Print ISSN: 2233-4165 / Online ISSN: 2233-5382
doi:http://dx.doi.org/10.13106/ijidb.2019.vol10.no1.39.

# Investigating Utility, Attitude, Intention, and Satisfaction of Skill-Sharing Economy

Soo-Jung La*, Yooncheong Cho**

Received: October 19, 2018. Revised: November 15, 2018. Accepted: December 05, 2018.

## Abstract

**Purpose** - Previous studies examined effects of sharing economy in the fields such as accommodation and automobile sector, while there are lack of researches in the field of skill-sharing economy. By classifying skill-sharing into general and special skill-sharing, this study explored effects of variables such as transaction utility, social utility, sustainability utility, emotional utility, economic utility, and trust utility, on attitudes, intention, satisfaction, and loyalty of demand (i.e., customers) and supply (i.e., providers) sides, potential, and actual customers.

**Research design, data, and methodology** - Data were collected via both online and offline surveys. This study applied factor analysis and multiple regression analysis for findings.

**Results** – Results show that utilities for general suppliers' skill-sharing are significant than other cases. Among utilities, this study found that trust utility shows significant for the cases of special customers', general suppliers' and special suppliers' potential skill-sharing. The results implies that trust is crucial in the transaction of the sharing economy.

**Conclusions** – Enhanced managerial systems help resolve issues on the sharing economy. This study provides implications what are positive effects of skill-sharing economy and recommends proper establishment of the sharing economy.

**Keywords:** Skill-sharing Economy, Utility Factors, Attitude, Intention to Use, Satisfaction.

**JEL classifications:** M31, M15, L97, J24.

## 1. Introduction

Sharing economy, a term first coined by Lessig (2008), is a recent phenomenon that has been growing rapidly and substantially since its emergence. Business models of platforms such as Airbnb, Uber, ZipCar, TaskRabbit, and Etzy are rooted in a barter system, while those have been facilitated with the growth of the 4th industrial revolution. Belk (2007 & 2010) defines sharing as "The act and process of distributing what is ours to others for their use and/or the act and process of receiving or taking something from others for our use." Botsman (2013) defines the sharing economy as an economic model based on sharing underutilized assets from spaces to skills to stuff for monetary or non-monetary benefits.

Mang and Wilt (2013) state that sharing economy is born out of social trends that have gone by a variety of labels, such as crowdsourcing, micro-financing and collaborative consumption. This has led to the interchangeable use of notionally different terms and created confusion and difficulty in drawing the boundaries of the sharing economy. Horton and Zeckhauser (2016) describe the sharing economy, a term they use interchangeably with peer-to-peer market, as a new kind of recently created rental market for technology startup firms in which the owners not only use their assets for their own consumption but also rent those assets out to those who would benefit from their use. When expounding on the sharing economy, scholars often somewhat interchangeably use terms such as crowd-based capitalism (Sundararajan, 2016), collaborative economy (Felson & Spaeth, 1978), mesh (Gansky, 2010), on-demand economy (Burrows, 2012), and access-based consumption (Bardhi & Eckhardt, 2012) with different perspectives.

Previous studies have investigated various fields of the sharing economy including accommodation, car, finance, space, and bicycling, while there are not many studies examined the issues of the skill sharing economy. The purpose of this study is to explore skill sharing practices in two main areas, general skill-sharing and special skill-sharing, and to analyze demand and supply (i.e., consumers and providers) sides' effects. This study poses the following research questions: Does utilities such as transaction, social, sustainability, emotional, economic, and

* Graduate. KDI School of Public Policy and Management
** Corresponding author, Professor, KDI School of Public Policy and Management, # 337 263 Namsejongro, Sejong, S. Korea,
Tel: 82-44-550-1087, e-mail: ycho@kdischool.ac.kr

trust utility affect the attitudes of consumers and providers in the market for skill-sharing? By classifying general and special skill-sharing services, this study examines the following research questions. Does attitude of potential consumers affect intention to consume general and special skill-sharing services? Does the attitude of actual consumers affect satisfaction gained from consuming general and special skill-sharing services? Does the attitude of potential suppliers affect intention to supply general and special skill-sharing services? Does the attitude of actual suppliers affect satisfaction gained from supplying general and special skill-sharing services? Does intention to consume affect potential satisfaction in general and special skill-sharing? Does intention to supply affect satisfaction in general and special skill-sharing? Does satisfaction from consuming a general and special skill-sharing service affect loyalty? Does satisfaction from supplying a general and special skill-sharing service affect loyalty?

## 2. Literature Review

### 2.1. Development of the Sharing Economy

The contemporary literature alludes to three factors that propelled the evolution of the sharing economy: 1) a shift in paradigm; 2) the advent of modern technologies; and 3) social issues. First, Weber (2016) stated that a paradigm shift from ownership-based consumption to access-based consumption made the emergence of the sharing economy in the early 2000s possible. Botsman and Rogers (2010) echo Weber's perspective, as they assert that the 20th century was dominated by ownership-based "hyper consumption," whereas the 21st century faces shared-access-based "collaborative consumption". On the other hand, Rifkin (2014a) maintains that this newly rising phenomenon can be explained by the rise of anti-capitalism as the whole economy is facing huge reductions in marginal costs. Rifkin (2014b) also notes that the sharing economy became the new paradigm after the economic collapse in 2008.

The advent of modern technologies certainly has contributed to the evolution of the sharing economy. Hamari, Sjöklint, and Ukkonen (2015) advocate that technological development has simplified sharing of both physical and non-physical goods and services through the availability of various information systems on the Internet. Calo and Rosenblat (2017) acknowledge that technological development has enhanced the overall quality of goods and services in the market through promoting competition and access to new resources through the sharing economy platforms. The digital dimension of modern technology reduces transaction costs, thereby promoting efficiency of sharing economy platforms and reducing the risks associated with the transactions as technologies decrease overall level of uncertainty and promote trust between strangers (Schor, Walker, Lee, Parigi, & Cook, 2015; Bakos, 1997). John (2013) states that modern technologies not only enable but also promote the sharing economy by encouraging offline practices of sharing through online practices via social network services, or SNS.

