, & Hollebeek, 2018; Benoit et al., 2017; Conduit et al., 2019; Lin, Miao, Wei, & Moon, 2019).

Recent developments in customer engagement extend this concept to actor engagement enabling the study of engagement in a triadic context in which engagement is the result of interaction between multiple actors in a network (Brodie, Fehrer, Jaakkola, & Conduit, 2019; Conduit et al., 2019). Actor engagement is defined as “a dynamic and iterative process that reflects actors’ dispositions to invest resources in their interactions with other connected actors in a service system” (Brodie et al., 2019). Similar to customer engagement, actor engagement behaviour— as an actor’s voluntary resource contribution—through the resource integration process will co-create value for all actors involved in an ecosystem (Elina Jaakkola & Aarikka-Stenroos, 2019).

While actor engagement has recently received attention in industrial marketing (Jaakkola & Aarikka-Stenroos, 2019; Kleinaltenkamp, Karpen, Plewa, Jaakkola, & Conduit, 2019; Storbacka, 2019), the study of this concept in the unique context of the sharing economy requires further attention (Brodie et al., 2019; Lin et al., 2019). In contrast to a B2B context, sharing economy platforms such as Airbnb or Uber do not own any product and only provide a structural arrangement to facilitate resource exchange between service providers and customers (Breidbach & Brodie, 2017). As interactions mainly occur between the customer and the service provider (Brodie et al., 2019), customer engagement and service provider engagement both engage each other rather than a platform (Lin et al., 2019). Moreover, the service provider as an independent economic actor is the primary source of value creation for the platform: thus, the platform performance relies on the service provider’s ability to satisfy and engage customers (Kumar et al., 2018). Therefore, understanding the nature of actors’ engagement in the sharing economy, its conceptualization, formation process, and contribution to value co-creation requires further consideration. One challenge in investigating actor engagement in the sharing economy is selecting a suitable analytical approach to provide empirical support for an actor engagement conceptual model (Brodie et al., 2019).

This study aims to advance understanding of the actor engagement formation process and its role in value co-creation in the sharing economy business model.
Storbacka, Brodie, Böhmann, Maglio, and Nenonen (2016) has been adopted as this framework provides a multilevel overall view of actor engagement requirements and the engagement formation process and its role in value co-creation in the triadic context. In this study, this framework is extended to the sharing economy business model to enhance our understanding of customer and service provider engagement, its formation process and how resource integration between these two actors leads to value co-creation at different levels. We also seek further to understand the platform’s role in this process. This study is among the first in the actor engagement area to provide empirical support for actor engagement and the value co-creation process.

In response to the recommendation by Brodie et al. (2019) to identify and use an appropriate method to strengthen understanding of actor engagement, this study adopts text and image data analysis approach to measure the actor engagement concept (Balducci & Marinova, 2018; Berger et al., 2020) and then test the relationship between actor engagement and value co-creation. Text and image are information that does not have a pre-defined organization or a numeric value, such as text and images (Balducci & Marinova, 2018). Most available marketing data are in form of text and image, and driving insight from this data is a crucial challenge for organizations (Balducci & Marinova, 2018). In this regard, these technologies and techniques are appropriate to investigate text and image available in the Airbnb platform thereby providing empirical support for our conceptual model.

4.2. Literature review

4.2.1. From customer to actor engagement

Customer engagement is defined as the customer’s behavioral manifestation towards a firm or brand beyond purchase and results from motivational drivers (van Doorn et al., 2010). The term “beyond purchase” relates to the customer’s non-transactional attitude and behavior, such as new product ideas or recommendations to other customers (Barari et al., 2020). Thus, engagement is the customer’s voluntary resource contributions (Jaakkola & Alexander, 2014) which are not related to the purchase of products or services (van Doorn et al., 2010). Customer engagement is a multidimensional concept, including cognitive, affective and behavioral components.
Cognitive engagement indicates the level of a customer’s thought processing and elaboration (Hollebeek, 2011) while affective engagement indicates a customer’s emotional bonding in their relationship with a particular firm (Hollebeek, 2011). Behavioral engagement is a customer’s sharing of a valuable resource (Jaakkola & Alexander, 2014) with both the company and other actors (Jaakkola & Alexander, 2014).

Actor engagement results from the interaction of actors’ dispositions and readiness to invest their resources via connections with other actors (Brodie et al., 2019). This is manifested in actors’ resource contribution behavior (Storbacka, 2019). Overall, customer and actor engagement is considered a multidimensional concept in which actor disposition (i.e. cognitive and affective engagement) influences actor tendency to become involved in engagement behavior beyond that necessary for exchange (Brodie et al., 2019; Jaakkola & Aarikka-Stenroos, 2019). However, actor engagement extends the dyadic view of engagement between customer and company to a multi-actor perspective (Chandler & Lusch, 2015) by including various actors in a network (Conduit et al., 2019; Kleinaltenkamp et al., 2019). Actor engagement extends the number of entities involved in the engagement process and provides an opportunity to study engagement in a triadic interaction context, such as the sharing economy (Breidbach & Brodie, 2017; Brodie et al., 2019). Moreover, actor engagement studies extend the level of analysis from the micro-level to an ecosystem that includes micro, meso and macro levels (Alexander, Jaakkola, & Hollebeek, 2018). In this ecosystem, the interaction between actors from different levels determines the engagement formation (Alexander et al., 2018; Conduit et al., 2019). Finally, while the literature on customer engagement has employed relationship marketing and SD logic (Brodie et al., 2011), actor engagement requires broader theories such as social network theory and the service ecosystem to study actor engagement processes in a network (Brodie et al., 2019).

### 4.2.2. Actor engagement and value co-creation

Value in marketing has been considered as an assessment of the trade-off between resource sacrifices and benefits (Smith, 2013; Zeithaml, 1988). Service dominant logic (SD-logic) has changed this traditional view of value from “value in exchange” to “co-creation value”. In this regard, value resides not in the product or service but emerges
jointly and through a resource integration process between the actors involved in an exchange (Vargo & Lusch, 2004; Vargo, Maglio, & Akaka, 2008). While the resource in the value co-creation process is mainly based on financial resources, engagement studies extend these resources beyond purchase and non-financial resources (Jaakkola & Aarikka-Stenroos, 2019; Storbacka et al., 2016). In this regard, Jaakkola and Alexander (2014) found that engaged customers bring resources such as knowledge, skills or time to their resource integration with a focal firm in which value is then co-created for both the customer and the firm. For instance, customer behavioral engagement such as feedback to the firm or a product review can assist in the modification of a firm’s product to better suit the customer’s needs and potentially increase the focal firm’s profitability.

Actor engagement indicates multiple and multilevel concepts in which several actors are involved in the interaction and each actor contributes their non-financial resources to the resource integration process. Thus, this process leads to value co-creation for all actors involved in the resource integration. In this regards, Jaakkola and Aarikka-Stenroos (2019) study customer referencing as an essential component of engagement behavior in the business-to-business model (B2B). Their findings indicate that customer referencing affects value creation for the actors involved by improving the relationship between these actors and their exchanges with the broader business network.

4.2.3. Sharing economy business model

The sharing economy is defined as a technology-enabled business model in which a service enabler mediates and facilitates exchange between the customer and service provider (Benoit et al., 2017; Kumar et al., 2018). This business model has several distinctive characteristics which distinguish it from traditional business models. The sharing economy is a triadic rather than a dyadic business model that includes the customer, the service provider and the platform as service enabler (Benoit et al., 2017; Kumar et al., 2018). In this business model, the platform does not provide any services and simply facilitates and orchestrates the exchange between the service provider and the customer for a fee (Breidbach & Brodie, 2017). For instance, a platform (e.g., Airbnb) enables customer access (e.g., guest) to service provider assets (e.g., host) for a fee.
This view of the sharing economy as a market-mediated exchange (Bardhi & Eckhardt, 2012; Eckhardt & Bardhi, 2015) distinguishes it from other disciplines as, in this case, the sharing economy only includes for-profit platforms (Kumar et al., 2018). Technology is considered as the main driver of the sharing economy in which the platform, as a technological intermediary, mediates the exchange between customer and service provider (Benoit et al., 2017). Furthermore, both customer and service provider are “equivalently positioned economic actors” (Perren & Kozinets, 2018) and, as such, this business model is sometimes considered a peer-to-peer business model (Philip, Ozanne, & Ballantine, 2019). From this standpoint, the customer and service providers as economic actors occupy the same position in the market, both as individual users or businesses (Lin et al., 2019). Moreover, “access instead of ownership” is an important feature of this business model (Habibi, 2019), in which the customer only has temporary access to tangible and intangible products and services and there is no transfer of ownership (Albinsson, Perera, Nafees, & Burman, 2019). Therefore, the sharing economy is different from similar platforms such as eBay or Amazon platforms in which there is a buyer/seller relationship between the actors (Eckhardt et al., 2019).

4.2.4. Actor engagement in the sharing economy

Storbacka et al.’s (2016) framework, based on the micro-foundation movement approach, has been adopted to study how actor engagement in the sharing economy drives value co-creation (Felin, Foss, & Ployhart, 2015). The framework indicates how actors’ actions and interactions at the individual level affect organizational outcomes and performance. As depicted in Figure 4-1, this framework provides a multilevel view (i.e., micro, meso and macro) to illustrate actor engagement formation and its role in the value co-creation process. This process includes three main mechanisms comprising (i) Situational mechanism (macro → meso → micro), (ii) Actor-formation mechanism (micro → micro) and (iii) Transformational mechanism (micro → meso → macro).
4.2.4.1. Situational mechanism

The situational mechanism primarily indicates the pre-condition for actor engagement formation and, in the sharing economy, requires both platform and actors (Breidbach Christoph & Brodie Roderick, 2017; Storbacka et al., 2016). At the macro level, the first condition is *platform* and this is considered a technological intermediary through which institutional logic provides structural support for resources integration among various actors, thereby value co-creation in a service system (Breidbach, Brodie, & Hollebeek, 2014). Thus, the platform does not become involved in resource provision and engagement activities but is considered as a facilitator (Kumar et al., 2018; Storbacka et al., 2016). The second condition is *actors* who are individuals or groups of individuals such as an organization (Brodie et al., 2019). A platform does not have any resources (Kumar et al., 2018), so actors are required to own or have access to resources that are necessary for other actors and the whole system to survive (Vargo et al., 2008). For instance, in Uber, the platform, by developing a website or mobile app, a pricing and payment system, a reputation system etc., as institutional logic aims to facilitate the exchange between drivers and passengers.

4.2.4.2. Actor-formation mechanism

The actor-formation mechanism illustrates the actor engagement formation at the micro-level. This pre-condition combined with the actor’s disposition proceeds through
the actor-formation mechanism and generates actor engagement properties (Storbacka et al., 2016). Engagement disposition reflects the actor’s internal tendencies that influence the capacity of actors to potentially innovate in a current time and place, in response to a specific past, and/or toward a specific future (Breidbach & Brodie, 2017). An actor’s disposition to engage that drives engagement activities that can be characterized by observable engagement properties (Storbacka et al., 2016). Recently Brodie et al. (2019) narrowed this broad view to actor engagement disposition and properties in which actor disposition is considered as the actor’s cognitive and affective readiness to engage and actor engagement behavior as a behavioral manifestation of this engagement disposition.

Before hypothesising the relationship between components of actor engagement, it is necessary to illustrate the nature of the customer and service provider in the sharing economy as a unique context. Engagement as a general concept follows the subject/objects pattern in which a subject engages with the object(s) (Hollebeek, Srivastava, & Chen, 2019). In the sharing economy, customer engagement could be toward both the service provider and platform (Lin et al., 2019). However, within a sharing economy ecosystem, the customer mainly interacts with the service provider and their engagement is towards the service provider (Lin et al., 2019). The platform through institutional logic facilitates engagement formation (Storbacka et al., 2016). For instance, in the Airbnb platform, its reputation system allows customers to become involved in engagement behavior by writing a comment about their service provider (Basili & Rossi, 2020). Therefore, we consider customer engagement in the sharing economy ecosystem as a multidimensional concept which is directed towards the service provider where customer cognitive and affective engagement, as engagement disposition, influence customer behavioral engagement as engagement properties. Thus, we hypothesize that:

H$_1$: Customer (a) cognitive and (b) affective engagement are positively related to customer behavioral engagement towards the service provider.

Previous research indicates that, in contrast to an employee, a service provider is an independent actor who is not a representative of a platform (Kumar et al., 2018; Lin et al., 2019). Thus the conceptualization of service provider engagement differs from employee engagement (Lin et al., 2019). Employee engagement is a multidimensional concept (Shuck & Wollard, 2010) reflecting employees’ simultaneous investment of
cognitive, affective, and behavioural effort and energy in their job and/or focal firm (Saks, 2006). Employee engagement occurs intra-organization (connection to firm) in the form of organizational engagement, and extra-organization (relationship to customers) in the form of job engagement (Finsterwalder, 2018). Therefore, within a sharing economy ecosystem, the service provider engagement only reflects the extra-organizational aspect of employee engagement which is engagement towards customers, as job engagement (Finsterwalder, 2018). Thus we consider service provider engagement at the job level as a multidimensional concept in which service providers’ cognitive and affective engagement as engagement disposition impact their behavioural engagement as engagement properties (Wollard & Shuck, 2011). Thus, we hypothesize that:

H2: Service providers’ (a) cognitive and (b) affective engagement are positively related to behavioural engagement towards their job.

Moreover, in the actor engagement formation process, actors provide a resource for other actors through their behavioural engagement and thus influence other actors’ responses and engagement (Jaakkola & Aarikka-Stenroos, 2019). Previous research in B2C and B2B indicates that a front-line employee has a vital role in customer engagement formation (Hogreve, Iseke, Derfuss, & Eller, 2017; Kumar & Pansari, 2016). Although the service provider is an independent actor in the sharing economy, previous research in the sharing economy indicates that their effort has a direct influence on customer engagement formation (Breidbach & Brodie, 2017). For instance, Cheng and Jin (2019) found that the intensity of a service provider’s energy to do their job has a vital role in customers’ tendency to write positive comments about them on the Airbnb platform. Therefore, within a sharing economy ecosystem, service providers’ behavioural engagement indicates their level of energy and effort directed towards serving a customer, which directly impacts customer behavioural engagement (Brodie et al., 2019). Thus, we hypothesize that:

H3: Service provider behavioural engagement is positively related to customer behavioural engagement.

4.2.4.3. Transformational mechanism

In the transformational mechanism, actor engagement behavior at the micro-level through resource integration at the meso level leads to value co-creation for all involved
actors at a macro level (Storbacka et al., 2016). In this process, engaged actors bring their non-financial resources such as knowledge or skills to the resource integration process, leading to the improvement of the well-being of all actors (Li, Juric, & Brodie, 2017; Vargo et al., 2008). In the sharing economy, customer engagement with a service provider within the platform brings a different kind of resource, which influences value co-creation for the service provider. For instance, within the Airbnb ecosystem, customer engagement behavior is reflected in service provider profile pages visible to others. Thus, customer engagement behavior such as referring to other customers or sharing positive experiences with the service provider influences potential customers to choose a service provider. Also, customers sharing their experience with the service provider could help to improve service quality. All these customer voluntary resource integrations with other actors influence the service provider in that new customers are attracted, thus the service provider’s performance is affected. Therefore, we hypothesize that:

**H4:** Customer behavioural engagement is positively related to service provider performance.

Service provider behavioural engagement indicates the amount of energy and effort the service provider invests in their job (Shuck & Wollard, 2010), and this is reflected in the service provider webpage within the sharing economy (Cheng & Jin, 2019). As a customer using the platform can easily compare service providers with each other, an increase in the service provider behavioural engagement could signal a point of differentiation with competitors. Thus, increased service provider behavioural engagement as visible activity directly impacts providers’ ability to attract more customers and enhance their performance. Thus, we hypothesize that:

**H5:** Service provider behavioural engagement is positively related to service provider performance.

Based on this literature discussion, a research framework was developed (Figure 4-2) in which service provider and customer cognitive and affective engagement as actor disposition influence their behavioural engagement as actor properties. Service provider behavioural engagement influences service provider performance directly and through customer behavioural engagement.
4.3. Methodology

4.3.1. Data preparation

This study utilized real-world data from Airbnb’s website, including service providers (e.g., hosts on Airbnb) and their customers (e.g., guests on Airbnb). The Insideairbnb.com website as a third-party was used (Zhang, 2019; Zhang, Yan, & Zhang, 2020) to access monthly data of service providers’ public information and activities such as their self-description, product and service description and their customer reviews. The data comprise two-time points, June/July 2018 and June/July 2019 and covers 26 cities in the USA that are the largest and most active on the Airbnb site. Only service providers who commenced with Airbnb during the first-time point and remained on the platform until the second time point are included in the sample. The final dataset includes 1,482 service providers and their customer comments.

