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Trust in the Ride Hailing Service of the Sharing Economy:
The Roles of Legitimacy and Process Transparency

Mohammad S. Najjar, The University of Memphis, USA
https://orcid.org/0000-0002-2459-0784

Laila Dahabiyeh, The University of Jordan, Amman, Jordan

ABSTRACT

This paper examines the factors that influence customers' trust in the ride hailing service (RHS). RHS faces legal, social, and safety concerns making trust critical in using RHS. Drawing on legitimacy and uncertainty reduction theories, the authors propose a theoretical framework of the antecedents of trust. This paper develops a survey instrument and collects data to empirically test the research model. The results reveal an association between the legitimacy of the service and customers' trust in the service. Nonetheless, the different types of legitimacy vary in their effect on trust levels. This research further shows that process transparency positively affects trust in RHS. The authors discuss the findings and offer valuable theoretical and practical implications to the growing literature on trust in the sharing economy.

KEYWORDS

Legitimacy, Ride Hailing Service, Service Process Transparency, Sharing Economy, Trust

INTRODUCTION

Recently, people are increasingly relying on the democratized marketplace of the sharing economy to collaboratively make use of underutilized inventory (Zervas, Proserpio, & Byers, 2017). The sharing economy does not simply generate incremental economic activities, it is changing the whole consumption pattern (Zervas et al., 2017), shaking the foundation of traditional marketing channels (Ferrell, Ferrell, & Huggins, 2017), and giving rise to collaborative consumption. Powered by digital technologies, collaborative consumption resembles a novel approach for offering innovative services that challenge conventional means (Möhlmann, 2015).

Ride hailing service (RHS) is a typical example of how collaborative consumption, through a digitally enabled innovation, is transforming the transportation industry. RHS came as a result of multiple actors' efforts to develop a business model that addresses deficiencies in the public transportation infrastructure (Cohen & Kietzmann, 2014). In RHS, platform providers (e.g., Uber and Lyft) use digitally enabled innovations (e.g., mobile or web applications) to match peer service providers (drivers) with potential customers (Yang, Song, Chen, & Xia, 2017).

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RHS is diffusing rapidly with an expected revenue annual growth rate of 12.9 percent resulting in approximately 692.9m users worldwide by 2023 (Statista, 2019). This rapid diffusion is supported by the multiplicity of advantages RHS offers such as fuel saving, reduction in traffic congestion, improved customer service due to timely response time, and cost savings (Jacobson & King, 2009; Kathan, Matzler, & Veider, 2016). Nonetheless, RHS is facing significant challenges. Taxi drivers around the world are protesting against RHS and lobbying for a ban on the service (BBC, 2018; Rhodes, 2017; Verbergt & Schechner, 2015). Governments are also skeptical about RHS especially since the peer service providers (i.e., private citizens) in several countries do not need to take licensing exams or carry necessary insurance (Malhotra & Van Alstyne, 2014). Moreover, the fact that peer service providers utilize their own private vehicles, and the lack of responsibility by RHS platform providers and their tendency to shift the liability of incidents to peer service providers or customers are negatively affecting trust in the service (Amey, Attanucci, & Mishalani, 2011; Gonzalez-Padron, 2017). Safety is also a main concern in RHS. A CNN investigation revealed that at least 103 Uber drivers in the US have been accused of sexually assaulting or abusing their passengers in the past four years (O'Brien, Black, Devine, & Griffin, 2018).

Trust is a key principle in the sharing economy (Botsman & Rogers, 2010; Huurne, Ronteltap, Corten, & Buskens, 2017) and identifying trust-building factors is crucial for the success of any service of the sharing economy. According to McKnight and Chervany (2001) typology of trust types, trusting a service in the sharing economy can be classified as institution-based trust, which is discriminant from other types of trust in exchange relationships such as interpersonal or dispositional trust. Institution-based trust is derived from sociology and states that people can rely on other entities because of structures, situations, or roles that provide assurances that things will go well (Baier, 1986). Institution-based trust is the trust in the situation or structures and is situation-specific and cross-personal at the same time (McKnight & Chervany, 2001). According to this view, service trust becomes a matter of structural assurance and situational normality of the service, which means one believes that favorable conditions are in place that are conducive to situational success of the service (Lewis & Weigert, 1985; Shapiro, 1987).

Trust in a service of the sharing economy is also different than other forms of trust in exchange relationships such as retailing on eBay and Amazon in many ways. First, transactions in the sharing economy go beyond a dyadic relationship to be of triad nature (the customer, the peer service provider, and the platform provider). Trust, hence, becomes more complicated and manifold. Second, the value exchange in the sharing economy occurs through short-term rental of services rather than long-term transfer of goods ownership (Möhlmann, 2016). Trust involves "entrusting a product with expectations of a reciprocal return" (Hawlitschek, Teubner, Adam, et al., 2016, p. 2). Third, the sharing economy market is less regulated than other markets such as e-commerce market and the taxi service market (Witt, Suzor, & Wikström, 2015). The lack of regulations in RHS indicates that consumers are less protected in the sharing economy. Moreover, RHS is relatively new and can suffer from liability of newness characterized by low levels of legitimacy and trust (Stinchcombe, 1965). As Zucker (1995, p. 13) notes, services need to be "legitimized before trust can be of more than local applicability".

This research seeks to identify antecedents of trust in RHS. We draw on legitimacy theory (Suchman, 1995) and uncertainty reduction theory (Berger, 1979; Berger & Bradac, 1982; Berger & Calabrese, 1975) to develop our research model and collect data from Jordan to test our hypothesized relationships. Legitimacy theory has been widely used for explaining the diffusion and adoption of digital innovations such as open source software (Barrett, Heracleous, & Walsham, 2013) and professional service automation (Wang & Swanson, 2007); nonetheless, it has not been adopted in the sharing economy literature. Lack of trust in the sharing economy results from different sources (Tussyadiah, 2015). Legitimacy theory offers powerful dimensions (cognitive, pragmatic, normative, and regulative) that can enrich our understanding of how trusting the sharing economy is affected by the different types of legitimacy. In addition, we have chosen uncertainty reduction theory because trust is most salient in situations of risk and uncertainty and these are both present in the sharing

economy market. Accordingly, uncertainty reduction theory offers valuable insights on how trust can be built in such markets.

THEORETICAL FRAMEWORK

Sharing Economy and RHS

Sharing economy emerged from digitally enabled technologies and innovations (e.g., the Internet and mobile technologies) that simplify the sharing of both physical and nonphysical goods and services (Hamari, Sjöklint, & Ukkonen, 2016; Huurne et al., 2017). The sharing economy is a reflection of servitization, where companies expand their markets by renting products and services rather than selling them (Cusumano, 2014), which represents a departure from the traditional market model that is based on ownership (Puschmann & Alt, 2016).

The sharing economy denotes the collaborative consumption through sharing, exchanging, or rental of resources (Lessig, 2008). Collaborative consumption is, thus, the techno-social aspect of this new economic logic (Dredge & Gyimóthy, 2015). Belk (2014) views collaborative consumption to encompass the coordination of the acquisition and distribution of a resource for a fee or other compensation. This view includes bartering, trading, and swapping. Hamari et al. (2016, p. 2050) provide a broad definition of collaborative consumption as "the peer-to-peer-based activity of obtaining, giving, or sharing access to goods and services, coordinated through community-based online services". Botsman and Rogers (2010) identify four main principles of collaborative consumption business models: 1) critical mass (the availability of sufficient number of choices to satisfy customers), 2) idling capacity (the exploitation of resources and redistribution of surplus capacity), 3) belief in the commons (customers, even unintentionally, create value through participating in the model), and 4) trust between strangers, which is the focus of this paper.

RHS is an example of an innovative service facilitated by and offered through the sharing economy. In RHS, capital platforms facilitate access to an idle physical asset (Gerwe & Silva, 2020). We build on the Gargiulo, Giannantonio, Guercio, Borean, and Zenezini (2015) definition of dynamic ridesharing; specifically, we define RHS as *a service that uses an online-enabled platform (mobile or web applications) to match and connect in real time drivers of private, non-commercial vehicles to those seeking local taxicab-like transportation*. RHS is an example of the transformation to what Heimans and Timms (2014) call "new power" business model, where business is open, participatory, peer-driven, and offered by many.

The importance of trust in innovations in the sharing economy (Govindan, Shankar, & Kannan, 2020; Kong, Wang, Hajli, & Featherman, 2020; Shmidt, 2020; Sutherland & Jarrahi, 2018) calls for more research to investigate the drivers and the influence of trust (Barnes & Mattsson, 2016; Möhlmann, 2016). The sharing economy involves interactions among individuals who are mostly strangers and these interactions entail access to personal spaces. For example, customers in ride hailing access and share a private vehicle with a stranger, which is a risky transaction (Gerwe & Silva, 2020). This is a remarkable characteristic of the sharing economy that distinguishes it from transactions occurring through other means (e.g., mobile and electronic commerce) where access and physical encounters are absent. Accordingly, trust in the sharing economy requires renewed examination and analysis (Hawlitschek, Teubner, & Gimpel, 2016).

