

**CONSUMERS' ACCEPTANCE OF  
RESTAURANT RESERVATION SYSTEMS**

**By**

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## **ABSTRACT**

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The advancement in technology, increased sales of mobile devices and availability of broadband Internet has spurred the introduction of new digital technologies, such as restaurant reservation systems (RRS). This technology allows the \$329 billion industry the opportunity to optimize interactions between customers and restaurant operators/owners. Therefore, understanding restaurant customers' acceptance and usage of this new technology is pertinent to helping the industry have better insights into how their customers feel about and use these platforms. Building on the Technology Acceptance Model (TAM) framework, this study analyzed the effect of the external variables eWOM valence, eWOM usefulness and perceived credibility on consumers' attitude toward and intention to use the RRS. Online questionnaires were distributed and the final sample of usable data comprised 203 respondents across the United States. The results of multiple regression analyses show a positive influence of the original TAM constructs (perceived ease of use and perceived usefulness) in addition to eWOM valence had positive effects on attitude while attitude, eWOM usefulness and perceived credibility had positive effects on behavioral intention. Also, the study found attitude to possess a partial mediating role in the interaction between PEOU/PU and behavioral intention in the usage and acceptance of RRS.

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## KEY TO ABBREVIATIONS

BI	Behavioral Intention
eWOM	Electronic Word of Mouth
PEOU	Perceived Ease of Use
PU	Perceived Usefulness
RRS	Restaurant Reservation System
TAM	Technology Acceptance Model

# CHAPTER 1

## INTRODUCTION

### **Background**

Since the advent of online restaurant reservation platforms in 1998 (Baltazar, 2012), customers have had the opportunity to search for restaurants and make reservations based on parameters such as time, cost, location and available cuisine. Restaurant owners, on the other hand, subscribe to these restaurant management services for a fee, which helps them to replace paper and phone reservation systems. Advancement in technology and the increasing use of mobile devices and broadband availability continues to contribute to the development of these platforms. However, there are different opinions about the usefulness, effectiveness and cost-benefit ratio of these platforms. Some restaurant owners complain that the cost of subscriptions and maintenance of these platforms is higher than the amount they earn for their work. For others, since the reservation systems control and have access to the customer database, the reservation systems might have more access and a stronger relationship with clients than do the subscribing restaurants. Yet, subscribing restaurant owners are obliged to keep the system because it helps the restaurants to be more accessible to customers (So, Everybody Loves Open Table. Do You?, 2010). This study seeks to understand consumers' attitudes towards the use of reservation platforms and how this influences their intention and behavior to patronize/visit subscriber restaurants.

The restaurant/foodservice industry is the second largest employer in the United States and each year there are new entrants into the business and while others exit (Young, Clark, McIntyre, 2006). The National Restaurant Association (NRA) is currently made up of almost 500,000 members. Fast food industry and chain restaurants alone, boast approximately \$329 billion in revenue, almost 6 million employees and a growth rate of about 2.5% and 3.8%, respectively (IBISWorld, 2015).



Restaurants and dining out are integral parts of the American lifestyle, with the average American purchasing a meal or snack from a restaurant about 5.8 times a week, spending half of their food dollars eating out (United States Healthful Food Council). Recently, for the first time ever, dining out expenditures overtook grocery sales (Jamrisko, 2015). This emphasizes the importance of the restaurant industry.

With an increase in the manufacture of mobile devices such as phones, tablets, and phablets<sup>1</sup>, mobile devices have accelerated the game of digital marketing and technology. In 2014, about 1,245 million smartphone units were sold worldwide, compared with about 969.72 million units in 2013 and 172.38 million units in 2009 (Statista, 2015). There has also been an increase in the use of mobile devices in the search for information on the Internet, with 80% of Internet users owning a smartphone. Smartphones are the second most popular device used in Internet search (80%), behind the PC/Laptop (91%), with tablets ranking as the third most popular device used in Internet search (47%) (Bosomworth, 2015). As a result, more businesses are posting their information online, setting up search engine optimizations, building websites and putting in place other services that enhance their web/online presence. The use of digital technology in business is changing the interactions between customers and business firms (Ku and Chen, 2013) by improving service operations and increasing service efficiency for customers (Lin and Hsieh, 2007).

The restaurant business has, over the last decade experienced a tremendous increase in digital advertising/marketing and growth in the use of technology for services in business. According to the NRA, 97% of fine-dining restaurant operators have a website, while 82% of casual dining, 81%

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<sup>1</sup> A hybrid between smartphones and tablets, consisting of phones who have larger than about 5” screen size

of quick service and 76% of family dining restaurant operators have a website. These sites provide customers with information about the menu, reservations, promotions and special offers, nutritional information and more. With over 87% of adults in the United States making use of the Internet (Brownstein, 2013) and quick access to mobile devices, searching for information about restaurant locations, menus and price can be easily accomplished. For example, Google reported that over 62% of the total US searches for national chain restaurants on Valentine's Day in 2012 was done on mobile devices and tablets.

There are huge ongoing investments into the online reservation market, for example, companies such as Priceline (OpenTable), TripAdvisor (La Fourchette), Yelp (SeatMe) and Google (Appetas) have bought into restaurant reservations business to the tune of over \$2.8 billion (Killian, 2014). This is in addition to companies like OpenTable getting high earnings ratio and high bids from Wall Street (So, Everybody Loves Open Table. Do You?, 2010). These companies are examples of directories dedicated to helping customers find restaurants around their local areas, while other companies such as chownow.com help restaurant businesses set up online ordering and reservation platforms to avoid the cost of creating customized websites from scratch. OpenTable, with its big data capabilities, not only helps restaurants fill tables that would otherwise go unturned, it also provides an opportunity to know who is dining in the restaurants (Killian, 2014). As of 2014, OpenTable was handling half the reservation-taking restaurants in the US, while its counterpart, LaFourchette operates in Europe. Each owns the largest market share in its respective market.

Like other industries, the Internet has forever altered the way customers find and patronize restaurants (NRA, 2006). About 18% of restaurant customers ordered meals online at least once in 2008 (Dining & the Internet, 2014). Ordering online is becoming popular for lunches at work

(Dining & the Internet, 2014), it allows customers access to entire menus and lets them order without feeling rushed. From a study by the NRA, over 36% of consumers have visited a restaurant website, 11% have placed an order online and 10% have used it to make reservations. In another study by the Pew Research center, a survey of more than 1000 adult respondents recorded that over half have used the Internet to find information about restaurants. These digital technologies are enabling restaurants to reduce labor costs and direct service employee involvement (Orel & Kara, 2014), standardize and improve options for service delivery, reduce wait times, maintain accuracy of order (Young, Clark, McIntyre, 2006), enable and lower the costs of advanced communications with consumers. They also provide faster access to information (Gramigna, 2014), offer new ways to learn about products before purchase (Huang, Lurie & Mitra, 2009) and make restaurants more competitive within the industry (Fitzsimmons and Fitzsimmons, 2004; Curran and Meuter, 2005; Bizhelp24, 2010).

Consequently, the use of digital technology in business presents challenges in integrating new technology into the workforce, requiring new skills to operate thereby establishing the need to re-train employees. It also creates challenges in introducing these technologies to customers, sometimes requiring a change in behavior or habits. In some cases digital technology has contributed to over-reliance on it to perform activities, and has resulted in decreased employment and a lower value placed on human resources. As processes become more automated and technology becomes more advanced and efficient, there is an increase in susceptibility to adverse effects such as online fraud, and data security breaches (Gordon, 2011).

## **Problem Statement**

While there have been several studies examining information technology, web-based and technology-based self-services by both customers and employees in the other sectors of the hotel and tourism management industry (Lam, Cho & Qu, 2007; Kim, Lee & Law, 2008; Lee, Kim & Lee, 2006; Kucukusta et al., 2015), there are very few studies (e.g. Ham, Kim & Forsythe, 2008) in the foodservice/restaurant operation sector and these are mostly focused on employees in the restaurant sector, rather than its customers. Understanding restaurant customers will help the industry to have better insights into how their customers think about and use these platforms and will address the knowledge gap in understanding consumer usage of online reservation systems.

This study, therefore, seeks to understand the behavioral intentions of consumers to use technology. We will apply the dimensions of Technology Acceptance Model (TAM) (perceived usefulness, perceived ease of use, attitude and behavioral intention) to how consumers use digital platforms to gather information about restaurants, their attitudes toward these platforms, and how use of digital technology influences their behavior to patronize or visit a new restaurant. The findings will also help restaurant owners to examine the effectiveness of the restaurant reservation systems by understanding their customers' approach to and assessment of these systems and how it affects their intention to patronize such restaurants.

## CHAPTER 2

### LITERATURE REVIEW

In order to remain distinct and attract customers, restaurants and food service operators place huge importance on their menu as the basis of their operation (Frei, 1995). However, apart from diverse menu selection, restaurant customers have come to also appreciate and develop expectations for a representation of technology in their interactions with restaurants (Mehta, 1999), as a way of improving their experience and distinguishing between one restaurant and its competitors (Olsen & Conolly, 2000). As in other aspects of their lives, customers have come to rely on technology when interacting with a restaurant to facilitate seamless ordering, reduce wait lines and anticipate prospective visits to restaurants based on information on their website and other digital platforms (Gragmigna, 2014). Likewise, researchers have found the use of technology to coordinate tasks in restaurant operations to be effective in maximizing operational efficiencies and productivity, standardizing functions and improving customer experience (Sigala 2004, Ham, Kim & Forsythe, 2008, Maria-Eugenia et al. 2014). Use of technology is acknowledged as one of the most significant competitive advantages for the hospitality industry (Olsen & Conolly, 1999); including restaurants in online directories and other Internet marketing platforms helps attract prospective customers and increases restaurant reservations, while providing information on pricing and communications of competitors (Maria-Eugenia, 2014). According to Gragmigna (2014), restaurants are the most searched industry location on phones and mobile devices. For example, 65% of location-based traffic on online platforms such as Foursquare and Yelp are related to restaurants. Gragmigna also notes that 63% of consumers would view restaurant menu and make reservations online, while 75% will make decisions based on their satisfaction with the results produced by their online search. Based on this, we conclude that the use of technology and presence of restaurants on online

directories and reservation platform contributes immensely to customers' expectation and anticipation of their visit to such restaurant.

The present study uses the Technology Acceptance Model (TAM) to understand intentions to use restaurant reservation systems by examining customers' attitudes. It also extends previous knowledge in the use of TAM in examining people's adaptation of new technology. The next section provides an overview of this theory.

### **Conceptual Framework - Technology Acceptance Model (TAM)**

As illustrated in Figure 1, the Technology Acceptance Model (TAM) posits that perceived ease of use (PEOU) and perceived usefulness (PU) predict technology usage (Davis, 1989). This model is based on the Theory of Reasoned Action (TRA), which examined the determinants of intended behaviors, and the Theory of Planned behavior (TPB). PEOU and PU are two belief constructs in the model. Two other constructs included in TAM are attitude towards use and behavioral intention to use, which according to TAM, are determinants of a user's adoption of technology. TAM suggests that the belief constructs are instrumental in explaining the variance in users' intentions (Wang et al., 2003).