4.3.2. Measurement

Text and image (Balducci & Marinova, 2018) have been used to measure actor engagement. The details of the research variables measurement and tools are provided in
Table 4-1. For text mining, both dictionary-based and classification techniques were used. The Linguistic Inquiry and Word Count (LIWC) (Pennebaker, Boyd, Jordan, & Blackburn, 2015) dictionary-based text mining software (Johnen & Schnittka, 2019; Packard, Moore, & McFerran, 2018) was used to measure research variables such as service provider and customer cognitive and affective engagement components. The Gunning Fog index (FOG) library on Python (Kanuri, Chen, & Sridhar, 2018) measured text readability as one of the service provider cognitive engagement components. Supervised classification in Python was employed for customer behavioural engagement measurement as it allows researchers to group texts into predefined categories based on a subset of a “training” set of the data (Humphreys & Wang, 2018). Lastly, we used the image-quality library on Python (Mittal, Moorthy, & Bovik, 2012; Z. Wang, Bovik, Sheikh, & Simoncelli, 2004) to measure two components of service provider behavioural engagement, profile image and place image.

Table 4-1: Variables measurement description

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimension</th>
<th>Metrics</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service provider engagement</td>
<td>Cognitive</td>
<td>Cognitive processing</td>
<td>Self, product and service description</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Text readability</td>
<td>Self, product and service description</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clout</td>
<td>Self, product and service description</td>
</tr>
<tr>
<td></td>
<td>Affective</td>
<td>Emotional tone</td>
<td>Self, product and service description</td>
</tr>
<tr>
<td></td>
<td>Behavioural</td>
<td>Number of filled fields</td>
<td>Self, product and service description</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Available product and service</td>
<td>Amenity data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Place description</td>
<td>Place image</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-description</td>
<td>Profile image</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strictness</td>
<td>Cancellation policy data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Response time</td>
<td>Response time data</td>
</tr>
<tr>
<td>Customer engagement</td>
<td>Cognitive</td>
<td>Cognitive processing</td>
<td>Customer comment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Affective state</td>
<td>Customer comment</td>
</tr>
<tr>
<td></td>
<td>Affective</td>
<td>Behavioural engagement</td>
<td>Customer comment</td>
</tr>
<tr>
<td></td>
<td>Behavioural</td>
<td>Number of customer comments as a proxy</td>
<td>Customer comments</td>
</tr>
<tr>
<td>Service provider performance</td>
<td>Number of customers</td>
<td>Price</td>
<td>Customers comments</td>
</tr>
<tr>
<td></td>
<td>Price</td>
<td>Price per night</td>
<td>Listing price + cleaning fee</td>
</tr>
</tbody>
</table>
4.3.2.1. Service provider engagement

**Cognitive engagement:** Cognitive processing, text readability and clout were used to assess service provider cognitive engagement (Stieglitz & Dang-Xuan, 2013). *Cognitive processing* reflects how service providers are concerned with organizing and understanding issues addressed in their profile writing, including self, product and service description (Cohn, Mehl, & Pennebaker, 2004). In this regard, previous research reveals that cognitive processing indicates content writer cognitive engagement in social media and will impact reader engagement (Stieglitz & Dang-Xuan, 2013). The LIWC cognitive processing dictionary was used to measure this variable in which a higher value reflects the service provider’s higher cognitive engagement with their job. *Readability measure* reflects how easily the reader can read and understand a text (Ajina, Laouiti, & Msolli, 2016). This reflects a service provider’s mental effort in writing the different sections of their profile (Zhang, Yan, & Zhang, 2018). For this measure, the Gunning Fog index library on Python was used. The Fog index indicates the number of years of formal education a reader of average intelligence needs to understand a text (Kanuri et al., 2018). A higher Fog index value indicates a lower level of readability; thus, the reciprocal value of this index is used and indicates that an increase in text readability shows a higher level of service provider cognitive engagement. The third measure is *clout* which refers to the relative social status, confidence or leadership that people display in their writing (Kacewicz, Pennebaker, Davis, Jeon, & Graesser, 2014). A higher clout value indicates that, in their writing, people focus more on others in contrast to people with a lower clout score who, in their writing, focus more on themselves (Duncan, Chohan, & Ferreira, 2019). In this study, we assume a higher clout score indicates higher service providers' cognitive effort to please their potential customers.

**Affective engagement:** The LIWC *emotional tone* dictionary was used to measure service providers emotional expression in their writing, and reflects the degree of service provider immersion (Tausczik & Pennebaker, 2010). These emotions could be positive or negative, so this index calculates the difference between positive and negative emotion (Herhausen, Ludwig, Grewal, Wulf, & Schoegel, 2019). A higher value of emotional tone reflects that the service provider demonstrates higher affective engagement in their work (Duncan et al., 2019).
**Behavioural engagement:** Several measures are used to assess service provider behavioural engagement. *Number of filled fields* by a service provider reflects the amount of information provided by a service provider about different aspects of their product and service. An increase in the service provider informational item impacts customer decision-making (Herzenstein, Sonenshein, & Dholakia, 2011) and indicates the amount of energy service providers undertake. This index measures the ratio of the number of fields filled by the service provider to the total number of available fields. A higher value of this index indicates higher service provider behavioural engagement. *Available product and service* for customers indicate the number of non-mandatory amenities the service provider provides. Higher available products and services could indicate the service providers’ effort towards the customer as well as engagement. Service providers’ *profile* and *place image quality* indicate how service providers use a high-quality image to describe themselves and their property. Li and Xie’s (2019) findings indicate the positive effect of using a high-quality image in the content of user engagement on Twitter. Also, previous research supports the positive influence of service provider profile image attributes on customer response (Fagerstrøm, Pawar, Sigurdsson, Foxall, & Yani-de-Soriano, 2017). The No-reference Image Quality Assessment index (Mittal et al., 2012; Wang et al., 2004) and Python software are used to measure service provider profiles and place image quality. As the higher value of this index indicates the lower quality of an image, the reciprocal value of this index is calculated. *Cancellation policy* indicates the service provider's strictness in cancellation and refund processes; thus, a lower level of strictness reflects the service providers’ higher effort toward their customers (Zhang et al., 2020). The cancellation policy variable is measured using a 6-point scale ranging from six being flexible to one being no-refunds. A higher value indicates higher behavioural engagement. *Response time* represents the waiting period for a customer to receive a response from a service provider. Response time implies the amount of energy and effort expended by the service provider and is classified into five categories in which five indicates a response within an hour to one indicating a response in days (Zhang et al., 2018). *Service provider verifications* indicate the number of verification items such as Email, phone, and Facebook used by the service provider to provide extra information for their customers (Biswas, Sengupta, & Chatterjee, 2020). Additional verification items not only increases customer trust but also indicates the amount of energy service providers
have devoted (Zhang et al., 2020). A higher number of verification items indicates that the service provider demonstrates higher behavioural engagement.

### 4.3.2.2. Customer engagement

**Cognitive engagement**: The LIWC *cognitive processing* dictionary was used to measure the amount of customer mental effort put into organizing and writing comments (Cohn et al., 2004). A higher value of cognitive processing indicates that customers have higher cognitive engagement with the service provider.

**Affective engagement**: The LIWC *emotional tone* dictionary was chosen to measure customers positive or negative emotional reflections in their comments. Emotion indicates the degree of writer immersion in the writing task (Tausczik & Pennebaker, 2010). Thus, a higher emotional tone level indicates higher and more positive customer engagement with the service provider.

**Behavioural engagement**: Following Kumar et al.’s (2010) conceptualization, behavioural engagement is considered as a multidimensional variable, including CLV (customer lifetime value), CIV (customer influence value), CRV (customer referral value) and CKV (customer knowledge value). CLV indicates future customer value for the service provider in the form of customer tendency to use the same service provider in the future. CIV demonstrates the impact of a customer on other people through sharing their experience. CRV indicates customer activity that helps service providers attract potential customers through their comments. CKV demonstrates customer feedback or suggestions for a service provider. Text classification via machine learning was employed to assign customer comments to different engagement behavior categories. In this method, the machine learning algorithm learns from pre-categorized examples as a training dataset to classify new cases (Li & Xie, 2019). As the customer comment could be assigned to one or more engagement behavior categories, the multi-label classification method was selected (Tsoumakas & Katakis, 2007). Similar to previous research, 1,000 customer comments were manually assigned to behavioural engagement categories (Li & Xie, 2019). Next, the Naive Bayes and Support Vector Machine algorithms and Wang and Manning’s (2012) procedure were followed to create a baseline to categorize customer comments. Additionally, a machine learning library in Python was used for this
classification. The probability of assigning each comment to each category is a value from 0 to 1, the higher value indicates higher customer engagement with a service provider in each behavioural engagement component.

4.3.3.3 Service provider performance

To estimate service provider performance in each month, we multiplied the number of customers in each month with the listing price per night. As the number of bookings on Airbnb was unavailable the number of reviews was used as a proxy to estimate the number of bookings (Biswas et al., 2020; Zervas, Proserpio, & Byers, 2017; Zhang et al., 2018). Previous research indicates that around 67% of customers leave a review on the Airbnb platform (Fradkin, 2015; Zervas et al., 2017). This ratio was used to predict the number of each service provider’s customers in each month. Moreover, Airbnb does not report the number of nights a customer stays in a property. However, based on Airbnb’s economic report (Lu, 2015), 4.5 nights is calculated to be the average number of nights a customer stays in an Airbnb property (Guttentag, Smith, Potwarka, & Havitz, 2018; Guttentag & Smith, 2017).

4.3.3.5 Control variable

Several control variables were included to ensure the accuracy of empirical models. The included property type (apartment, house, bed and breakfast etc.), room type (entire home/apartment, private room and shared room), and capacity (the number of guests an accommodation can serve). Moreover, we controlled GDP growth over the two time periods as an increase in GDP may impact customers’ budgets and increase the service provider performance (Kumar & Pansari, 2016).

4.4. Data analysis and results

4.4.1. Descriptive analysis

The descriptive data analysis is presented in Table 4-2. These data indicate all variables in t1 (June and July 2018) and t2 (June and July 2019). Following Kumar and Pansari’s (2016) procedure, the difference between variables from t1 and t2 ($\Delta = t2-t1$) is calculated and these new variables are used to test the research hypothesis.
Table 4-2: Descriptive data analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
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<td></td>
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<td>t1</td>
<td>t2</td>
<td>t1</td>
<td>t2</td>
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<tr>
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<td></td>
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<td>2.67</td>
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<td>.17</td>
<td>.11</td>
<td>.12</td>
<td>.12</td>
<td>.10</td>
</tr>
<tr>
<td>Clout</td>
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<td>.00</td>
<td>99.00</td>
<td>99.00</td>
<td>61.27</td>
<td>69.34</td>
<td>.11</td>
<td>.08</td>
</tr>
<tr>
<td>Service provider affective engagement</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional tone</td>
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<td>.00</td>
<td>99.00</td>
<td>99.00</td>
<td>78.02</td>
<td>80.55</td>
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<td></td>
</tr>
<tr>
<td>Number of filled fields</td>
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<td>1</td>
<td>11</td>
<td>11</td>
<td>7.86</td>
<td>8.45</td>
<td>2.35</td>
<td>2.21</td>
</tr>
<tr>
<td>Available product and service</td>
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<td>1</td>
<td>59</td>
<td>73</td>
<td>25.72</td>
<td>30.02</td>
<td>10.19</td>
<td>11.20</td>
</tr>
<tr>
<td>Place image quality</td>
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<td>.01</td>
<td>.87</td>
<td>.91</td>
<td>.39</td>
<td>.40</td>
<td>.15</td>
<td>.14</td>
</tr>
<tr>
<td>Profile image quality</td>
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<td>.01</td>
<td>.86</td>
<td>.89</td>
<td>.37</td>
<td>.38</td>
<td>.12</td>
<td>.11</td>
</tr>
<tr>
<td>Cancellation policy</td>
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<td>4</td>
<td>6</td>
<td>6</td>
<td>5.06</td>
<td>4.95</td>
<td>.80</td>
<td>.76</td>
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<td>Responses time</td>
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<td>4</td>
<td>4</td>
<td>3.89</td>
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<td>.47</td>
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<td>4.30</td>
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</tr>
<tr>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Cognitive processing</td>
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<td>.00</td>
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<td>100.0</td>
<td>7.50</td>
<td>8.64</td>
<td>6.90</td>
<td>6.65</td>
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<tr>
<td>Emotional tone</td>
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<td>.00</td>
<td>99.00</td>
<td>99.00</td>
<td>13.41</td>
<td>14.88</td>
<td>12.90</td>
<td>12.45</td>
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<tr>
<td>Customer behavioural engagement</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CLV (customer lifetime value)</td>
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<td>0.00</td>
<td>0.95</td>
<td>0.96</td>
<td>0.18</td>
<td>0.21</td>
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<td>0.01</td>
</tr>
<tr>
<td>CRV (customer referral value)</td>
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<td>0.00</td>
<td>0.97</td>
<td>0.97</td>
<td>0.26</td>
<td>0.31</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>CIV (customer influence value)</td>
<td>0.02</td>
<td>0.00</td>
<td>0.99</td>
<td>0.99</td>
<td>0.58</td>
<td>0.62</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>CKV (customer knowledge value)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.96</td>
<td>0.98</td>
<td>0.38</td>
<td>0.40</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>Service provider performance</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of comments</td>
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<td>1</td>
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<td>3.56</td>
<td>4.13</td>
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<td>.08</td>
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<td>Daily price</td>
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<td>11</td>
<td>2,800</td>
<td>2,682</td>
<td>171.1</td>
<td>171.5</td>
<td>153.7</td>
<td>142.9</td>
</tr>
</tbody>
</table>

4.4.2. Measurement and structural model analysis

As formative constructs are part of the structural model, PLS-SEM and SmartPLS software were used to test the research model and hypotheses (Hair, Ringle, & Sarstedt, 2011; Hair Jr, Hult, Ringle, & Sarstedt, 2016). Following (Hair et al., 2011) procedure, customer and service provider engagement indicators’ weight and loading are first considered to assess their formative measurement models.

The outer weight of profile image quality ($\lambda = .101$, $p>0.05$) and responses time ($\lambda = .126$, $p>0.05$) are nonsignificant and their outer loading is lower than 0.50, so these two
indicators have been removed from the formative measurement model (Hair et al., 2011; Hair Jr et al., 2016). The outer weight and outer loading are at an acceptable level for the remaining indicators. Also, to check the collinearity of indicators, each indicator’s variance inflation factor (VIF) value should be lower than 3. All indicators are at the acceptable level.

After checking the formative measurement model, the relationship between the research variables is tested in the structural model and its result is provided in Figure 4-3.

Fig. 3 indicates that both service provider cognitive (λ=0.11, p<.001) and affective engagement (λ=0.07, p<.05) have a positive and significant impact on service provider behavioural engagement which support hypothesis H1a and H1b. Similarly, customer cognitive (λ=0.10, p<.001) and affective engagement (λ=0.03, p<.05) significantly influence customer behavioural engagement. Thus, both hypotheses, H2a and H2b are supported. Moreover, in both customer and service provider engagement, cognitive engagement has a higher impact on behavioural engagement than affective engagement. Also, service provider behavioural engagement directly influences customer behavioural

Figure 4-3. Result of structural model testing
engagement ($\lambda=0.05$, $p<.05$), which provides enough evidence to support hypothesis H3. Furthermore, service provider ($\lambda=0.06$, $p<.001$) and customer behavioural engagement ($\lambda=0.04$, $p<.05$) have a positive and significant influence on service provider performance; thus, hypotheses H4 and H5 are supported. Finally, the control variable analysis indicates that these variables do not significantly affect our model.

4.5. Conclusion and discussion

4.5.1. Theoretical implications

This research employed Storbacka et al.'s (2016) actor engagement framework to study the role of actor engagement on value co-creation for a service provider in the sharing economy. Although this framework provides a unique view of the actor engagement formation process in the triadic context, this research extends the framework to the sharing economy context. Thus, through this study, a more comprehensive understanding of the nature of the actor's engagement concept, the relationship between different actor engagements and how actors’ engagement leads to value co-creation is developed. Moreover, although a number of conceptual models illustrate the actor engagement process (Breidbach et al., 2014; Breidbach & Brodie, 2017; Storbacka et al., 2016), this research is among the first to provide empirical evidence for the role of actor engagement in value co-creation.

The research findings indicate that service provider and customer engagement in the sharing economy exhibit some differences compared to other contexts such as B2C and B2B. Although Lin et al. (2019) comment on these differences, they did not provide any conceptualization of customer and service provider engagement in the sharing economy. Our research findings indicate that customer and service providers’ engagement within the platform is directed towards each other rather than the platform. This confirms the facilitating role of the platform. In this regard, Storbacka et al. (2016) argued that the platform does not have an active role in customer and service provider engagement and simply provides structural support. Moreover, following (Brodie et al., 2019), the multidimensional conceptualization of actor engagement, we consider service provider and customer engagement as a multidimensional concept including cognitive, affective and behavioural components. The empirical findings in this study support this
idea that the actor’s cognitive and affective engagement disposition predicts actor behavioural engagement. While Storbacka et al. (2016) provide a comprehensive view of these components, our research findings confirm Brodie et al.’s (2019) view of cognitive and affective engagement in behavioural engagement.