Trust

Trust is crucial for having and maintaining social exchange (Lane & Bachmann, 1996; Williams & Belkin, 2016). Trust plays a key role in the engagement in social interactions; it is particularly important and operational in situations characterized by uncertainty and ambiguity (Aldrich & Fiol, 1994; Doney & Cannon, 1997; Mayer, Davis, & Schoorman, 1995; Moorman, Deshpandé, & Zaltman, 1993) such as those involving interactions with strangers in RHS (Gonzalez-Padron, 2017; Huurne

et al., 2017). Trust is essential to alleviate the unpredictability of the other party's actions (Najjar & Kettinger, 2013) and reduces the uncertainty in situations where customers feel vulnerable (Chaudhuri & Holbrook, 2001). Without vulnerability, trust may not be a cause for concern because the risk is reduced and outcomes are inconsequential for the trustor (Moorman et al., 1993).

Trust is a complex construct; this is evident in its various definitions. For example, research has defined trust as expectations shared between actors in an exchange (Zucker, 1986), a willingness, with confidence, to depend on an exchange partner (Moorman, Zaltman, & Deshpande, 1992), a belief, absence any evidence, that things will work as expected (Aldrich & Fiol, 1994), confidence that parties will behave as promised (Fawcett, Jin, Fawcett, & Magnan, 2017), and beliefs that the other party has beneficial features (Nicolaou & McKnight, 2006). Further, an economic approach to trust defines it forming as a result of cost-benefit evaluation of individuals (Barney & Hansen, 1994). Our conceptualization of trust is institution-based and is more in line with Chaudhuri and Holbrook (2001) view of brand trust. Therefore, we define trust in RHS as *the willingness of RHS customer to rely on the ability of RHS to perform its stated function*.

Trust does not need to be explicitly represented. In many situations it is considered an implicit concept that can replace formal contracts (Saenz, 2019; Zucker, 1986). With the presence of trust, meeting the level of service becomes expected and taken for granted. Accordingly, implicit in trust is the existence of background expectations that reflect what is commonly known and hence rarely questioned (Shapiro, 1987; Zucker, 1986). For instance, the value of money in economic transactions is taken for granted, and so money is trusted as a payment method. Such background expectations are pivotal because they serve as cornerstones in social interactions. The external environment influences trust decisions individuals make even before starting a relationship (Davies & Prince, 2005; Williams & Belkin, 2016).

Previous research has shown the positive relationship between trust and behavioral intentions. Jarvenpaa, Tractinsky, and Saarinen (1999) show that customers' confidence in an Internet shopping mall affect their intention to purchase. Bélanger and Carter (2008) suggest that government agencies should take advantage of trust-building mechanisms used by e-commerce vendors to encourage adoption intention of e-government services. Venkatesh, Thong, Chan, and Hu (2016) find that citizens' trust in e-government services is positively associated with their intention to use these services. Websites that convey trust to consumers impact the consumer's purchase intentions from that website (Wakefield, Stocks, & Wilder, 2004). The level of individual's initial trust in mobile banking influences his/her intention to adopt it (Kim, Shin, & Ho, 2009; Zhou, 2011). Kim and Prabhakar (2004) find a significant relationship between trust in the electronic channel and the adoption of Internet banking. In a study on collaborative consumption, Möhlmann (2015) finds an indirect significant positive effect of trust on the likelihood of using a sharing option.

Trust plays a pivotal and critical role in the behavioral intention to use RHS. Since using RHS involves some degree of vulnerability resulting from the expectations of the customer that RHS will be delivered as promised, the formation of trust may reduce the sense of vulnerability and encourage customers to use the service. We hypothesize:

H1: Trust in RHS is positively associated with intention to use RHS.

Legitimacy Theory

As mentioned in the previous section, trust should not be mistakenly assumed to necessitate face-to-face interactions to be built. That is, trust is not always interaction-based. The existence of institutional arrangements plays a key role in developing institutional-based trust. Institutional arrangements give individuals good reasons to trust an organization and its actions (Bachmann & Inkpen, 2011). We argue that legitimacy is a type of these institutional arrangements that influences trust levels.

Legitimacy is defined as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, beliefs, and definitions" (Suchman, 1995, p.574) and is central for the existence of organizations. Legitimacy grants organizations and their actions creditability and acceptance, and has been perceived as a main factor behind conformance to stakeholder expectations (Dimaggio & Powell, 1983; Meyer & Rowan, 1977). Legitimacy is created subjectively because individuals evaluate the phenomenon in question and form a belief about its legitimacy consequently (Suddaby, Bitektine, & Haack, 2017; Suchman, 1995). Accordingly, legitimacy is a set of beliefs individuals hold for a certain phenomenon, which is in our case trust belief about RHS. It is important to stress here that our interest in this paper is not the legitimacy of an organization, rather the services it offers. That is, we investigate the legitimacy of RHS service itself.

Research has identified several dimensions that compose legitimacy (Scott, 1995; Suchman, 1995; Tost, 2011; Zimmerman & Zeitz, 2002). These are pragmatic, normative, cognitive, and regulative dimensions which are pertinent to our study of trust in RHS. We argue that these four dimensions affect the level of trust in RHS. We discuss them next.

Pragmatic Legitimacy

Pragmatic legitimacy addresses the self-interests of individuals. Its conferral hinges on the extent to which the service satisfies one's personal interests. Alignment between the service offerings and the interests of targeted audience is critical to attain pragmatic legitimacy (Golant & Sillince, 2007; Lounsbury & Glynn, 2001).

Rational decisions and evaluations based on cost-benefit calculations dominate this type of legitimacy. Individuals are consequentialists and determine whether the service is legitimate or not by asking questions such as how valuable this service is, and to what extend it satisfies personal needs. Pragmatic legitimacy thus focuses on exchange relationships between the service and individuals (Suchman, 1995). This makes it endogenous in nature since it emerges from the exchange itself. It has been argued hence that pragmatic legitimacy can be bought by offering favorable exchanges that reflect what is desirable (Cashore, 2002; Suchman, 1995; Suddaby et al., 2017).

Services that have pragmatic legitimacy are perceived to be representatives of one's interests (Golant & Sillince, 2007). This allows the audience to develop high expectations of the reliability and superiority of the service (Golant & Sillince, 2007; Suddaby et al., 2017). Therefore, it has been suggested that pragmatic legitimacy promotes trust because it can prevent opportunistic behavior (Moreno-Luzon, Chams-Anturi, & Escorcia-Caballero, 2018). We thus suggest that pragmatic legitimacy has a positive effect on trust:

H2: Pragmatic legitimacy of RHS is positively associated with trust in RHS.

Normative Legitimacy

Normative legitimacy focuses on the societal impact of the service rather than an evaluation of means and ends (Golant & Sillince, 2007). It goes beyond the self-interest individual to replicate cultural logic. Normative legitimacy reflects the normative evaluations individuals infer to a service; that is whether the service represents the right thing to do.

A service is seen to have normative legitimacy when it complies with societal values (Golant & Sillince, 2007) and institutional working practices (Davies & Prince, 2005). Accordingly, the use of ethical arguments and institutional vocabularies are well-known strategies for mobilizing support for the service and creating positive beliefs about its operations (Garud, Jain, & Kumaraswamy, 2002; Suddaby & Greenwood, 2005).

Supported by normative legitimacy, a service is perceived to fit in a pre-existing cultural framework. This fit between societal beliefs and the service offerings increases the propensities of

developing positive beliefs about the service making it accepted by the general public (Johnson, Dowd, & Ridgeway, 2006; Lenz & Viola, 2017). Moreover, it is important to emphasize that normative legitimacy is not only granted based on the evaluation of the service outcomes, but it also accounts for the procedures and methods employed for producing the outcomes of the service itself (Bitektine & Haack, 2015; Saenz, 2018; Suchman, 1995).

Normative judgment bestowed to a service is an importance source of trust (Barney & Hansen, 1994; Davies & Prince, 2005). Normative legitimacy leads individuals to trust that the service will adhere to societal values and principles (Smits, van Leeuwen, & van Tatenhove, 2017) and an industry's working practices (Bitektine & Haack, 2015; Davies & Prince, 2005; Lane & Bachmann, 1996). Accordingly, we argue that normative legitimacy has a positive effect on trust:

H3: Normative legitimacy of RHS is positively associated with trust in RHS.

Cognitive Legitimacy

Cognitive legitimacy refers to the taken-for-grantedness aspect of the service. A service is seen to be 'given' when knowledge of it has been widely diffused and accepted in the society making its existence inevitable (Aldrich & Fiol, 1994; Shepherd & Zacharakis, 2003). Accordingly, unlike pragmatic and normative legitimacy that are interest or judgment-based, cognitive legitimacy is knowledge-based (Aldrich & Fiol, 1994).

Cognitive legitimacy is powerful because it diminishes challenges and alternatives (Tost, 2011). With cognitive legitimacy, the service becomes embedded in the social structure where individuals no longer have to think about it or explain it. It becomes consensually accepted as a social fact (Bitektine & Haack, 2015; Johnson et al., 2006). Cognitive legitimacy thus equips innovative services against negative rumors spread by competing services that feel threatened by the newcomer (Aldrich & Fiol, 1994). The service here needs neither justification for its existence nor support from its audience (Suchman, 1995; Tost, 2011) because its legitimacy is conferred based on passive cognitive processing (Bitektine & Haack, 2015). Although this might imply that a service needs to be well-institutionalized in societies in order to have cognitive legitimacy, this is not necessary as a service can also be unquestioned when it conforms to already existing practices in its field (Lenz & Viola, 2017; Tost, 2011).