Uchitelle (2009) indicates that the number of jobs lost in the United States in 2008 was 2.6 million. Hicks (2017) suggests that the aftermath of the financial crisis was a decline in the traditional job market and increase in independent contractors and temporary workers. Other scholars (Mason, 2015; Stephany, 2015; Castells, 2012) also ascribe the rise of the sharing economy to the 2007-08 financial crisis. Stephany (2015) argues that economic distress let the underemployed and cash-strapped flock to freelance marketplaces, and consumers to cheaper models of consumption through e-commerce platforms.

### 2.2. Skill-sharing

As there are different types of skills, this study classifies two types of skill-sharing: general and special skill-sharing. A general skill refers to a simple labor that many can perform for instance, cleaning a house, buying and delivering a canned pet food, delivering a freshly cooked meal, lending a hand with moving in or out, and assembling furniture. A special skill, on the other hand, includes arts and crafts, website design, clothing design, cake baking according to the needs of customers, and other services that require some expertise to perform. Some frameworks of special skill-sharing overlap with those of knowledge sharing. Therefore, this study defines special skill-sharing to monetizing one's skill by producing sellable products. Special skill-sharing in this study involves supplying customized products that are specifically designed, created, and delivered according to the needs of customers. The most well-known general skill-sharing platform is TaskRabbit.com, which is an online platform that matches its customers, or task demanders, with taskers who are capable of performing requested tasks (www.taskrabbit.com). Another renowned special skills sharing platform is Etsy.com, which was founded in 2005 (Green, 2016), is most famous for unique pieces of handmade crafts made by individual vendors.

## 3. Theoretical Background

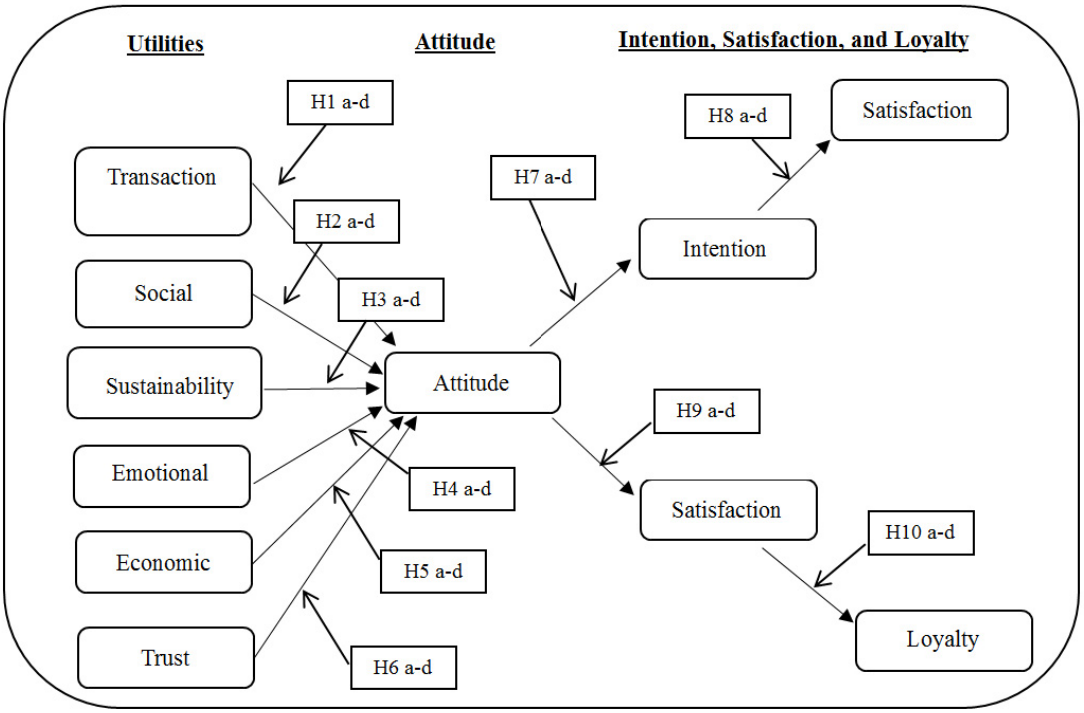
Ajzen (2005) states that an attitude is a disposition to respond favorably or unfavorably to an object, person, institution, or event. Ajzen (1991)'s Theory of Planned Behavior, Davis (1989)'s Technology Acceptance Model, and Venkatesh, Morris, Davis, and Davis (2003)'s Unified Theory of Acceptance and Use of Technology combined help researchers understand how the determinants (i.e. beliefs, intention, and attitude) of consumer behavior are correlated

with one another. Regarding intention, Fishbein and Ajzen (1980) addressed that most behaviors of social relevance are under volitional control and are thus predictable from intentions. Expectancy value model of achievement choice (Eccles, 2005; Eccles, Adler, Futterman, Goff, Kaczala, Meece, & Midgley, 1983) clarifies how the utility gained from consuming a product or service influences the decision-maker's behavior. Howard and Sheth (1969) assume that consumers are fully aware of their needs and wants, thereby choosing the option that will yield the highest expected utility after searching for and processing the information under certain restraints. Previous studies (Hennig-Thurau, Henning, & Sattler, 2007; Lamberton & Rose, 2012) develop their models on utility theories and propose that rational consumers would prefer an illegal copy to the original product if consuming an illegal copy of a product gives them higher level of utility.

## 4. Hypothesis Development

By applying previous studies (Hennig-Thurau, Hennig, & Sattler, 2007; Lamberton & Rose, 2012; Lee & Cho, 2018; Oliver, 1980), this study proposes relationships among utility variables, attitude, intention, satisfaction, and loyalty of consumers in the context of skill-sharing (Figure 1).

This study postulates that the utility variables impact the attitude of both consumers and providers of general and special skill-sharing. As a number of studies concede, flexibility in peer-to-peer markets relatively lowers the entry barriers for suppliers by increasing asset utilization (Botsman & Rogers, 2010; Edelman & Geradin, 2016; Einav, Farronato, & Levin, 2016; Horton & Zeckhauser, 2016; Sundararajan, 2013). This suggests that a customer who has an underused asset such as skills can easily become a supplier in the market for skill-sharing. This study proposed the determinants of the attitudes of consumers and suppliers in the market for skill-sharing. Hypotheses for "a" and "b" are applied for effects of consumers, while "c" and "d" are applied for effects of providers, or the skill-sharing platform customers who supply services. Furthermore, hypotheses "a" and "c" are applied for effects of general skill sharing, while "b" and "d" are applied for effects of special skill sharing. Hypothesis 1~6 applied for both cases of potential and actual customers.