Whereas previous research suggests that, in actor engagement formation, the actor’s behavioural engagement influences each other through an engagement formation process (Storbacka et al., 2016), our research findings reveal this relationship actually to be from service provider to customer engagement. Our conceptualization indicates that service provider behavioural engagement, as a manifestation of engagement disposition, directly impacts customer behavioural engagement. These findings support the previous research in the sharing economy in which service provider immersion in their work influences customer engagement tendency, which is manifested in customer commentary on the platform (Cheng & Jin, 2019; Han, Shin, Chung, & Koo, 2019). Further, service provider behavioural engagement directly and indirectly through customer behavioural engagement influences service provider performance. These results confirm previous research findings of the role of service provider effort in their performance in the sharing economy (Cheng & Jin, 2019). However, our findings also indicate that a service provider could influence their performance through customer engagement.

Finally, this study contributes to the developing body of literature in which the sharing economy is investigated via text and image data analysis. Platforms such as Airbnb potentially provide researchers with a plethora of text and image data from service provider and customer perspectives. Although the use of text and image data analysis is not new to the sharing economy (Zhang, 2020; Biswas et al., 2020; Zhang, 2019; Cheng & Jin, 2019; Fagerstrøm et al. 1, 2017), this research extended this method, to provide empirical support for our framework, actor engagement and value co-creation. As most marketing data are in form of text and image (Balducci & Marinova, 2018), this research demonstrates how marketers can use text and image data to measure various marketing concepts to test marketing models.
4.5.2. Managerial implications

From a practical perspective, our findings demonstrate that service provider engagement can further increase customer engagement and, ultimately their performance. Research results indicate that the service provider’s profile reflects different aspects of the service provider’s cognitive, affective and behavioural investment in their job and that it has a direct impact on their customer engagement and their ability to attract new customers. As the service provider’s writing style reflects their cognitive and affective engagement with their customers, it may be beneficial to put more mental and emotional effort into writing various sections of their profile, such as self, product and services description. Importantly, this study demonstrates that service providers should consider the wide range of behaviors that reflect their behavioural engagement with their work. These behaviors are not limited to profile writing and include the quality of profile images, and the number of verifications, products and services.

Additionally, this study has a number of important implications for sharing economy platforms. This new and innovative business model has grown rapidly in the past decade. Although platforms are mainly responsible for orchestrating the relationship between customers and service providers, the profit and long-term sustainability require them to focus on customer and service provider engagement. Platforms in the sharing economy are an open business model in which the platform does not create any limitations for actors to enter or exit the platform. While an increase in actor engagement has a potential to create a “ripple effect” to attract more actors to a platform (Hsu, Wang, Chih, & Lin, 2015), disengagement has the opposite effect. Moreover, service provider engagement's role in initiating customer engagement and their performance is especially important for the platform because a higher service provider performance means a higher platform performance. Although service providers in the sharing economy are often not professional staff, they play an essential role in actor engagement formation and platform performance. Thus, platforms should be aware of service providers’ roles and undertake activities to encourage them to increase their engagement with their job and customers.

4.5.3. Limitations and future research

This study has some limitations that indicate avenues for future research. The source of data is from a single platform, Airbnb. Although Airbnb as a home renting
platform is considered one of the important representatives of the sharing economy, it would be insightful for future research to include actor engagement in alternative sharing platforms such as Uber (transportation) or the Lendingclub (financial industry). This research has been conducted in the USA and while data was gathered across most states, leading to a wide variety of service provider and customer types, any future research could benefit from studying actor engagement in a cross-cultural context. Moreover, actor engagement was measured based on the service provider and customer behavioural data on the Airbnb website. Although previous research confirms the validity of text and image data analysis, it forces researchers to employ available data to measure research variables. For example, for this study, we did not have access to some data such as service provider sales data and, therefore, the volume of comments has been used as a proxy to predict service provider sales. Future research could use another method such as survey or experimental design to study actor engagement and its role in value creation in the sharing economy.

References


Chapter 5: Actor Engagement and Sharing Economy Platform Performance in The International Context: Big Data Analytics


I am the chief investigator. I drafted the literature review section of the paper, collected and analysed the data, and wrote the initial as well as subsequent drafts of the paper. The co-authors of this manuscript are my thesis supervisors. They provided intellectual input for the entire study from conception to completion. They guidance on conceptual model, data analysis and amended early and final drafts of the paper.

(Signed) Mojtaba Barai
February 2022

(Signed) Dr Mitchell Ross
February 2022

(Signed) Dr Sara Thaichon
February 2022

(Signed) Dr Jiraporn Surachartkumtonkun
February 2022
Abstract

Recent customer engagement literature has proposed the ‘actor engagement’ concept to enable the researcher to study engagement in the sharing economy as a global business model. This research studies the actor engagement formation among customers and service providers on sharing economy platform performance in various countries. This study utilizes real-world data from the Airbnb website including structured and unstructured data (i.e., text) of 159,662 service providers and 2,087,233 customers in 7 countries. Text mining and machine learning techniques are used to measure research variables and multilevel regression is employed to test the research model. Results indicate that among service provider engagement behaviours, effort to maximize value for money and accuracy of service provider descriptions are the main predictor of customer engagement behavior and platform performance. For customer engagement behaviours, customer lifetime value (CLV) and customer referral value (CRV) are among the behaviours that have the highest impact on platform performance. In addition, Airbnb as a truly global platform enables the investigation of a range of country-level factors (e.g., economic, competitiveness, cultural, technological, social, and political factors) on actor engagement thus providing a more comprehensive understanding of this concept from a global perspective. The theoretical and empirical implications of these findings are discussed.

Keywords: actor engagement, sharing economy, customer engagement, text mining, big data analytics
5.1. Introduction

Customer engagement, a focal marketing concept (Hollebeek et al., 2021), considers the enduring relationship between customer and firm beyond financial transactions (Barari et al., 2021b; Katsifaraki and Theodosiou, 2020). Engagement is manifested by customers’ behavioral engagement, in which customers bring valuable resources such as knowledge, skills or time to their interaction with a firm (Hollebeek et al., 2019b; Roy et al., 2021). Recent developments in engagement have led to the development of the actor engagement concept (Hollebeek et al., 2020) thus enabling the study of engagement as the result of interaction between multiple actors in an ecosystem (Brodie et al., 2019; Conduit et al., 2019). This concept reflects actors' dispositions to voluntary resource contribution with other actors in a service system (Brodie et al., 2019).

Although actor engagement has recently received attention in industrial marketing (Kleinaltenkamp et al., 2019; Storbacka, 2019), the study of this concept in the sharing economy requires further attention (Brodie et al., 2019; Lin et al., 2019). The sharing economy is a triadic business model in which a platform (e.g. Airbnb) facilitates short term access by a customer (e.g. guest in Airbnb) to a service providers products and services (e.g. host in Airbnb) (Lindblom et al., 2018). This type of business model transforms the traditional dyadic nature of customer-firm to a triadic interaction in which the platform is considered a technological intermediary between two parties (Benoit et al., 2017). In contrast to traditional business models, sharing economy platforms (such as Airbnb) do not provide products or services and only provide a structural arrangement to facilitate resource exchange between a service provider and a customer (Breidbach and Brodie, 2017). Thus, platform sustainability and success rely on the service provider’s ability to engage both customer and service provider with the platform (Kumar et al., 2018). Engaging more users on both sides of a platform (customer and provider) leads to a network effect in the platform and enhances its performance (Eckhardt et al., 2019b). The sharing economy operates in a global context and, as such, country-based economic, cultural, social, and political factors may have an impact on the operation of a firm and their customer’s decisions (Berry et al., 2010). Unsurprisingly, national-level factors have attracted considerable attention from marketing researchers when explaining heterogeneity in marketing models (Kozlenkova et al., 2021; Roy et al., 2018). However, previous actor engagement research is predominantly based on a particular market or
country (Brodie et al., 2019; Storbacka et al., 2016). Although these studies provide a useful view of engagement at a national level, their findings suffer from lack of generalizability to the international context. The study of actor engagement in a national market cannot fully capture the dynamic nature of engagement formation and manifestation across international markets (Brodie et al., 2019).

The current research adopts the Breidbach and Brodie (2017) framework to advance our understanding of actor engagement formation and its impact on platform performance in the sharing economy from an international perspective. This framework provides a multilevel and multi-actor view of actor engagement formation and resource integration between actors to create value for the platform. However, this model generally considers the sharing economy as a closed ecosystem to illustrate actor engagement formation. We add national culture to our model based on the S-D logic ecosystem framework by Akaka et al. (2013) to extend the Breidbach and Brodie (2017) framework to the international context. This framework emphasizes the complexity of context, especially cultural context, which guides actor resource integration and value co-creation for the platform. As sharing economy platforms, such as Airbnb, operate across different countries (Kumar et al., 2018), the study of engagement using a single platform (i.e., Airbnb) provides an opportunity to better understand the role of the national context as a moderator in our model.

In response to the call by Brodie et al. (2019) to identify and use an appropriate method to strengthen understanding of actor engagement, this study adopts a big data analytics technique to use data in the Airbnb platform to test the research model. The emergence of the sharing economy platform as an open business model allows researchers to access a large amount of customer and service provider behavioural data (Balducci and Marinova, 2018; Berger et al., 2020). We used the machine learning technique to measure actor engagement in our model. We used multilevel regression to test the research conceptual model to examine the complex and nested relationship between service providers and customers through the sharing economy platform (Vanhal et al., 2020).
5.2. Literature review

5.2.1. Evolution from customer to actor engagement

Customer engagement refers to a customer’s voluntary investment of their resources (i.e. knowledge, energy or time) in their relationship with a firm (Jaakkola and Alexander, 2014). This resource contribution is beyond purchase (van Doorn et al., 2010) and manifests in behaviours such as a recommendation to other customers, complaint behaviour, or feedback to the firm (van Doorn et al., 2010). In contrast to purchasing behaviour, engagement behaviour relates to the non-transactional nature of customer engagement (Barari et al., 2021b). In addition, customer engagement behaviours contribute to firm marketing activities such as attracting a new customer or new product idea (Harmeling et al., 2017).

While customer engagement studies tend to consider engagement in customer-firm relationships, actor engagement enables researchers to study engagement in a more complex context such as the sharing economy. Actor engagement indicates actor dispositions and readiness to invest resources via connections with other actors beyond that necessary for exchange (Brodie et al., 2019). This behaviour is defined as “actors’ voluntary resource contributions that focus on the engagement object, go beyond what is necessary for the exchange, and occur in interactions with a focal object” (Alexander et al., 2018). Actor engagement extends the traditional view of the engagement between customer and focal firm (Hollebeek et al., 2020) to a multi-actor perspective by including various independent actors (Chandler and Lusch, 2015). When investigating the sharing economy, actor engagement provides an opportunity to study engagement in a multi-actor context, which includes a network of interactions between service providers and their customers (Breidbach and Brodie, 2017; Brodie et al., 2019) facilitated by a platform. Moreover, actor engagement studies extend the level of analysis from the micro-level to an ecosystem that includes micro, meso and macro levels (Alexander et al., 2018). In this ecosystem, the interaction between actors from different levels determines the engagement formation and value co-creation in a network (Conduit et al., 2019), while contextual variables influence and influence this process.
5.2.2. Actor engagement in the sharing economy

The sharing economy comprises three independent actors (customer, service provider and platform) in which the platform is a technological intermediary that facilitates a customer’s temporary access to a service providers’ resources such as accommodation in the case of Airbnb (Benoit et al., 2017; Kumar et al., 2018). As the platform facilitates resource exchange between service providers and customers, its success depends on attracting and maintaining a relationship with sufficient service providers who share their resources (e.g., house, car or skills) with customers who are willing to obtain them for a fee via the platform (Eckhardt et al., 2019b). In contrast to customer-firm interactions, in the sharing economy both customers and service providers are positioned equally and thus it is considered a peer to peer business model (Eckhardt et al., 2019b). Additionally, in contrast to an employee in traditional business models, service providers are independent of the platform and could potentially offer their services via different platforms at the same time (Eckhardt et al., 2019b).

In the sharing economy, customer engagement could be toward both the service provider and platform (Lin et al., 2019). However, within the sharing economy ecosystem, the customer mainly interacts with the service provider and their engagement is towards the service provider (Lin et al., 2019). The platform through institutional logic (structural support for resources integration among various actors) facilitates engagement formation (Storbacka et al., 2016). For instance, in the Airbnb platform, its reputation system allows customers to demonstrate engagement behaviour by writing a comment about their service provider (Basili and Rossi, 2020) rather than the platform. As a service provider is an independent actor who is not a representative of a platform (Kumar et al., 2018; Lin et al., 2019), service provider engagement reflects the extra-organizational aspect of employee engagement which is engagement towards customers, as job engagement (Finsterwalder, 2018). Thus we consider service provider engagement at the job level in which service providers’ disposition and its behavioral manifestation are towards their customers (Wollard and Shuck, 2011).
5.3. Research framework and hypothesis development

Adopting the Breidbach and Brodie (2017) framework and S-D logic service ecosystem (Vargo and Akaka, 2012), the research framework (see Figure 5-1) provides a multilevel (i.e., micro, meso and macro) and multi-actor (i.e., customer, service provider and platform) view to illustrate actor engagement formation, its impact on platform performance and the role of context. Based on the Breidbach and Brodie (2017) framework, actor engagement takes place at the micro-level in which the platform provides institutional support in this process. Actor engagement at the micro-level, through the resource integration process, influences platform performance at the meso level.

Breidbach and Brodie's (2017) framework provides an excellent overview of how actor engagement takes place in a multilevel ecosystem and how actor engagement influences platform performance in the sharing economy ecosystem. However, it considers the sharing economy a closed ecosystem, making it challenging to employ this framework in an international context. Therefore, we adopted the Akaka et al. (2013) service ecosystem to extend the Breidbach and Brodie (2017) framework to the international context. The service ecosystem approach aims to draw attention to the dynamic of the context of exchange which influences and is influenced by resource integration and engagement formation among actors. Based on this the role of context is considered at a macro level to study how national-level factors (i.e., economic, competitiveness, culture, technology, social and political factors) moderate relationships in the model.
5.3.1. Actor engagement at micro level

Customer and service provider disposition, through the action-formation mechanism, generates actor engagement practice at the micro-level (Storbacka et al., 2016). While engagement disposition reflects the actor’s internal tendencies, engagement practice indicates observable engagement behavior (Storbacka et al., 2016). In this process, actors provide a resource for other parties through their behavioral engagement and thus influence other actors’ responses and engagement (Jaakkola and Aarikka-Stenroos, 2019). As a customer mainly interacts with a service provider in the sharing economy, a service provider has an essential role in customer engagement formation (Breidbach and Brodie, 2017). Service provider engagement is measured as level of energy and effort a service provider directs towards serving a customer, which has a direct impact on customer engagement (Brodie et al., 2019). As such, we hypothesis that:

H1a: Service provider engagement is positively related to customer engagement.
5.3.2. Actor engagement and platform performance at Meso level

Actor engagement indicates multilevel concepts in which several actors are involved in the interaction and each actor contributes their non-financial resources (Alexander et al., 2018; Storbacka et al., 2016) and through a resource integration process, these resources create value for all actors involved in the process (Alexander et al., 2018; Storbacka et al., 2016). In the sharing economy ecosystem, actor engagement provides the required resources to create value for actors (Breidbach and Brodie, 2017) while the platform plays the role of a resource integration facilitator (Storbacka, 2019). For example, in the Airbnb platform, customer and service provider engagement are reflected in the service provider profile and are visible to other actors. The positive engagement behavior not only will impact current actors’ relationship with the platform but will also encourage potential actors to become a user of a platform. As such, this will increase the number of customers and service providers operating on a platform network and subsequently enhance its performance. We hypothesis that:

H_{1b}: Service provider engagement is positively related to platform performance.
H_{1c}: Customer engagement is positively related to platform performance.

5.3.3. The role of country-level moderators at Macro level

5.3.3.1. Economic moderators

**GDP per capita:** Gross national product (GDP) per capita is an economic factor that reflects the difference between customers’ purchase power in different countries (Berry et al., 2010). People from countries with a higher level of GDP per capita have a greater opportunity to access resources such as information and skills so that they are able to access and use businesses like the sharing economy (Kozlenkova et al., 2021). Moreover, these higher levels of resources in countries with higher levels of GDP per capita help customers to not only develop relationships with sharing economy platforms but also participate in the customer engagement behaviour manifestation such as recommending a service provider to other customers or sharing their service experience (Gupta et al., 2018). Thus, we expect:

H_{2a}: GDP positively moderates the relationship between service provider engagement and customer engagement.
The sharing economy operates based on a reputation system in which users engage in behaviours such as reviewing and rating their peer customers or service provider (Basili and Rossi, 2020). These engagement behaviours are visible to current and potential customers and service providers and could be used as an important source of information in a customer’s decision to join and develop a relationship with a service provider (Breidbach and Brodie, 2017). People from countries with a higher level of GDP per capita tend to have greater access to resources and capabilities to utilise engagement behaviours in their decision to join or develop a relationship with a platform (Kozlenkova et al., 2021). For instance, customers in these countries are more likely to have the required skills to review service provider profiles and their customers' reviews in order to select an appropriate service provider which consequently enhances their relationship with a platform and encourages other customers to use this platform. Thus, we expect:

H$_2$: GDP positively moderates the relationship between (b) service provider and (c) customer engagement with platform performance.