Previous research shows background expectations, represented in taken-for-grantedness, is critical to the formation of trust (Zucker, 1986). These expectations which are widely shared and thus socially valid act as referential beliefs that "create strong expectations for what is likely to occur in the local situation" (Johnson et al., 2006, p. 58). We therefore argue that cognitive legitimacy has a positive influence on trust:

H4: Cognitive legitimacy of RHS is positively associated with trust in RHS.

Regulative Legitimacy

The presence of risks and uncertainties in RHS emphasizes the importance of having legal requirements and governance system to build trust in the service (Hartl, Hofmann, & Kirchler, 2016). RHS is constantly being compared with regular taxi services that are highly regulated and thus have stronger consumer protection laws.

Regulative legitimacy refers to conformity with laws and regulations (Tost, 2011). It requires the presence of a formal authority that legitimizes the service and approves its operations which increases trust in the service (Grayson, Johnson, & Chen, 2008). The government regulatory bodies are seen as "guardians of trust" (Shapiro, 1987) and impose sanctions and punishments for breaking the law. Accordingly, the regulative environment assures individuals that problematic situations, if occurred, can be well-addressed because laws exist that govern the operations of the service.

Regulative legitimacy of the service therefore decreases risk and uncertainty surrounding forthcoming interactions (Grayson et al., 2008) enabling individuals to establish future expectations that are likely to be met (Biteknite and Haack, 2015; Lane & Bachmann, 1996). Moreover, law has been perceived as an "environmental structure promoting the constitution of trust" (Lane & Bachmann, 1996, p. 368). We thus argue that regulative legitimacy has a positive effect on trust:

H5: Regulative legitimacy of RHS is positively associated with trust in RHS.

Uncertainty Reduction Theory

Uncertainty reduction theory (UTR: Berger, 1979; Berger & Bradac, 1982; Berger & Calabrese, 1975) explains the initial interaction and communication process that takes place when strangers meet. URT assumes that people initially attempt to reduce uncertainty and increase predictability about the behavior of both themselves and others in the interaction. According to URT, individuals' level of uncertainty is a key element in relational development. Uncertainty reduction is concerned with both the interaction process and the outcome of the interaction (Berger, 1986); it is important for the conduct of any communicative transaction and it plays a role in the prediction of specific relationship outcomes.

Prior research found that URT accounts for behavior in electronic settings as well face-to-face settings (Antheunis, Valkenburg, & Peter, 2010; Flanagin, 2007; Tidwell & Walther, 2002). URT has also been applied to the context of service encounter; service quality can be enhanced by reducing uncertainty between customers and service providers (Smith, 1996). Other studies also apply URT in the fields of organizational behavior (Taylor, Masterson, Renard, & Tracy, 1998), consumer behavior (Murray, 1991; Siehl, Bowen, & Pearson, 1992) and information systems (Venkatesh et al., 2016). We apply URT and discuss the influence of service process transparency on trust and their roles as means to reduce uncertainty and, consequently, impact behavioral intention.

Service Process Transparency

Transparency is the extent to which relevant, timely, and reliable information is provided (Williams, 2005). Service process transparency, in particular, is the availability of complete knowledge of the service process to monitor and control a service (Datta & Chatterjee, 2011). For example, Welch, Hinnant, and Moon (2005) view service process transparency in the context of e-government as the extent to which a citizen can obtain a clear understanding of the working of a particular government process or service. Service process transparency allows individuals to better understand and follow through a service process, resulting in better control and confidence in using the service (Nicolaou & McKnight, 2006). Providing accurate and complete information about the service process can improve its transparency (Venkatesh et al., 2016). The perception of an organization's transparency is an evaluation of the quality of information provided by the organization (Schnackenberg & Tomlinson, 2016). Based on the discussion above, we define RHS process transparency as *the availability of accurate and complete information about how RHS works*.

RHS customers rely heavily on the information they receive about the service. The transparency of RHS is instrumental to enable customers to obtain information about how the service operates. Venkatesh et al. (2016) identify transparency as one key means of uncertainty reduction. Transparency of RHS is an important factor, alongside trust, in the reduction of uncertainty in RHS.

Uncertainty is critical to trust, because trust is unnecessary if the trustor can control an exchange partner's actions or has complete knowledge about those actions (Coleman, 1990). Transparency is required to stimulate and maintain trust between parties (Köbis, Soraperra, & Shalvi, 2021). Providing relevant, timely, and reliable information positively relates to the competence aspect of trust (McKnight, Kacmar, & Choudhury, 2004). Therefore, transparency, as a means of reducing uncertainty, contributes to the formation of trust.

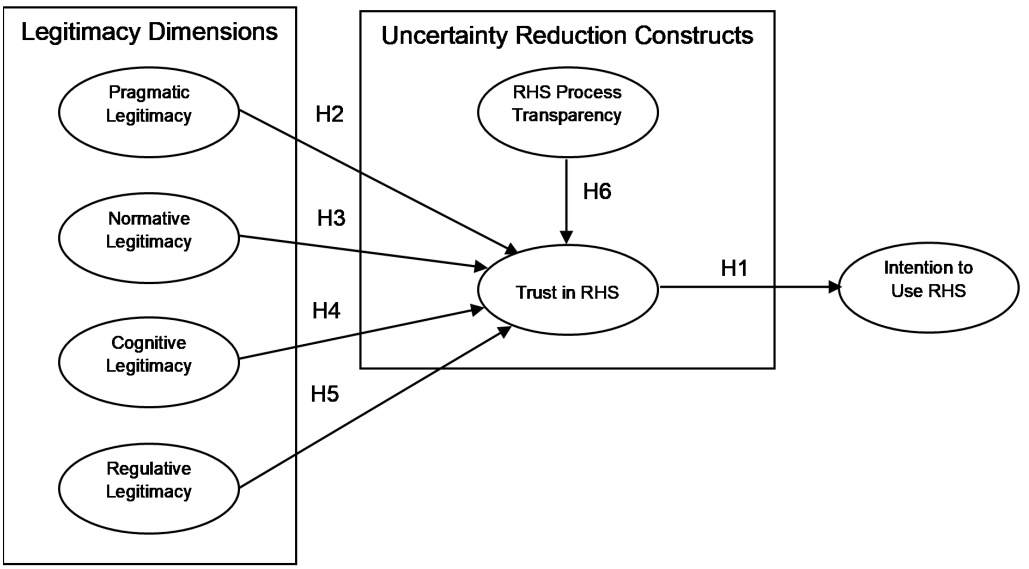
As discussed in the introduction section, trust in RHS is an institution-based trust which has two components: structural assurance and situational normality. In RHS, structural assurance stems from the belief that protective structures of RHS are in place that are conducive to situational success, while situational normality refers to the belief that the situation in RHS is favorable or conducive to situational success. When RHS process is transparent, customers will have structural assurance about the regulations, processes, or procedures of RHS. Furthermore, a transparent RHS would influence the customer's perception that things in RHS are normal or in proper order and there is nothing inexplicable or abnormal about the service.

RHS involves many new, unprecedented processes that most customers are not familiar with, which raises the level of uncertainty in the RHS process. Such a high level of uncertainty may hinder the development of trust because of the lack of necessary information. Transparency, thus, would assist in building trust by providing relevant, timely, and reliable information concerning the RHS process (Xu, 2020). In RHS, permeant transparency replaces privacy (Heimans & Timms, 2014). RHS process transparency is an important predictor of the trust in that service. We, consequently, hypothesize:

H6: RHS process transparency is positively associated with trust in RHS.

Figure 1 illustrates our research model.

Figure 1. Research Model



RESEARCH METHODOLOGY

In order to test our theoretical framework, we used a cross-sectional design and collected data using a survey.

Measure Development

Most of our measures are adopted from validated measures in existing literature (see Table 3 Appendix A). However, the existing measures of cognitive legitimacy we found in the literature were either lacking parsimony or were narrow in their contextual development with no agreed upon scale. Therefore, we decided to further develop items for this construct to better reflect our context and followed the stages recommended by Lewis, Templeton, and Byrd (2005). Table 5 and Table 6 in Appendix B illustrate the stages we followed to develop items for cognitive legitimacy alongside the activities we performed in each step. We pretested the instrument with two IS experts for content validity. All items in the final instrument were measured using a 7-point Likert scale with responses ranging from 1 (Strongly Disagree) to 7 (Strongly Agree).

Data Collection

Since their debut in 2015, RHS companies Uber and Careem dominate the RHS market in Jordan. Although the endorsement of a regulation to allow licensing of RHS goes back to December, 2017, it was only until July, 2018 that Careem became the first fully licensed RHS company in the country (Al-Kayed, 2018). During the data collection period, the use of RHS in Jordan was controversial; taxi drivers repeatedly protested against the government's intention to license the service while some residents welcomed the better-quality service (Dupire, 2017).

Since we intend to study factors that build the trust in RHS and the intention to use RHS, we focused on the local market of RHS in Jordan. Our target sample was a convenient sample drawn from the population of local citizens who represent potential and current customers of RHS in Jordan. We used an online survey and posted an invitation to participate in the study on Facebook to facilitate data collection and ensure a reasonable sample size. We also asked friends to encourage their friends to participate as well. The data collection spanned over a two-month period (from April 2018 to May 2018). Since we are not measuring the actual usage of the service but rather the intention to use the service, we required that each respondent had heard of RHS before and could identify the service. At the beginning of the survey, we briefly defined RHS and gave the potential respondent examples of companies that offer RHS locally. We then asked the participant a Yes/No screening question about whether he/she have heard of or used RHS before. Those who answered the screening question with (No) were thanked and were not allowed to complete the survey. Overall, we received a total of 555 responses. After dropping 22 incomplete responses, our final sample comprised a total of 533 responses. Table 1 summarizes the demographic characteristics of the sample.