Ham, Kim and Forsythe (2008) conducted a study to demonstrate the appropriateness of TAM as a tool to measure the use of technology in restaurants and to determine the factors affecting restaurant employees' technology use intentions. These researchers found TAM to be simple and easy-to-use in determining user acceptance of- and intention to use- computer technology. Similarly, other researchers (Schepers & Wetzels, 2007) found TAM to be one of the most useful models for

explaining intention to use a technology; a much simpler, easier to use and more powerful model of the determinants of user acceptance of computer technology (Igarria, Guimaraes & Davis, 1995).

TAM has also been tested, applied, replicated and extended in a variety of business settings including the hotel and travel industry (Lee, Kim & Lee, 2006; Lam, Cho & Qu, 2007; Kim, Lee & Law, 2008), online banking (Wang, 2003), online shopping (Ashraf, Thongpapanl, & Auh, 2014), medicine and telemedicine (Hu, Chau, Liu Sheng, & Tam, 1999; Kostopoulos, Rizomyliotis, & Konstantoulaki, 2015), and academic institutions and special education (Nam, Bahn, & Lee, 2013). Originally proposed by Davis (1989), TAM aids in understanding and explaining user acceptance of technology based on the functions of perceived usefulness and perceived ease of use.

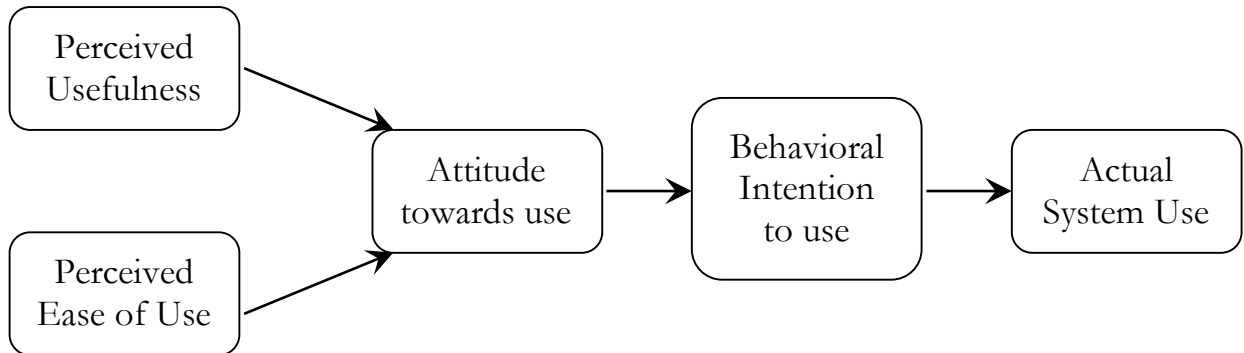


Figure 1. The original TAM Model

### **Perceived Usefulness and Perceived Ease of Use**

Perceived usefulness and perceived ease of use are antecedent constructs in the TAM. These constructs predict technology acceptance/adoption and usage behavior and are the two measurements of beliefs in TAM to predict technology acceptance (Ham, Kim & Forsythe, 2008). According to Davis (1989), perceived ease of use is defined as the degree to which a person believes that the use of a particular system or technology would be free of effort, while perceived usefulness is defined as the degree to which a person believes that using a particular system or technology will enhance his/her job performance. Consequently in this study, we define perceived ease of use (PEOU) as the degree to which a customer believes that using a form of online reservation system will require little or no effort, either physically or mentally. Perceived usefulness is defined as the degree to which a person believes that using a form of online reservation system will enrich and aid his experience of finding, booking or patronizing a restaurant.

According to Venkatesh and Davis (1996), prior knowledge or hands on experience with technology can be referred to as computer self-efficacy. These researchers found that computer self-efficacy served as a determinant of PEOU prior to and after the actual use of such technology. They also found a significant increase in the mean differences in PEOU after hands-on experience with the technology when compared with PEOU before hands-on experience. Subsequently, in examining new technology, such as online reservation systems for restaurants, customers' PEOU is likely to influence the usefulness of the restaurant reservation system (RRS). From previous studies (Wang & Wu, 2014), PEOU is expected to be more significant in the early stages of adopting a new technology. However, the longer an individual is exposed to and uses technology, the more likely it will become a routine tool. As a result, an individual may perceive it as easy to use and more useful



in helping to find or book a restaurant; hence, PU and PEOU may not need to be assessed at each time of use.

H1: PEOU has a positive impact on the PU in utilizing online reservation systems for finding, booking and patronizing a restaurant.

## **Attitude**

Attitude is defined as an individual's positive or negative judgment about a concrete subject (Binder & Nierderle, 2007). It can be learnt, may change with experience, and can be described in terms of good/bad, like/dislike, harmful/beneficial, and pleasant/unpleasant (Ajzen & Fishbein 2000). Attitude can also be influenced by beliefs. Thus, a customer's attitude towards the use of online reservation platforms can be defined as the general evaluation of the customer's feelings towards it or his/her evaluation of the desirability to employ restaurant reservation platforms (Smith, Caputi & Rawstorne, 2000; Kim, Park and Morrison, 2008).

The effects of the belief constructs of TAM (PU and PEOU) on attitude vary. For example, Burton-Jones and Hubona (2006) refined TAM to exclude attitude, as other studies (e.g. Venkatesh, 1999) did not find attitude as a mediating variable between beliefs and BI, but rather found other external variables to have an effect on usage intention. However, Lu, Chou and Ling (2009) reported that PEOU influenced attitudes and usage/adoption intentions through its effects on PU. Though there seems to be inconsistent findings, we suggest that an individual's perception of whether or not RRS is useful and easy to use may affect his/her feelings and evaluation to use the platform.

To examine the effects of PEOU and PU on attitude towards the use of restaurant reservation systems, we propose that:

H2a: PEOU has a positive influence on attitude towards the usage of online reservation systems for finding, booking and patronizing a restaurant.

H2b: PU has a positive influence on attitude towards the usage of online reservation systems for finding, booking and patronizing a restaurant

### **Intention to Use**

Ham, Kim, and Forsythe (2008) posit that the effect of PEOU and PU on behavioral intentions can be different, depending on the purpose of use and how tasking the technology is to use. For a more task-purposing technology, the effect of PU on intention to use is more significant than the effect of PEOU, while the reverse is the case for an entertainment-purposing technology. This is consistent with previous findings that confirm that users of a more task-purposing technology considered the functionality of the technology. We consider that the use of restaurant reservation platform can be both task-purposing and entertainment-purposing.

As a result, this study proposes:

H3a: PEOU has positive impact on customer intention to use online reservation systems for finding, booking and patronizing a restaurant

H3b: PU has positive impact on customer intention to use online reservation systems for finding, booking and patronizing a restaurant

H3c: Customer attitude has positive impact on their intention to use online reservation systems for finding, booking and patronizing a restaurant

## **An Adaptation of TAM**

While the relationships among original TAM constructs have been confirmed by previous research, the inclusion of contextual constructs to fit into the TAM is necessary to explore other influences that may affect the use of the system, and capture the specific contexts in which the technology is used. TAM provides a foundation for understanding the effect of external factors on internal beliefs, attitudes, and intentions. Demographics characteristics and technology characteristics are some examples of these external variables (Davis, 1989; Ozturk & Hancer, 2015). Specific to this study, influences such as prior affirmation of the functionality or usefulness of the system by known or unknown persons through online reviews (eWOM) and perceived credibility, are meaningful constructs that have been added. eWOM and perceived credibility are peculiar to RRS because it is a relatively new phenomenon and people might want to rely on the opinion of prior users, and it also involves uploading certain personal information such as credit card information for payments, which might be a deterrent if users do not perceive the system to be safe.

## **Word of Mouth**

Word of Mouth (WOM) communications among customers is vital and influential because it affects attitudes and purchase behavior (Brown & Reingen 1987; Herr, Kardes, & Kim 1991). It also strongly influences the adoption of new products and services (Chevalier & Mayzlin, 2006; Hogan, Lemon, & Libai, 2003; Kumar, Peterson, & Leone, 2007). Usually, the source of WOM is from a known person, and this seems to make the message more genuine and trustworthy. However, with the use of social media and other digital platforms such as the restaurant reservation systems, customers more often tend to interact with one another digitally and these platforms give opportunities for recommendations and reviews, which may serve as a form of electronic WOM (eWOM). As a result, an individual using a RRS may interact with previous users through their

reviews and recommendations in order to aid his or her decision making process, based on the usefulness and valence of the eWOM.

Park and Lee (2009, p. 334) define the usefulness of online reviews – eWOM, as “the degree to which consumers believe that online reviews would facilitate their purchase decision-making process”. eWOM has been suggested to be an effective predictor of consumers’ intention to comply with the review (Cheung et al., 2008; Park & Lee, 2009) and a determinant of the frequency of usage of such service (Wober & Gretzel, 2000; Wober, 2003). On the other hand, the valence of online reviews – eWOM emphasizes whether it is positive or negative (Zhao et al., 2015). This study, thus, examines the influence of the usefulness and valence of eWOM on the attitude towards and behavioral intention to use the restaurant reservations system for finding, booking and patronizing a restaurant.

H4a: Usefulness of eWOM has a positive impact on customers’ attitude towards the usage of restaurant reservation systems for finding, booking and patronizing a restaurant

H4b: Usefulness of eWOM has a positive impact on the intention of customers to use the restaurant reservation systems for finding, booking and patronizing a restaurant

H4c: Valence of eWOM has a positive impact on customers’ attitude towards the usage of restaurant reservation systems for finding, booking and patronizing a restaurant

H4d: Valence of eWOM has a positive impact on the intention of customers to use the restaurant reservation systems for finding, booking and patronizing a restaurant

H4e: Valence of eWOM has a positive influence on the usefulness of eWOM

## **Perceived Credibility**

In the wake of internet scams and frauds, consumers using e-channels are curious about how their personal information is handled in transactions (Shin, 2010). They are careful about information and privacy breaches that might occur as a result of using such electronic channels. Booking a table or searching for a restaurant using the restaurant reservation systems may include entering location or address and financial information in order to make payments for purchase. Perceiving a sense of security denotes that there will be no breaches to the confidentiality of their information on the system or that the system will be protected from unsanctioned intrusions (Wang et al., 2003). Having a sense of privacy denotes that user information or other types of data collected shared during interactions with the system (with or without consumer knowledge) are protected from a third-party (Wang et al., 2003). Perceived credibility is thus, a dimension that reflects the users' privacy and security concerns – identified by studies as affecting users intentions to use e-channels for transactions. Consequently in this study, we define perceived credibility as the degree to which a customer believes that using a form of restaurant reservation system is secure in conducting transactions and would not divulge personal information. Perceived credibility tends to influence consumers' interaction and voluntary acceptance of the system (Adams & Sasse, 1999, Wang et al, 2003, Shin, 2010). Wang et al (2003) found perceived credibility to positively influence behavioral intention. In the context of this study, we hypothesize that:

H5a: Perceived credibility will have a positive effect on the attitude of consumers towards the use of restaurant reservation systems.

H5b: Perceived credibility will have a positive effect on the behavioral intention of consumers to use restaurant reservation systems.