5.3.3.2. Competitiveness moderators

Travel and tourism competitiveness index (TTCI): It is developed and published by the World Economic Forum (WEF) (Calderwood and Soshkin, 2019). This index indicates the overall quality and sustainability of the travel and tourism industry in a country (Kumar and Dhir, 2020). A higher level of TTCI in a country leads to increased mobility of people both within and between countries (Bazargani and Kiliç, 2021). As platforms such as Airbnb are an integral part of the travel and tourism industry, a higher level of TTCI supports customers to use and develop relationships with sharing economy platforms as an alternative to a traditional business model (Kim et al., 2021). Therefore, at a given level of service provider engagement, customers are more likely to use the sharing economy platform service and share their experience with others in the service provider profile. Thus, we expect:

H$_{3a}$: TCCI positively moderates the relationship between service provider engagement and customer engagement.

A higher level of TCCI not only influences demand for sharing economy services but also increases the number of customers who participate in the sharing economy platform as a service provider (Bazargani and Kiliç, 2021). Besides that, actor
engagement behaviour is reflected in the sharing economy platform and consider a valid and unbiased source of information for new and current users (Breidbach and Brodie, 2017). Therefore, in countries with a higher level of TTCI, more new customers and service providers use actor engagement behaviour to join a platform and more current users employ this behaviour to enhance their relationship with platform usage. Thus, we expect:

H₃: TTCI level positively moderates the relationships (b) service provider and (c) customer engagement with platform performance.

5.3.3.3. Cultural moderators

Individualism: It reflects the extent to which an individuals’ priority is their personal goal, motivation, or desire, whereas collectivism gives priority to the group (Hofstede et al., 2005). Relationship marketing research indicates that customer relationship formation is more likely to occur in a collectivist culture where customers have greater emphasis on social bonding and dependence on their relationships with a firm (Gupta et al., 2018). Moreover, in collectivist countries, customer tendency to undertake engagement behaviour such as sharing experiences is more common (Roy et al., 2018). However, a higher level of customer engagement towards firms in collectivist cultures is observed due to homophily which is similarities between customer networks as in-group with strong ties such as family members or friends (Pezzuti and Leonhardt, 2020). In the sharing economy, in contrast to customer firm relationships in the B2C business model, customers receive a service from a stranger and engage with them as an out-group with weak ties. In this context, customer engagement is more common and stronger in an individualistic culture where customer evaluation and engagement are based on service providers engagement with their job to meet their expectations. Thus, we expect:

H₄ₐ: Individualism positively moderates the relationship between service provider engagement and customer engagement.

The role of relationship development in firm performance tends to be stronger in collectivist cultures than individualistic cultures (Samaha et al., 2014). In a collectivist culture, people rely more on the opinions of others and therefore positive customer-firm relationships encourage other customers to develop a relationship with a firm (Gilly et
al., 1998). Similarly, the influence of customer engagement on firm performance is stronger in a collectivist culture where customer engagement attracts more customers to choose a specific firm (Samaha et al., 2014). In contrast to traditional business models, the sharing economy aims to facilitate exchange between out-groups as people with weak ties (Kozlenkova et al., 2021) and this has a negative impact on the collectivist tendency to include engagement behaviour from strangers in their decision making. People in an individualistic society tend to make decisions based on their personal needs and goals (Barari et al., 2021b). In this context, actor engagement is considered a valuable source of information for current and potential customers and service providers to stay with a platform or become its user. Thus, we expect:

\[ H_4: \] Individualism positively moderates the relationships between (b) service provider and (c) customer engagement with platform performance.

**Power distance:** It indicates the extent to which inequality in authority, status or power is expected and accepted by society members (Hofstede et al., 2005). Prior research in relationship marketing indicates that customer-firm relationship formation is easier in countries with higher power distance where relationships give power to people who are involved in these relationships (Samaha et al., 2014). Moreover, marketing activities in these countries lead to a higher level of customer engagement because customers prefer to use engagement behaviour to signal power or status to their network (Barari et al., 2021b). However, Lam et al. (2009) find that although customers from countries with higher levels of power distance are more likely to share their service experience with others, this is largely limited to in-groups such as family members and close friends. Thus in the sharing economy where customers and service providers have the same position in the market and customer engagement behaviour is directed to weak ties, power distance has negative role in the actor engagement formation. Thus, we expect:

\[ H_{5a}: \] Power distance negatively moderates the relationship between service provider engagement and customer engagement.

In countries with a higher level of power distance people are more likely to tell others about their product and service experience offline or through online social media (Barari et al., 2021b) and others are more likely to use this information in their decision making (Lam et al., 2009). Therefore, in countries with a higher level of power distance,
customer-firm positive relationships lead to an increase in the number of a firm’s customers and thereby firm performance (Samaha et al., 2014). In contrast to customer-firm relationships in B2C, the sharing economy is a network of strangers as out-groups who have the same position in the market as peer to peer business model. In this context, a higher level of power distance not only has a negative role in people’s tendency to engage with unknown people but also uses actor engagement behaviour as an input in the decision to stay or join a platform. Thus, we expect:

Hs: Power distance negatively moderates the relationships (b) service provider and (c) customer engagement with platform performance.

**Masculinity**: It refers to the extent achievement and assertiveness (masculine values) rather than caring and modesty (feminine values) influence peoples’ behaviour (Hofstede et al., 2005). In contrast to people from masculine cultures, people from feminine cultures are relationship-oriented and like to develop and keep a relationship (Samaha et al., 2014). Moreover, the tendency to reciprocate relationship benefits such as engagement behaviour tends to be higher in feminine cultures than in masculine cultures (Barari et al., 2021b). However, people from feminine cultures are more likely to engage within-group with known people in their network than unknown people (Lam et al., 2009). The sharing economy business model aims to facilitate interaction between a network of strangers (Kumar et al., 2018). In contrast, masculine culture decision making is influenced by service provider performance and, in this case, service provider engagement leads to a higher level of customer engagement (Pick and Eisend, 2016). Thus, we expect:

H₉₆ₐ: Masculinity level positively moderates the relationship between service provider engagement and customer engagement.

People from feminine cultures, in contrast to masculine cultures, tend to be more loyal to their relationships with a firm and more likely to reciprocate the benefits they received from a firm (Barari et al., 2021b). Thus, customer relationships lead to a higher level of firm performance in feminine culture than a masculine culture (Samaha et al., 2014). However, the sharing economy includes a network of strangers and is considered as an out-group. This has a negative impact on the role of feminism in relationships between actor engagement and platform performance. In contrast, masculine cultures show more focus on their gaining from a relationship to balance it with their investment
(Pick and Eisend, 2016). Therefore, current and potential users in masculine countries consider actor engagement as an indicator of a high return relationship which increases their tendency to join and stay with a platform. Thus, we expect:

\[ H_6: \] Masculinity level positively moderates the relationships (b) service provider and (c) customer engagement with platform performance.

**Uncertainty avoidance:** It refers to the extent to which people in a society tolerate an unknown or uncertain situation (Hofstede et al., 2005). Customer engagement is a customer’s tendency to engage in behaviours such as recommending a product or service to family and friends (Hollebeek, 2019). For receivers of this engagement behaviour, the recommendation may not result in the desired outcome thus increasing uncertainty (Barari et al., 2021b). However, this negative impact of uncertainty avoidance on customer engagement formation is limited to strong ties networks (Lam et al., 2009). In contrast to customer-firm relationships, the sharing economy is considered to be a network of weak ties where customer engagement is with a stranger as service providers and towards others as an out-group (Kozlenkova et al., 2021). From this view, in countries with a higher level of uncertainty, relationship formation and engagement with service providers decrease customers future risk. Thus, we expect:

\[ H_{7a}: \] Uncertainty avoidance positively moderates the relationship between service provider engagement and customer engagement.

As mentioned previously, customers in a high uncertainty avoidance culture tend to view engagement behaviours as a risk and thus people in this type of culture are less likely to take part in these behaviours (Barari et al., 2021b). However, these findings are limited to the in-group context where people’s engagement behaviours are directed towards known people such as family and friends (Lam et al., 2009). Uncertainty is an integral part of the sharing economy in that both sides of the interaction are strangers as weak ties. In this context, current and potential users tend to engage with a platform to reduce future uncertainty and this increases the network of users of a platform. Thus, we expect:

\[ H_7: \] Uncertainty avoidance positively moderates the relationships (b) service provider and (c) customer engagement with platform performance.
5.3.3.4. Technological moderators

**Internet penetration**: It indicates the percentage of people in a country who have access to the internet from any location without considering the specific device or network used (ITU, 2019). A higher level of internet penetration indicates a higher level of infrastructure to support various industries and customers. Internet penetration is the main driver of the sharing economy business model to facilitate customer and service provider interaction through an internet-based intermediary such as a platform (Benoit et al., 2017). Customer engagement in the sharing economy platform is reflected in the service provider profile webpage where a customer could share their experience, recommendation and feedback about a service provider with other customers. In a given level of service provider engagement, access to the internet facilitates customer engagement with a service provider. Thus we expect:

$$H_{8a}$$: Internet penetration positively moderates the relationship between service provider engagement and customer engagement.

Actor engagement behaviour is reflected in the service provider webpage and is visible to current and potential customers and service providers (Breidbach and Brodie, 2017). As these behaviours are unbiased, it is considered a powerful source of information for decision making (Basili and Rossi, 2020). In countries with a higher level of Internet penetration, current and potential users have more opportunity to use other customer reviews as a manifestation of engagement behaviour in their decision to join and develop their relationship with a platform and this increases a platform’s user and its performance. Thus, we expect:

$$H_{8b}$$: Internet penetration positively moderates the relationships (b) service provider and (c) customer engagement with platform performance.

**Mobile penetration**: It indicates the percentage of people in a country who use mobile devices (ITU, 2019). Similar to internet penetration, mobile penetration is one of the main drivers of economic development, especially in the sharing economy business model (Kumar et al., 2018). As customers tend to always carry their mobile phones, this channel is a convenient way for a customer to access a platform service and develop a relationship. Similar to Internet penetration, customer engagement is reflected in the service provider profile webpage. A higher level of mobile penetration encourages more customers to go
to a service provider webpage profile and undertake engagement behaviours such as feedback to service providers or sharing their experience. Thus, we expect:

\(H_9\): Mobile penetration positively moderates the relationship between service provider engagement and customer engagement.

While some sharing economy platforms, such as Uber, mainly work through mobile technology, a user could potentially access other platforms, such as Airbnb, via a range of different devices. However, as people tend to carry their mobile phones most of the time, mobile technology is considered as the most convenient channel for customers and service providers to interact with a platform. Actor engagement behaviour is one of the important sources of information for current and potential users to join or enhance their relationship with a platform. A higher level of mobile penetration enables a current or potential user of the platform to use actor engagement in their decision to join or enhance their relationship with the platform. This increases the platform network and, we expect:

\(H_9\): Mobile penetration positively moderates the relationships (b) service provider and (c) customer engagement with platform performance.

5.3.3.5. Social moderators

**Environmentalism:** It indicates a country level pro-environmental belief in which environment protection has an equal or higher importance than economic development (World Bank, 2015). The sharing economy is considered an environment-friendly solution in which access, as opposed to ownership, has a positive environmental impact (Hamari et al., 2016b). For instance, using car-sharing instead of a personal car significantly reduces greenhouse gas emissions (Biswas et al., 2015). In a country with a higher level of environmentalism, more customers will develop relationships and engage with service providers who are engaged with their work in the sharing economy as an eco-friendly option (Kozlenkova et al., 2021). Therefore, environmentalism could boost the postive impact of service provider engagement on customer engagement. Thus, we expect:

\(H_{10a}\): Environmentalism positively moderates the relationship between relationship service provider engagement and customer engagement.
The sharing economy allows people to access a product and service rather than purchase to protect the environment (Hamari et al., 2016b). Thus environmental benefits are considered an important driver of a sharing economy platform usage (Benoit et al., 2017). Although actor engagement has a positive impact on platform performance, this relationship is stronger in countries with higher levels of environmentalism. In these countries, current and potential actors have more encouragement to use actor engagement behaviours as information to join or develop their relationship with a platform as an environment-friendly solution. Thus, we expect:

H_{10}: Environmentalism positively moderates the relationships (b) service provider and (c) customer engagement with platform performance.

5.3.3.6. Political moderators

**Freedom score:** It indicates the level of a citizen’s freedom across areas such as the right to vote, freedom of expression and equality (Freedom House, 2019) and it has a significant impact on firms operations and their consumer behaviour (Berry et al., 2010). Most sharing economy platforms are based on a reputation system and customer engagement behaviour is considered an important part of this system (Basili and Rossi, 2020). In countries with a higher level of democracy, people have the power to openly, and without concern, share their positive and negative opinions with other people (Freedom House, 2019). In this regard, in these countries, customers are more likely to express their opinion about a service experience as engagement behaviour with others as weak ties. Thus, we expect:

H_{11a}: Democracy score positively moderates the relationship between service provider engagement and customer engagement.

Research in international marketing indicates that the political situation is one of the important drivers of a firm’s success in a foreign country (Berry et al., 2010). As previously mentioned, the sharing economy business model is based on a reputation system in which actor engagement provides valid and unbiased information for current and potential platform users. In countries with a higher level of democracy score, people not only are able to express their opinion freely but also are able to use the opinions of others as input in their decision making. Thus with a given level of actor engagement, customers in a higher level of democracy, current and potential customers and service
providers are more likely to use engagement behaviour as input to their decision to join and develop a relationship with the platform. Thus, we expect:

\[ H_{11}: \text{Democracy score positively moderates the relationships (b) service provider and (c) customer engagement with platform performance.} \]

### 5.4. Method

#### 5.4.1. Data collection

This study utilizes real-world data from the Airbnb website including service providers (e.g., hosts on Airbnb) and their customers (e.g., guests on Airbnb). Monthly data of service providers and their customers were accessed via Insideairbnb.com for one year, from February 2018 to February 2019. This dataset includes each service provider and their customers' reviews and location. As Airbnb is a popular platform, service providers may have customers from different countries. To ensure both service providers and their customers are from the same country, we match service provider country with customer country. This allows us to better understand the role of the cultural context in actor engagement formation and platform performance.

As indicated in Table 1, data were extracted from significant cities across seven countries, including the USA, Australia, the United Kingdom, Canada, Singapore, China, and South Africa. Reviews that were not in English were removed to facilitate actor engagement measurement through supervised machine learning and increase its accuracy. The final dataset includes 145,434 service providers and 1,703,266 customer reviews, including structured and unstructured data.

<table>
<thead>
<tr>
<th>Country</th>
<th>City</th>
<th>No of service provider</th>
<th>No of customer</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>New York City, Los Angeles</td>
<td>32,589</td>
<td>448,000</td>
</tr>
<tr>
<td>Canada</td>
<td>Toronto, Montréal,</td>
<td>27,575</td>
<td>310,819</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>London, Manchester</td>
<td>31,435</td>
<td>406,000</td>
</tr>
<tr>
<td>Australia</td>
<td>Melbourne, Sydney</td>
<td>30,488</td>
<td>392,446</td>
</tr>
</tbody>
</table>

*Table 5-1 Research sample description*
<table>
<thead>
<tr>
<th>Country</th>
<th>City</th>
<th>Services</th>
<th>Visitors</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>Hong Kong</td>
<td>10,188</td>
<td>181,595</td>
</tr>
<tr>
<td>Singapore</td>
<td>Singapore</td>
<td>7,324</td>
<td>101,251</td>
</tr>
<tr>
<td>South Africa</td>
<td>Cape Town</td>
<td>20,063</td>
<td>247,122</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11 cities</strong></td>
<td><strong>159,662</strong></td>
<td><strong>2,087,233</strong></td>
</tr>
</tbody>
</table>

### 5.4.2. Variables measurement

A range of metrics and techniques are used to measure customer and service provider engagement and platform performance. Service provider engagement is measured via seven pre-defined metrics including cleanliness, accuracy, check-in, communication, location, value and amenities. These variables indicate a service provider’s effort to satisfy customer needs.