Measurement Model

We used SmartPLS 2.0.M3 (Ringle, Wende, & Will, 2005), a partial least square (PLS) software, to analyze the measurement and the structural models. PLS is suitable to estimate the loadings (and weights) of indicators on constructs and the relationships among constructs in multistage models (Fornell & Bookstein, 1982). PLS can also be used to determine the predictive validity of the path rather than constructing a casual model (Hair, Sarstedt, Ringle, & Mena, 2012).

All items loaded significantly on their respective constructs and ranged from 0.635 to 0.928, which are higher than the cutoff value of 0.5, and close to the ideal value of 0.7 suggested by Hair, Anderson, Tatham, and Black (1998).

Internal consistency of all constructs supports convergent validity. Consistent with recommended values, average variance extracted (AVE) > 0.50 (Fornell & Larcker, 1981), composite reliability > 0.60 (Bagozzi & Yi, 1988), and Cronbach's alpha > 0.70 (Hair et al., 1998) for all constructs. Discriminant validity was evaluated by comparing the square root of AVE with the correlations between constructs. The square root of AVE for a construct should be greater than the correlations with any other construct (Table 2). The matrix of cross-loadings (see Table 3, Appendix A) also supported discriminant validity, since the loading of each item on its respective construct is larger than its loading on any other construct.

Table 1. Demographic and Usage Data of the Sample (N=533)

		Frequency	Percentage
Gender	Male	245	46
	Female	259	48.6
	N/A	29	5.4
Age	18-24	151	28.3
	25-34	207	38.8
	35-44	99	18.6
	45-54	48	9.0
	> 54	21	3.9
	N/A	7	1.3
Employment	Unemployed	131	24.6
	Employed – Private Sector	252	47.3
	Employed – Public Sector	78	14.6
	Self-employed	40	7.5
	Retired	22	4.1
	N/A	10	1.9
Education	High School	65	12.2
	College degree (2 years diploma)	60	11.3
	Undergraduate degree (Bachelor)	297	55.7
	Graduate degree (Masters, PhD)	102	19.1
	N/A	9	1.7
Years using Smartphone	1-3 years	37	6.9
	4-7 years	219	41.1
	8-10 years	150	28.1
	> 10 years	117	22.0
	N/A	10	1.9
Own a car	Yes	332	62.3
	No	191	35.8
	N/A	10	1.9

RESULTS

Common Method Variance

Since we collected all our data using a single source (i.e., survey), common method variance (CMV) might be a concern. CMV is the variance that is attributable to the measurement method when independent and dependent variables are not obtained from different sources and not measured in different contexts (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). We used Harman's one factor test and ran an unrotated, exploratory factor analysis (EFA) using all the variables in the study, we then examined the number of factors that emerged. EFA revealed five factors with eigen values greater than 1.00 and no single factor accounting for the majority of variance (the highest was 38.1%),

Table 2. Constructs Internal Consistency and Correlations

	AVE	CR	CA	PL	NL	CL	RL	PT	TR	IU
PL	0.675	0.861	0.758	**0.822**						
NL	0.566	0.838	0.742	0.528	**0.753**					
CL	0.576	0.844	0.753	0.630	0.607	**0.759**				
RL	0.748	0.899	0.831	0.299	0.437	0.353	**0.865**			
PT	0.647	0.880	0.818	0.511	0.511	0.614	0.250	**0.804**		
TR	0.726	0.914	0.874	0.641	0.619	0.684	0.337	0.619	**0.852**	
IU	0.852	0.920	0.826	0.518	0.511	0.599	0.342	0.483	0.666	**0.923**

Notes: AVE = average variance extracted. CR = composite reliability. CA = Cronbach's alpha. PL = pragmatic legitimacy. NL = normative legitimacy. CL = cognitive legitimacy. RL = regulative legitimacy. PT = process transparency. TR = trust. IU = intention to use. The square root of AVE is shown in bold on the diagonal.

indicating that CMV is not a threat. This test is more a diagnostic technique to assess whether CMV is a problem or not (Podsakoff et al., 2003).

Structural Model

We also used SmartPLS to test the structural model. We ran bootstrapping (with 5000 resampling) to generate t-values to assess significance levels. Figure 2 shows the results of our structural model assessment including path coefficients, their statistical significance, and the proportion of explained variance (R^2).

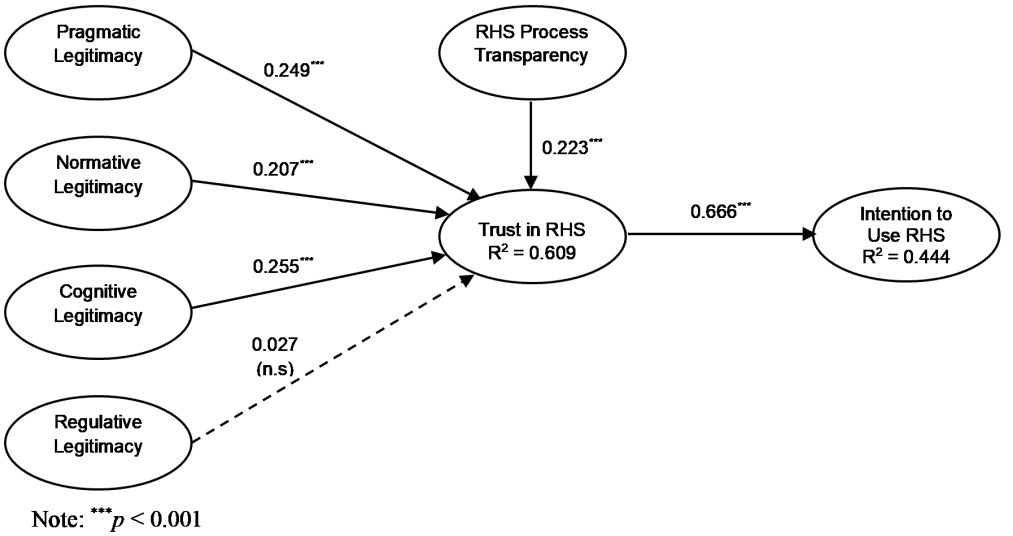
All hypotheses, except H5, were significant. Trust in RHS positively affected intention to use RHS ($\beta = 0.666$, t-value = 19.184, $p < 0.001$), supporting Hypothesis H1. Pragmatic, normative, and cognitive legitimacies had all positive and significant effect on trust in RHS, indicating support for Hypotheses H2, H3, H4, respectively; the paths from pragmatic legitimacy ($\beta = 0.249$, t-value = 5.441, $p < 0.001$), normative legitimacy ($\beta = 0.207$, t-value = 4.500, $p < 0.001$), and cognitive legitimacy ($\beta = 0.255$, t-value = 5.452, $p < 0.001$) to trust in RHS were all positive and significant. However, the hypothesized effect of regulative legitimacy on trust in RHS ($\beta = 0.027$, t-value = 0.847, $p > 0.1$) was not significant. Thus, Hypothesis H5 was not supported. RHS process transparency had a significant and positive effect of trust in RHS ($\beta = 0.223$, t-value = 5.450, $p < 0.001$), thus Hypothesis H6 was supported. Trust in RHS explained around 44 percent of the variance of intention to use RHS. Service process transparency, pragmatic legitimacy, normative legitimacy, and cognitive legitimacy together explained around 71 percent of the variance of trust in RHS.

We also tested for potential effect of demographic and usage data as control variables. All control variables were found to be insignificant: gender ($\beta = 0.046$, t-value = 0.955, $p > 0.1$), age ($\beta = 0.000$, t-value = - 0.001, $p > 0.1$), employment ($\beta = 0.070$, t-value = 1.284, $p > 0.1$), education ($\beta = -0.022$, t-value = - 0.479, $p > 0.1$), number of years using smartphone ($\beta = 0.040$, t-value = 0.834, $p > 0.1$), and owning a car ($\beta = 0.064$, t-value = 1.265, $p > 0.1$).

DISCUSSION AND IMPLICATIONS

Sharing economy is an emerging phenomenon that is giving rise to business models enabled by digital technologies. Despite acknowledging the critical role of trust in the sharing economy, little is known about the factors that lead customers to trust the services offered in the sharing economy (Barnes & Mattsson, 2016; Gonzalez-Padron, 2017; Möhlmann, 2016). In this work, we investigated the effect of legitimacy and transparency on trust levels of one of the leading innovations in the sharing economy, which is ride hailing service. Our paper offers insights into the factors that affect

Figure 2. Structural Model Results



customers' trust in RHS. Our results provide evidence of the important roles of service legitimacy and process transparency in trusting RHS. We show that given the complicated nature of RHS, where despite the legal and social challenges the service is facing its diffusion is rising, an in-depth examination of trust factors is crucial to improve current understanding of trust in RHS in particular and the sharing economy in general.

Theoretical Implications

Theoretically, our results have many implications for the new but growing research on trust in the sharing economy. Our paper fills a gap in the literature by identifying the antecedents of trust in services available in the sharing economy. We achieve this by introducing a novel theoretical perspective that builds on legitimacy and uncertainty reduction theories.