Note: a&b are applied for customers, c&d are applied for providers, a&c are applied for general skills sharing, and b&d are applied for special skills sharing'

**Figure 1:** The Model of Utilities, Attitude, Satisfaction, Intention, and Loyalty of Skills Sharing (Modified from Hennig-Thurau, Henning, & Sattler, 2007; Lamberton & Rose, 2012; Lee & Cho, 2018; Oliver, 1980)

### 4.1. Transaction Utility on Attitude

Thaler (2008) mentioned that transaction utility refers not to the value of consumed goods or services but to the expected benefits from the transaction. Grewal, Monroe, and Krishnan (1998) denote transaction utility as the perceived benefit of a transaction, or the expected satisfaction/pleasure of obtaining monetary benefit from the access to goods or services. As the sharing economy has been facilitated along with the development technology, transaction utility that connects the demand and supply sides should be increased. Therefore, this study hypothesized effects of transaction utility of consumers and providers on attitudes for both general and special skill sharing.

**H1a~b:** The level of transaction utility of consumers affects the level of attitude of consumers for general and special skill-sharing.

**H1c~d:** The level of transaction utility of suppliers affects the level of attitude of providers for general and special skill-sharing.

### 4.2. Social Utility on Attitude

Social influence, as Venkatesh and Davis (2000) define it, is the degree of dependence of consumer behaviors on peers, or of the extrinsic motivation on participation. Gardete (2015) addressed that consumers' willingness to buy is shown to be positively correlated with responsiveness to social influence. Such statements of Gardete (2015) coincide with those maintained by other studies that social utility is one of the significant determinants of participation in collaborative consumption (Bardhi & Eckhardt, 2012; Botsman & Rogers, 2010; Gansky, 2010). Lamberton and Rose (2012) specify that social utility is the gains that may accrue to sharing participants in form of approval by reference group and is sufficient for this study.

Parameswaran and Whinston (2007) and Raymond (1999) demonstrate the high correlation between gaining reputation among like-minded people and motivation to share in online communities and open-source projects. Wasko and Faraj (2005) find that the participants in electronic networks of practice share knowledge, since their contribution often enhances personal reputation. Donath (1999) also finds that active participation can be driven by the desire for a good reputation. Yang and Lai (2010) explain that individuals are more likely to gain self-based achievement rather than enjoyment in the process of sharing knowledge. Therefore, this study hypothesizes the effect of social utility on attitudes of consumers and providers for both general and special skill-sharing practices.

**H2a~b:** The level of social utility of consumers affects the level of attitude of consumers for general and special skill-sharing.

**H2c~d:** The level of social utility of suppliers affects the level of attitude of providers for general and special skill-sharing.

### 4.3. Sustainability Utility on Attitude

Sustainability utility refers to the belief that sharing is a way to protect the environment or reduce waste (Mintona & Roseb, 1997). As Prothero, Dobscha, Freund, Kilbourne, Luchs, Ozanne, and Thøgersen (2011) mentioned, participation in collaborative consumption is often thought to be eco-friendly because it promotes sharing instead of producing. As Mont (2004) puts it, over-production can be avoided if fewer materials are required, which leads to less waste produced. Previous studies (Botsman & Rogers, 2010; Crane, Ecola, Hassell, & Nataraj, 2012, Rifkin, 2014a; Rifkin, 2014b) elaborate environmental benefits of car-sharing services. Skill-sharing also can be beneficial to the environment by promoting reuse of existing products. Furthermore, as Sachs (2017) argues, skill-sharing practices may create more job opportunities for individuals, since an individual can easily access the vast opportunities for performing tasks or selling handmade products by simply creating an account. Sustainability utility is the expectation of social gains that result from protecting the environment, reducing waste, and increasing job opportunities. Therefore, this study hypothesizes the effect of sustainability utility on attitude of consumers and providers for both general and special skill-sharing practices.

**H3a~b:** The level of sustainability utility of consumers affects the level of attitude of consumers for general and special skill-sharing.

**H3c~d:** The level of sustainability utility of suppliers affects the level of attitude of suppliers for general and special skill-sharing.

### 4.4. Emotional Utility on Attitude

Numerous scholarly work on happiness (Dunn, Aknin, & Norton, 2008; Kahn & Isen, 1993; Lyubomirsky, King, & Diener, 2005) signifies the importance of emotion. Morris, Woo, Geason, and Kim (2002) also establish the importance of emotion on the purchase decision of individuals. This study proposes that emotional utility is the expected gain from the positive feelings an individual gets from consuming or providing a product or a service in the context of the general and special skill-sharing economy. Therefore, this study hypothesizes the effect of emotional utility on attitude of consumers and providers for both general and special skill-sharing practices.

**H4a~b:** The level of emotional utility of consumers affects the level of attitude of consumers for general and special skill-sharing.

**H4c~d:** The level of emotional utility of suppliers affects the level of attitude of suppliers for general and

special skill-sharing.

### 4.5. Economic Utility on Attitude

People often pay attention to the economic value of a product or a service to maximize their economic utility. Hall and Mishkin (1982) established that a change in the price of a product or a service causes a change in income of an individual, which then causes a change in the aggregate consumption patterns. Carlson, Wolfe, Blanchard, Huber, and Ariely (2015) also show that consumers tend to select less variety of items to avoid feeling loss when their budget restricts them to a certain level. As mentioned earlier, Bardhi and Eckhardt (2012) mentioned the importance of economic utility in a sharing economy in which people use sharing services for their competitive advantage rather than collaborative motivation. Therefore, this study hypothesizes about the effect of economic utility on attitudes of consumers and providers for both general and special skill-sharing practices.

**H5a~b:** The level of economic utility of consumers affects the level of attitude of consumers for general and special skill-sharing.

**H5c~d:** The level of economic utility of suppliers affects the level of attitude of suppliers for general and special skill-sharing.