**Table 5-2 Research variables description**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimensions</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Service provider</strong></td>
<td>engagement</td>
<td>Cleanliness: Accommodation cleanliness and tidiness</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accuracy: Accuracy of service provider descriptions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check-in: Service provider effort in pleasant check-in</td>
</tr>
<tr>
<td></td>
<td>Communication</td>
<td>Communication: Service provider communication with a customer before and during a stay</td>
</tr>
<tr>
<td></td>
<td>Location</td>
<td>Location: Service provider description of a neighbourhood</td>
</tr>
<tr>
<td></td>
<td>Value for money</td>
<td>Value for money: Service provider service value for the price</td>
</tr>
<tr>
<td></td>
<td>Amenities</td>
<td>Amenities: Amenities provided by service provider</td>
</tr>
<tr>
<td></td>
<td>CLV</td>
<td>Customer tendency to enhance a relationship with a service provider and use it in the future</td>
</tr>
<tr>
<td><strong>Customer</strong></td>
<td>engagement</td>
<td>CIV: Sharing different aspects of service experience to enhance other customer knowledge</td>
</tr>
<tr>
<td></td>
<td>behaviour</td>
<td>CRV: Customers refer a service provider to other customers</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CKV: Customer feedback or suggestions to a service provider</td>
</tr>
</tbody>
</table>

Customer engagement is measured by counting the monthly average number of customer reviews for each service provider in their profile. This variable is used to test relationships between service provider engagement and customer engagement. As service providers join a platform at different times, the average number of reviews monthly is used instead of the total number of reviews. As customer reviews may be positive or
negative, the emotional tone of customer reviews is used to reflect engagement valence. Emotional tone is measured by LIWC (Pennebaker et al., 2015) and is a number from 0 to 100 in which for review numbers higher than 50 indicate positive emotional content while numbers below 50 indicate negative emotional content. For each service provider, the monthly average number of customer reviews is multiplied by the emotional tone to develop an overall measure of the level of customer engagement for a specific service provider.

Based on the conceptualization developed by Kumar et al. (2010), the impact of customer engagement on platform performance is measured via the four dimensions CLV (customer lifetime value), CIV (customer influence value), CRV (customer referral value) and CKV (customer knowledge value). Text classification and supervised machine learning are employed to assign specific customer engagement behaviours to each dimension (Vermeer et al., 2019). Using this method, the machine learning algorithm learns from pre-categorised examples as a training dataset to classify new cases (Li and Xie, 2019). In the first step, creating a training dataset, 2,000 customer comments are assigned to four behavioural engagement categories manually (Li and Xie, 2019). Following this Naive Bayes and Support Vector Machine algorithms and the Wang and Manning (2012) procedure is followed to create a baseline to categorise customer engagement behaviours. The machine learning library in Python is used for this classification. The probability of assigning each comment to each category is a value from 0 to 1 with a higher value indicating the higher probability of an engagement behaviour belonging to one or more engagement dimensions.

To estimate platform performance (i.e., Airbnb), firstly service provider sales are estimated and then this data is used to estimate platform earnings from each service provider in a month. While the price of the service is available in a service provider’s profile the total number of customers and duration of their stay is not available. For each service provider, the number of reviews is used as a proxy to estimate the number of bookings in a month (Biswas et al., 2020; Zervas et al., 2017; Zhang et al., 2018). Fradkin (2015) and Zervas et al (2017) estimate that 67% of Airbnb customers leave a review for a service provider while based on the work of several researchers (Guttentag et al., 2018; Guttentag and Smith, 2017; Lu, 2015), 4.5 nights is the average length of customer stay
in Airbnb accommodation. In the final step, Airbnb platform fees from each service provider are used to calculate platform earnings. For each accommodation booking, Airbnb receives a 3% fee from a service provider (Centre, 2021) (Airbnb Help Centre, 2021), thus this value multiplies with service provider sales to calculate Airbnb earnings from each service provider in a month (Centre, 2021).

For the national level moderators, GDP data is extracted from the World Bank data (Nations, 2018) and TTCI data is extracted from World Economic Forum. Cultural dimensions are measured by the Hofstede et al. (2005) cultural dimensions score. Internet penetration and Mobile penetration is measured via the International Telecommunication Union data (ITU, 2019). Environmentalism is measured via country renewable energy consumption rate and based on World Bank information (Bank, 2015). Finally, Freedom House data has been used to measure freedom score (House, 2021).

### 5.5. Data analysis and result

Two hierarchical linear models are specified to estimate the effect of service provider engagement on customer engagement and the role of national-level factors as moderators (model one) and the effect of actor engagement on platform performance and the role of moderators in these relationships (model two). In these two models, we put the relationships between dependent and independent variables into level one and national level moderators into level two. As multilevel models do not provide a diagnostic test for multicollinearity, a linear regression model is used to test multicollinearity (Kumar and Pansari, 2016). Results indicate that for all models the variance inflation factors (VIF) are below 5-3 as threshold thus multicollinearity is not a problem for our multilevel meta-regression.

*Table 5-3 Result of the testing research hypothesis*

| Level 1 variables | Model one | | | Model two | |
|-------------------|-----------|-----------|-----------|-----------|
|                   | SPE → CE  | SPE → PP  | CEB → PP  | |
|                   | Hypothesis | γ         | Hypothesis | γ         | Hypothesis | γ         |
| Cleanliness       | $H_{1a}$  | .040*     | $H_{1b}$  | .014      | |
|                   | $H_{2a}$  | .108**    | $H_{2b}$  | .063*     | |
| Accuracy          | $H_{1a}$  | .042*     | $H_{1b}$  | .039*     | |
|                   | $H_{2a}$  | .044*     | $H_{2b}$  | .037*     | |

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As it seen in the table 3, in model one, service provider engagement behaviours including cleanliness (γ = .040, p < .05), accuracy (γ = .108, p < .01), check-in (γ = .042, p < .05), communication (γ = .044, p < .05), location (γ = .061, p < .01), value for money (γ = .111, p < .01) and amenities (γ = .037, p < .05) have a positive and significant impact on customer engagement and thus confirm H_1. Among these predictors, value for money and accuracy are found to have the largest impact on customer engagement. Moderator analysis indicates that most of the national level factors moderate the relationship between service provider engagement and customer engagement. Economic and competitiveness factor results indicate both GDP (γ = .091, p < .01) and CCIT (γ = .051, p < .05) positively and significantly moderate the relationship between service provider and customer engagement thus supporting H_5 and H_7. For the cultural dimensions, individualism (γ = .065, p < .01) and uncertainty avoidance (γ = .022, p < .05) positively and power distance (γ = -.057, p < .05) negatively moderate the relationship between service provider

<table>
<thead>
<tr>
<th>Location</th>
<th>H_{1a}</th>
<th>.061**</th>
<th>H_{1b}</th>
<th>.043*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value for money</td>
<td>H_{1a}</td>
<td>.111**</td>
<td>H_{1b}</td>
<td>.067*</td>
</tr>
<tr>
<td>Amenities</td>
<td>H_{1a}</td>
<td>.037*</td>
<td>H_{1b}</td>
<td>.016</td>
</tr>
<tr>
<td>CLV</td>
<td>H_{1c}</td>
<td>.108**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CIV</td>
<td>H_{1c}</td>
<td>.088**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRV</td>
<td>H_{1c}</td>
<td>.058*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CKV</td>
<td>H_{1c}</td>
<td>.043*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Level 2 variables**

**Economic**

GDP per capita           | H_{2a} | .091** | H_{2b} | .061* | H_{2c} | .087* |

**Competitiveness**

TTCI                     | H_{3a} | .051*  | H_{3b} | .051* | H_{3c} | .071* |

**Culture**

Individualism            | H_{4a} | .065*  | H_{4b} | .025* | H_{4c} | .035* |

Power distance            | H_{5a} | -.057* | H_{5b} | -.007 | H_{5c} | -.027*|

Masculinity               | H_{6a} | .016   | H_{6b} | -.010 | H_{6c} | .011  |

Uncertainty avoidance     | H_{7a} | .022*  | H_{7b} | -.006 | H_{7c} | .013  |

**Technology**

Internet penetration      | H_{8a} | .062*  | H_{8b} | .048* | H_{8c} | .055* |

Mobile penetration        | H_{9a} | .051*  | H_{9b} | .051* | H_{9c} | .057* |

**Social**

Environmentalism          | H_{10a} | .043*  | H_{10b} | .009  | H_{10c} | .035* |

**Political**

Democracy score           | H_{11a} | .038*  | H_{11b} | .006  | H_{11c} | .027* |

** p < .01, * p < .05, SPE: service provider engagement, CE: customer engagement, PP: platform performance**
engagement and customer engagement, thus supporting H9, H11 and H15. However, this was no significant relationship was found for masculinity (γ = .016, p > .05) and therefore H13 is rejected. Both internet penetration (γ = .062, p < .05) and mobile penetration (γ = .051, p < .05) positively and significantly moderate the impact of service provider engagement on customer engagement thus supporting H17 and H19. Lastly, in model 1, for the social and political dimensions, the relationship between service provider and customer engagement are positively and significantly moderated by environmentalism (γ = .043, p < .05) and democracy score (γ = .038, p < .05) thus supporting H21 and H23.

In model two, most service provider engagement behaviours (e.g., accuracy (γ = .063, p < .01), check-in (γ = .026, p < .05), communication (γ = .037, p < .05), location (γ = .043, p < .01), and value for money (γ = .067, p < .01)) and all customer engagement behaviours (CLV (γ = .108, p < .05), CIV (γ = .088, p < .05), CRV (γ = .058, p < .05), CKV (γ = .043, p < .05)) have a positive and significant impact on platform performance. However, cleanliness (γ = .014, p > .05) and amenities (γ = .016, p > .05) do not significantly impact platform performance. These findings provide partial support for H2 and confirm H3.

National level factors are mostly found to moderate the relationship between actor engagement and platform performance. For Economic and competitive factors, the relationships between service provider engagement and platform performance is positively moderated by GSP (γ = .061, p < .05) and TTCI (γ = .051, p < .05) thus supporting H6a and H8a. Similarly, GDP (γ = .087, p < .05) and TCCI (γ = .071, p < .05) positively and significantly moderate the role of customer engagement on platform performance, thus H6b and H8b are supported. For the culture dimension, individualism positively and significantly moderates the relationship between service provider engagement and platform performance (γ = .025, p < .05) and customer engagement and platform performance (γ = .035, p < .05) and as such both H9a and H9b are supported. In contrast, power distance has a negative impact on the relationship between service provider engagement (γ = -.007, p > .05) and customer engagement (γ = -.027, p < .05) on platform performance but this is only significant for customer engagement. Thus H11a is rejected but H11b is confirmed. H14a, H14b, H16a and H16b are not supported as masculinity and uncertainty avoidance are not significant moderators for the relationships between
service provider engagement and platform performance (masculinity: \( \gamma = -0.010, p > 0.05 \), uncertainty avoidance \( \gamma = 0.011, p > 0.05 \)) and customer engagement and platform performance (masculinity: \( \gamma = -0.006, p > 0.05 \), uncertainty avoidance \( \gamma = 0.013, p > 0.05 \)). From a technology perspective, both internet and mobile penetration significantly and positively moderate the relationship between service provider engagement (Internet penetration \( \gamma = 0.048, p < 0.05 \), mobile penetration \( \gamma = 0.051, p < 0.05 \)) and customer engagement (Internet penetration \( \gamma = 0.055, p < 0.05 \), mobile penetration \( \gamma = 0.057, p < 0.05 \)) with platform performance and therefore \( H_{18a}, H_{18b}, H_{20a}, H_{20b} \) are confirmed. Social and political results shows that while this variable significantly moderates the relationship between customer engagement and platform performance (environmentalism \( \gamma = 0.035, p > 0.05 \), democracy score \( \gamma = 0.027, p < 0.05 \) this is not significant for service provider engagement and platform performance (environmentalism \( \gamma = 0.009, p < 0.05 \), democracy score \( \gamma = 0.006, p < 0.05 \). Thus, \( H_{22a} \) and \( H_{24b} \) are confirmed but \( H_{22a} \) and \( H_{24a} \) are rejected.

5.6. Discussion

5.6.1. Theoretical implications

This research employed the Breidbach and Brodie (2017) framework and S-D logic service ecosystem to study actor engagement formation and its role on platform performance in the sharing economy. While Breidbach and Brodie (2017) framework provides an overview of the actor engagement formation process in the sharing economy, based on the S-D logic service ecosystem, this research extends this framework to study the role of country-level moderators at a macro-level. Thus, this study develops a comprehensive understanding of actor engagement formation and its role in platform performance in the international context. Moreover, although there exist a number of conceptual models illustrating actor engagement in the sharing economy (Breidbach et al., 2014; Breidbach and Brodie, 2017; Storbacka et al., 2016), this research is among the first to provide empirical evidence for actor engagement in the sharing economy in an international context.

At the actor level, service provider engagement is found to have a significant impact on customer engagement. In a traditional business model, the employee is part of a firm’s value proposition and their role in customer engagement is mainly at the level of
face-to-face interaction with the customer (Kumar and Pansari, 2016). However, in the sharing economy, the service provider is largely responsible for not only developing the service but also delivering the service to customers. Thus, service provider engagement plays an important role in customer engagement formation. Among service provider engagement behavior dimensions, value for money and accuracy are found to be the two most influential factors in customer engagement formation. While previous research argues that service providers can focus on a different aspect of their product and service to create value for customers (Benoit et al., 2017), our findings indicate that a service provider’s effort to deliver economic value and assurance are the main drivers of customer engagement.

Country-level variables are found to significantly moderate actor engagement formation. For economic and competitiveness factors, results show that the relationship between service provider engagement and customer engagement is enhanced by an increase in GDP and TTCI. While the sharing economy is argued to be an affordable option for developing countries in which people often have lower disposable incomes (Eckhardt et al., 2019b; Kumar et al., 2018), our results tell a different story. Based on our findings the role of service provider engagement on customer engagement is stronger in developed countries with a higher level of GDP and TTCI. This is because the sharing economy, as a technology-based business model, facilitates interaction between strangers and that people from countries with a higher level of GDP and TTCI tend to have more support and capabilities to positively enhance their engagement. For cultural factors, our result indicates a different view of the role of culture in actor engagement formation. Relationship marketing and customer engagement literature argue that engagement formation is easier in countries with a lower level of individualism, uncertainty avoidance and a higher level of power distance (Barari et al., 2021b; Samaha et al., 2014). However, in this study the opposite is found to occur. The impact of service provider engagement on customer engagement is found to be stronger in countries with a higher level of individualism, uncertainty avoidance and lower level of power distance. We argue that these findings are due to the specific nature of sharing economy in which customers receive service from previously unknown people (service providers) (Kozlenkova et al., 2021) and the engagement behavior is reflected in the service provider webpage and directed towards out-groups (people with weak ties).
In addition, technology-related factors (Internet and mobile penetration) are found to positively impact the role of service provider engagement on customer engagement. These findings illustrate that technology advancement is not only a sharing economy driver but also facilitates actor engagement formation. While previous research did not consider the impact of social and political factors (environmentalism and freedom) on engagement study, our findings confirm the positive role of these factors in actor engagement formation. While environmentalism is studied as an important benefit of sharing economy (Benoit et al., 2017), it is found to positively facilitate the role of service provider engagement on customer engagement. Moreover, the Freedom index shows the role of the political situation in engagement formation in an open business model such as Airbnb. In countries with a higher freedom index, when the customer receives service from an engaged service provider, they are more likely to echo their opinion with others.

At the platform level, both customer engagement and service provider engagement are found to have a significant impact on platform performance. In contrast to a traditional business model, in the sharing economy customer mainly interact with a service provider as an independent actor. Although service provider engagement is defined at the job level rather than platform level, these findings confirm the importance of service provider engagement in platform performance. Moreover, for a service provider, value for money and accuracy have the highest impact on platform performance, indicating the important role of service providers effort to optimize their service price and accuracy of their communication with their customers in platform performance enhancement. For customer engagement, CLV and CIV have the highest impact on platform performance, and this illustrates how customers tend to use a service provider again and that their service recommendations to other customers are more influential than other engagement behaviours.

From an international view, national-level moderators explain the variabilities in the role of actor engagement on platform performance across different countries. For economic and competitiveness factors, a higher level of GDP and TTCI positively moderates the role of actor engagement on platform performance. While it seems the sharing economy is more suitable for developing countries, our result shows a different view. Our findings highlight the role of economic and competitiveness factors to
determine platform performance in the international context. For cultural factors, in contrast to previous research in relationship marketing and engagement (Barari et al., 2021b; Samaha et al., 2014), the role of actor engagement on platform performance is stronger in cultures that display high individualism and lower power distance. This is because, in contrast to a traditional business model, sharing economy include a network of strangers as weak ties. Technology moderators, internet and mobile penetration, significantly moderate relationships between actor engagement and platform performance. Although previous research considers technology as an important driver of sharing economy (Eckhardt et al., 2019b; Kumar et al., 2018), this study highlights the role of technology in enhancing the impact of actor engagement on platform performance.

For social and political factors, both environmentalism and democracy scores only moderate the relationship between customer engagement and platform performance. Overall, these findings introduce the role of new variables into engagement studies.

5.6.2. Managerial implications

From a practical perspective, the findings from this study can assist service providers to enhance their relationship with their customers and platform in order to increase their performance. Service providers should focus their efforts in seven areas including cleanliness, check-in, communication, location, amenities and, especially value for money and accuracy of description. In this regard, service providers should regularly review their prices to make sure customers are satisfied with the value they receive. In addition, a service provider should provide an honest description of the different aspects of their services. As customer engagement behaviour plays an important role to convince a current customer to reuse a service in future and to convince potential customers to choose this service, service providers should review not only their customer reviews but also reviews for other service providers in order to get a more holistic view of customer expectations.