## Modified Conceptual Framework

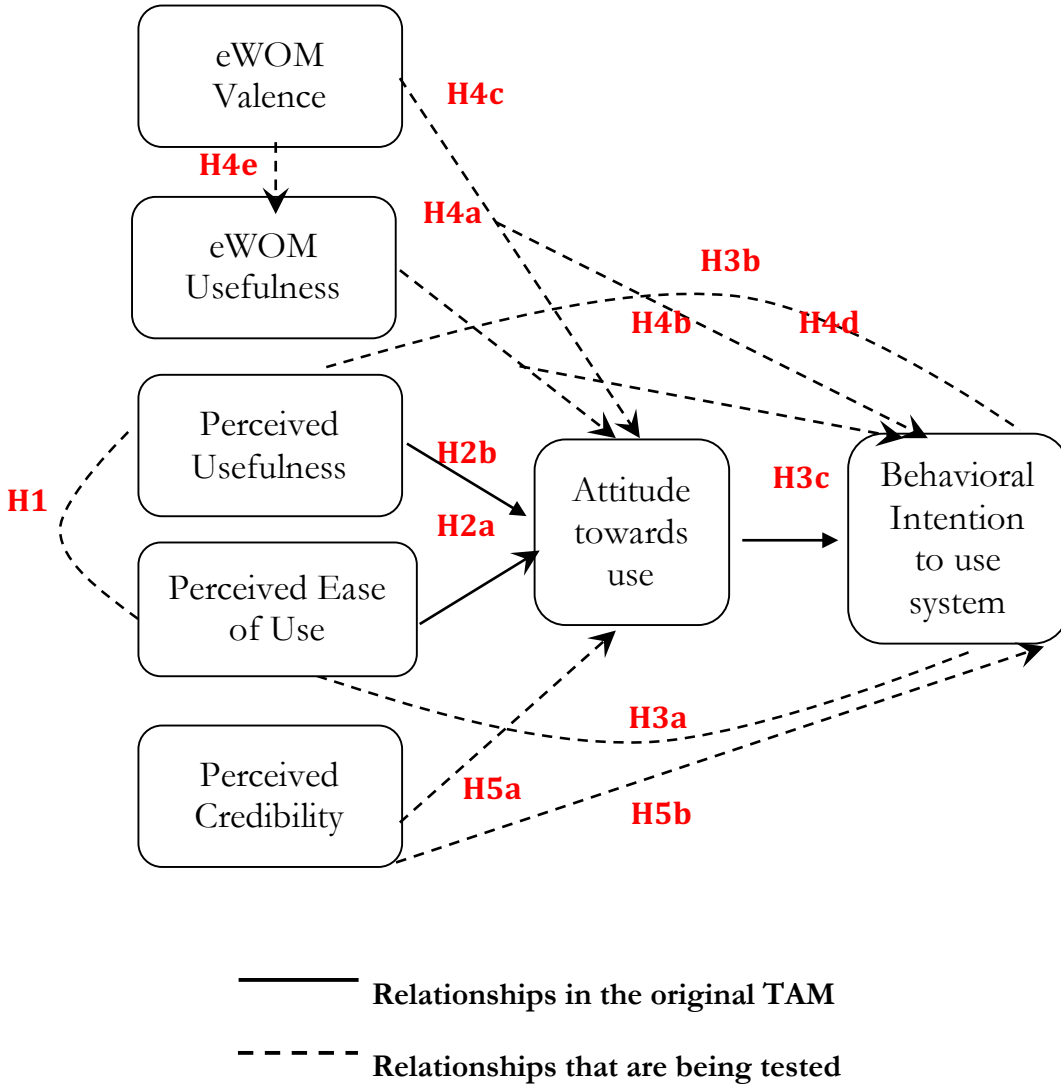


Figure 2: Modified TAM framework

## CHAPTER 3

### METHOD, MEASURES AND ANALYSIS

#### Method

An online survey for this study was distributed through the SONA system (a student research pool at Michigan State University) and Amazon Mechanical Turk (mTurk). While the SONA system gave access to a substantial student population, mTurk ensured that the study was made available to a more heterogeneous group of respondents to allow diverse opinions to enhance the generalizability of the study. The proposed samples size for the study was a total of 250 respondents – with about 100 students from SONA and 150 respondents on mTurk. However, a total of 275 responses were collected. This is made up of 90 respondents from the SONA system and 185 respondents from mTurk. Students recruited through the SONA system received 0.25 SONA credits as an incentive for participation, while mTurk respondents received \$0.80 as incentive.

Demographic variables were examined by asking respondents questions regarding age, gender, education level, income, and ethnicity. Response options for age included ranges 18 - 24, 25 - 34, 35 - 44, 45 - 54, 55 - 64 and 65 and older while gender included 'male', 'female' and 'prefer not to answer'. Education level was measured by asking respondents to select from the following options: 'Some high school', 'High school graduate', 'Some college', '2- year associate degree', 'Bachelor's degree', 'Masters Degree' and 'Graduate/Professional'. 'White American', 'Black or African American', 'Native American', 'Asian American' and 'Other' were options for ethnicity while income ranges included '\$5,000 - \$9, 999', '\$10,000 - \$19,999', '\$20,000 - \$29,999', '\$30,000 - \$39,999', '\$40,000 - \$49,999', '\$50,000 - \$74,999', '\$75,000 - \$99,999', and '\$100,000 and more'.

A chi square test was carried out to compare the demographics (age, gender and income), in both SONA and mTurk respondents, however, the tests were not statistically significant. Hence there were no differences in both samples.

## **Measures**

The study adopted the original TAM constructs measurement scales from Wang and Wu (2014) and Kim, Park and Morrison (2008), some of which are part of scales originally adopted from Venkatesh and Davis (1996), Davis (1989), Mattila (2001), Shamdasani et al. (2008), and Yen (2005). All scales are 7-Likert scales with measurements from 1 = Strongly Disagree to 7 = Strongly agree.

### **Perceived Usefulness**

An 8-item scale was used to measure customers' perceptions of the usefulness of RRSs. This pre-existing scale is known to have a reliability coefficient alpha of .86 (Kim, Park & Morrison, 2008).

### **Perceived Ease of Use**

This is a 10-item scale that examines how easy or free of effort the usage of the system is for customers. It is known to have a reliability coefficient ranging from .80 (Kim, Park & Morrison, 2008) to 0.93 (Venkatesh & Davis, 1996).

### **Attitude**

The attitude scale is a 4-item scale that explores what customers feel about the use of the system. It has a coefficient reliability of .75 (Kim, Park & Morrison, 2008).



### **Perceived Credibility**

The perceived credibility scale is a 2-item scale that investigates users' perceptions of how much they trust the system with their personal information or feel secure about the data it collects from them. It was adopted from Wang et al. (2003) who found it to have a composite reliability of .95.

### **eWOM**

The usefulness of eWOM is measured with a 5-item scale focused on the level of importance of the online review to the user. The scale had a Cronbach's alpha of .87 (Zhao et al., 2015) and was originally adapted from Park and Lee (2009). Measurement of positive and negative valence of eWOM was adapted from Vermeulen and Seegers (2009) as well as Sparks and Browning (2011) by Zhao et al (2015) and had a Cronbach's alpha of .64 and .78 respectively.

### **Behavioral Intention to Use**

This 2-item scale asks participants about their intention to use the system for their restaurant reservation and if they expect to use the system for a future search or reservation. It has previously been found to have reliability of .75 (Kim, Park & Morrison, 2008).

### **Individual's Privacy Concern**

The Global Information Privacy concern scale measures individuals' privacy concerns. It focuses on the importance individuals place on their privacy and how concerned they might be about their information. It is a 6-item scale, adopted from Maholtra, Kim and Agrawal (2004), and has a reliability of .75.

A full list of all scale items is available in Appendix 2.

## **Analysis**

For this study, demographic variables such as age, gender, education level, income, and ethnicity were computed using descriptive statistics to summarize the data collected and provide information about the respondents.

The effects of eWOM (usefulness and valence), Perceived Usefulness, Perceived Ease of Use and perceived Credibility on attitude, intention to use and patronage intention, in addition to other relationships stated in the hypotheses were analyzed using Pearson's correlations and multiple regression. Since they were adopted from previous studies, these variables were confirmed using reliability analysis.

## CHAPTER 4

### RESULTS AND DISCUSSION

#### Results

Out of 275 respondents, 87.3% (n = 240) had heard about restaurant reservation systems while 73.8% (n = 203) had used the RRS to find, book or go to a restaurant. Approximately 26% of respondents (n= 72) who had no prior experience with the use of RRS were removed from the analysis since they did not possess the vital experience necessary to answer the survey questions. It was assumed that they would not be able to provide appropriate evaluations of the systems without prior use or experience. The final sample with usable data comprised 203 participants, was used for all subsequent analyses.

Table 1 shows a summary of the demographic composition of the sample. 52.2% (n = 106) of the respondents were female, 47.3% (n = 96) were male and 0.5% (n = 1) preferred not to answer. The respondents' ages ranged from 18 to over 65 with 38.4% (n = 78) between 25 – 34 years.

Approximately 40% (n = 135) stated that their education level was at least a bachelors' degree, and 64.5% (n = 131) are Caucasian Americans. The median total family income was in the category of \$50,000 - \$74,999 (mode was category \$100,000 and more). About 32% (n = 65) spent over 20 hours surfing the Internet on an average week (median – 11-20 hours, mode – more than 20 hours), 59.6% (n = 121) accessed RRSs on their phones while 32.5% (n = 66) accessed RRSs on their computers. Over half (57.1%, n = 116) dined out at least once a week, while only about 20.7% (n = 42) had used RRSs in the previous two weeks. Of the different RRSs listed by participants, OpenTable, GrubHub, Yelp, and SeatMe were the most popular.

**Table 1: Descriptive Information of Final Sample (n = 203)**

<b>DEMOGRAPHICS</b>	<b>n</b>	<b>%</b>
Age		
18 - 24	71	35.0
25 - 34	78	38.4
35 - 44	36	17.7
45 - 54	9	4.4
55 - 64	8	3.9
65 and older	1	0.5
Gender		
Male	96	47.3
Female	106	52.2
Prefer not to answer	1	0.5
Education		
Some high school	2	1.0
High school graduate	20	9.9
Some college	51	25.1
2- year associate degree	20	9.9
Bachelor's degree	81	39.9
Masters Degree	24	11.8
Graduate/Professional	5	2.5
Ethnicity		
White American	131	64.5
Black or African American	16	7.9
Native American	2	1.0
Asian American	24	11.8
Other	30	14.8
Income		
\$5,000 - \$9, 999	9	4.4
\$10,000 - \$19,999	1	5.4
\$20,000 - \$29,999	18	8.9
\$30,000 - \$39,999	35	17.2
\$40,000 - \$49,999	18	8.9
\$50,000 - \$74,999	42	20.7
\$75,000 - \$99,999	26	12.8
\$100,000 and more	44	21.7
Length of Use of RRSs		
Less than 3 months	53	26.1
3 – 6 months	37	18.2
Over 6 months - 1 year	38	18.7
1-2 years	38	18.7
Over 2 years	36	17.7

**Table 1 (cont'd)**

<b>DEMOGRAPHICS</b>	<b>n</b>	<b>%</b>
Frequency of Use of RRSs		
More than twice a week	4	2.0
Twice a week	8	3.9
Once a week	12	5.9
Once every two weeks	18	8.9
Once a month	54	26.6
Less than once a month	100	49.3
I never use the system	7	3.4
Frequency of Dining at a sit-down Restaurant		
More than twice a week	21	10.3
Twice a week	40	19.7
Once a week	55	27.1
Once every two weeks	42	20.7
Once a month	29	14.3
Less than once a month	15	7.4
Devices used to access RRS		
Phone	121	59.6
Tablet	12	5.9
PC or MAC computer	66	32.5
Other:	2	1.0
Hours Spent Web Surfing per week		
Less than one hour	9	4.4
2 – 5 hours	34	16.7
6 – 10 hours	41	20.2
11 – 20 hours	53	26.1
More than 20 hours	65	32.0

Since the scales were adopted from previous studies, reliability analyses were carried out and the Cronbach's Alpha for each construct was checked. Items with low Cronbach's Alpha signified a low contribution to the measurement of the construct of interest and were considered for elimination (according to Churchill, 1979). Due to an initial low Cronbach's alpha for eWOM valence (0.64), a principal component analysis with varimax rotation was carried out to explore the factors and determine which items to retain. "I would terminate my booking because of negative reviews" was deleted due to cross loading problems while "I found that the volume of negative reviews is important, I dislike an

*abundance of positive reviews and I will not use the system if any negative review is spotted*” were removed because they possessed factor loadings less than 0.6 on the first factor. They placed more emphasis on the volume of positive or negative reviews rather than its valence. Items 1 and 2 were retained in the scale. A correlation analysis was then carried out and the two items were strongly correlated,  $r(201) = 0.73, p < .01$  (2-tailed).