### 4.6. Trust Utility on Attitude

Wirtz and Lwin (2009) state that trust is a mediating factor that helps resolve issues and promote relationships. Botsman (2012) emphasizes trust in the sharing economy as one of the most essential determinants of consumer behaviors. Ostrom (1990) introduces eight different design principles for common pool resource institutions to building trust. Ostrom (2003) also emphasizes the importance of reciprocity of trust for cooperation among people. Previous studies (Botsman, 2012; Ert, Fleischer, & Magen, 2016; Sundararajan, 2014; Zervas, Proserpio, & Byers, 2017) addressed the importance of trust in the sharing economy. Therefore, this study hypothesizes the effect of trust utility on attitudes of consumers and providers for both general and special skill-sharing practices.

**H6a~b:** The level of trust utility affects the level of attitude of consumers for general and special skill-sharing.

**H6c~d:** The level of trust utility affects the level of attitude of suppliers for general and special skill-sharing.

### 4.7 Effects of Attitude, Intention, Satisfaction and Loyalty

The existing literature suggests that consumer and provider behaviors may be predicted by measuring attitude, intention and satisfaction (Fishbein & Ajzen, 1980; Ajzen, 1991; Davis, 1989; Venkatesh, Thong, & Xu, 2012; Oliver, 1997). As the utilities of consumers and providers may affect their attitude, which then affects their satisfaction or intention, this study hypotheses the effects of attitudes of potential customers on intention, effects of intention on expected satisfaction, attitudes of actual customers on satisfaction, and effects of satisfaction on loyalty. Hypotheses “a~b” applied for effects for customers, while “c~d” applied for effects for providers. Hypotheses of general skill sharing, while “b” and “d” are applied for effects of special skill sharing. Hypotheses 7a~d and 8a~d are applied potential customers and providers, while Hypotheses 9a~d and 10a ~ d are applied actual customers and providers.

**H7a~d:** The level of attitude affects the level of intention for potential consumers/providers of general and special skill-sharing.

**H8a~d:** The level of intention affects the level of satisfaction for potential consumers/providers of general and special skill-sharing.

**H9a~d:** The level of attitude affects the level of satisfaction for actual consumers/providers of general and special skill-sharing.

**H10a~d:** The level of satisfaction affects the level loyalty for actual consumers/providers of general and special skill-sharing.

## 5. Methodology

Both online and offline surveys were conducted with randomly selected respondents. The questions were asked on a 7-point Likert scale and applied multi-item scales to measure each variable. The online survey was distributed on websites of some institutions and well-known SNSs. The response rate was 20.5% for online surveys, while the response rate was around 98% for offline surveys. Offline surveys were distributed in areas such as Hongdae, Sinchon, Itaewon and Gangnam in Korea as these districts incorporate a wide range of age groups of Korean nationals as well as foreigners from diverse countries.

The total number of respondents was 103, with 50.49% male respondents and 49.51% female respondents. Among the respondents, 66.99% were Korean and 33.01% were non-Korean. Among the respondents, 70.87% were in their 20s and 22.33% were in their 30s and above. Among the respondents, those who have used general skill-sharing services are 55.43%, whereas those who have provided general skill-sharing services are 39.81%. Those who have used special skill-sharing services are 16.50%, whereas those who have provided special skill-sharing services are 14.56%.

## 6. Data Analysis

This study applied factor analysis and multiple regression for major findings and MANOVA for additional findings. To check the validity of the major construct of the study, this paper used the extraction method and varimax rotation methods with Kaiser normalization for factor analyses. This study selected factors that Eigen values are greater than 1.

### 6.1 Potential and Actual Demand Side General Skill-Sharing

The Cronbach's alpha was applied to test the reliability of each construct of interest. In the case of the potential consumers' general skill-sharing (i.e., demand side), the values of Cronbach's alpha for potential customers' transaction utility was .745, social utility was 0.724, sustainability utility was .725, emotional utility was .702, economic utility was .763, trust utility was .754, attitude was .807, intention was .793, and expected satisfaction was .897. For the actual customers' general skill sharing, the values of Cronbach's alpha for actual customers' transaction utility was .753, social utility was 0.732, sustainability utility was .723, emotional utility was .765, economic utility was .743, trust utility was .700, attitude was .786, satisfaction was .840, and loyalty was .740. Table 1 shows the results of factor analysis for potential customers of general skill-sharing services.

**Table 1:** Component Matrix: Utility Dimension for General Skills Sharing for Potential Customers

| Items | | Components | | | | | |
|---|---|---|---|---|---|---|---|
| **Factors** | **Scale Items** | **1** | **2** | **3** | **4** | **5** | **6** |
| Transaction 1 | I like the fact that I can submit my request anytime anywhere as long as I have access to the internet or Wifi. | .803 | | | | | |
| Transaction 2 | It is important that the process of submitting my request is short and easy. | .728 | | | | | |
| Transaction 3 | It is important that I can easily contact the supplier. | .503 | | | | | |
| Social 1 | The whole idea of general skill sharing makes me intrigued because it sounds trendy. | | .771 | | | | |
| Social 2 | If people around me give positive feedback on general skill sharing services, I will be interested in consuming those services. | | .755 | | | | |
| Social 3 | If people around me are the users of general skill sharing services, I will also become a user of those services. | | .647 | | | | |
| Sustainability 1 | If general skill sharing services are helpful to the job market, I will be more inclined to use those services. | | | .840 | | | |
| Sustainability 2 | If general skill sharing services promote healthy environment, I will be more inclined to use those services. | | | .795 | | | |
| Sustainability 3 | I like consuming products and/or services of the companies that positively contribute to social welfare. | | | .779 | | | |
| Emotional 1 | I will feel productive as I can spend more time on my priorities with someone helping me with everyday tasks. | | | | .837 | | |
| Emotional 2 | I will be happy to use general skill sharing services as someone who is better than me at everyday tasks is doing the work. | | | | .795 | | |
| Emotional 3 | General skill sharing services will make me happy as the amount of work I have to do will be reduced. | | | | .741 | | |
| Economic 1 | General skill sharing sounds like a good deal. | | | | | .901 | |
| Economic 2 | I think general skill sharing services will help me save my time. | | | | | .825 | |
| Economic 3 | General skill sharing services save me costs (i.e. time and money spent on finding the service supplier) that otherwise would have occurred. | | | | | .756 | |
| Trust 1 | I trust to get the service I expect. | | | | | | .845 |
| Trust 2 | I trust general skill sharing websites and apps to operate transparently. | | | | | | .834 |
| Trust 3 | I trust that I will be protected from possible liabilities such as physical injuries and/or damages, robbery, and etc. | | | | | | .785 |

This study applied multiple regression analysis using factor scores. As shown in Table 2, transaction and emotional utilities were statistically significant at 0.1 level and economic utility was statistically significant at 0.05 level for potential customer of general skill sharing, while only trust utility is statistically significant but only at 0.1 level of significance actual customer of general skills sharing.