This study has several important implications for sharing economy platform managers. Although platforms are mainly responsible for orchestrating the relationship between customers and service providers, their performance requires engaging users, especially service providers with the platform. Although service providers in sharing economy may not be professional staff, they have an essential role in customer
engagement formation and platform performance. Therefore, platform managers should ensure service providers are sufficiently incentivised to increase their engagement with work. Platform managers could develop a service provider analytics system allowing service providers to evaluate different aspects of their engagement behaviour and its impact on the customer. For instance, they could provide analytics to assist a service provider in determining their optimal service price based on their capabilities compared to other service providers as competitors.

Platform managers, especially international platforms, also should be aware of the moderating role of the country-level factors in their platform performance, particularly GDP and TTCI of the specific countries in which they operate. The findings from this study suggest that platforms should not expect the same level of actor engagement response from countries with different country-level factors. Considering these differences will provide a better picture of platform performance in the global context. Also, platforms should consider the role of cultural context when extending their business to different countries and cultures. For instance, actor engagement formation in cultures higher in individualism is easier and more profitable. Moreover, when developing marketing strategies for specific countries, managers also should consider technological factors such as Internet penetration and mobile access as this is found to have an important role in users engagement formation and impacts platform performance. Lastly, platform managers should adjust their marketing strategies in different countries with different social and political contexts. For instance, in countries with a higher level of environmentalism, the platform could focus on sustainability as a benefit of their business model to not only attract more users to the platform but also enhance their engagement and platform itself.

5.6.3. Limitations and future research

This study has some limitations that indicate avenues for future research. Firstly, the source of data is from a single platform, Airbnb. Although Airbnb as a home renting platform is considered an important representative of the sharing economy (Zervas et al., 2017), it would be insightful for future research to investigate actor engagement in other sharing platforms such as Uber in transportation or Lendingclub from the financial industry. In addition, there is a bidirectional relationship between customer and service
provider engagement. However, there is insufficient data to study customer engagement's role in service provider engagement. The model is limited to studying the role of service provider engagement on customer engagement and not vice versa. Thus, the two-way interaction between customer and service provider engagement considers as a fruitful research area for future research. Moreover, we measure actor engagement concept based on the available behavioural data on the Airbnb website. Although the previous research confirms the validity of unstructured data analysis in marketing studies, it forces research to enjoy available data to measure research variables. Besides that, we do not have access to some data such as platform sales in each country data therefore volume of comments has been used as a proxy to predict platform sales. To provide a more accurate measurement of platform performance, future research could incorporate other methods such as surveys to predict platform performance.

Reference


Centre, A.H., 2021. What are Airbnb service fees?


Lu, V., 2015. Airbnb’s place among traditional hotels still up for debate. The Toronto Star.


Chapter 6: General discussion and conclusion

6.1. Introduction

This concluding chapter presents the general discussion and conclusion to the main findings of the thesis. First, this chapter revisits the research aim and research questions. Results from the four papers, which consist of the two meta-analytics review papers and two empirical papers, are discussed. The implications for theory and practice are then presented and outlines this thesis's theoretical and managerial contributions. The chapter concludes with the limitations of the thesis and recommendations for future research.

6.2. Revisiting the research aim and research questions

The concept of actor engagement has recently gained attention in marketing and extends the dyadic view of engagement on the network micro-level to how engagement occurs on multiple levels among various actors (Chandler and Lusch, 2015). Engagement plays an important role in the B2C context and has an important role in the sharing economy (Alexander et al., 2018; Brodie et al., 2019). In this regard, the quality of customer and service-provider relationships with each other and with platforms determine the relationship quality and platform success (Kumar et al., 2018). However, the triadic nature of the sharing economy limits the application of customer engagement as a dyadic concept in this context (Brodie et al., 2019). Recently, the actor engagement concept has become an avenue to study engagement in a triadic context, such as found in the B2B and the sharing economy models, in which the relationships are dissimilar to traditional business models (Alexander et al., 2018; Benoit et al., 2017). Although actor engagement considers a solid framework to study engagement in the sharing economy, this area needs more research attention (Brodie et al., 2019).

The literature review indicates a scarcity of conceptual and empirical research on actor engagement in the sharing economy (Brodie et al., 2019; Lin et al., 2019). To broaden the actor engagement concept, the current study considers the neglected side of this concept: actor engagement in the sharing economy. Therefore, the overarching research objective is to study the role of actor engagement in platform performance in the
sharing economy. To achieve this objective, four interrelated research questions were presented in the introductory chapter of this thesis:

**RQ1:** What is the customer engagement formation process in the marketing discipline?

**RQ2:** What is the relationship between actors in the sharing economy business model?

**RQ3:** What is the relationship between actor engagement and service provider performance?

**RQ4:** What is the influence of the actor’s engagement on the platform's performance?

As depicted in figure 6-1, research question 1 was addressed through a meta-analysis of empirical in the customer engagement literature. Also, a meta-analytic review was used to cover research question 2 and systematically review the relationships between actors in the sharing economy ecosystem. These meta-analytic reviews are significant as they identified specific research gaps, which were then addressed by research questions 3 and 4 through an empirical investigation. Research questions 3 and 4 underpin service-dominant logic and service ecosystem theories. The thesis is framed within a positivist paradigm, and the three research questions were answered by adopting primarily quantitative research methods. The following section discusses how each research question was addressed.

<table>
<thead>
<tr>
<th>Research gaps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research gap 1</td>
</tr>
<tr>
<td>Integrate and comprehensive model of customer engagement’s antecedents and outcomes in the marketing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research question 1</td>
</tr>
<tr>
<td>What is the customer engagement formation process in the marketing discipline?</td>
</tr>
</tbody>
</table>

Findings
Research Question 1: What is the customer engagement formation process in the marketing discipline?

Research question 1 was addressed in paper one, which presented a meta-analysis integrating data of 196 effect sizes of 184 publications with a sample of 146,380. The findings reveal engagement through two pathways: (1) organic as relationship-oriented (perceived quality, value, and relationship quality) and (2) promoted as firm-initiated (functional and experiential initiatives). Moderator analysis indicates that the influence of the two pathways on engagement depends on engagement context (online versus offline), industry type (service versus manufacturing) and product type (hedonic versus utilitarian) and cultural context. Findings support attitudinal engagement–loyalty and behavioral engagement–firm performance linkage. Study results provide new insight into various engagement approaches and their relationship to each other. The authors offer recommendations to help marketers manage their customer engagement process more effectively.

Research Question 2: What is the relationship between actors in the sharing economy business model in marketing discipline?

Research question 2 was addressed in paper two. To provide a general picture of the relationship formation process between customer, service provider, and platform, this study integrates 214 effect sizes from 192 studies with 88,154 sample sizes. The findings indicate motivators and inhibitors for individuals to join a platform as a customer or service provider can be identified that through a two-level relationship quality pathway, influence their attitudinal and behavioral responses towards the platform. Moderator analysis reveals the impact of customer motivators and inhibitors on customer response to service providers and platforms depending on country-level moderators and cultural context. These results provide insight into relationship formation among actors in the sharing economy. The study also recommends platform managers manage their relationships more effectively with their users.
Research Question 3: What is the relationship between actor engagement and service provider performance?

Research question 3 was addressed in paper three. This research examined the actor engagement and their role in service provider performance. Research data include text and image from Airbnb in seven countries. Text and image mining and machine learning were used to measure research variables after which a PLS-SEM was employed to test the research model. Results indicate that for the multidimensional actor engagement concept, affective engagement has a greater impact versus cognitive engagement on behavioral engagement. Also, service providers’ behavioral engagement influences customer engagement behavior and subsequently, service provider performance.

Research Question 4: What is the influence of the actor’s engagement on the platform’s performance?

Research question 4 is addressed in paper four. Recent literature about customer engagement has proposed the “actor engagement” concept to enable the researcher to study engagement in the sharing economy in the context of a global business model. This research studies actor engagement formation among customers and service providers concerning sharing economy platform performance in various countries. Research data include structured and unstructured data from 159,662 service providers and 2,087,233 customers from Airbnb in seven countries. Text mining and machine learning techniques were used to measure research variables, and multilevel regression was employed to test the research model. Results indicate that among service provider engagement behaviors, efforts to maximize value for money and accuracy of service provider descriptions are the main predictor of customer engagement behavior and platform performance. For customer engagement behaviors, customer lifetime value and customer referral value (CLV and CRV, respectively) are among the behaviors that have the highest impact on platform performance. In addition, Airbnb, as a genuinely global platform, enabled the investigation of a range of country-level factors (such as economic, competitiveness, cultural, technological, social, and political) on actor engagement, thus providing a more comprehensive understanding of this concept from a global perspective. The theoretical and empirical implications of these findings are discussed.
6.3. Results of the meta-analytic review

6.3.1. Study 1: Customer engagement

The conceptual framework in the first paper is rooted in two main perspectives on customer engagement behavior: (1) organic pathway as relationship-oriented engagement and (2) promoted pathway as firm-initiated engagement. In the conceptual model (Figure 6-2), the organic pathway was developed based on the relationship marketing approach to engagement (Bowden, 2009a), while the promoted pathway reflects the firm-initiated approach to engagement (Harmeling et al., 2017; Palmatier et al., 2017).

![Figure 6-2: Path model results](image)

The organic pathway to engagement results from the relationship between customer and firm over time (Palmatier et al., 2017). In this pathway, satisfaction, trust, and commitment are the main factors by which new and current customers become engaged with the firm (Bowden, 2009a). The firm employs various techniques and methods to directly influence customer engagement behavior (Harmeling et al., 2017). In this regard, a firm’s efforts to influence engagement behavior can be divided into two main areas: (1) functional (a monetary incentive is used to compensate customers for marketing tasks) and (2) experiential initiatives (hedonic and social initiatives and are
aimed at creating an emotional bond with the customer) (Harmeling et al., 2017). Moderators in this model include engagement context (online versus offline), industry type (service versus manufacturing), product type (hedonistic versus utilitarian), and cultural context (power distance/individualism, masculinity, uncertainty avoidance). Paper one researched questions and its hypotheses, and the results of the findings are illustrated in Table 6-1.

Table 6-1: Paper one questions, hypothesis and findings

<table>
<thead>
<tr>
<th>Research question</th>
<th>Research Hypothesis</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1.1: Does organic pathway components influence on customer engagement?</td>
<td>H1: Perceived quality → Perceived value</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H2: Perceived quality → Satisfaction</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H3: Perceived value → Satisfaction</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H4a: Satisfaction → Trust</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H4b: Satisfaction → Commitment</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H5: Trust → Commitment</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H6a: Commitment → Attitudinal engagement</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H6b: Commitment → Behavioural engagement</td>
<td>Supported</td>
</tr>
<tr>
<td>Q1.2: Does promoted pathway components influence on customer engagement?</td>
<td>H7: Functional initiative → Behavioural engagement</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H8: Experiential initiative → Attitudinal engagement</td>
<td>Supported</td>
</tr>
<tr>
<td>Q1.3: Does promoted pathway influence organic pathways?</td>
<td>H9a: Functional initiative → Perceived value</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H9b: Experiential initiative → Perceived value</td>
<td>Supported</td>
</tr>
<tr>
<td>Q1.4: Does customer engagement influence firm performance?</td>
<td>H10: Attitudinal engagement → Behavioural engagement</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H11: Attitudinal engagement → Loyalty</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H12: Behavioural engagement → Performance</td>
<td>Supported</td>
</tr>
<tr>
<td>Q1.5: Do the moderators variables moderate the relationships in the model?</td>
<td>H13: The positive effects of (a) commitment and (b) experimental initiative on attitudinal engagement are stronger in an offline than online context.</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H14: The positive effects of (a) commitment and (b) functional initiative on behavioural engagement are stronger in an online than offline context.</td>
<td>Supported</td>
</tr>
<tr>
<td>Hypothesis</td>
<td>Description</td>
<td>Support</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>H15:</td>
<td>The positive effects of commitment on (a) attitudinal and (b) behavioural engagement are stronger in the service than in the manufacturing industries.</td>
<td>Supported</td>
</tr>
<tr>
<td>H16:</td>
<td>The positive effects of (a) experiential initiative on attitudinal engagement and (b) functional initiative on behavioural engagement are stronger in the manufacturing than in the service industries.</td>
<td>Rejected</td>
</tr>
<tr>
<td>H17:</td>
<td>The positive effects of commitment on (a) attitudinal and (b) behavioural engagement are stronger for hedonic than utilitarian products.</td>
<td>Supported</td>
</tr>
<tr>
<td>H18:</td>
<td>The positive effects of (a) experiential initiative on attitudinal engagement and (b) functional initiative on behavioural engagement are stronger for hedonic than utilitarian products.</td>
<td>Supported</td>
</tr>
<tr>
<td>H19:</td>
<td>The positive effects of commitment on (a) attitudinal and (b) behavioural engagement are stronger in cultures with higher power distance.</td>
<td>Partially supported</td>
</tr>
<tr>
<td>H20:</td>
<td>The positive effects of (a) experiential initiative on attitudinal engagement and (b) functional initiative on behavioural engagement are stronger in cultures with higher power distance.</td>
<td>Supported</td>
</tr>
<tr>
<td>H21:</td>
<td>The positive effects of commitment on (a) attitudinal and (b) behavioural engagement are stronger in cultures with higher individualism.</td>
<td>Supported</td>
</tr>
<tr>
<td>H22:</td>
<td>The positive effects of experiential and functional initiative on (a) attitudinal and (b) behavioural engagement respectively are stronger in cultures with higher individualism.</td>
<td>Supported</td>
</tr>
<tr>
<td>H23:</td>
<td>The positive effects of commitment on (a) attitudinal and (b) behavioural engagement are stronger in cultures with lower masculinity.</td>
<td>Supported</td>
</tr>
<tr>
<td>H24:</td>
<td>The positive effects of (a) experiential initiative on attitudinal engagement and (b) functional initiative on behavioural engagement are stronger in cultures with lower masculinity.</td>
<td>Supported</td>
</tr>
<tr>
<td>H25:</td>
<td>The positive effects of commitment on (a) attitudinal and (b) behavioural engagement are stronger in cultures with lower uncertainty avoidance.</td>
<td>Supported</td>
</tr>
<tr>
<td>H26:</td>
<td>The positive effects of (a) experiential initiative on attitudinal engagement and (b) functional initiative on behavioural engagement are stronger in cultures with lower uncertainty avoidance.</td>
<td>Supported</td>
</tr>
</tbody>
</table>
**Q1.1: Does the organic pathway components influence customer engagement?**

As shown in table 6-1, in the organic pathway, perceived quality directly impacted both perceived value and satisfaction. However, this effect is higher for the perceived quality–value linkage than the quality–satisfaction linkage. In addition, perceived value has a significant effect on customer satisfaction, and compared to perceived quality, it is a better predictor of customer satisfaction. For relationship quality components, satisfaction was shown to be a significant predictor of both trust and commitment, and this effect is higher for satisfaction–trust than for satisfaction–commitment. As with satisfaction, trust has a significant effect on commitment. However, trust is a much better predictor of commitment than satisfaction. Among the relationship quality components, only commitment directly and significantly affected both attitudinal and behavioral engagement (H6b; β = 0.30), and this effect was stronger for the commitment–attitudinal engagement linkage than for the commitment–behavioral engagement linkage.

**Q1.2: Do promoted pathway components influence customer engagement?**

From table 6-1, in the promoted pathway, functional and experimental initiatives were shown to have dual functions in our model. The functional initiative directly and significantly affected behavioral engagement, and the experiential initiative had a direct and significant impact on attitudinal engagement. However, the relationship between experimental initiative and attitudinal engagement appears to be much stronger than functional initiative and behavioral engagement.

**Q1.3: Does the promoted pathway influence organic pathways?**

For the indirect effect in the promoted pathway, the effect of both functional and experimental initiatives on perceived value was shown to be significant. In contrast to the direct effect, in the indirect effect, the experimental initiative–attitudinal engagement linkage was found to be stronger than the functional initiative–behavioral engagement linkage.
**Q1.4: Does customer engagement influence firm performance?**

As predicted in the research framework, table 4 indicates attitudinal engagement had a significantly effect on behavioral engagement, and this effect was higher than the impact of commitment on behavioral engagement. Moreover, attitudinal engagement was shown to be a significant driver of customer loyalty, and behavioral engagement significantly affects firm performance.

**Q1.5: Do the moderators’ variables moderate the relationships in the model?**

**Engagement context:** The relationships between commitment and attitudinal engagement and experiential and attitudinal engagement are significantly stronger offline than online. In contrast, the commitment and functional behavioral engagement relationships were significantly higher in online than offline contexts.

**Industry type:** In the organic pathway, the linkages between commitment and attitudinal engagement and commitment and behavioral engagement were higher for the service industry than for manufacturing although they were not significantly different. In the promoted pathway, experiential and attitudinal engagement and functional and behavioral engagement linkages were found to be significantly higher in manufacturing than in the service industry.

**Product type:** The relationships between commitment and attitudinal engagement and commitment and behavioral engagement in the organic pathway are positive and significant. The linkages between experiential and attitudinal engagement and functional and behavioral engagement were found to be higher among hedonic than utilitarian products in the promoted pathway. Patterns were consistent in the product type moderation effect in organic and promoted pathways, indicating that customer engagement was greater for hedonic rather than utilitarian products.