Privacy concern gave a higher Cronbach’s alpha after one item was deleted. *“I believe other people are too much concerned with online privacy issues”* was considered irrelevant to the privacy concern construct and was removed. Alpha co-efficient of the construct increased accordingly from 0.68 to 0.85.

### **Hypotheses Testing**

To test the hypotheses, a multiple linear regression was used to explore the effects of the various independent variables (Perceived Usefulness, Perceived Ease of Use, Perceived Credibility, eWOM usefulness and valence) on the dependent variables (attitude and behavioral intention). Simple linear regression analyses were carried out to explore the effect of PEOU on PU, and eWOM valence on eWOM usefulness. In all, four models were run.

H2a, 2b, 4a, 4c and 5a were tested using one model, to examine the effects of the independent variables on attitude. The regression model was found to be statistically significant,  $R = .77$ , adjusted  $R^2 = .59$   $F(5, 197) = 58.11, p < .001$ . Likewise, H3a, 3b, 3c, 4b, 4d and 5b were tested using one model, to examine the effects of the independent variables on behavioral intention. The regression model was found to be statistically significant  $R = .82$ , adjusted  $R^2 = .66$   $F(6, 196) = 67.54, p < .001$ .

***H1: Perceived ease of use has a positive impact on the perceived usefulness in utilizing online reservation systems for finding, booking and patronizing a restaurant.***

The regression model was statistically significant,  $R = .47$ , adjusted  $R^2 = .22$   $F(1, 201) = 57.85$ ,  $p < .001$ . Results showed that PEOU was positively and significantly associated with PU,  $\beta = .47$ ,  $t = 7.61$ ,  $p < .001$ . H1 was supported. (See Table 2)

***H2a: PEOU has a positive influence on attitude towards the usage of online reservation systems for finding, booking and patronizing a restaurant.***

The regression model was found to be statistically significant,  $R = .77$ , adjusted  $R^2 = .59$   $F(5, 197) = 58.11$ ,  $p < .001$ . Results showed that PEOU was positively and significantly associated with attitude,  $\beta = .39$ ,  $t = 7.28$ ,  $p < .001$ . H2a was supported. (See Table 2)

***H2b: PU has a positive influence on attitude towards the usage of online reservation systems for finding, booking and patronizing a restaurant***

Results showed that PU was positively and significantly associated with attitude,  $\beta = .39$ ,  $t = 6.92$ ,  $p < .001$ . H2b was supported. (See Table 2)

***H3a: PEOU has positive impact on customer intention to use online reservation systems for finding, booking and patronizing a restaurant***

Results showed that PEOU was not positively and significantly associated with behavioral intention,  $\beta = .08$ ,  $t = 1.48$ ,  $p > .05$ . H3a was not supported. (See Table 2)

***H3b: PU has positive impact on customer intention to use online reservation systems for finding, booking and patronizing a restaurant***

Results showed that PU was not positively and significantly associated with behavioral intention,  $\beta =$

.09,  $t = 1.50$ ,  $p > .05$ . H3b was not supported. (See Table 2)

***H3c: Customer attitude has positive impact on their intention to use online reservation systems for finding, booking and patronizing a restaurant***

Results showed that attitude was positively and significantly associated with behavioral intention,  $\beta = .45$ ,  $t = 7.05$ ,  $p < .001$ . H3c was supported. (See Table 2)

***H4a: Usefulness of eWOM has a positive impact on customers' attitude towards the usage of restaurant reservation systems for finding, booking and patronizing a restaurant***

Results showed that usefulness of eWOM was not positively and significantly associated with attitude,  $\beta = .096$ ,  $t = 1.62$ ,  $p > .05$  H4a was not supported. (See Table 2)

***H4b: Usefulness of eWOM has a positive impact on the intention of customers to use the restaurant reservation systems for finding, booking and patronizing a restaurant***

Results showed that eWOM Usefulness was positively and significantly associated with behavioral intention,  $\beta = .26$ ,  $t = 4.87$ ,  $p < .001$ . H4b was supported. (See Table 2)

***H4c: Valence of eWOM has a positive impact on customers' attitude towards the usage of restaurant reservation systems for finding, booking and patronizing a restaurant***

Results showed that eWOM valence was positively and significantly associated with attitude,  $\beta = .14$ ,  $t = 2.70$ ,  $p < .05$ . H4c was supported. (See Table 2)



***H4d: Valence of eWOM has a positive impact on the intention of customers to use the restaurant reservation systems for finding, booking and patronizing a restaurant***

Results showed that eWOM Valence was not positively and significantly associated with behavioral intention,  $\beta = .03$ ,  $t = 0.67$ ,  $p > .05$ . H4d was not supported. (See Table 2).

***H4e: Valence of eWOM has a positive influence on the usefulness of eWOM***

The regression model was statistically significant,  $R = .42$ , adjusted  $R^2 = .17$   $F(1, 201) = 42.06$ ,  $p < .001$ . Results showed that eWOM Valence was positively and significantly associated with eWOM usefulness,  $\beta = .42$ ,  $t = 6.49$ ,  $p < .001$ . H4e was supported. (See Table 2).

***H5a: Perceived credibility will have a positive effect on the attitude of consumers towards the use of restaurant reservation systems.***

Results showed that perceived credibility was not positively and significantly associated with attitude,  $\beta = .01$ ,  $t = 0.085$ ,  $p > .05$ . H5a was not supported. (See Table 2)

***H5b: Perceived credibility will have a positive effect on the behavioral intention of consumers to use restaurant reservation systems.***

Results showed that perceived credibility was positively and significantly associated with behavioral intention,  $\beta = .11$ ,  $t = 2.14$ ,  $p < .05$ . H5b was supported. (See Table 2)

**Table 2: Summary of results**

<b>H</b>	<b>Description of hypotheses</b>	<b>Results</b>	<b>Adjusted R2</b>	<b>df</b>	<b><math>\beta</math></b>	<b>p-value</b>
1	PEOU → PU	<b>Supported</b>	.22	57.58	.473	<b>.000</b>
2a	PEOU → attitude	<b>Supported</b>	.59	58.11	.392	<b>.000</b>
2b	PU → attitude	<b>Supported</b>	.59	58.11	.390	<b>.000</b>
3a	PEOU → behavioral intention	<b>Not Supported</b>	.66	67.54	.081	.140
3b	PU → behavioral intention	<b>Not Supported</b>	.66	67.54	.085	.136
3c	Attitude → behavioral intention	<b>Supported</b>	.66	67.54	.453	<b>.000</b>
4a	eWOM usefulness → attitude	<b>Not Supported</b>	.59	58.11	.096	.107
4b	eWOM usefulness → behavioral intention	<b>Supported</b>	.66	67.54	.262	<b>.000</b>
4c	eWOM valence → attitude	<b>Supported</b>	.59	58.11	.138	<b>.008</b>
4d	eWOM valence → behavioral intention	<b>Not Supported</b>	.66	67.54	.031	.506
4e	eWOM valence → eWOM usefulness	<b>Supported</b>	.17	42.06	.416	<b>.000</b>
5a	Perceived Credibility → attitude	<b>Not Supported</b>	.59	58.11	.005	.932
5b	Perceived Credibility → behavioral intention	<b>Supported</b>	.66	67.54	.114	<b>.033</b>

**Test for Mediation**

To further understand the relationships between the original TAM constructs (PEOU, PU, attitude and BI), the researcher conducted analyses to test for the mediating effects of attitude on the impact of PEOU and PU on BI. Using Baron and Kenny's (1986) 4-step test, the relationship between PEOU and BI was partially mediated by attitude. Similarly, the relationship between PU and BI was partially mediated by attitude.

Figure 3 shows that the standardized regression coefficient between PU and attitude was statistically significant ( $\beta = .61$ ,  $t = 10.785$ ,  $p < .001$ ), as was the standardized regression coefficient between

attitude and behavioral intention ( $\beta = .75, t = 16.026, p < .001$ ). The direct effect of PU on BI was statistically significant ( $\beta = .61, t = 10.785, p < .001$ ). While controlling for attitude, the effects of PU on BI remained statistically significant ( $\beta = .20, t = 3.315, p < .01$ ), however, this shows a reduction in the effect of PU on BI when attitude was added to the model. These results indicate partial mediation of attitude on the relationship between PU and BI.

As figure 4 illustrates, the standardized regression coefficient between PEOU and attitude was statistically significant ( $\beta = .63, t = 11.516, p < .001$ ), as was the standardized regression coefficient between attitude and behavioral intention ( $\beta = .75, t = 16.026, p < .001$ ). The direct effect of PEOU on BI was statistically significant ( $\beta = .56, t = 9.464, p < .001$ ). While controlling for attitude, the effects of PEOU on BI remained statistically significant ( $\beta = .14, t = 2.312, p < .05$ ). However, the effect of PEOU on BI decreased when attitude was added to the model, which demonstrates partial mediation of attitude on this relationship.