**Table 2:** Effects of Utilities on Attitude for Demand Side Potential & Actual General Skill-Sharing

| Variables (Independent à Dependent) | Standardized Coefficient (t-value-Sig) | |
|---|---|---|
| | Demand Potential General | Demand Actual General |
| Transaction Utility à Attitude(H1a) | .196 (.069)* | .098 (.414) |
| Social Utility à Attitude(H2a) | .024 (.850) | -.162 (.236) |
| Sustainability Utility à Attitude(H3a) | .113 (.313) | .190 (.121) |
| Emotional Utility à Attitude(H4a) | .214 (.078)* | .224 (.228) |
| Economic Utility à Attitude(H5a) | .360 (.019)** | .257 (.160) |
| Trust Utility à Attitude(H6a) | .216 (.083) | .229 (.067)* |

*Significant at .1 level; **Significant at .05 level; ***Significant at .01 level (2-tailed).

These finding suggest that potential and actual customers of general skill-sharing value given utilities differently when making decisions to use general skill-sharing platforms. Potential customers correspond with transaction, emotional, and economic utilities, while actual customers correspond only with trust utility. Trust utility is regarded as an important value due to possible social risks based on actual experience. On the other hand, for those who have not experienced general skill-sharing platforms, the easy and short transaction of using an application or website (transaction utility), the positive feelings associated with the use of service (emotional utility), and the price or cost of a service (economic utility) might seem more important.

## 6.2. Potential and Actual Demand Side Special Skill-Sharing

In the case of the demand side of potential customers' special skill-sharing, the values of Cronbach's alphas for utilities, intention, expected satisfaction, satisfaction, and loyalty were also over 0.70. This study also applied factor and multiple regression analyses for potential customer of special skills sharing services. Table 3 shows results of potential and actual customer of special skills sharing platforms. Emotional and trust utilities are statistically significant at 0.1 level and 0.05 level for potential customers' special skill-sharing, while sustainability and trust utilities are statistically significant at 0.05 level for actual customers' of special skills sharing.

**Table 3:** Effects of Utilities on Attitude for Demand Side Potential & Actual Special Skill-Sharing

| Variables (Independent à Dependent) | Standardized Coefficient (t-value-Sig) | |
|---|---|---|
| | Demand Potential Special | Demand Actual Special |
| Transaction Utility à Attitude (H1b) | .145 (.197) | .198 (.177) |
| Social Utility à Attitude (H2b) | .066 (.595) | -.013 (.935) |
| Sustainability Utility à Attitude (H3b) | -.043 (.714) | .349 (.024)** |
| Emotional Utility à Attitude (H4b) | .236 (.089)* | .061 (.728) |
| Economic Utility à Attitude (H5b) | .237 (.121) | .065 (.712) |
| Trust Utility à Attitude (H6b) | .307 (.010)** | .384 (.015)** |

*Significant at .1 level; **Significant at .05 level; ***Significant at .01 level (2-tailed).

As indicated, trust utility is statistically significant for both potential and actual customers of special skill-sharing, while those customers diverge when it comes to emotional utility and sustainability utility. For other effects, emotional utility is statistically significant for potential customers, whereas sustainability utility is statistically significant for actual customers. One possible explanation is that customers who have not experienced the service make decisions based on the probability of gaining emotional utility. However, customers who have experienced the service will be more inclined toward service providers who engage in activities that promote social welfare.

## 6.3. Potential and Actual Supply Side General Skill-Sharing

In the case of the supply side of potential and actual customers' general skill-sharing, the values of Cronbach's alphas for utilities, intention, expected satisfaction, satisfaction, and loyalty were also over 0.70. This study also applied factor and multiple regression analyses for potential customers of general skills sharing services. As shown in Table 4, transaction, social, and emotional utilities are statistically significant at 0.05 level and sustainability and trust utilities are statistically significant at 0.1 level for potential suppliers of general skills sharing, while transaction, social, emotional, and trust utilities are statistically significant at 0.05 level for actual suppliers of general skills sharing.

**Table 4:** Effects of Utilities on Attitude for Supply Side Potential & Actual General Skill-Sharing

| Variables (Independent à Dependent) | Standardized Coefficient (t-value-Sig) | |
|---|---|---|
| | Supply Potential General | Supply Actual General |
| Transaction Utility à Attitude (H1c) | .178 (.037)** | .293 (.028)** |
| Social Utility à Attitude (H2c) | .217 (.021)** | .378 (.034)** |
| Sustainability Utility à Attitude (H3c) | .379 (.000)*** | -.121 (.499) |
| Emotional Utility à Attitude (H4c) | .036 (.724)** | -.410 (.030)** |
| Economic Utility à Attitude (H5c) | -.056 (.604) | .262 (.141) |
| Trust Utility à Attitude (H6c) | .289 (.002)*** | .644 (.012)** |

*Significant at .1 level; **Significant at .05 level; ***Significant at .01 level (2-tailed).

Transaction utility, social utility, emotional utility, and trust utility are all statistically significant for both potential suppliers and actual suppliers of general skills. Economic utility does not show significant for both cases of supply side general skills and both cases of potential and actual customers. The potential suppliers may consider to provide service in the hope that general skill-sharing platforms contribute to securing decent jobs and enhancing social welfare, while they do not expect that services help their income.