**Cultural context:** Power distance significantly and positively moderates the relationship between commitment and behavioral engagement in the organic pathway, but this relationship was not found to be significant for commitment and attitudinal engagement. Similarly, in the promoted pathway, the relationship between functional initiatives and
behavioral engagement was significantly moderated by power distance, but moderation was not significant for the experiential and attitudinal engagement linkage. In the organic pathway, individualism was shown to significantly and positively moderate the relationships between commitment and attitudinal engagement and commitment and behavioral engagement. Similarly, in the promoted pathway, individualism significantly moderated experimental and attitudinal engagement relationships and functional and behavioral engagement relationships in a positive manner. In the organic pathway, masculinity’s negative moderation of the relationships between commitment, attitudinal, and behavioral engagement increases. Similarly, individualism significantly and negatively was shown to moderate the relationship between experiential initiatives and attitudinal engagement and functional initiatives and behavioral engagement in the promoted pathway. Finally, in both the organic and promoted pathways, uncertainty avoidance significantly and negatively moderated relationships between commitment and attitudinal engagement, commitment and behavioral engagement, experimental initiatives and attitudinal engagement, and functional initiatives and behavioral engagement.

6.3.2. Study 2: Relationships among actors in the sharing economy

The conceptual framework (Figure 6-3) that guided this meta-analysis is rooted in the service ecosystem and provided a suitable approach for studying triadic interactions in the sharing economy (Lin et al., 2019). Motivators indicate customers and service providers expect benefits from a sharing economy (Benoit et al., 2017). Inhibitors indicate risks related to using the sharing economy, these risks were shown to negatively impact customer and service provider responses. As customers and service providers mainly interact with each other rather than the platform (Kumar et al., 2018), we consider customer relationship quality (satisfaction with and trust of a service provider) as a predictor of the quality of their relationship with the platform (satisfaction with and trust of the platform) (Mittendorf, 2017; Yang et al., 2018).
For outcome variables, the relationship quality in the sharing economy influences customer and service provider positive responses towards the platform (Yang et al., 2019). Finally, we included country-level moderators, such as Gross Domestic Product (GDP) per capita, HDI, and culture as the main moderators in our model. The paper presents two research questions and their hypotheses, and the result of findings are illustrated in table 6-2.

Table 6-2: Paper two questions, hypothesis, and findings

<table>
<thead>
<tr>
<th>Research question</th>
<th>Research Hypothesis</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2.1: Does customer motivators and inhibitors have significant</td>
<td>H1a: Utilitarian value → Customer satisfaction with service provider</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H1b: Hedonic value → Customer satisfaction with service provider</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H1c: Social value → Customer satisfaction with service provider</td>
<td>Supported</td>
</tr>
<tr>
<td>Question</td>
<td>Hypothesis</td>
<td>Support</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td>2.1: How does environmental value affect customer satisfaction and trust of service provider?</td>
<td>H1d: Environmental value → Customer satisfaction with service provider</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H2a: Utilitarian value → Customer trust of service provider</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H2b: Hedonic value → Customer trust of service provider</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H2c: Social value → Customer trust of service provider</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H2d: Environmental value → Customer trust of service provider</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H3: Perceived risk → Customer satisfaction with service provider</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H4: Perceived risk → Customer trust of service provider</td>
<td>Supported</td>
</tr>
</tbody>
</table>

| 2.2: How do customer relationships with service provider influence customer relationships with platform? | H5: Customer satisfaction with service provider → Customer trust of service provider | Supported |
| H6: Customer satisfaction with service provider → Customer satisfaction with platform | Supported |
| H7: Customer trust of service provider → Customer trust of platform | Supported |
| H8: Customer satisfaction with platform → Customer trust of platform | Supported |

| 2.3: How do service providers' motivators and inhibitors influence their relationship with platform? | H9: Customer satisfaction with platform → Customer loyalty of platform | Supported |
| H10: Customer trust of platform → Customer loyalty to platform | Supported |
| H11a: Economic value → Service provider satisfaction with sharing economy | Supported |
| H11b: Flexibility value → Service provider satisfaction with sharing economy | Supported |
| H11c: Social value → Service provider satisfaction with sharing economy | Supported |
| H12: Perceived risk → Service provider satisfaction with sharing economy | Supported |
| H13: Service provider satisfaction with sharing economy → Service provider retention in platform | Supported |

| 2.4: How does service provider satisfaction with sharing economy influence customer satisfaction and trust? | H14a: Service provider satisfaction with sharing economy → Customer satisfaction with service provider | Supported |
| H14b: Service provider satisfaction with sharing economy → Customer trust of platform | Supported |

| 2.5: Do the moderators variables moderate the relationships in the model? | H15: The effect of (a) customer motivators on their responses are stronger in countries with a lower level of GDP, whereas the effect of (b) customer inhibitors on their responses are higher in countries with higher levels of GDP. | Partially supported |
| H16: The effect of (a) customers motivators on their responses are higher in countries with higher levels of HDI, whereas the effect of (b) customers inhibitors are higher in countries with lower levels of HDI. | Partially supported |
Q1: Do customer motivators and inhibitors significantly influence customer satisfaction and trust of service providers?

The results for customer relationships indicated that customer motivators, namely utilitarian, hedonic, social, and environmental values, produced a significant impact on customer satisfaction. Moreover, as expected, perceived risk had negative and significant impact on customer satisfaction with the service provider. Moreover, customer motivators, utilitarian, hedonic, social, and environmental value, had significant and positive impact, while perceived risk had a significant and negative impact on customer trust of a service provider.

Q2.2.: Do customer relationships with service providers influence customer relationships with platform?

In addition, the result shows customer satisfaction with a service provider caused a significant influence on both customer satisfaction with a platform and customer trust of a service provider. For customer trust of a platform, both customer trust of a service provider and customer satisfaction were found to be significant predictors of this variable. Customer loyalty was significantly predicted by customer satisfaction with a platform and trust.

Q2.3: Do service providers motivators and inhibitors significantly influence their relationship with platform?

For the service provider, the data analyses indicated service provider motivators, such as economic, flexibility and social value, caused a significant and positive impact, while perceived risk had a significant and negative influence on service provider satisfaction with the sharing economy. In addition, service provider satisfaction with the sharing economy significantly influenced service provider retention of a platform.
**Q2.4: Does service provider satisfaction with sharing economy influence customer satisfaction and trust?**

Finally, results indicate that service provider satisfaction with the sharing economy is a significant predictor of customer satisfaction with a service provider and customer satisfaction with a platform.

**Q2.5: Do the moderators’ variables moderate the relationships in the model?**

**GDP**: The result indicates the impacts of motivators, namely utilitarian, hedonic, social, and environmental value, on customer responses are higher among customers from higher GDP levels, while the influence of perceived risk on customer response is higher in countries with lower GDP levels. However, the moderator role of GDP was not significant for different GDP levels.

**HDI**: As predicted, HDI positively and significantly moderated the relationship between motivators and customer responses. Compared to countries with lower levels of HDI, the influence of utilitarian, hedonic, social, and environmental value values on customer responses were higher among customers from countries with higher HDI levels. In contrast, the impact of inhibitors, such as perceived risk, on customer response was found to be stronger for countries with a lower level of HDI.

**Cultural value**: The result indicated that except for environmental value, power distance negatively and significantly moderated the relationships between utilitarian, hedonic, social and customer responses, while power distance produced a positive and significant impact on perceived risk and customer response. In addition, results indicate that the influence of utilitarian, hedonic, and environmental values were higher in countries with higher levels of individualism. The opposite patterns were found for social value and perceived risk. However, the moderator role of individualism was not significant. Moreover, utilitarian, environmental value, and perceived risk were shown to be stronger in countries with higher levels of masculinity, while masculinity negatively moderated the relationship between hedonic and social value. Also, except for environmental value, uncertainty avoidance negatively and significantly moderated the relationship between
motivators, including utilitarian, hedonic, and social impact on customer responses, and positively moderated the relationship between perceived risk and customer responses.

6.4. Results of the empirical research

Research questions 3 and 4 include the empirical investigation aimed at testing two conceptual models that were developed based on specific research gaps from the systematic quantitative literature review and the review of relevant literature. The following section discusses the results of the hypotheses from each conceptual model and compares the results with previous literature to develop conclusions for each hypothesis.

6.4.1. Study 3: Role of actor engagement on the service provider performance

This study examined actor engagement formation and its role in service provider performance in the sharing economy. In this model (Figure 6-4), customer and employee engagement concepts were borrowed to measure the multidimensional nature of actor engagement and the relationship between its components. Moreover, this study illustrates the relationships between dimensions of customer and service provider engagement and how relationships between them formed actor engagement and influenced service provider performance.

Figure 6-4: Study three conceptual model
The paper’s three research questions, their hypotheses, and the result of findings are illustrated in table 6-3.

Table 6-3: Paper three questions, hypothesis, and findings

<table>
<thead>
<tr>
<th>Research question</th>
<th>Research Hypothesis</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q3.1: Do service providers engagement disposition influence their behavioural engagement?</td>
<td>H1a: Service provider cognitive engagement (\rightarrow) Service provider behavioural engagement</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H1b: Service provider affective engagement (\rightarrow) Service provider behavioural engagement</td>
<td>Supported</td>
</tr>
<tr>
<td>Q3.2: Do customers engagement disposition influence their behavioural engagement?</td>
<td>H2a: Customer cognitive engagement (\rightarrow) Customer behavioural engagement</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H2b: Customer affective engagement (\rightarrow) Customer behavioural engagement</td>
<td>Supported</td>
</tr>
<tr>
<td>Q3.3: Do service providers behavioural engagement influence customer behavioural engagement?</td>
<td>H3a: Service provider behavioural engagement (\rightarrow) Customer cognitive engagement</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H3b: Service provider behavioural engagement (\rightarrow) Customer affective engagement</td>
<td>Supported</td>
</tr>
<tr>
<td>Q3.4: Do actor behavioural engagement influence service provider performance?</td>
<td>H4: Service provider behavioural engagement (\rightarrow) Service provider sales</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H5: Customer behavioural engagement (\rightarrow) Service provider sales</td>
<td>Supported</td>
</tr>
</tbody>
</table>

6.4.2. Study 4: Role of actor engagement on platform performance

Adopting the Breidbach and Brodie (2017) framework and S-D logic service ecosystem (Vargo and Akaka, 2012), the research framework (see figure 6-5) provided a multilevel (micro, meso, and macro) and multi-actor (such as customer, service provider, and platform) view to illustrate actor engagement formation, its impact on platform performance, and the role of context.
Based on the Breidbach and Brodie (2017) framework, actor engagement occurred at the micro-level in which the platform provided institutional support in this process. Through the resource integration process, actor engagement at the micro level influenced platform performance at the meso level. Moreover, based on the S-D logic service ecosystem, the role of context was considered at the macro level to study how national-level factors (such as economic, competitiveness, culture, technology, social, and political factors) moderated relationships in the model. The paper’s four research questions, their hypotheses, and the result of findings are illustrated in Table 6-4.

### Figure 6-5: Paper four conceptual model

![Conceptual Model](image)

**Country level moderators:**
- Economic (Gross national product)
- Competitiveness (Travel and tourism competitiveness index)
- Culture (Power distance, Individualism, Masculinity, Uncertainty avoidance)
- Technology (Internet penetration and Mobile penetration)
- Social (Environmentalism)
- Political (Freedom score)

### Table 6-4: Paper four questions, hypothesis, and findings

<table>
<thead>
<tr>
<th>Research question</th>
<th>Research Hypothesis</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4.1: Do actor engagement influence platform performance?</td>
<td>H1: Service provider engagement → Customer engagement</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H2: Service provider engagement → Platform performance</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H3: Customer engagement → Platform performance</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>H4: GDP positively moderates the relationship between service provider engagement and customer engagement.</td>
<td>Supported</td>
</tr>
</tbody>
</table>
Q4.2: Does the national level factors moderate the relationships in the model?

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
<th>Support Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>H5: GDP positively moderates the relationship between (a) service provider and (b) customer engagement with platform performance.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H6: TCCI positively moderates the relationship between service provider engagement and customer engagement.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H7: TTCI level positively moderates the relationships (a) service provider and (b) customer engagement with platform performance.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H8: Individualism positively moderates the relationship between service provider engagement and customer engagement.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H9: Individualism positively moderates the relationships between (a) service provider and (b) customer engagement with platform performance.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H10: Power distance negatively moderates the relationship between service provider engagement and customer engagement.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H11: Power distance negatively moderates the relationships (a) service provider and (b) customer engagement with platform performance.</td>
<td>Partially supported</td>
<td></td>
</tr>
<tr>
<td>H12: Masculinity level positively moderates the relationship between service provider engagement and customer engagement.</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>H13: Masculinity level positively moderates the relationships (a) service provider and (b) customer engagement with platform performance.</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>H14: Uncertainty avoidance positively moderates the relationship between service provider engagement and customer engagement.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H15: Uncertainty avoidance positively moderates the relationships (a) service provider and (b) customer engagement with platform performance.</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>H16: Internet penetration positively moderates the relationship between service provider engagement and customer engagement.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H17: Internet penetration positively moderates the relationships (a) service provider and (b) customer engagement with platform performance.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H18: Mobile penetration positively moderates the relationship between service provider engagement and customer engagement.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>H19: Mobile penetration positively moderates the relationships (a) service provider and (b) customer engagement with platform performance.</td>
<td>Supported</td>
<td></td>
</tr>
<tr>
<td>Hypothesis</td>
<td>Description</td>
<td>Support</td>
</tr>
<tr>
<td>------------</td>
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<td>---------</td>
</tr>
<tr>
<td>H20: H2</td>
<td>Environmentalism positively moderates the relationship between relationship service provider engagement and customer engagement.</td>
<td>Supported</td>
</tr>
<tr>
<td>H21: H2</td>
<td>Environmentalism positively moderates the relationships (a) service provider and (b) customer engagement with platform performance.</td>
<td>Partially supported</td>
</tr>
<tr>
<td>H22: H2</td>
<td>Democracy score positively moderates the relationship between service provider engagement and customer engagement.</td>
<td>Supported</td>
</tr>
<tr>
<td>H23: H2</td>
<td>Democracy score positively moderates the relationships (a) service provider and (b) customer engagement with platform performance.</td>
<td>Partially supported</td>
</tr>
</tbody>
</table>

**Q4.1: Do actor engagement influence platform performance?**

As seen in table 6-4, in model one, service provider engagement behaviors including cleanliness, accuracy, check-in, communication, location, value for money, and amenities were found to have a positive and significant impact on customer engagement. Among these predictors, value for money and accuracy demonstrated the largest impact on customer engagement. In model two, most service provider engagement behaviors (such as accuracy, check-in, communication, location, and value for money and all customer engagement behaviors [CLV, CIV, CRV, and CKV]) had a positive and significant impact on platform performance. However, cleanliness and amenities did not appear to significantly impact platform performance.

**Q4.2: Does the national level factors moderate the relationships in the model?**

Economic and competitiveness factor results indicate both GDP and CCIT positively and significantly moderated the relationship between service providers and customer engagement. For the cultural dimensions, individualism and uncertainty avoidance positively moderated and power distance negatively moderated the relationship between service provider engagement and customer engagement. However, no significant relationship was found with respect to masculinity. Both internet and mobile penetration were shown to moderate the impact of service provider engagement on customer engagement in a positive and significant manner. Last, for the social and political dimensions, the relationship between service provider and customer engagement
were found to be positively and significantly moderated by environmentalism and democracy score.

National-level factors were mostly found to moderate the relationship between actor engagement and platform performance. For economic and competitive factors, the relationships between service provider engagement and platform performance were positively moderated by GSP and TTCI. Similarly, GDP and TCCI were demonstrated to positively and significantly moderate the role of customer engagement on platform performance. For the culture dimension, individualism positively and significantly moderated the relationship between service provider engagement and platform performance and customer engagement and platform performance. In contrast, power distance showed a negative impact on the relationship between service provider engagement and customer engagement on platform performance, but this impact was only significant for customer engagement. Also, masculinity and uncertainty avoidance were not significant moderators for the relationships between service provider engagement and platform performance (masculinity, uncertainty avoidance) and customer engagement and platform performance (masculinity and uncertainty avoidance). From a technology perspective, both internet and mobile penetration significantly and positively moderated the relationship between service provider engagement (Internet penetration and mobile penetration) and customer engagement (Internet penetration and mobile penetration) with platform performance. Social and political results indicate that while this variable significantly moderated the relationship between customer engagement and platform performance (environmentalism, democracy score), this moderation was not significantly different for service provider engagement and platform performance.