First, we emphasize the critical role of trust in the sharing economy. Specifically, we extend prior research (Bélanger & Carter, 2008; Jarvenpaa et al., 1999; Venkatesh et al., 2016) and investigate the impact of trust on behavioral intention. We demonstrate that trust in an innovative service (e.g., RHS) can motivate individuals' intention to use that service. This finding is in line with the research stream that posits trust as an important antecedent of the intention to use technology.

Second, we show that the legitimacy of the service influences customers' trust in the service. However, the different types of legitimacy vary in their effect on trust levels. While pragmatic, normative, and cognitive legitimacy have significant and positive effect on trust, regulative legitimacy does not have a significant effect. The positive relationship between pragmatic legitimacy and trust conforms to other studies that revealed economic benefits affect individuals' intention to participate in collaborative consumption (Hamari et al., 2016; Möhlmann, 2015). We confirm and extend this finding by explaining that the positive effect might be due to the fact that pragmatic legitimacy increases one's trust that the service will meet expectations and needs, hence increases customers' intention to use the service.

Societal values influence individuals' decisions and actions (Zimmerman & Zeitz, 2002). Our paper shows that evaluating the action to be taken and its compliance with norms and beliefs is one

of the means customers resort to when deciding whether to trust RHS or not. Normative legitimacy is thus important in the context of the sharing economy. Customers trust services that comply with industry standards and societal values. Such alignment reduces uncertainty and offers confidence about the trustworthiness of the service.

Our results further show that gaining cognitive legitimacy for a service is also positively associated with trust. Cognitive legitimacy is conferred when a service becomes taken-for-granted. A service that is cognitively legitimate is one that is widely diffused and familiar. Cognitive legitimacy represents a natural description of how the world should operate (Zimmerman & Zeitz, 2002). Accordingly, trust decisions are taken subconsciously without a need for active cognitive processing. This indicates that trust decisions in the sharing economy cannot be bounded by rational choices or normative assessments. That is, once a service is taken for granted, individuals no longer have to rely only on whether it fits cultural values or maximize personal utilities.

Contrary to prior research that suggests the presence of legal protection for customers will affect trust decisions in the sharing economy (McKnight and Chervany, 2001; Hartl et al., 2016) our study reveals that legal protection has no effect on trust. This is an unexpected result given that customers using unregulated services can suffer from service delivery disruption. In Jordan, the context of our paper, police officers were targeting RHS service providers (drivers), stopping them, fining them, and questioning the customers riding with them. Still, regulative legitimacy was found to have no significant effect on trust levels and hence intention to use RHS. This might be due to the presence of other sources of legitimacy that are perceived by customers to be more important. Customers tend to overlook the legality of a service as long as it is widely known, complies with societal values, and satisfies personal needs. The insignificant impact of regulative legitimacy explains the wide adoption of RHS despite the lack of clear regulations governing it. It further reveals the stronger influence of the other types of legitimacy (i.e., pragmatic, normative, and cognitive) in trust decisions.

Legitimacy of RHS is hence multifaceted. Therefore, approaching legitimacy as an overarching concept fails to capture the details necessary for a better understanding of the phenomenon. As we have shown, RHS can be seen to be both legitimate and illegitimate depending on the type of legitimacy under consideration. In a recent study, Garud, Kumaraswamy, Roberts, and Xu (2020) find that Uber entered some markets despite the lack of legitimacy, deployed market strategies to generate cognitive legitimacy, and deployed nonmarket strategies to garner other dimensions of legitimacy.

Third, previous research shows that a lack of knowledge of how the sharing economy works is a barrier to collaborative consumption (Tussyadiah, 2015). Keymolen (2013) argues that consumers' knowledge of how the technology work enhances the propensity of trusting collaborative consumption. Our research contributes to these studies by emphasizing the role of process transparency in building trust. Transparency entails offering complete, timely, and accurate information to customers through RHS application. Customers employ an active strategy (Berger, 1979) for reducing uncertainty in RHS by interacting with the application and retrieving relevant information. A transparent service decreases opportunistic behavior leading customers to trusting and using it.

Practical Implications

Our research offers valuable business insights to RHS providers that can help them offer better services and increase their market share.

First, pragmatic, normative, and cognitive legitimacy positively affect trust levels. RHS providers should seek to legitimize their services according to these dimensions. One mean of achieving that is by marketing campaigns. Through a careful choice of words, marketing campaigns can be designed to present RHS as a normal service and/or a natural extension to the traditional taxi service. Highlighting economic benefits such as savings in time and cost is also a fruitful strategy. Since cognitive legitimacy is conferred through high familiarity with the service, participating in social events and having advertising booths in shopping centers and public places can help increase exposure to and awareness of the service.

Second, the positive effect between process transparency and trust has design and marketing implications. RHS platform providers, through application developers, should design their applications to provide customers with complete, timely, and accurate information about the different aspects of the service process such as the driver, the car, the route, how RHS works, as well as how customers' information will be used. This should improve the transparency of the service and hence reduce uncertainty and increase trust in the service. From a marketing perspective, organizations need to enhance process transparency by educating consumers about the organizations' business models, especially when consumers are unfamiliar with the organization (Costello & Reczek, 2020).

Limitations and Future Research

Our research has several limitations that may represent future research opportunities. The cross-sectional research design has limitations to infer casual relationships; future research can apply different research designs to test similar research models. We conducted our research in Jordan and collected data from a Jordanian sample; future research might use different samples to explore how national and regional differences may have an impact on our findings. We only focus on RHS as an example of a sharing economy service; future research may examine the roles of legitimacy and transparency in other services of the sharing economy.

CONCLUSION

In this paper, we offer a nuanced understanding of the factors that shape trust in RHS. We draw on legitimacy and uncertainty reduction theories to examine the effect of legitimacy and process transparency on trust. We show how the different types of legitimacy and service process transparency of the service influence trust in RHS.

REFERENCES

Agarwal, R., & Prasad, J. (1997). The role of innovation characteristics and perceived voluntariness in the acceptance of information technologies. *Decision Sciences*, *28*(3), 557–582. doi:10.1111/j.1540-5915.1997.tb01322.x

Al-Kayed, M. (2018). Transport-stricken Jordanians express delight over licensing of Careem. *The Jordan Times*. Retrieved from http://www.jordantimes.com/news/local/transport-stricken-jordanians-express-delight-over-licensing-careem

Aldrich, H. E., & Fiol, C. M. (1994). Fools rush in: The institutional context of industry creation. *Academy of Management Review*, *19*(4), 645–670. doi:10.5465/amr.1994.9412190214

Amey, A., Attanucci, J., & Mishalani, R. (2011). Real-time ridesharing: Opportunities and challenges in using mobile phone technology to improve rideshare services. *Transportation Research Record: Journal of the Transportation Research Board*, *2217*(1), 103–110. doi:10.3141/2217-13

Antheunis, M. L., Valkenburg, P. M., & Peter, J. (2010). Getting acquainted through social network sites: Testing a model of online uncertainty reduction and social attraction. *Computers in Human Behavior*, *26*(1), 100–109. doi:10.1016/j.chb.2009.07.005

Bachmann, R., & Inkpen, A. C. (2011). Understanding institutional-based trust building processes in inter-organizational relationships. *Organization Studies*, *32*(2), 281–301. doi:10.1177/0170840610397477

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, *16*(1), 74–94. doi:10.1007/BF02723327

Baier, A. (1986). Trust and antitrust. *Ethics*, *96*(2), 231–260. doi:10.1086/292745

Barnes, S. J., & Mattsson, J. (2016). Understanding current and future issues in collaborative consumption: A four-stage Delphi study. *Technological Forecasting and Social Change*, *104*, 200–211. doi:10.1016/j.techfore.2016.01.006

Barney, J. B., & Hansen, M. H. (1994). Trustworthiness as a source of competitive advantage. *Strategic Management Journal*, *15*(S1), 175–190. doi:10.1002/smj.4250150912

Barrett, M., Heracleous, L., & Walsham, G. (2013). A rhetorical approach to IT diffusion: Reconceptualizing the ideology-framing relationship in computerization movements. *Management Information Systems Quarterly*, *37*(1), 201–220. doi:10.25300/MISQ/2013/37.1.09

BBC. (2018). *Spanish taxis block roads in 'anti-Uber' protest*. Retrieved from https://www.bbc.com/news/world-europe-45009087

Bélanger, F., & Carter, L. (2008). Trust and risk in e-government adoption. *The Journal of Strategic Information Systems*, *17*(2), 165–176. doi:10.1016/j.jsis.2007.12.002

Belk, R. (2014). You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*, *67*(8), 1595–1600. doi:10.1016/j.jbusres.2013.10.001

Berger, C. R. (1979). Beyond initial interaction: Uncertainty, understanding, and the development of interpersonal relationships. *Language and Social Psychology*, 122-144.

Berger, C. R. (1986). Uncertain outcome values in predicted relationships: Uncertainty reduction theory then and now. *Human Communication Research*, *13*(1), 34–38. doi:10.1111/j.1468-2958.1986.tb00093.x

Berger, C. R., & Bradac, J. J. (1982). *Language and social knowledge: Uncertainty in interpersonal relations* (Vol. 2). Hodder Education.

Berger, C. R., & Calabrese, R. J. (1975). Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. *Human Communication Research*, *1*(2), 99–112. doi:10.1111/j.1468-2958.1975.tb00258.x

Bitektine, A., & Haack, P. (2015). The "macro" and the "micro" of legitimacy: Toward a multilevel theory of the legitimacy process. *Academy of Management Review*, *40*(1), 49–75. doi:10.5465/amr.2013.0318

Botsman, R., & Rogers, R. (2010). *What's mine is yours: The rise of collaborative consumption*. Harper Business.