## 6.4. Potential and Actual Supply Side Special Skill-Sharing

In the case of the supply side of potential and actual customers' special skill-sharing, the values of Cronbach's alpha for utilities, intention, expected satisfaction, satisfaction, and loyalty were all over 0.70. As shown in Table 5, economic utility was statistically significant at 0.1 level and emotional and trust utilities are both statistically significant at 0.01 level for potential suppliers of special skills sharing platforms, while none of the utilities show statistically significant for actual suppliers of special skills sharing. Compare to the supply side general skill-sharing, economic utility show significant in the case of supply side special skill-sharing for potential providers.

**Table 5:** Effects of Utilities on Attitude for Supply Side Potential General& Actual Special Skill-Sharing

| Variables (Independent à Dependent) | Standardized Coefficient (t-value-Sig) | |
|---|---|---|
| | Supply Potential Special | Supply Actual Special |
| Transaction Utility à Attitude (H1d) | .057 (.440) | .452 (.144) |
| Social Utility à Attitude (H2d) | .079 (.311) | -.312 (.239) |
| Sustainability Utility à Attitude (H3d) | .105 (.300) | .172 (.393) |
| Emotional Utility à Attitude (H4d) | .403 (.000)*** | -.287 (.270) |
| Economic Utility à Attitude (H5d) | .165 (.073)* | .346 (.338) |
| Trust Utility à Attitude (H6d) | .235 (.004)*** | .550 (.123) |

*Significant at .1 level; **Significant at .05 level; ***Significant at .01 level (2-tailed).

## 6.5 Demand and Supply Sides: Potential Customers

For both potential customers of general and special skills sharing platforms, the effects of attitude on intention and effects of intention on expected satisfaction show significant at 0.01 level (Table 6).

**Table 6:** Effects of Attitude on Intention and of Intention on Satisfaction for Demand General

| Variables (Independent à Dependent) | Standardized Coefficient (t-value-Sig) | |
|---|---|---|
| | Demand Potential General | Demand Potential Special |
| Attitude à Intention (H7a & b) | .663 (.000)*** | .663 (.000)*** |
| Intention à Satisfaction (H8a & b) | .712 (.000)*** | .712 (.000)*** |

*Significant at .1 level; **Significant at .05 level; ***Significant at .01 level (2-tailed).

For both potential suppliers of general and special skills sharing platforms, the effects of attitude on intention and effects of intention on expected satisfaction show significant at 0.01 level (Table 7).

**Table 7:** Effects of Attitude on Intention and of Intention on Satisfaction for Supply General

| Variables (Independent à Dependent) | Standardized Coefficient (t-value-Sig) | |
|---|---|---|
| | Supply Potential General | Supply Potential Special |
| Attitude à Intention (H7c & d) | .440 (.000)*** | .525 (.000)*** |
| Intention à Satisfaction (H8c & d) | .787 (.000)*** | .723 (.000)*** |

*Significant at .1 level; **Significant at .05 level; ***Significant at .01 level (2-tailed).

## 6.6. Demand and Supply: Actual Customers

For both actual customers of general and special skills sharing platforms, the effects of attitude on satisfaction and effects of satisfaction on loyalty show significant at 0.01 level (Table 8).

**Table 8:** Effects of Attitude on Satisfaction and of Satisfaction on Loyalty for Demand General

| Variables (Independent à Dependent) | Standardized Coefficient (t-value-Sig) | |
|---|---|---|
| | Demand Actual General | Demand Actual Special |
| Attitude à Satisfaction (H9a & b) | .567 (.000)*** | .554 (.000)*** |
| Satisfaction à Loyalty (H10a & b) | .461 (.000)*** | .442 (.000)*** |

*Significant at .1 level; **Significant at .05 level; ***Significant at .01 level (2-tailed).

For actual suppliers of general skills sharing platforms, only effects of satisfaction on loyalty show significant at 0.01 level (Table 9).

**Table 9:** Effects of Attitude on Satisfaction and of Satisfaction on Loyalty for Supply General

| Variables (Independent à Dependent) | Standardized Coefficient (t-value-Sig) | |
|---|---|---|
| | Supply Actual General | Supply Actual Special |
| Attitude à Satisfaction (H9c & d) | .399 (.113) | .774 (.001)*** |
| Satisfaction à Loyalty (H10c & d) | .902 (.000)*** | .561 (.029)** |

*Significant at .1 level; **Significant at .05 level; ***Significant at .01 level (2-tailed).

# 7. Results

### 7.1 Major Findings

For both cases of general and special skill-sharing services, effects of utilities on attitude show more significant

with potential customers than actual customers. Overall, effects of utilities on attitude show more significant with potential case than actual case. The results of the study could mention that potential customers' expectation level is higher than actual customers, while actual customers find proposed utilities do not fully meet their expectation. In the case of demand side special skill-sharing, trust utility show significant for both potential and actual customers, while sustainability utility show significant for actual customers only. The difference in results provide implication that actual customers perception on special skill-sharing platforms can enhance social welfare through protecting the environment, reducing unnecessary waste, and creating jobs.

The results of potential customers and suppliers of general skill-sharing services show that emotional utility shows significant, while the results of actual customers and suppliers of general skill-sharing services show that trust utility shows significant. The results of potential customers and suppliers of special skill-sharing services show that both emotional and trust utilities show significant. Therefore, overall, trust utility shows significant for skill-sharing economy as trust seems the critical issue for the development of the sharing economy. Therefore, findings provide both managerial and policy implications to improve trust by adopting enhanced system and social environment with provision of proper policy reactions.

### 7.2. Additional Findings

Other additional analyses were conducted for this research. Some of the interesting findings involve logit regression and MANOVA. The regression of gender (male=0 and female=1) on utilities for actual customers of general skill-sharing services show that trust utility is statistically significant. When nationality (domestic=0 and foreign=1) is regressed on utilities for actual customers of special skill-sharing services, social utility is also statistically significant. The results for MANOVA indicate that the transaction utility value of those who have experienced sharing economy platform and that of those who have not experienced sharing economy platforms differ significantly for actual customers of general and special skill-sharing services and actual suppliers of general skill-sharing services. Those who have experienced sharing economy platforms provide higher values for transaction utility than those who have not experienced. Therefore, those who have experienced sharing economy platforms evaluate easy to access services and fast execution of orders offered by sharing economy platforms.