6.5. Synthesis of thesis findings

The thesis is mainly focused on the role of actor engagement in value creation in the sharing economy context. The concept of value creation has been deeply studied from different lenses in marketing. In this regard, service-dominant logic (SD-logic) is considered a prominent theory that provides a fresh and solid view of value creation in marketing.
As actor engagement is extended from the customer engagement concept, the thesis initially focused on customer engagement to better understand engagement in marketing. As there are different and even contradictory views on this concept, meta-analysis helps this research synthesise previous research in this area. The customer engagement review provides a procedural view of engagement formation and how the attitude toward engagement as disposition is behavioural engagement's primary driver. Besides that, the result indicates that behavioural engagement creates value for the focal firm in loyalty and firm performance. Also, moderators, especially at the country level, moderate the relationship between engagement and its outcome. The finding of the first meta-analysis has been used as the backbone of the first and second empirical studies. Both empirical studies aim to study the role of engagement on value creation for service providers in the first study and platform in the second study. In addition, based on the first meta-analysis findings, cognitive and affective engagement are considered drivers of behavioural engagement in the first study. Also, the role of the national-level moderator was defined for the second empirical study to show its difference from the B2C business model.

Like the engagement concept, the sharing economy context has gotten much attention from marketing scholars. Research in this area indicates a significant difference between the sharing economy and a traditional business model in the number and nature of actors and their relationships. However, this is not in agreement with previous research in this regard and similar to engagement literature, it requires further attention. Meta-analysis of sharing economy literature provides a better picture of relationship formation among actors in this context. The findings indicate a triadic relationship between customer, service provider and platform in this business model. More importantly, it shows two-level relationship formation between actors in the sharing economy. This finding helps us develop two empirical research, which first empirical study mainly focused on engagement formation between customer and service provider and how it creates value for a service provider. The second empirical study has focused on actor engagement at the platform level and how it creates value for a platform.

The first empirical study has been developed based on our customer engagement and sharing economy meta-analyses. The first empirical study focuses on actor
engagement formation and how it could create value for a service provider. Unstructured data from Airbnb in text and images have been used to measure all research variables. This research provides further insight into the actor engagement and its formation and how it creates value. The research findings indicate that actor disposition constitutes behavioural engagement, including actor cognitive and affective engagement. This is compatible with the first meta-analysis finding in which attitudinal engagement (including cognitive and behavioural) is a driver of behavioural engagement. In addition, actor affective engagement has a higher impact on behavioural engagement than cognitive engagement in this process, which implies the emotional laden of engagement. Also, customer engagement and service provider engagement influence service provider performance, where customer engagement has a higher influence than service provider engagement. This finding confirms the first and second meta-analysis studies where engagement could create value for the firm (in the first meta-analysis) and interaction between actors, i.e., customer and service provider, influence value for a service provider (in the second meta-analysis).

The second empirical study investigates the role of actor engagement in platform performance and how contextual variables moderate relationships in this model. This model is mainly based on second meta-analysis findings where interaction between actors at the micro-level influences platform performance at the meso level and moderators at the macro level moderate these relationships. Similar to the first empirical study, the data source is from Airbnb in 7 countries. Also, texting techniques, mainly machine learning, have been used to measure research variables. The findings indicate that actor engagement at the micro level significantly impacts platform performance at the meso level, which confirms the findings in the sharing economy meta-analysis. However, the moderator variables' findings, especially in cultural values, differ from the customer engagement meta-analysis findings. These conflicting findings imply the difference between sharing economy and with B2C business model. Sharing economy platforms aim to facilitate exchange between a network of strangers, thus a lower level of trust between both parts of the exchange. Therefore, in contrast to B2C, engagement formation and its role in platform performance is higher in developed countries than in developing countries.
6.6. Implications for theory and practice

6.6.1. Theoretical contributions

Recently literature on customer engagement has proposed the ‘actor engagement’ concept to enable the researcher to study engagement in an innovative business model such as the sharing economy. Therefore, this research aims to study the relationship between actor engagement and platform performance in the sharing economy platform. Therefore, this research conducts two meta-analyses to provide further clarification around the customer engagement concept in marketing and actor engagement in the sharing economy. Based on findings from meta-analyses, two conceptual models have been developed and tested to fill the research gaps in actor engagement and their role in performance in the sharing economy.

First meta-analysis findings indicate customer engagement progressed through two pathways: (1) organic and (2) promoted. In the organic pathway, engagement formation evolved and resulted from a high-quality relationship (satisfaction, trust, and commitment) between customer and firm. In the promoted engagement pathway, functional and experiential initiatives directly and indirectly influenced customer engagement through perceived value. The current research indicates that the effect of functional and experiential initiatives is most likely not limited to direct effects and that they are connected to the organic pathway through perceived value. Moreover, the direct effect of experiential initiatives was found to be much stronger than functional initiatives.

In contrast to the direct effects, the indirect effect of functional initiative was more effective than experiential initiatives. Moreover, engagement formation requires more focus on attitudinal than behavioral components. Also, our results confirm that the relationships between attitudinal and behavioral engagement and its outcomes (such as customer loyalty and firm performance) are limited to attitudinal engagement–loyalty and behavioral engagement–firm performance. Furthermore, the moderator analysis indicates that the moderators, such as engagement context (online versus face to face), industry type (service versus manufacturing), product type (hedonic versus utilitarian), and cultural context significantly moderated the relationship between the direct antecedent of engagement and customer engagement along both the organic and promoted pathways.
Based on the meta-analysis of relationships between actors in the sharing economy, our model confirmed that customer and service provider relationships can influence their relationships with a platform. Moreover, this model highlights the difference between the relationship formation process in the sharing economy with customer-firm relationships in traditional business models (Aurier and N’Goala, 2010; Palmatier et al., 2006). The critical difference shows the duality of relationship quality between actors in the sharing economy (Lin et al., 2019; Mao et al., 2020; Mittendorf et al., 2019; Yang et al., 2019) in which the customer–service provider relationship quality spills over to the platform and causes high-quality relationships between customers, service providers, and a platform (Mittendorf et al., 2019; Ta et al., 2018). Moreover, for both customers and service providers, the findings confirm the role of the motivators and inhibitors as relationship formation initiators in the sharing economy (Benoit et al., 2017; Hamari et al., 2016b; Möhlmann, 2015). In the two-level relationship quality process, customer satisfaction and trust with different service providers over time spills over to the platform and enhances customer satisfaction with and trust of a platform (Yang et al., 2019). Moreover, results highlight the importance of service provider satisfaction with the sharing economy as a strong predictor of customer satisfaction with service providers and platforms. More importantly, our results indicate that service provider satisfaction, rather than the platform, produced a stronger impact on customer satisfaction. The result of moderator analysis shows in contrast to GDP, HDI significantly moderated relationships in the sharing economy. Our findings also show that power distance and uncertainty avoidance significantly moderated relationships in our conceptual model among cultural components. These findings confirmed the role of cultural differences in the customer response in the sharing economy (Albinsson et al., 2019).

The findings of the first empirical research confirmed actor engagement as a multidimensional concept including cognitive, affective and behavioral components (Brodie et al., 2019; Brodie et al., 2011). While the relationship between engagement components did not receive sufficient attention in the engagement study, our findings indicate that actors’ cognitive and affective engagement disposition could predict actors’ behavioral engagement. In addition, the affective component of actor engagement was shown to play a greater role in behavioral rather than cognitive engagement. As a service provider in the sharing economy is independent in terms of economics, our results
demonstrate that service providers and customer behavioral engagement could influence service provider sales. More importantly, while both components of actor engagement demonstrated a role in the platform sales, customer behavioral engagement has a greater role than service provider behavioral engagement. This finding highlights the critical role of customer engagement formation in service provider sales. Also, our results indicate that service providers’ age and gender variables significantly moderated actor engagement formation. The findings indicate age led to positively moderated relationships between service provider behavioral engagement and customer cognitive and affective engagement. Also, the relationship between service provider behavioral engagement and customer cognitive and affective engagement was higher among females than males. Our results show different moderating roles of cultural components in engagement from a cultural view. These differences indicate that the sharing economy consists of a network of strangers with weak ties unlike relationships in the B2C business model (Kozlenkova et al., 2021). Therefore, actor engagement formation and its role in service provider performance were shown to be stronger in countries with higher levels of individualism, masculinity, and a lower level of power distance.

The second empirical study extended Breidbach and Brodie (2017) framework to study the role of country-level moderators in the engagement formation in the sharing economy. Thus, this study developed a comprehensive understanding of actor engagement formation and its role in platform performance in the international context. Moreover, this research is the first to provide empirical evidence for actor engagement in the sharing economy in an international context. At the actor level, service provider engagement was found to significantly impact customer engagement. In a traditional business model, the employee is part of a firm’s value proposition, and their role in customer engagement occurs mainly at the level of face-to-face interaction with the customer (Kumar and Pansari, 2016). However, in the sharing economy, the service provider is mainly responsible for developing and delivering the service to customers. Thus, service provider engagement was shown to play an essential role in customer engagement formation. At the platform level, both customer engagement and service provider engagement significantly impacted platform performance.
In contrast to a traditional business model, customers mainly interact with a service provider as an independent actor in the sharing economy. Although service provider engagement is defined at the job level rather than platform level, these findings confirm the importance of service provider engagement in platform performance. In addition, country-level variables were found to significantly moderate relationships in our model. From an international view, national-level moderators could explain the variabilities in actor engagement on platform performance across different countries. For economical and competitiveness factors, a higher level of GDP and TTCI was shown to positively moderate the role of actor engagement on platform performance.

In contrast to previous research in relationship marketing and engagement (Barari et al., 2021b; Samaha et al., 2014), the role of actor engagement on platform performance was shown to be stronger in cultures that display high individualism and lower power distance. Technology moderators, internet, and mobile penetration led to significantly moderated relationships between actor engagement and platform performance. Both environmentalism and democracy scores were found to moderate the relationship between customer engagement and platform performance for social and political factors.

Finally, the first and second empirical studies contribute to the developing body of literature in which the sharing economy is investigated via unstructured data analysis. Platforms, such as Airbnb, potentially provide researchers with a plethora of unstructured data from service providers and customers (Wu et al., 2017). Although text and image analysis is not new to marketing (Balducci and Marinova, 2018; Berger et al., 2020), this research extended this method to study engagement in the sharing economy thus providing empirical support for the actor engagement conceptual model. As most marketing data are unstructured and the volume of unstructured data is growing faster than structured data (Balducci and Marinova, 2018), this research demonstrates how a researcher can use unstructured data to measure various marketing concepts to test marketing models. This finding is particularly relevant in a context, such as the sharing economy, which features nested relationships between actors.
6.6.2. Managerial contributions

This research provides critical insights for marketing managers to consider in developing and implementing their engagement strategy. Based on the findings related to the first meta-analysis that were related to the practitioner, two main strategies to influence customer engagement: (1) organic and (2) promoted were revealed. The organic strategy considers a firm’s long-term relationship with the customer to form attitudinal and behavior engagement. In this strategy, marketing managers should be aware of offering quality in customer perceived value and the effect of these two aspects of their value proposition on customer satisfaction. Marketing managers could employ technological advancement, especially in a social media brand community, to enhance customer perceived quality and value of the firm’s value proposition. For instance, the online brand community provides various and unique benefits that improve customers’ experience of the firm’s product and services (Gummerus et al., 2012a; Wirtz et al., 2013). However, perceived quality and value are insufficient for engagement formation, which requires enhancing relationship quality. In the promoted strategy, the marketing manager can influence customer engagement directly by employing functional and experiential initiatives. While experiential initiatives are fairly effective in creating attitudinal engagement, functional initiatives have a feeble influence on the behavioral engagement. Suppose marketing managers evaluate their promoted strategy based on short-term influence. In that case, they should invest more in experiential initiatives in the form of a game or event, especially in social media, to indirectly influence customer engagement behavior through attitudinal engagement. Moreover, both functional and experiential initiatives through perceived value can influence customer engagement in organic pathways. Therefore, marketing managers could combine their organic and promoted engagement strategies to target their current customers with a well-established relationship.

The second meta-analysis provides insights for platform marketing managers to better understand and manage their relationships with customers and service providers. First, our results tell marketing managers to consider the complexity of relationship formation with customers in the sharing economy. Using the sharing economy brings benefits and risks for customers, and they need to make sure their platform provides enough benefits for customers to compensate for the risk. Also, they need to develop a
system to maximize customers’ expected value, especially hedonic and utilitarian, to facilitate the customer–service provider relationship quality. Moreover, marketing managers need to know that risk plays an essential and dysfunctional role in customer satisfaction and trust of a service provider as a stranger. Thus, as with motivators, managers require a mechanism to help customers minimize their risk and enhance their relationship with service providers. In addition, based on the two-level relationship quality, a platform needs to make sure customers form a high-quality relationship with service providers. In addition, service providers play an essential role in a sharing economy, especially in the industries in which several platforms compete. Our findings advise platforms to focus mainly on economic value followed by flexibility and social values to satisfy service providers’ expected values of working on a platform. For instance, in the ridesharing industry, several platforms, such as Uber, Didi, and Ola compete to attract more drivers to their ecosystem to increase their network and profitability. Thus, a platform in this industry requires developing a payment system to optimize service provider income by considering platform profits and customer service prices. Moreover, the marketing manager must pay close attention to service providers’ satisfaction because this parameter has a dual impact on the sharing economy ecosystem. More importantly, service provider satisfaction directly impacts customer relationship quality with both service providers and platforms.

In addition, empirical research results indicate service providers must be aware of the importance of their profile page because a service provider’s profile not only reflects different aspects of the service provider’s cognitive, affective, and behavioral investment in their job but also has a direct impact on their customer engagement and their abilities to attract new customers. As the service provider’s writing style reflects their cognitive and affective engagement with their customers, it may be beneficial to put more mental and emotional effort into writing various sections of their profile, such as self, product, and service descriptions. Additionally, the first and second empirical research sections have several important implications for sharing economy platforms. Although platforms are mainly responsible for orchestrating the relationship between customers and service providers, their profit and long-term sustainability require them to focus on customer and service provider engagement. Platforms in the sharing economy are an open business model in which the platform does not create any limitation for users to enter or exit the
platform. While an increase in engagement can create a “ripple effect” to attract more users to a platform, disengagement has the opposite effect. Moreover, service providers in the sharing economy are often not professional staff, but they play an essential role in engagement formation and platform sales. Thus, platforms should be aware of service providers’ roles and undertake activities to encourage them to increase their engagement with their job and customers.

Platform managers, especially international platforms, also should be aware of the moderating role of the country-level factors in their platform performance, particularly GDP and TTCI of the specific countries in which they operate. The findings from this study suggest that platforms should not expect the same level of actor engagement response from countries with different country-level factors. Considering these differences will provide a better picture of platform performance in the global context. Also, platforms should consider cultural context when extending their business to different countries and cultures. For instance, actor engagement in cultures higher in individualism is easier and more profitable.

Moreover, when developing marketing strategies for specific countries, managers also should consider technological factors, such as internet penetration and mobile access in engagement formation. This consideration has been found to have an essential role in user engagement formation and impact platform performance. As technology considers as a basis of sharing economy, an international platform such as Uber requires considering this influential factor in entering an emerging market with a lower level of technology infrastructure. Last, platform managers should adjust their marketing strategies in countries with different social and political contexts. For instance, in countries with a higher level of environmentalism, the platform could focus on sustainability as a benefit of their business model to attract more users and enhance their engagement and platform itself.

6.6.3. Limitations and recommendations for future research

This study has some limitations that indicate avenues for future research. Although meta-analysis provides a comprehensive and generalizable view of previous
research in an area, it has some limitations. As our conceptual model in first and second study were developed on the basis of previous empirical research, the model is limited to variables studied in previous research. In the first meta-analysis, previous research has mostly studied customer engagement as a positive concept while engagement behaviour includes both positive and negative dimension. Also, as previous research has focused mainly on firm-related antecedents and outcomes of engagement, our model suffers from customer-related factors. In the second meta-analysis, as there was limited available empirical research on the service provider relationship with customers and platforms, we could not test two-level relationship quality for a service provider. Thus, future research should empirically cover this important research area in the sharing economy. Moreover, research about platform marketing activities and their impacts on customers and service providers are rare. Although the platforms depend on service provider resources, they are responsible for a different aspect of the marketing mix. In this regard, the impact of platform marketing activities, such as advertising or pricing, on customer and service provider relationships require further investigation.

For the empirical research, the source of data is from a single platform, Airbnb. Although Airbnb as a home renting platform is considered an important representative of the sharing economy (Zervas et al. 2017), it would be insightful for future research to investigate actor engagement in other sharing platforms such as Uber in transportation or Lendingclub from the financial industry. Moreover, we measure actor engagement concept based on the available behavioural data on the Airbnb website. Although the previous research confirms the validity of unstructured data analysis in marketing studies, it forces research to enjoy available data to measure research variables. Besides that, we do not have access to some data such as platform sales in each country data therefore volume of comments has been used as a proxy to predict platform sales. To provide a more accurate measurement of platform performance, future research could incorporate other methods such as surveys to predict platform performance.

6.7. Summary

This chapter discusses the research findings, specifically from the four studies, which address the central thesis question: the role of actor engagement on sharing
economy platform performance. The first and second studies consisted of meta-analytic review, whilst the third and fourth studies consisted of an empirical enquiry using big data analytics. The empirical studies addressed gaps identified in the meta-analytic reviews by adopting the service ecosystem theory. Several theoretical and practical contributions were discussed. As with any study, limitations in the current study were found and could provide opportunities for future research and are recommended to address these limitations.

Reference