Cashore, B. (2002). Legitimacy and the privatization of environmental governance: How non–state market–driven (NSMD) governance systems gain rule–making authority. *Governance: An International Journal of Policy, Administration and Institutions*, *15*(4), 503–529. doi:10.1111/1468-0491.00199

Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: The role of brand loyalty. *Journal of Marketing*, *65*(2), 81–93. doi:10.1509/jmkg.65.2.81.18255

Cohen, B., & Kietzmann, J. (2014). Ride on! Mobility business models for the sharing economy. *Organization & Environment*, *27*(3), 279–296. doi:10.1177/1086026614546199

Coleman, J. (1990). *Foundations of social theory*. Belknap.

Costello, J. P., & Reczek, R. W. (2020). Providers versus platforms: Marketing communications in the sharing economy. *Journal of Marketing*, *84*(6), 22–38. doi:10.1177/0022242920925038

Cusumano, M. A. (2014). How traditional firms must compete in the sharing economy. *Communications of the ACM*, *58*(1), 32–34. doi:10.1145/2688487

Datta, P., & Chatterjee, S. (2011). Online consumer market inefficiencies and intermediation. *SIGMIS Database*, *42*(2), 55–75. doi:10.1145/1989098.1989102

Davies, M., & Prince, M. (2005). Dynamics of trust between clients and their advertising agencies: Advances in performance theory. *Academy of Marketing Science Review*, *2005*, 1.

Dimaggio, P. J., & Powell, W. W. (1983). The iron cage revisited - Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, *48*(2), 147–160. doi:10.2307/2095101

Doney, P. M., & Cannon, J. P. (1997). An examination of the nature of trust in buyer-seller relationships. *Journal of Marketing*, *61*(2), 35–51. doi:10.2307/1251829

Dredge, D., & Gyimóthy, S. (2015). The collaborative economy and tourism: Critical perspectives, questionable claims and silenced voices. *Tourism Recreation Research*, *40*(3), 286–302. doi:10.1080/02508281.2015.1086076

Dupire, C. (2017). Citizens divided over ride hailing apps. *The Jordan Times*. Retrieved from http://jordantimes.com/news/local/citizens-divided-over-ride-hailing-apps

Elsbach, K. D. (1994). Managing organizational legitimacy in the California cattle industry: The construction and effectiveness of verbal accounts. *Administrative Science Quarterly*, *39*(1), 57–88. doi:10.2307/2393494

Fawcett, S. E., Jin, Y. H., Fawcett, A. M., & Magnan, G. (2017). I know it when I see it: The nature of trust, trustworthiness signals, and strategic trust construction. *International Journal of Logistics Management*, *28*(4), 914–938. doi:10.1108/IJLM-11-2016-0268

Ferrell, O. C., Ferrell, L., & Huggins, K. (2017). Seismic shifts in the sharing economy: Shaking up marketing channels and supply chains. *Journal of Marketing Channels*, *24*(1-2), 3–12. doi:10.1080/1046669X.2017.1346973

Flanagin, A. J. (2007). Commercial markets as communication markets: Uncertainty reduction through mediated information exchange in online auctions. *New Media & Society*, *9*(3), 401–423. doi:10.1177/1461444807076966

Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *JMR, Journal of Marketing Research*, *19*(4), 440–452. doi:10.1177/002224378201900406

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *JMR, Journal of Marketing Research*, *18*(1), 39–50. doi:10.1177/002224378101800104

Gargiulo, E., Giannantonio, R., Guercio, E., Borean, C., & Zenezini, G. (2015). Dynamic ride sharing service: Are users ready to adopt it? *Procedia Manufacturing*, *3*, 777–784. doi:10.1016/j.promfg.2015.07.329

Garud, R., Jain, S., & Kumaraswamy, A. (2002). Institutional entrepreneurship in the sponsorship of common technological standards: The case of Sun Microsystems and Java. *Academy of Management Journal*, *45*(1), 196–214. doi:10.2307/3069292

Garud, R., Kumaraswamy, A., Roberts, A., & Xu, L. (2020). Liminal movement by digital platform-based sharing economy ventures: The case of Uber Technologies. *Strategic Management Journal*, ●●●, 1–29. doi:10.1002/smj.3148

Gerwe, O., & Silva, R. (2020). Clarifying the sharing economy: Conceptualization, typology, antecedents, and effects. *The Academy of Management Perspectives*, *34*(1), 65–96. doi:10.5465/amp.2017.0010

Golant, B. D., & Sillince, J. A. A. (2007). The constitution of organizational legitimacy: A narrative perspective. *Organization Studies*, *28*(8), 1149–1167. doi:10.1177/0170840607075671

Gonzalez-Padron, T. L. (2017). Ethics in the sharing economy: Creating a legitimate marketing channel. *Journal of Marketing Channels*, *24*(1-2), 84–96. doi:10.1080/1046669X.2017.1347005

Govindan, K., Shankar, K. M., & Kannan, D. (2020). Achieving sustainable development goals through identifying and analyzing barriers to industrial sharing economy: A framework development. *International Journal of Production Economics*, *227*, 107575. doi:10.1016/j.ijpe.2019.107575

Grayson, K., Johnson, D., & Chen, D.-F. R. (2008). Is firm trust essential in a trusted environment? How trust in the business context influences customers. *JMR, Journal of Marketing Research*, *45*(2), 241–256. doi:10.1509/jmkr.45.2.241

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). Multivariate data analysis. Academic Press.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, *40*(3), 414–433. doi:10.1007/s11747-011-0261-6

Hamari, J., Sjöklint, M., & Ukkonen, A. (2016). The sharing economy: Why people participate in collaborative consumption. *Journal of the Association for Information Science and Technology*, *67*(9), 2047–2059. doi:10.1002/asi.23552

Handelman, J. M., & Arnold, S. J. (1999). The role of marketing actions with a social dimension: Appeals to the institutional environment. *Journal of Marketing*, *63*(3), 33–48. doi:10.1177/002224299906300303

Hartl, B., Hofmann, E., & Kirchler, E. (2016). Do we need rules for "what's mine is yours"? Governance in collaborative consumption communities. *Journal of Business Research*, *69*(8), 2756–2763. doi:10.1016/j.jbusres.2015.11.011

Hawlitschek, F., Teubner, T., Adam, M. T. P., Borchers, N. S., Moehlmann, M., & Weinhardt, C. (2016). Trust in the sharing economy: An experimental framework. *Proceedings of Thirty Seventh International Conference on Information Systems*.

Hawlitschek, F., Teubner, T., & Gimpel, H. (2016). Understanding the sharing economy--Drivers and impediments for participation in peer-to-peer rental. In *System Sciences (HICSS), 2016 49th Hawaii International Conference on System Sciences (HICSS)* (pp. 4782-4791). Academic Press.

Heimans, J., & Timms, H. (2014). Understanding "new power". *Harvard Business Review*, *92*(12), 48–56.

Huurne, M., Ronteltap, A., Corten, R., & Buskens, V. (2017). Antecedents of trust in the sharing economy: A systematic review. *Journal of Consumer Behaviour*, *16*(6), 485–498. doi:10.1002/cb.1667

Jacobson, S. H., & King, D. M. (2009). Fuel saving and ridesharing in the US: Motivations, limitations, and opportunities. *Transportation Research Part D, Transport and Environment*, *14*(1), 14–21. doi:10.1016/j.trd.2008.10.001

Jarvenpaa, S. L., Tractinsky, N., & Saarinen, L. (1999). Consumer trust in an Internet store: A cross-cultural validation. *Journal of Computer-Mediated Communication, 5*(2). 10.1111/j.1083-6101.1999.tb00337.x

Johnson, C., Dowd, T. J., & Ridgeway, C. L. (2006). Legitimacy as a social process. *Annual Review of Sociology*, *32*(1), 53–78. doi:10.1146/annurev.soc.32.061604.123101

Kathan, W., Matzler, K., & Veider, V. (2016). The sharing economy: Your business model's friend or foe? *Business Horizons*, *59*(6), 663–672. doi:10.1016/j.bushor.2016.06.006

Keymolen, E. (2013). Trust and technology in collaborative consumption. Why it is not just about you and me. *Bridging Distances in Technology and Regulation*, 135-150.