## 8. Conclusion

This study found that trust between customers and suppliers is crucial in the transaction of the sharing economy. Enhanced rating system should help resolve uncertainty that happened between customers and suppliers due to information asymmetry. In particular, skill-sharing platforms have a characteristic that allows them to conduct reliability checks on suppliers as well as customers. Skill-sharing platforms could also promote with the development of community in which hard work is appreciated and any complaint is well resolved. This study considered the sharing economy as efficient marketing tools that foster economic models of skill-sharing, while it also recommends viable solutions to policy makers in an attempt to mitigate social issues such as significant job replacements or job losses with the adoption of inevitable technology development. This study urges stakeholders and government to work together to consider determination of proper policies for the better establishment of sharing economy in societies.

This study has limitations. Due to the skill-sharing economy platforms are a newly rising phenomenon, it was difficult to find actual suppliers of special skills. Sample size should be increased for the future study. Further research on this subject might analyze cross-cultural differences.

## Reference

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179-211.

Ajzen, I. (2005). *Attitudes, Personality, and Behavior.* UK: McGraw-Hill Education.

Bakos, Y. (1997). Reducing buyer search costs: Implications for electronic marketplaces. *Management Science, 43*(12), 1676-1692.

Bardhi, F., & Eckhardt, G. (2012). Access-based consumption: The case of car sharing. *Journal of Consumer Research, 39*(4), 881-898.

Belk, R. (2007). Why Not Share Rather Than Own? *Annuals of the American Academy of Political and Social Science, 611*(1), 126-140.

Belk, R. (2010). Sharing. *Journal of Consumer Research, 36*(5), 715-734.

Botsman, R., & Rogers, R (2010). *What's Mine Is Yours: The Rise of Collaborative Consumption*. New York, NY: Harper Business.

Botsman, R. (2012, June). *The Currency of the New Economy is Trust* [Webinar].

Botsman, R. (2013). *The Sharing Economy Lacks A Shared Definition.* Retrieved from https://www.fastcoexist.com/3022028/the-sharing-economy-lacks-a-shared-definition

Burrows, R. (2012). *The Market-Driven Supply Chain: A Revolutionary Model for Sales and Operations Planning in the New On-Demand Economy*. New York, NY:

AMACOM.

Calo, R., & Rosenblat, A. (2017). The TAKING Economy: Uber, Information, and Power. *Columbia Law Review, 117*(6), 1623-1690.

Carlson, K. A., Wolfe, J., Blanchard, S. J., Huber, J. C., & Ariely, D. (2015). The Budget Contraction Effect: How Contracting Budgets Lead to Less Varied Choice, *Journal of Marketing Research, 52*(3), 337-348.

Castells, Manuel (2012). *Networks of outrage and hope: social movements in the internet age*. Cambridge, UK: Polity Press.

Crane, K., Ecola, L., Hassell, S., & Nataraj, S. (2012). Personal Transportation: Sharing, Rather Than Owning, Vehicles. *Energy Services Analysis: An Alternative Approach for Identifying Opportunities to Reduce Emissions of Greenhouse Gase*, 19-40, Santa Monica, CA; Arlington, VA; Pittsburgh, PA: RAND Corporation.

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*(3), 319-340.

Donath, J. S. (1999). Identity and Deception in the Virtual Community. In P. Kollock & A. S. Smith (Eds.), *Communities in Cyberspace*, 25-59. London, UK: Routledge.

Dunn, E. W., Aknin, L. B., & Norton, M. I. (2008). Spending Money on Others Promotes Happiness. *Science*, *319*(5870), 1687-1688.

Eccles, J. S., Adler T. F., Futterman, R., Goff, S. B., Kaczala, C. M., Meece, J. L., & Midgley, C. (1983). Expectancies, Values, and Academic Behaviors. In J. T. Spence (Ed.), *Achievement and Achievement Motivation* (75-146). San Francisco, CA: W. H. Freeman.

Eccles, J. S. (2005). Subjective Task Value and the Eccles et al. Model of Achievement-Related Choices. In A. J, Elliott & C.S. Dweck (Eds.), *Handbook of Competence and Motivation* (105-121). New York, NY, US: Guilford Publications.

Edelman, B. G., & Geradin, D. (2016). Efficiencies and Regulatory Shortcuts: How Should We Regulate Companies Like Airbnb and Uber? *Stanford Technology Law Review*, *19*(2), 293-328.

Einav, L., Farronato, C., & Levin, J. (2016). Peer-to-Peer Markets. *Annual Review of Economics*, *8*(1), 615-635.

Ert, E., Fleischer, A., & Magen, N. (2016). Trust and Reputation in the Sharing Economy: The Role of Personal Photos in Airbnb. *Tourism Management*, *55*, 62-73.

Fishbein, M., & Ajzen, I. (1980). *Understanding Attitudes and Predicting Social Behavior.* Upper Saddle River, NJ: Prentice-Hall, Inc.

Felson, M., & Spaeth, J. L. (1978). Community Structure and Collaborative Consumption: A Routine Activity Approach. *American Behavioral Scientist*, *21*(4), 614-624.

Gansky, L. (2010). *The Mesh: Why the Future of Business Is Sharing*. New York, NY: Penguin Publishing Group.

Gardete, P. M. (2015). Social Effects in the In-Flight Marketplace: Characterization and Managerial Implications. *Journal of Marketing Research*, *52*(3), 360-374.

Green, P. (2016). After Etsy, Scratching an Itch. *The New York Times.*

Grewal, D., Monroe, K. B., & Krishnan, R. (1998). The Effects of Price-Comparison Advertising on Buyers' Perceptions of Acquisition Value, Transaction Value, and Behavioral Intentions. *Journal of Marketing*, *62*(2), 46-59.

Hall, R. E., & Mishkin, F. S. (1982). The Sensitivity of Consumption to Transitory Income: Estimates from Panel Data on Households. *Econometrica*, *50*(2), 461-481.

Hamari, J., Sjöklint, M., & Ukkonen, A. (2015). The sharing economy: Why people participate in collaborative consumption. *Journal of the Association for Information Science and Technology*, *67*(9), 2047-2059.