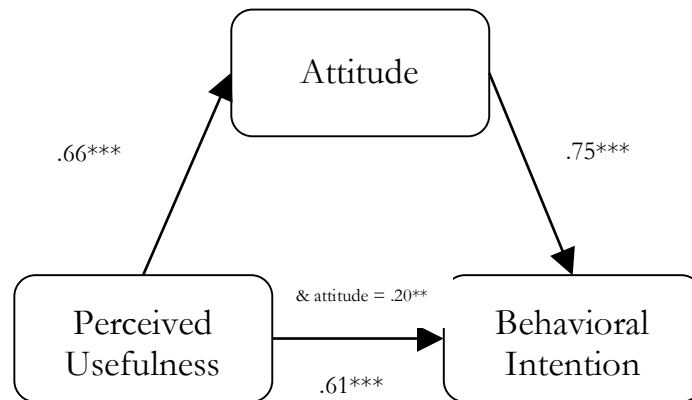


Figure 3. Standardized regression coefficients for the relationship between PU and BI as mediated by Attitude. ( $^{***}p < 0.001$ ;  $^{**}p < 0.01$ )

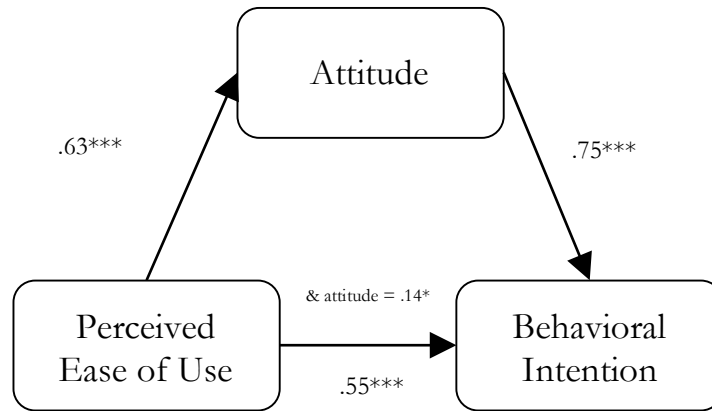


Figure 4. Standardized regression coefficients for the relationship between PEOU and BI as mediated by Attitude. (\*\*\*) $p < 0.001$ ; (\*) $p < 0.05$ )

**Table 3: PEOU: test for mediation - summary of results**

	Equation	Adjusted R <sup>2</sup>	df	B	p-value
1	PEOU → BI	.305	89.574	.555	.000
2	PEOU → Attitude	.395	132.626	.630	.000
3	Attitude → BI	.559	256.833	.749	.000
4	PEOU (& Attitude) → BI	.568	133.866	.138	.022

**Table 4: PU: test for mediation - summary of results**

	Equation	Adjusted R <sup>2</sup>	df	B	p-value
1	PU → BI	.363	116.324	.605	.000
2	PU → Attitude	.427	151.836	.656	.000
3	Attitude → BI	.559	256.833	.749	.000
4	PU (& Attitude) → BI	.580	140.292	.200	.001

## **Additional Analyses**

The researcher was interested in examining how consumers' perceptions of how much they trust the system with their personal information affected their attitude towards the use of RRS and their intention to use the system, while controlling for the effect of privacy concern (how much importance they place on their privacy and how concerned they might be about their information). To examine this, hierarchical multiple regressions were performed with perceived credibility as the independent variable, and attitude and behavioral intention as dependent variables respectively. A hierarchical multiple regression was used, rather than a multiple linear regression, in order to examine the unique effects of privacy concern and perceived credibility on the dependent variables. This analysis sought to understand if perceived credibility predicted the dependent variables above and beyond the effect of privacy concern.

With attitude as the dependent variable, regression model 1 was not statistically significant,  $R = .06$ , adjusted  $R^2 = -.01$   $F(1, 201) = 0.77$ ,  $p > .001$ . Results showed that privacy concern was not associated with attitude,  $\beta = .06$ ,  $t = 0.88$ ,  $p > .001$ . However, the second regression model was statistically significant,  $R = .48$ , adjusted  $R^2 = .22$   $F(2, 200) = 29.60$ ,  $p < .001$ . Results showed that both privacy concern and perceived credibility were positively and significantly associated with attitude (Privacy  $\beta = .13$ ,  $t = 2.09$ ,  $p < .05$ ; Credibility  $\beta = .48$ ,  $t = 7.63$ ,  $p < .001$ ). There was an increase in beta coefficient values for privacy concern from .062 in model 1 to .131 in model 2 (See Table 5).

**Table 5: Summary of hierarchical multiple regression for effect of perceived credibility and privacy concern on attitude**

Model			Adjusted R2	df	$\beta$	p-value
1	Privacy concern	<b>Not significant</b>	-.01	.77	.062	.382
2	Privacy concern Perceived Credibility	<b>Significant Significant</b>	.22	29.60	.131 .479	<b>.038 .000</b>

a. Dependent Variable: Attitude

With behavioral intention as dependent variable, regression model 1 was not statistically significant,  $R = .02$ , adjusted  $R^2 = -.01$   $F(1, 201) = 0.057$ ,  $p > .001$ . Results showed that privacy concern was not associated with behavioral intention,  $\beta = .01$ ,  $t = 0.24$ ,  $p > .05$ . The second regression model was statistically significant,  $R = .56$ , adjusted  $R^2 = .31$   $F(2, 200) = 46.13$ ,  $p < .001$ . Results showed only perceived credibility was associated with behavioral intention,  $\beta = .57$ ,  $t = 9.60$ ,  $p < .001$  (See Table 6).

**Table 6: Summary of hierarchical multiple regression testing the effect of perceived credibility on behavioral intention while controlling for privacy concern**

Model			Adjusted R2	df	$\beta$	p-value
1	Privacy concern	<b>Not significant</b>	-.01	.057	.017	.812
2	Privacy concern Perceived Credibility	<b>Not Significant Significant</b>	.31	46.13	.099 .568	.095 <b>.000</b>

a. Dependent Variable: Behavioral Intention

## Framework Based on Supported Hypotheses

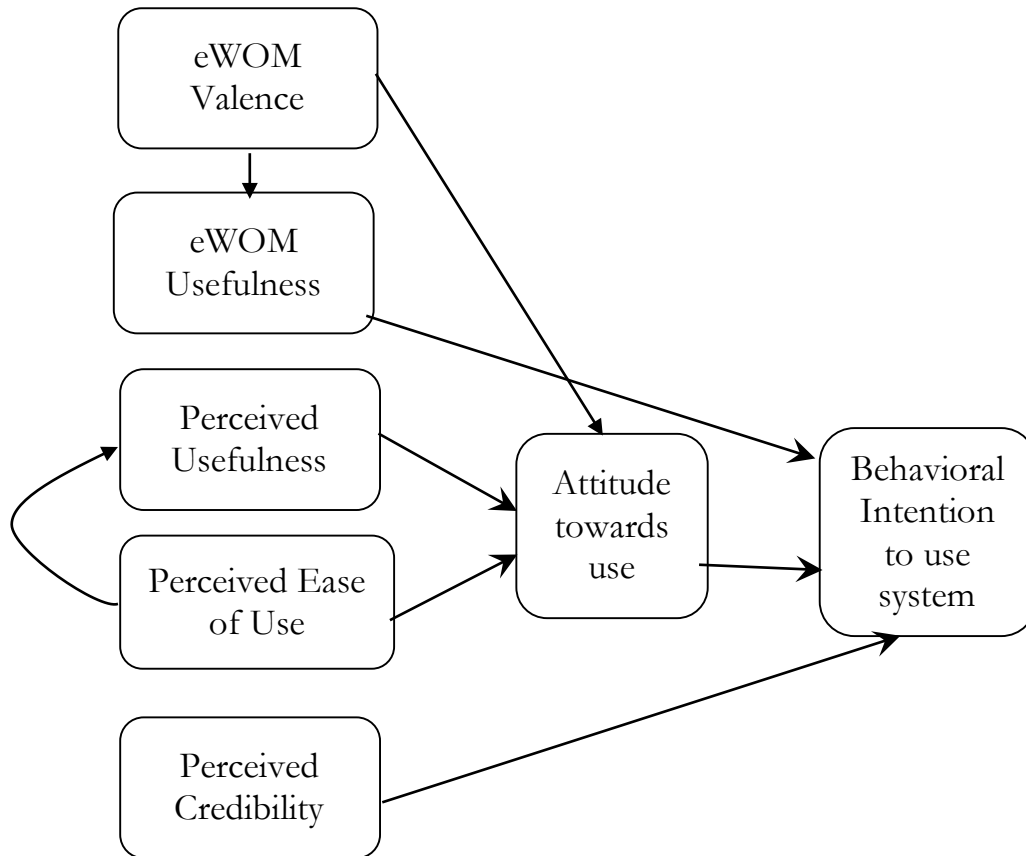


Figure 5: Revised conceptual framework based on supported hypotheses

## Discussion

The study examined consumers' attitudes towards the use of restaurant reservation systems (RRSs), the effects of certain external variables (eWOM valence, eWOM Usefulness and Perceived Credibility) and how these affect intention to use RRSs. Data were collected online through a survey using mTurk and MSU SONA system.

Results showed that PEOU was positively associated with perceived usefulness. Perceived Usefulness, PEOU and eWOM valence were predictors of attitude toward RRS, while attitude, eWOM Usefulness and perceived credibility were predictors of behavioral intention. eWOM usefulness and perceived credibility were **not** related to attitude. Perceived Usefulness, PEOU and eWOM valence were not related to behavioral intention. In further analyses, attitude was found to partially mediate the effects of PEOU and BI on behavioral intention. Privacy concern had no independent effect on attitude or behavior, but became a significant predictor of attitude when perceived credibility was added to the model. Perceived credibility had positive relationships with both attitude and behavior when controlling for privacy concern.

### ***Perceived Usefulness and Perceived Ease of Use***

PEOU has a significant influence on PU, which implies that as a relatively new technology like the RRS gains popularity and increases in use, consumers may perceive it as more useful in performing desired tasks based on the ease of their experience with it. This affirms Wang et al (2003) such that a positive shift in consumers' perceptions of a technology's ease of use positively affects how useful they perceive it to be to them.

PU and PEOU had a positive effect on consumers' attitude towards the use of RRS and demonstrated moderately strong relationships (both beta scores = .39). This finding, therefore, implies that a for a consumer to form a positive attitude toward an RRS, it should be perceived as useful and not require much effort to use. The mediating effects of attitude suggests that PEOU and PU may indirectly influence consumers' intention to use the system, if their attitude towards it is positive, thereby confirming previous research from Agarwal and Prasad (1999), Hu, Chau, Sheng and Tam (1999), Chau and Hu (2001) and Moon and Kim (2001).



### ***eWOM Usefulness and eWOM Valence***

The positive effect of eWOM valence on eWOM usefulness, with a moderately strong relationship ( $\beta = .42$ ), suggests that the positivity or negativity of online reviews has an impact on the extent to which eWOM would influence consumers' decision making process towards the use of RRS.

Though the valence of the reviews has a slight impact on how consumers feel towards the system ( $\beta = .14$ ), review usefulness has more impact in facilitating their intention to use ( $\beta = .26$ ). This supports findings from Zhao et al (2015), which shows a positive relationship between the valence of eWOM and hotel online bookings. Zhao et al (2015) emphasized that consumers' attitude will be influenced especially by negative reviews and the usefulness of online review positively influences purchase intentions. Though, when compared with other predictors (PU and PEOU), eWOM valence had the weakest influence on attitude. This may be because PU and PEOU are subjective factors, based on an individual's own assessment of the system, while eWOM might be considered an external influence based on other people's assessment of the system. An individual may feel that his or her own assessment holds more value than what others say about it.