Kim, G., Shin, B., & Ho, G. L. (2009). Understanding dynamics between initial trust and usage intentions of mobile banking. *Information Systems Journal*, *19*(3), 283–311. doi:10.1111/j.1365-2575.2007.00269.x

Kim, K. K., & Prabhakar, B. (2004). Initial trust and the adoption of B2C e-commerce: The case of internet banking. *ACM SIGMIS Database: the DATABASE for Advances in Information Systems*, *35*(2), 50–64. doi:10.1145/1007965.1007970

Köbis, N. C., Soraperra, I., & Shalvi, S. (2021). The consequences of participating in the sharing economy: A transparency-based sharing framework. *Journal of Management*, *47*(1), 317–343. doi:10.1177/0149206320967740

Kong, Y., Wang, Y., Hajli, S., & Featherman, M. (2020). In sharing economy we trust: Examining the effect of social and technical enablers on millennials' trust in sharing commerce. *Computers in Human Behavior*, *108*, 105993. doi:10.1016/j.chb.2019.04.017

Lane, C., & Bachmann, R. (1996). The social constitution of trust: Supplier relations in Britain and Germany. *Organization Studies*, *17*(3), 365–395. doi:10.1177/017084069601700302

Lenz, T., & Viola, L. A. (2017). Legitimacy and institutional change in nternational organisations: A cognitive approach. *Review of International Studies*, *43*(5), 939–961. doi:10.1017/S0260210517000201

Lessig, L. (2008). *Remix: Making art and commerce thrive in the hybrid economy*. Penguin Press. doi:10.5040/9781849662505

Lewis, B. R., Templeton, G. F., & Byrd, T. A. (2005). A methodology for construct development in MIS research. *European Journal of Information Systems*, *14*(4), 388–400. doi:10.1057/palgrave.ejis.3000552

Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social Forces*, *63*(4), 967–985. doi:10.2307/2578601

Lounsbury, M., & Glynn, M. A. (2001). Cultural entrepreneurship: Stories, legitimacy, and the acquisition of resources. *Strategic Management Journal*, *22*(6-7), 545–564. doi:10.1002/smj.188

Malhotra, A., & Van Alstyne, M. (2014). The dark side of the sharing economy… and how to lighten it. *Communications of the ACM*, *57*(11), 24–27. doi:10.1145/2668893

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, *20*(3), 709–734. doi:10.5465/amr.1995.9508080335

McKnight, D. H., & Chervany, N. L. (2001). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. *International Journal of Electronic Commerce*, *6*(2), 35–59. doi:10.108 0/10864415.2001.11044235

McKnight, D. H., Kacmar, C. J., & Choudhury, V. (2004). Shifting factors and the ineffectiveness of third party assurance seals: A two-stage model of initial trust in a web business. *Electronic Markets*, *14*(3), 252–266. doi:10.1080/1019678042000245263

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, *83*(2), 340–363. doi:10.1086/226550

Möhlmann, M. (2015). Collaborative consumption: Determinants of satisfaction and the likelihood of using a sharing economy option again. *Journal of Consumer Behaviour*, *14*(3), 193–207. doi:10.1002/cb.1512

MöhlmannM. (2016). Digital trust and peer-to-peer collaborative consumption platforms: A mediation analysis. Retrieved from https://ssrn.com/abstract=281336710.2139/ssrn.2813367

Moorman, C., Deshpandé, R., & Zaltman, G. (1993). Factors affecting trust in market research relationships. *Journal of Marketing*, *57*(1), 81–101. doi:10.1177/002224299305700106

Moorman, C., Zaltman, G., & Deshpande, R. (1992). Relationships between providers and users of market research: The dynamics of trust within and between organizations. *JMR, Journal of Marketing Research*, *29*(3), 314–328. doi:10.1177/002224379202900303

Moreno-Luzon, M. D., Chams-Anturi, O., & Escorcia-Caballero, J. P. (2018). Organizational legitimacy and stakeholder trust in the organization: A feed-forward relationship. In E. Díez-De-Castro & M. Peris-Ortiz (Eds.), *Organizational Legitimacy*. Springer. doi:10.1007/978-3-319-75990-6_18

Murray, K. B. (1991). A test of services marketing theory: Consumer information acquisition activities. *Journal of Marketing*, *55*(1), 10–25. doi:10.1177/002224299105500102

Najjar, M. S., & Kettinger, W. J. (2013). Data monetization: Lessons from a retailer's journey. *MIS Quarterly Executive*, *12*(4).

Nicolaou, A. I., & McKnight, D. H. (2006). Perceived information quality in data exchanges: Effects on risk, trust, and intention to use. *Information Systems Research*, *17*(4), 332–351. doi:10.1287/isre.1060.0103

O'Brien, S. A., Black, N., Devine, C., & Griffin, D. (2018). *CNN investigation: 103 Uber drivers accused of sexual assault or abuse*. Retrieved from https://money.cnn.com/2018/04/30/technology/uber-driver-sexual-assault/index.html

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, *88*(5), 879–903. doi:10.1037/0021-9010.88.5.879 PMID:14516251

Puschmann, T., & Alt, R. (2016). Sharing economy. *Business & Information Systems Engineering*, *58*(1), 93–99. doi:10.1007/s12599-015-0420-2

Rhodes, A. (2017). *Uber: Which countries have banned the controversial Taxi App*. Retrieved from https://www.independent.co.uk/travel/news-and-advice/uber-ban-countries-where-world-taxi-app-europe-taxi-us-states-china-asia-legal-a7707436.html

Ringle, C. M., Wende, S., & Will, S. (2005). *SmartPLS 2.0 (M3)*. Beta.

Saenz, C. (2019). Building legitimacy and trust between a mining company and a community to earn social license to operate: A Peruvian case study. *Corporate Social Responsibility and Environmental Management*, *26*(2), 296–306. doi:10.1002/csr.1679

Schnackenberg, A. K., & Tomlinson, E. C. (2016). Organizational transparency:A new perspective on managing trust in organization-stakeholder relationships. *Journal of Management*, *42*(7), 1784–1810. doi:10.1177/0149206314525202

Scott, W. R. (1995). *Institutions and Organizations*. Sage.

Shapiro, S. P. (1987). The social control of impersonal trust. *American Journal of Sociology*, *93*(3), 623–658. doi:10.1086/228791

Shepherd, D. A., & Zacharakis, A. (2003). A new venture's cognitive legitimacy: An assessment by customers. *Journal of Small Business Management*, *41*(2), 148–167. doi:10.1111/1540-627X.00073

Shmidt, M. (2020). Participants' interaction with sharing economy platforms in Russia. *Information Technology & People*, *33*(3), 897–917. doi:10.1108/ITP-10-2018-0443

Siehl, C., Bowen, D. E., & Pearson, C. M. (1992). Service encounters as rites of integration: An information processing model. *Organization Science*, *3*(4), 537–555. doi:10.1287/orsc.3.4.537

Smith, W. L. (1996). A framework for the application of uncertainty reduction (UCR) theory to service encounters. *The International Journal of Organizational Analysis*, *4*(3), 299–308. doi:10.1108/eb028854

Smits, C. C., van Leeuwen, J., & van Tatenhove, J. P. (2017). Oil and gas development in Greenland: A social license to operate, trust and legitimacy in environmental governance. *Resources Policy*, *53*, 109–116. doi:10.1016/j.resourpol.2017.06.004

Statista. (2019). *Ride Hailing*. Retrieved from https://www.statista.com/outlook/368/100/ride-hailing/worldwide

Stinchcombe, A. L. (1965). Social structures and organizations. In J. G. March (Ed.), *Handbook of Organizations* (pp. 142–193). Rand McNally.

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review*, *20*(3), 571–610. doi:10.5465/amr.1995.9508080331

Suddaby, R., Bitektine, A., & Haack, P. (2017). Legitimacy. *The Academy of Management Annals*, *11*(1), 451–478. doi:10.5465/annals.2015.0101

Suddaby, R., & Greenwood, R. (2005). Rhetorical strategies of legitimacy. *Administrative Science Quarterly*, *50*(1), 35–67. doi:10.2189/asqu.2005.50.1.35

Sutherland, W., & Jarrahi, M. H. (2018). The sharing economy and digital platforms: A review and research agenda. *International Journal of Information Management*, *43*, 328–341. doi:10.1016/j.ijinfomgt.2018.07.004

Taylor, M. S., Masterson, S. S., Renard, M. K., & Tracy, K. B. (1998). Managers' reactions to procedurally just performance management systems. *Academy of Management Journal*, *41*(5), 568–579.

Tidwell, L. C., & Walther, J. B. (2002). Computer-mediated communication effects on disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time. *Human Communication Research*, *28*(3), 317–348. doi:10.1111/j.1468-2958.2002.tb00811.x

Tost, L. P. (2011). An integrative model of legitimacy judgments. *Academy of Management Review*, *36*(4), 686–710.

Tussyadiah, I. P. (2015). An exploratory study on drivers and deterrents of collaborative consumption in travel. In *Information and communication technologies in tourism 2015* (pp. 817–830). Springer. doi:10.1007/978-3-319-14343-9_59

Venkatesh, V., Thong, J. Y. L., Chan, F. K. Y., & Hu, P. J. H. (2016). Managing citizens' uncertainty in e-government services: The mediating and moderating roles of transparency and trust. *Information Systems Research*, *27*(1), 87–111. doi:10.1287/isre.2015.0612

Verbergt, M., & Schechner, S. (2015). *Taxi drivers block Paris roads in Uber protest*. Retrieved from https://www.wsj.com/articles/taxi-drivers-block-paris-roads-in-uber-protest-1435225659

Wakefield, R. L., Stocks, M. H., & Wilder, W. M. (2004). The role of web site characteristics in initial trust formation. *Journal of Computer Information Systems*, *45*(1), 94–103. doi:10.1080/08874417.2004.11645821

Wang, P., & Swanson, E. B. (2007). Launching professional services automation: Institutional entrepreneurship for information technology innovations. *Information and Organization*, *17*(2), 59–88. doi:10.1016/j.infoandorg.2007.02.001

Wang, S., Beatty, S. E., & Liu, J. (2012). Employees' decision making in the face of customers' fuzzy return requests. *Journal of Marketing*, *76*(6), 69–86. doi:10.1509/jm.10.0529

Welch, E. W., Hinnant, C. C., & Moon, M. J. (2005). Linking citizen satisfaction with e-government and trust in government. *Journal of Public Administration: Research and Theory*, *15*(3), 371–391. doi:10.1093/jopart/mui021

Williams, C. C. (2005). Trust diffusion: The effect of interpersonal trust on structure, function, and organizational transparency. *Business & Society*, *44*(3), 357–368. doi:10.1177/0007650305275299

Williams, M., & Belkin, L. Y. (2016). Maintaining trust through active meaning construction. *Academy of Management Proceedings*.