Hennig-Thurau, T., Hennig, V., & Sattler, H. (2007). Consumer File Sharing of Motion Pictures. *Journal of Marketing*, *71*(4), 1-18.

Hicks, M. S. (2017). Flexible jobs give workers choices. *Monthly Labor Review*, 1-2.

Horton, J. J., & Zeckhauser, R. J. (2016). *Owning, Using and Renting: Some Simple Economics of the "Sharing Economy,"* (National Bureau of Economic Research Working Paper, No. 22029).

Howard, J. A., & Sheth, J. N. (1969). *The Theory of Buyer Behavior*. New York, NY: John Wiley and Sons.

John, N. A. (2013). *Sharing, Collaborative Consumption and Web 2.0* (LSE Electronic Working Paper, No.26).

Kahn, B. E., & Isen, A. M. (1993). The Influence of Positive Affect on Variety Seeing Among Safe, Enjoyable Products. *Journal of Consumer Research*, *20*(2), 257-270.

Lamberton, C., & Rose, R. (2012). When Is Ours Better Than Mine? A Framework for Understanding and Altering Participation in Commercial Sharing Systems. *Journal of Marketing*, *76*(4), 109-125.

Lee, S., & Cho, Y. C. (2018, February). Investigating the Impact of Justice Dimension and Perceived Value on Customer Satisfaction for Sharing Economy of Accommodation. *Journal of Marketing Thought*, *4*(4).

Lessig, L. (2008). *Remix: Making Art and Commerce Thrive in the Hybrid Economy.* New York, NY: Penguin Publishing Group.

Lyubomirsky, S., King, L., & Diener, E. (2005). The Benefits of Frequent Positive Affect: Does Happiness

Lead to Success? *Psychological Bulletin*, *131*(6), 803-855.

Mang, P. Y., & Wilt, W. M. (2013). *Insurance in the Sharing Economy*. Avarie Capital, LLC & Assured Research, LLC.

Mason, P. (2015). *PostCapitalism: A Guide to Our Future.* New York, NY: Farrar, Straus & Giroux.

Mintona, A. P., & Roseb, R. L. (1997). The Effects of Environmental Concern on Environmentally Friendly Consumer Behavior: An Exploratory Study. *Journal of Business Research*, *40*(1), 37-48.

Morris, J. D., Woo, C., Geason, J. A., & Kim, J. (2002). The Power of Affect, *Journal of Advertising Research, 42*(3), 7-17.

Mont, O. (2004). Institutionalization of Sustainable Consumption Patterns Based on Shared Use. *Ecological Economics*, *50*(1-2), 135-153.

Oliver, R. L. (1980). A Cognitive Model of the Antecedents and Consequences of Satisfaction Decisions. *Journal of Marketing Research*, *17*(4), 46-49.

Oliver, R. L. (1997). *Satisfaction: A Behavioral Perspective on the Consumer.* Armonk, NY: Emerald Group Publishing Limited

Ostrom, E. (1990). *Governing the Commons: The Evolution of Institutions for Collective Action*. Cambridge, UK: Cambridge University Press.

Ostrom, E. (2003). How Types of Goods and Property Rights Jointly Affect Collective Action. *Journal of Theoretical Politics, 15*(3), 230-270.

Parameswaran, M., & Whinston, A. B. (2007). Social Computing: An Overview. *Communications of the Association for Information System*, *19*(1), 37.

Prothero, A., Dobscha, S., Freund, J., Kilbourne, W. E., Luchs, M. G., Ozanne, L. K., & Thøgersen, J. (2011). Sustainable Consumption: Opportunities for Consumer Research and Public Policy. *Journal of Public Policy & Marketing*, *30*(1), 31-38.

Raymond, E. S. (1999). *The Cathedral and the Bazaar: Musings on Linux and Open Source by an Accidental Revolutionary*. Sebastopol, CA: O'Reilly & Associates.

Rifkin, J. (2014a). The Rise of Anti-Capitalism. *The New York Times.*

Rifkin, J. (2014b). *The Zero Marginal Cost Society: The Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism*. New York, NY: Palgrave Macmillan.

Sachs, J. D. (2017). *Building the New American Economy: smart, fair, and sustainable*. New York, NY: Columbia University Press.

Schor, J. B., Walker, E. T., Lee, C. W., Parigi, P., & Cook, K. (2015). On the Sharing Economy. *SAGE Journals*, *14*(1), 12-19.

Stephany, A. (2015). *The business of sharing: making in the new sharing economy*. Hampshire, England: Palgrave Macmillan.

Sundararajan, A. (2013). From Zipcar to the Sharing Economy. *Harvard Business Review.*

Sundararajan, A. (2014). Trusting the 'Sharing Economy' to Regulate Itself. *The New York Times.*

Sundararajan, A. (2016). *The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism*. Cambridge, MA: The MIT Press.

Swan, J. E., & Combs, L. J. (1976). Product Performance and Consumer Satisfaction: A New Concept. *Journal of Marketing*, *40*(2), 25-33.

Thaler, R. H. (2008). Mental Accounting and Consumer Choice. *Marketing Science, 27*(1), 15-25.

Uchitelle, L. (2009). *U.S. Lost 2.6 Million Jobs in 2008.* New York Times.

Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, *46*(2), 186-204.

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, *27*(3), 425-478.

Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, *36*(1), 157-178.

Wasko, M., & Faraj, S. (2005). Why Should I Share? Examining Social Capital and Knowledge Contribution in Electronic Networks of Practice. *MIS Quarterly*, *29*(1), 35-57.

Weber, T. A. (2016). Product Pricing in a Peer-to-Peer Economy. *Journal of Management Information Systems*, *33*(2), 573-596.

Wirtz, J., & Lwin, M. O. (2009). Regulatory Focus Theory, Trust, and Privacy Concern. *Journal of Service Research*, *12*(2), 190-207.

Yang, H., & Lai, C. (2010). Motivations of Wikipedia content contributors. *Computers in Human Behavior*, *26*(6), 1377-1383.

Zervas, G., Proserpio, D., & Byers, J. W. (2017). The Rise of the Sharing Economy: Estimating the Impact of Airbnb on the Hotel Industry. *Journal of Marketing Research*, *54*(5), 687-705.