Since consumers' attitude predicts how positively or negatively they feel towards the RRS and it is emotion based, positive online reviews may tend to make them feel positive towards it, especially when the review is genuine. However, negative reviews tend to have more impact since consumers tend to believe that a negative (vs. positive) review would have been more likely to be influenced by personal experience. Positive reviews may be believed to be patronizing and influenced by other factors such as system operators providing incentives for consumers to write reviews, which are not necessarily based on an individual's personal experience. In addition, online reviews can be considered to be social influences whose valence can influence attitude.

A new user may find the reliability and relevance of information provided by online reviews apt, directly related to his anticipated experience or match the information that the new user inquires. This (eWOM usefulness), therefore, may have a greater influence in his decision making process towards the use of the RRS.

### ***Perceived Credibility***

In examining H5a and 5b, the effect of perceived credibility on attitude toward RRS was not significant, though it was statistically significant with a weak relationship ( $\beta = .11$ ) on behavioral intention (Table 2). Though consumers' privacy concerns may result in a negative feeling towards the RRS, their intention to use the system might be positively affected when they perceive the system as secure. Wang et al (2003) found a strong effect of perceived credibility on intention of users to adopt Internet banking. Since Internet banking platforms more actively involve consumers' financial information than an RRS, this might explain the weak relationship between perceived credibility and intention to use the RRS compared with a stronger relationship found with Internet banking. Based on their experience of the RRS system, consumers' positive feelings towards the system take into consideration other factors (e.g. its ease of use, aesthetics, usefulness to the task at hand or purpose for use, etc.), which outweigh the importance of the security of their data.

However, (based on additional analyses) for consumers who are already concerned about their privacy, their level of trust in the system with their personal information might influence their attitude towards the system. An increase in beta coefficient values for privacy concern's effect on attitude toward RRS suggests that privacy concern has a slightly more power to influence consumers' attitude when perceived credibility of the system is high. Their intention to use the

system continues to be affected by their level of trust in the system, whether or not they are already concerned about their privacy (with a higher power when they are already concerned about their privacy).

### ***Attitude***

The positive effect of attitude on behavioral intention demonstrated a moderately strong relationship ( $\beta = .45$ ) and suggests that consumers' assessment of the system (positive or negative) has the capacity to greatly influence whether or not they intend to use the system. In Kim, Park & Morrison (2008) study, attitude had a significant effect on, and moderately strong relationship with behavioral intention, which implies that consumers were more likely to use a technology if they felt positively towards it.

While other factors (PU and PEOU) may influence attitude directly, attitude mediates their effect on behavioral intention. This, therefore, suggests an indirect relationship between the effects of PU and PEOU on consumers' intention to use the system. Attitude as a partial mediator between PU/PEOU and BI validates the findings of Agarwal and Prasad (1999), Hu, Chau, Sheng and Tam (1999), Chau and Hu (2001) and Moon and Kim (2001). Previous studies had shown mixed conclusions regarding the mediating role of attitude. While some studies found a partial mediating role, others found attitude as a full mediator between PU/PEOU and BI (Chen, Gillenson and Sherrell, 2002; Hsu and Lu, 2004; Amoako-Gyampah and Salam, 2004) or no mediation at all (Jackson, Chow and Leitch, 1997; Riemenschneider et al., 2003). In the context of RRS use, this study validates attitude as a mediator of the effects of PU and PEOU on BI.

## CHAPTER 5

### IMPLICATIONS AND CONCLUSION

#### **Theoretical Contributions of the Study**

The study applied the Technology Acceptance Model, which has been used to explain intention to use a technology based on the functions of PU and PEOU in a variety of business settings. This study confirmed the relationship between the original TAM constructs, especially within the restaurant industry on the use of RRSs.

The results of this study demonstrated good reliability for PU (adopted from Kim, Park & Morrison (2008)) and PEOU (adopted from Venkatesh & Davis (1996)), thus these scales can be used across different populations in explaining consumers' attitudes and intentions to use RRSs. The analyses of the constructs in this study also considered the mediating effect of attitude on the relationship between PU/PEOU and BI in the context of RRS acceptance and usage. It validates support for the role of attitude as a mediator amidst mixed conclusions regarding its mediating role of attitude. In previous studies, the role of attitude as a mediator was either found to be partial (Agarwal and Prasad, 1999; Hu, Chau, Sheng and Tam, 1999; Chau and Hu, 2001 and Moon and Kim, 2001), full (Chen, Gillenson and Sherrell, 2002; Hsu and Lu, 2004; Amoako-Gyampah and Salam, 2004) or without effect (Jackson, Chow and Leitch, 1997; Riemenschneider et al., 2003).

The significant relationships between eWOM Usefulness and behavioral intention and eWOM valence and attitude in the context of RRS acceptance and usage are additions to previous theoretical models. Very few studies have been carried out on consumers' use and acceptance of RRS, especially examining the effects of eWOM Usefulness and eWOM valence on consumers' attitude and behavior. In this study, these relationships have been tested empirically and found to be antecedents

of attitude and behavior. This study's findings imply that consumers' ability to verify the valence of online reviews based on usage experience made people feel better about using the system. The relevance of the review to them also helped in facilitating their decision to use the system. This supports previous findings on the effect of eWOM on influencing attitude and purchase behavior. According to Adjei et al (2010) and Abd-Elaziz et al (2015), eWOM valence has a significantly positive influence on consumers' attitude and purchase decisions. The relevance and reliability of eWOM was also found to significantly influence consumers' purchase decision (Al Mana and Mirza, 2013). As long as consumers are able to evaluate the reliability and genuineness of the review, they can be persuaded positively.

### **Managerial Implications**

Results from this study inform certain factors to consider when developing a RRS. Since almost 60% of respondents dine-out in a sit-down restaurant at least once a week and effect of PEOU and PU on attitude and intention was found to be significant, this implies that people will continue to have the need to patronize restaurants (at least weekly or more) and having easy to use tools (e.g. RRS) in helping them do that will continue to be important. Emphasis should, therefore, be placed on developing RRSs that improve the user experience, in addition to consumers finding it useful in helping them accomplish a task, because ease of use certainly motivates attitude and indirectly intention to use the system. More emphasis should be placed on developing easy-to-use mobile applications since most consumers (almost 60% of surveyed participants) access RRS from their mobile phones. As attitude is a strong predictor of behavioral intention, developers and restaurant owners or RRS managers should ensure that consumers continue to feel positive towards the use of the system.

Likewise, consumers have the need to feel confident about the security of their information on the system as this is an important factor in forming attitudes and behavioral intention towards the system. Restaurant owners or operators who invest in the use of the RRS would also want to ensure that their customers are assured of the safety of their information when they use the system. Since privacy concern was only weakly related to attitude and not positively related to intention, this may suggest that consumers are able to feel confident about using the system as long as they feel it is secure enough for their information or data. Prior privacy concerns appear to have a slight influence on consumer attitudes but not their intention to use the system.

Online reviews should be genuine, reliable and relevant. Consumers may need to quickly sift through the many online reviews available to decide their usefulness and applicability to their current situation. Developers can ensure that reviews suggested to a user directly apply to the current situation of such user. For example, relevant reviews with information that matches location, purpose of dining, type of restaurant and budget might be suggested to the user.

### **Limitations/Future Research**

Apart from original TAM constructs such as Perceived Usefulness and Perceived Ease of Use, this study also examined the effects of certain external variables (eWOM valence, eWOM Usefulness and Perceived Credibility). However, these may not be the only variables that consumers consider important in influencing their attitude or decision to use the RRS. Therefore, other variables (such as self-efficacy, system characteristics, individual differences, purpose of use, etc.) outside the scope of this study should be considered in future studies.

Inasmuch as previous studies (such as Tao, 2009) have found a linkage between intention to use a technology and actual system usage, future studies may focus on predicting how the findings of this study translate into patronage for the restaurants that make use of the system. More specifically, studies may focus on how attitude towards the system and intention to use the system converts to actual patronage for the restaurants. Studies of this nature may further help in justifying investments by restaurant operators and owners into building or owning these systems.

Future research studies may replicate this study across different sample size/population in order to validate the results and also enhance the generalizability of the findings from this study. In addition, the full proposed model should also be tested based on the hypotheses this study found support for.

## **Conclusion**

This study focused on the application of Technology Acceptance Model on the restaurant industry, related to the use of emerging technology in restaurant reservations system. It also explored several external factors that consumers may consider in the use of RRS to find, locate and patronize a restaurant. Results from the study affirm previous research on the effects of PU, PEOU and eWOM valence on attitude, the effects of attitude, perceived credibility and eWOM Usefulness on intention and proposed mediation effects of attitude on the relationship between PU/PEOU and intention. In addition, it affirmed the effects of PEOU on PU and eWOM valence on eWOM usefulness.

Though, the study aimed at testing and examining the relationships proposed in the hypotheses, further studies are necessary to fully test and validate the proposed model.

Findings from the research suggest that consumers place as much emphasis on the effectiveness and convenience of using the system as the ease of their interaction with the system. These factors were

found to be significant in determining how they feel towards the system and indirectly their intention to use the system. Considering the investments that restaurant operators and other investors are putting into building these reservation systems, it is important that consumers actually use and in turn, gives expected returns on these investments. In order to achieve these, software developers must ensure that they build tools, which are not only easy to use but also, prove useful and responsive to the needs of consumers per time. This is important because it strongly determines how consumers feel towards the systems, which in turn affects their intention to use the system. It is also important that tools that give reviews based on consumers' previous experience with the use of the system are embedded into applications since this also affects consumers' attitude and intention.



## **APPENDICES**

## APPENDIX A: Questionnaire

### USER PROFILE

1. Have you heard about restaurant reservation platforms?
  - a. Yes
  - b. No.
  
2. Have you ever used a restaurant reservation system for finding, booking or patronizing a restaurant?
  - a. Yes
  - b. No
  
3. Have you used any of the following apps or websites to make reservations or book a table online (Check all that apply)
  - a. OpenTable
  - b. Yelp SeatMe
  - c. Caviar
  - d. Grubhub
  - e. Seamless
  - f. Reserve
  - g. Resy
  - h. Table8
  - i. Tock
  - j. Cover
  - k. LaFourchette
  - l. Other: Please indicate
  
4. For how long have you been using restaurant reservation systems

- a. Less than 3 months
  - b. 3 – 6 months
  - c. Over 6 months - 1 year
  - d. 1-2 years
  - e. Over 2 years
5. Frequency of use
- a. More than twice a week
  - b. Twice a week
  - c. Once a week
  - d. Once every two weeks
  - e. Once a month
  - f. Less than once a month
  - g. I never use the system
6. I most frequently access a restaurant reservation system from
- a. Phone
  - b. Tablet
  - c. PC or Mac Computer
  - d. Other:
7. How many hours do you surf the web in an average week?
- a. Less than one hour
  - b. Two – five hours
  - c. 6 – 10 hours
  - d. 11 – 20 hours

- e. More than 20 hours
8. When was the last time you used a restaurant reservation system?
- a. More than a month ago
  - b. Last month
  - c. In the last two weeks
  - d. In the last week

9. What is the most recent restaurant reservation system that you have used?

Type the name of this system here. \_\_\_\_\_

Then, keep this system in mind when answering questions XX to XX. **Please indicate how much you agree or disagree with the following statements.**

	Strongly disagree	Disagree	Somewhat disagree	Neither agree or Disagree	Somewhat agree	Agree	Strongly agree
<b>INDIVIDUAL'S PRIVACY CONCERN</b>							
All things considered, the Internet would cause serious privacy problems.							
Compared to others, I am more sensitive about the way online companies handle my personal information.							
To me, it is the most important thing to keep my privacy intact from online companies.							
I believe other people are too much concerned with online privacy issues.							