Witt, A., Suzor, N., & Wikström, P. (2015). Regulating ride-sharing in the peer economy. *Communication Research and Practice*, *1*(2), 174–190. doi:10.1080/22041451.2015.1048041

Xu, X. (2020). How do consumers in the sharing economy value sharing? Evidence from online reviews. *Decision Support Systems*, *128*, 113162. doi:10.1016/j.dss.2019.113162

Yang, S., Song, Y., Chen, S., & Xia, X. (2017). Why are customers loyal in sharing-economy services? A relational benefits perspective. *Journal of Services Marketing*, *31*(1), 48–62. doi:10.1108/JSM-01-2016-0042

Zervas, G., Proserpio, D., & Byers, J. W. (2017). The rise of the sharing economy: Estimating the impact of Airbnb on the hotel industry. *JMR, Journal of Marketing Research*, *54*(5), 687–705. doi:10.1509/jmr.15.0204

Zhou, T. (2011). An empirical examination of initial trust in mobile banking. *Internet Research*, *21*(5), 527–540. doi:10.1108/10662241111176353

Zimmerman, M. A., & Zeitz, G. J. (2002). Beyond survival: Achieving new venture growth by building legitimacy. *Academy of Management Review*, *27*(3), 414–431. doi:10.5465/amr.2002.7389921

Zucker, L. G. (1986). Production of trust: Institutional sources of economic structure, 1840–1920. *Research in Organizational Behavior*, *8*, 53–111.

APPENDIX A. MEASUREMENT SCALES AND CROSS-LOADINGS

Table 3. Constructs, Measurement Items, and Source

Construct	Items	Source
Pragmatic Legitimacy	PL1: RHS offers a service that satisfies my needs. (0.866) PL2: RHS is the kind of service that I can get my money's worth. (0.741) PL3: RHS offers the latest trends in transportation service that meet my needs. (0.853)	
Normative Legitimacy	NL1: The general public approves RHS operating procedures. (0.635) NL2: RHS meets transportation industry standards in its operations. (0.789) NL3: RHS meets acceptable standards of the society. (0.793) NL4: RHS follows accepted transportation industry operating guidelines. (0.782)	
Cognitive Legitimacy	CL1: RHS makes sense to me. (0.758) CL2: I am very familiar with RHS. (0.752) CL3: I believe that RHS is a necessary means of transportation. (0.832) CL4: It is difficult to imagine the absence of RHS. (0.688)	Developed for this Study
Regulative Legitimacy	RL1: RHS conforms with the government transportation policies. (0.859) RL2: RHS fits the government transportation policies. (0.891) RL3: RHS goes along with the government transportation policies. (0.844)	
Service Process Transparency	PT1: I am aware of the exact steps of the operation of RHS. (0.790) PT2: I know the exact steps of how RHS works. (0.834) PT3: I can control the way RHS handles my ride information. (0.784) PT4: I can check all actions performed by RHS concerning my ride. (0.808)	
Trust	TR1: I trust RHS. (0.863) TR2: I can rely on RHS. (0.846) TR3: RHS is an honest service. (0.855) TR4: RHS is safe. (0.844)	
Intention to Use	IU1: I intend to increase my use of RHS in the future. (0.928) IU2: I intend to use RHS in the future for my transportation. (0.918)	
Note: Factor loadings are between parentheses.		

Table 4. Matrix of Cross-loadings

	PL	*NL*	*CL*	*RL*	*PT*	*TR*	*IU*
PL1	***0.866***	*0.456*	*0.572*	*0.217*	*0.447*	*0.560*	*0.435*
PL2	***0.741***	*0.394*	*0.475*	*0.255*	*0.383*	*0.452*	*0.392*
PL3	***0.853***	*0.450*	*0.502*	*0.269*	*0.428*	*0.559*	*0.449*
NL1	*0.358*	***0.635***	*0.427*	*0.339*	*0.356*	*0.396*	*0.309*
NL2	*0.423*	***0.789***	*0.441*	*0.349*	*0.367*	*0.494*	*0.402*
NL3	*0.428*	***0.793***	*0.487*	*0.262*	*0.416*	*0.514*	*0.412*
NL4	*0.376*	***0.782***	*0.474*	*0.381*	*0.399*	*0.448*	*0.406*
CL1	*0.556*	*0.505*	***0.758***	*0.296*	*0.436*	*0.545*	*0.409*
CL2	*0.490*	*0.402*	***0.752***	*0.226*	*0.552*	*0.504*	*0.461*
CL3	*0.510*	*0.514*	***0.832***	*0.285*	*0.436*	*0.568*	*0.522*
CL4	*0.336*	*0.414*	***0.688***	*0.265*	*0.452*	*0.449*	*0.424*
RL1	*0.267*	*0.367*	*0.307*	***0.859***	*0.214*	*0.290*	*0.294*
RL2	*0.250*	*0.403*	*0.303*	***0.891***	*0.246*	*0.305*	*0.306*
RL3	*0.259*	*0.363*	*0.308*	***0.844***	*0.186*	*0.280*	*0.285*
PT1	*0.362*	*0.430*	*0.501*	*0.163*	***0.790***	*0.482*	*0.402*
PT2	*0.411*	*0.420*	*0.537*	*0.173*	***0.834***	*0.504*	*0.411*
PT3	*0.402*	*0.334*	*0.431*	*0.235*	***0.784***	*0.474*	*0.337*
PT4	*0.465*	*0.454*	*0.504*	*0.232*	***0.808***	*0.528*	*0.403*
TR1	*0.535*	*0.530*	*0.573*	*0.250*	*0.567*	***0.863***	*0.569*
TR2	*0.553*	*0.558*	*0.592*	*0.272*	*0.553*	***0.846***	*0.525*
TR3	*0.522*	*0.502*	*0.584*	*0.335*	*0.503*	***0.855***	*0.583*
TR4	*0.573*	*0.519*	*0.580*	*0.293*	*0.487*	***0.844***	*0.592*
IU1	*0.516*	*0.464*	*0.564*	*0.293*	*0.451*	*0.634*	***0.928***
IU2	*0.437*	*0.479*	*0.541*	*0.339*	*0.441*	*0.594*	***0.918***

APPENDIX B. ITEMS DEVELOPMENT PROCEDURE

Table 5. The Stages and Activities of Cognitive Legitimacy Items Development

Stage	Activities
Establish the domain and the conceptual definition for the construct based on the literature.	We scanned previous literature to develop conceptual definition and dimensions for the construct. Conceptual definition: the taken-for-grantedness aspect of the service. Dimensions: Making sense and taken for granted.
Produce an instrument and improve it through multiple iterations.	We generated pool of items by converting each item statement in the domain to one or more items in the instrument, generating six items. We pre-tested the instrument with colleges, friends, and students to check the content, understandability, and terminology. We revised the items based on the feedback we received from the pre-test. We then conducted a pilot test to further purify the instrument. We asked students to fill out the instrument. Overall, we received 131 responses for our pilot test.
Assess the measurement properties of the instrument.	We performed a confirmatory factor analysis using LISREL 8.80. We dropped item that were not clear or had factor loading < 0.5 value recommended by Joseph F Hair et al. (1998). Two items had the same loading of 0.49, which is close to the recommended cutoff value, so we decided to retain the one that covers our conceptualization better and exclude the other for the sake of parsimony. We ended up with four items (see Table B2). We assessed the reliability and convergent validity for the retained items and the criteria were overall satisfactory: Cognitive legitimacy: AVE = 0.55, CR = 0.83, CA = 0.72.

Notes: AVE = average variance extracted. CR = composite reliability. CA = Cronbach's alpha.

Table 6. The Generated Items Pool

Construct	Items' pool and initial loadings
CL1: RHS make sense to me. (0.69) CL2: I am very familiar with RHS. (0.73) CL3: I tend to take RHS for granted. (0.49) † CL4: I believe RHS are a necessary mean for transportation. (0.63) CL5: It is difficult to imagine the absence of RHS. (0.49) CL6: I understand how RHS works and operates. (0.44) †	

Notes: † dropped item (unclear or low loading). CFA's factor loadings are between parentheses.

Mohammad Najjar is an instructor in the Department of Business Information and Technology, Fogelman School of Business and Economics, the University of Memphis, USA. He received his PhD in Management Information Systems from the University of Memphis, USA. Mohammad has around five years of practical experience in systems analysis and development. His research interests include information systems services, information management, data monetization, information assurance, and the adoption of IT-enabled innovations. Mohammad has published in European Journal of Information Systems, MIS Quarterly Executive, Information Technology & People, and international IS conferences.

Laila Dahabiyeh is an Assistant Professor of Information Systems Management at the School of Business, The University of Jordan. She earned her Master's and Ph.D. from Warwick Business School. Her research interests are in the areas of IS security and privacy, legitimacy of digital innovations, collective action, incentives, and the role of IS in facing societal challenges. Laila's work has appeared in several IS journals such as Information Technology & People and Entertainment Computing and international IS conferences.