Compared with other subjects on my mind, personal privacy is very important.							
I am concerned about threats to my personal privacy today.							
<b>PERCEIVED USEFULNESS</b>							
The system provided me with complete information, such as meal choices and prices, which was helpful in ordering meals.							
The system provided me with a zoomable graphical interface that enabled you to see each dish more clearly.							
I think the system provided good functionality that enabled me to browse the menu more conveniently.							
I think the system provided good functionality that enabled me to locate a restaurant quickly							
I think the system provided fast response, which is useful in the process of ordering meals							
I think the system provided fast response, which is useful in the process of booking my table at a selected restaurant							
Compared to a phone call, I think this system's features made it more convenient to order meals or book a reservation							
The system enhanced the quality of my experience in making restaurant reservations							
<b>PERCEIVED EASE OF USE</b>							
I think the system provided an easy navigation interface.							
Interacting with the system did not require a lot of my mental effort							
Using the system for ordering meals was be easy for me							
My interaction with this system was clear and understandable							
I found that the use of this system was easy							
I found it easy to get the system to							

locate a restaurant I can visit							
I found it easy to get the system to make restaurant reservations							
It was easy for me to become skillful at using the system to locate a restaurant							
It was easy for me to become skillful at using the system to browse the menu.							
It was easy for me to become skillful at using the system make a reservation							
<b>ATTITUDE TOWARDS SYSTEM USE</b>							
Using the XX system for locating a restaurant was a good idea							
I liked the idea of using the XX system for making restaurant reservations							
Making reservations online was more interesting when I used XX system							
I found it more interesting to locate a restaurant online when I used XX system							
<b>INTENTION TO USE THE SYSTEM</b>							
I intend to use the XX system for my restaurant reservations in the future							
I predict I would use this XX system for my future search for a restaurant							
<b>PERCEIVED CREDIBILITY</b>							
Using this XX reservation system would not divulge my personal information.							
I believe the system is secure in conducting my transactions.							
<b>eWOM - USEFULNESS</b>							
I found the reviews on this XXX system to be genuine							
I found the reviews on this XXX system to be reliable							
I found the reviews on this XXX system to be neutral							
I found the reviews on this XXX system to be useful							
I found the reviews on this XXX system to be relevant							

<b>eWOM – VALENCE</b>							
I paid more attention to positive reviews on the XXX system							
I found positive reviews to be of more value							
I found that the volume of negative reviews is important							
I dislike an abundance of positive reviews							
I would terminate my booking because of negative reviews							
I will not use this XXX system if any negative review is spotted							

**DEMOGRAPHICS**

1. Gender

- a. Male
- b. Female
- c. Prefer not to answer

2. Age

- a. 18 – 24
- b. 25 – 34
- c. 35 – 44
- d. 45 – 54
- e. 55 – 64
- f. 65 and older

3. Education level

- a. Some high school
- b. High school graduate
- c. Some college

- d. 2- year associate degree
  - e. Bachelor's degree
  - f. Masters
  - g. Doctoral
  - h. Graduate/professional
4. Your total family Income
- a. \$5, 000 - \$9, 999
  - b. \$10,000 - \$19,999
  - c. \$20,000 - \$29,999
  - d. \$30,000 - \$39,999
  - e. \$40,000 - \$49,999
  - f. \$50,000 - \$74,999
  - g. \$75,000 - \$99,999
  - h. \$100,000 and more
5. Number of children
- a. 0
  - b. 1
  - c. 2
  - d. 3
  - e. 4
  - f. 5 or more
6. Frequency of dining out in a sit-down restaurant
- a. More than twice a week
  - b. Twice a week



- c. Once a week
- d. Once every two weeks
- e. Once a month
- f. Less than once a month

7. Ethnicity

- a. White American
- b. Black or African American
- c. Native American
- d. Asian American
- e. Native Hawaiian
- f. Pacific Islander
- g. Other

**APPENDIX B: SCALES AND RELIABILITY**

**Table B.1: Scales and Reliability**

		REFERENCES	RELIABILITY	CRONBACH'S ALPHA
<b>Perceived Usefulness</b>	The system provided me with complete information, such as meal choices and prices, which was helpful in ordering meals.	Kim, Park & Morrison (2008)	0.86	0.84
	The system provided me with a zoomable graphical interface that enabled you to see each dish more clearly.			
	I think the system provided good functionality that enabled me to browse the menu more conveniently.			
	I think the system provided good functionality that enabled me to locate a restaurant quickly			
	I think the system provided fast response, which is useful in the process of ordering meals			
	I think the system provided fast response, which is useful in the process of booking my table at a selected restaurant			
	Compared to a phone call, I think this system's features made it more convenient to order meals or book a reservation			
	The system enhanced the quality of my experience in making restaurant reservations			
<b>Perceived Ease of Use</b>	I think the system provided an easy navigation interface.	Venkatesh & Davis (1996)	0.80, 0.93	0.96
	Interacting with the system did not require a lot of my mental effort			
	Using the system for ordering meals was be easy for me			
	My interaction with this system was clear and understandable			
	I found that the use of this system was easy			

<b>Table B.1 (cont'd)</b>				
	I found it easy to get the system to locate a restaurant I can visit			
	I found it easy to get the system to make restaurant reservations			
	It was easy for me to become skillful at using the system to locate a restaurant			
	It was easy for me to become skillful at using the system to browse the menu.			
	It was easy for me to become skillful at using the system			
<b>Attitude</b>	Using the XX system for locating a restaurant was a good idea	Kim, Park & Morrison (2008)	0.75	0.89
	I liked the idea of using the XX system for making restaurant reservations			
	Making reservations online was more interesting when I used XX system			
	I found it more interesting to locate a restaurant online when I used XX system			
<b>Perceived Credibility</b>	Using this XX reservation system would not divulge my personal information.	Wang et al (2003)	0.95	0.84
	I believe the system is secure in conducting my transactions.			
<b>eWOM valence</b>	I paid more attention to positive reviews of the RRS	Zhao et al (2015)	0.644, 0.782	0.84
	I found positive reviews to be of more value			
	I found that the volume of negative reviews is important			
	<i>I dislike an abundance of positive reviews</i>			
	<i>I would terminate my booking because of negative reviews</i>			
	<i>I will not use the system if any negative review is spotted</i>			
<b>eWOM usefulness</b>	I found the reviews on this RRS to be reliable	Zhao et al (2015)	0.874	0.85
	<i>I found the reviews on the RRS to be neutral</i>			

<b>Table B.1 (cont'd)</b>				
	I found the reviews on this RRS to be genuine			
	I found the reviews on the RRS to be useful			
	I found the reviews on the RRS to be relevant			
	I intend to use the XX system for my restaurant reservations in the future			
<b>Behavioral Intention</b>	I predict I would use this XX system for my future search for a restaurant	Kim, Park & Morrison (2008)	0.75	0.88
	I predict I will patronize a restaurant in the future that uses this RRS			
	I expect to patronize a restaurant in the future that uses this RRS			
	I plan to visit a restaurant in the next six months that uses this RRS			
	All things considered, the Internet would cause serious privacy problems.			
<b>Individual's Privacy Concern</b>	Compared to others, I am more sensitive about the way online companies handle my personal information.	Maholtra, Kim & Agrawal (2004)	0.75	0.85
	To me, it is the most important thing to keep my privacy intact from online companies.			
	<i>I believe other people are too much concerned with online privacy issues.</i>			
	Compared with other subjects on my mind, personal privacy is very important.			
	I am concerned about threats to my personal privacy today.			

## **BIBLIOGRAPHY**

## BIBLIOGRAPHY

- About The United States Healthful Food Council. (n.d.). Retrieved September 14, 2015, from <http://ushfc.org/about/#fancy-form-delay>
- Abd-Elaziz, M. E., Aziz, W. M., Khalifa, G. S., & Abdel-Aleem, M. (2015). Determinants of Electronic word of mouth (EWOM) influence on hotel customers' purchasing decision. *Journal of Faculty of Tourism and Hotels, Fayoum University*, 9(2/2).
- Adams, A. and Sasse, M.A. (1999), "Privacy issues in ubiquitous multimedia environments: wake sleeping dogs, or let them lie?", in Proceedings of Interact '99, IFIP TC.13 International Conference on Human-Computer Interaction, 30 August-3 September, Edinburgh, UK, pp. 214-21.
- Adjei, M., Noble, S., & Noble, C. (2010). The influence of C2C communications in online brand communities on customer purchase behavior. *Journal Of The Academy Of Marketing Science*, 38(5), 634-653. doi:10.1007/s11747-009-0178-5
- Agarwal, R. and Prasad, J. (1999), Are Individual Differences Germane to the Acceptance of New Information Technologies?. *Decision Sciences*, 30: 361–391. doi:10.1111/j.1540-5915.1999.tb01614.x
- Al Mana, A. M., & Mirza, A. A. (2013). The impact of electronic word of mouth on consumers' purchasing decisions. *International Journal of Computer Applications*, 82(9).
- Amoako-Gyampah, K., & Salam, A. F. (2004). An extension of the technology acceptance model in an ERP implementation environment. *Information & Management*, 41(6), 731-745.
- Ashraf, A. R., Thongpapanl, N. (Tek), & Auh, S. (2014). The Application of the Technology Acceptance Model Under Different Cultural Contexts: The Case of Online Shopping Adoption. *Journal of International Marketing*, 22(3), 68–93. Retrieved from <http://ezproxy.msu.edu:2047/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=98365652&site=ehost-live>
- Baltazar, A. (2012, September). Online Reservation Platforms Help Boost Restaurants' Revenues. Retrieved July 28, 2016, from <https://www.fsrmagazine.com/technology/online-reservation-platforms-help-boost-restaurants-revenues>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Binder, M., & Niederle, U. (2007). Institutions as determinants of preference change- A one way relation? Retrieved from <https://papers.econ.mpg.de/evo/discussionpapers/2006-07.pdf>

- Bosomworth, D. (2015, January 15). Mobile marketing statistics 2015. Retrieved July 11, 2015, from <http://www.smartinsights.com/mobile-marketing/mobile-marketing-analytics/mobile-marketing-statistics/>
- Burton-Jones, A., & Hubona, G. S. (2006). The mediation of external variables in the technology acceptance model. *Information & Management*, 43(6), 706-717. doi:10.1016/j.im.2006.03.007
- Brown, J. J., & Reingen, P. H. (1987). Social ties and word-of-mouth referral behavior. *Journal of Consumer Research*, 14 (3), 350–362.
- Chau, P. Y., & Hu, P. J. H. (2001). Information technology acceptance by individual professionals: A model comparison approach. *Decision sciences*, 32(4), 699-719.
- Chen, L., Gillenson, M., and Sherrrell, D. (2002). Enticing online consumers: An extended technology acceptance perspective. *Information and Management*. 39(8): 705-719.
- Cheung, C.M., Lee, M.K. and Rabjohn, N. (2008), “The impact of electronic word-of-mouth: the adoption of online opinions in online customer communities”, *Internet Research*, Vol. 18 No. 3, pp. 229-247.
- Chevalier, J. A., & Mayzlin, D. (2006). The effect of word of mouth on sales: Online book reviews. *Journal of Marketing Research*, 43 (3), 345–354.
- Churchill, G.A. Jr (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, Vol. 16 No. 1, pp. 64-73.
- Curran, J. M., & Meuter, M. L. (2005). Self-service technology adoption: comparing three technologies. *Journal of Services Marketing*, 19(2), 103-113.
- Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technologies, *MIS Quarterly*, 13(3), 319–340.
- Dining & The Internet. (2014). *Restaurant, Food & Beverage Market Research Handbook*, 15355-360.
- Fitzsimmons, J. A., & Fitzsimmons, M. J. (2006). *Service management: operations, strategy, and information technology*. Irwin/McGraw-Hill.
- Fleming, C. A., Miller, R. K., & Washington, K. D. (2006). CHAPTER 11: Internet Applications. In *Restaurant & Foodservice Market Research Handbook* (pp. 71-75). Richard K. Miller & Associates.
- Frei, B.T. (1995) ‘The menu as money maker’, *Restaurants and Institutions*, 105:6, pp.144-145.
- Gramigna, K. (2014). 5 Consumer Tech Trends Impacting Restaurants. *Restaurant Hospitality*, 98(9), 24.

- Gordon, R. (2011). Four Advantages and disadvantages of technologies and gadgets. Retrieved December 18, 2015, from <http://www.utahsip.org/gadget-news/four-advantages-and-disadvantages-of-technologies-and-gadgets/>
- Ham, S., Kim, W. G., & Forsythe, H. W. (2008). Restaurant Employees' Technology Use Intention: Validating Technology Acceptance Model with External Factors. *Journal of Hospitality & Leisure Marketing*, 17(1-2), 78–98. doi:10.1080/10507050801978422
- Hu, P., Chau, P., Sheng, O., & Tam, K. (1999). Examining the Technology Acceptance Model Using Physician Acceptance of Telemedicine Technology. *Journal of Management Information Systems*, 16(2), 91-112. Retrieved from <http://www.jstor.org/stable/40398433>
- Hsu, C. L., & Lu, H. P. (2004). Why do people play on-line games? An extended TAM with social influences and flow experience. *Information & management*, 41(7), 853-868.
- Kostopoulos, G., Rizomyliotis, I., & Konstantoulaki, K. (2015). Determinants Of Physicians' Purchase Intention For Innovative Services: Integrating Professional Characteristics With Technology Acceptance Model And Theory Of Planned Behaviour. *International Journal of Innovation Management*, 19(2), -1. Retrieved from 10.1142/S1363919615500243
- Kucukusta, D., Law, R., Besbes, A., & Legoh  rel, P. (2015). Re-examining perceived usefulness and ease of use in online booking. *International Journal of Contemporary Hospitality Management*, 27(2), 185–198. doi:10.1108/ijchm-09-2013-0413
- Nam, C. S., Bahn, S., & Lee, R. (2013). Acceptance of Assistive Technology by Special Education Teachers: A Structural Equation Model Approach. *International Journal of Human-Computer Interaction*, 29(5), 365–377. Retrieved from 10.1080/10447318.2012.711990
- Jackson, C. M., Chow, S., & Leitch, R. A. (1997). Toward an understanding of the behavioral intention to use an information system. *Decision sciences*, 28(2), 357-389.
- Jamrisko, M. (2015, April 4). Americans' Spending on Dining Out Just Overtook Grocery Sales for the First Time Ever. Retrieved September 14, 2015, from <http://www.bloomberg.com/news/articles/2015-04-14/americans-spending-on-dining-out-just-overtook-grocery-sales-for-the-first-time-ever>
- Killian, K. (2014). Big names vie for a seat at the table. *Restaurant Business*, 113 (9), 11.
- Kim, T. G., Lee, J. H., & Law, R. (2008). An empirical examination of the acceptance behavior of hotel front office systems: An extended technology acceptance model. *Tourism Management*, 29(3), 500–513.
- Kim, D., Park, J., & Morrison, A. M. (2008). A model of traveller acceptance of mobile technology. *International Journal Of Tourism Research*, 10(5), 393-407.
- Kumar, V., Petersen, J. A., & Leone, R. P. (2007). How valuable is word of mouth? *Harvard Business Review*, 85, 139–146.



- Lam, T., Cho, V., & Qu, H. (2007). A study of hotel employee behavioral intentions towards adoption of information technology. *International Journal of Hospitality Management*, 26(1), 49–65.
- Lee, H. Y., Kim, W. G., & Lee, Y. K. (2006). Testing the determinants of computerized reservation system users' intention to use via a structural equation model. *Journal of Hospitality & Tourism Research*, 30(2), 246–266.
- Lin, J.-S. C., & Hsieh, P.-L. (2007). The influence of technology readiness on satisfaction and behavioral intentions toward self-service technologies. *Computers in Human Behavior*, 23(3), 1597–1615. doi:http://dx.doi.org/10.1016/j.chb.2005.07.006
- Lockwood, T. (Eds.). *The Handbook of Design Management*, pp.331–346.
- Lu, J., Chou, H., & Ling, P. (2009). Investigating passengers' intentions to use technology-based self check-in services. *Transportation Research: Part E*, 45(2), 345-356. doi:10.1016/j.tre.2008.09.006
- Malhotra, N. K. Kim, S. S. and J. Agarwal (2004). "Internet Users' Information Privacy Concerns (IUIPC): The Construct, the Scale and a Causal Model." *Information Systems Research*, 15(4), 336– 355.
- María-Eugenia Ruiz-Molina, Irene Gil-Saura & Gloria Berenguer-Contrí (2014) Information and Communication Technology as a Differentiation Tool in Restaurants, *Journal of Foodservice Business Research*, 17:5, 410-428, DOI: 10.1080/15378020.2014.967639
- Mattila, A.S., (2001). Emotional bonding and restaurant loyalty. *Cornell Hotel Restaur. Adm. Q.*42(6),73–79.
- Mehta, S. (1999) Strategic implications of an emerging cashless society in the US', *Electronic Markets*, 9:1/2, pp.93-103.
- Moon, J. & Kim, Y. (2001). Extending the TAM for a World-Wide-Web context. *Information & Management*, 38, 217--230.
- Nam, C. S., Bahn, S., & Lee, R. (2013). Acceptance of Assistive Technology by Special Education Teachers: A Structural Equation Model Approach. *International Journal of Human-Computer Interaction*, 29(5), 365–377. Retrieved from 10.1080/10447318.2012.711990
- Olsen, M., & Connolly, D. (1999). Antecedent of technological change in the hospitality industry. *Tourism Analysis*, 4(1), 29–46.
- Olsen, M. D., & Connolly, D. J. (2000). Experience-based travel: How technology will change the hospitality industry. *Cornell Hotel and Restaurant Administration Quarterly*, 41 , 31–40.
- Orel, F.D., Kara, A., (2014) Supermarket self checkout service quality, customer satisfaction, and loyalty: empirical evidence from an emerging market. *J. Retail Consum. Serv.* 21 (2), 118-129

- Ozturk, A. B., & Hancer, M. (2015). The Effects of Demographics and Past Experience on RFID Technology Acceptance in the Hospitality Industry. *International Journal Of Hospitality & Tourism Administration*, 16(3), 275-289. doi:10.1080/15256480.2015.1054756
- Park, C. and Lee, T.M. (2009), “Antecedents of online reviews’ usage and purchase influence: an empirical comparison of US and Korean Consumers”, *Journal of Interactive Marketing*, Vol. 23 No. 4, pp. 332-340.
- Peterson, T. (2014, November 4). Digital to Overtake TV Ad Spending in Two Years, Says Forrester. Retrieved July 11, 2015, from <http://adage.com/article/media/digital-overtake-tv-ad-spending-years-forrester/295694/>
- Ramey, K. (2013, February 25). The Advantages and Disadvantages of Technology in the Workplace. Retrieved July 5, 2015, from <http://www.useoftechnology.com/technology-workplace-2/>
- Riemenschneider, C. K., Harrison, D. A., & Mykytyn, P. P. (2003). Understanding IT adoption decisions in small business: integrating current theories. *Information & management*, 40(4), 269-285.
- Sigala, M. (2004). Integrating and exploiting information and communication technologies (ICT) in restaurant operations. *Journal of Foodservice Business Research* , 6 (3), 55–76.
- Smith, B., Caputi, P., & Rawstorne, L. (2000). Differentiating computer experience and attitude towards computers: An empirical investigation. *Computers in Human Behavior*, 16, 59-81.
- Sparks, B.A. and Browning, V. (2011), “The impact of online reviews on hotel booking intentions and perceptions of trust”, *Tourism Management*, Vol. 32 No. 6, pp. 1310-1323.
- So, Everybody Loves Open Table. Do You?. (2010). *Restaurant Hospitality*, 94(12), 16.
- Tao, D. (2009). Intention to Use and Actual Use of Electronic Information Resources: Further Exploring Technology Acceptance Model (TAM). *AMLA Annual Symposium Proceedings, 2009*, 629–633.
- The Pros and Cons of New Technology. (2010, September 3). Retrieved July 5, 2015, from <http://www.bizhelp24.com/tech/computers/the-pros-and-cons-of-new-technology.html>
- Topic: Smartphones. (2015). Retrieved July 11, 2015, from <http://www.statista.com/topics/840/smartphones/>
- Venkatesh V, Davis F.D. (1996). A model of the antecedents of perceived ease of use: development and test. *Decision Sciences* 27(3): 451–481.
- Venkatesh, V. (1999). Creation of favorable user perceptions: exploring the role of intrinsic motivation. *MIS Quarterly* 23(2), pp. 239–260.

- Vermeulen, I.E. and Seegers, D. (2009), "Tried and tested: the impact of online hotel reviews on consumer consideration", *Tourism Management*, Vol. 30 No. 1, pp. 123-127.
- Wang, H., & Wu, S. (2014). Factors influencing behavioural intention to patronise restaurants using iPad as a menu card. *Behaviour & Information Technology*, 33(4), 395-409.  
doi:10.1080/0144929X.2013.810776
- Wang, Y. S., Wang, Y. M., Lin, H. H., & Tang, T. I. (2003). Determinants of user acceptance of Internet banking: An empirical study. *International Journal of Service Industry Management*, 14(5), 501–519
- Wöber, K.W. (2003), "Information supply in tourism management by marketing decision support systems", *Tourism Management*, Vol. 24 No. 3, pp. 241-255.
- Wöber, K.W. and Gretzel, U. (2000), "Tourism managers' adoption of marketing decision support system", *Journal of Travel Research*, Vol. 39 No. 2, pp. 172-181.
- Young, J. A., Clark, P. W., & McIntyre, F. S. (2006). The Web as an E-Commerce Medium: An Exploratory Study of Consumer Perceptions in a Restaurant Setting. *Journal Of Marketing Chan*
- Zhao, X., Wang, L., Guo, X., & Law, R. (2015). The influence of online reviews to online hotel booking intentions. *International Journal Of Contemporary Hospitality Management*, 27(6), 1343-1364. doi:10.1108/IJCHM-12-2013-0542