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The Effect of Participation in Production Ideation Crowdsourcing on Affective Commitment as a Driver of Customer Loyalty in the United States Lodging Industry

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FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

THE EFFECT OF PARTICIPATION IN PRODUCT IDEATION CROWDSOURCING
ON AFFECTIVE COMMITMENT AS A DRIVER OF CUSTOMER LOYALTY IN
THE UNITED STATES LODGING INDUSTRY

A dissertation submitted in partial fulfillment of
the requirements for the degree of
DOCTOR OF BUSINESS ADMINISTRATION

by

Clay Dickinson

2022

To: Dean William Hardin
College of Business

This dissertation, written by Clay Dickinson and entitled *The Effect of Participation in Product Ideation Crowdsourcing on Affective Commitment as a Driver of Customer Loyalty in the United States Lodging Industry*, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

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Date of Defense: June 7, 2022

The dissertation of Clay Dickinson is approved.

Dean William Hardin
College of Business

Andrés G. Gil
Vice President for Research and Economic Development
and Dean of the University Graduate School

Florida International University, 2022

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DEDICATION

I dedicate this dissertation to my wife Rebekah Dickinson, my son Thomas Coston Dickinson, II, and to my three daughters: Rachel, Abigail, and Avah Dickinson. Without the help and encouragement of my immediate family, I would have struggled even more mightily to complete this dissertation at this stage of my life. I also dedicate this dissertation also to my deceased parents: Ann Brockman Dickinson, who gave me a lifelong love of learning, and Dr. Thomas Coston Dickinson, Sr., MD, who instilled within me the ambition and tenacity required to complete this work.

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ABSTRACT OF THE DISSERTATION
THE EFFECT OF PARTICIPATION IN PRODUCT IDEATION CROWDSOURCING
ON AFFECTIVE COMMITMENT AS A DRIVER OF CUSTOMER LOYALTY IN
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by

Clay Dickinson

Florida International University, 2022

Miami, Florida

Professor George Marakas, Major Professor

Crowdsourcing and customer loyalty are two salient issues that offer tremendous opportunities and challenges in the U.S. lodging industry. Crowdsourcing has been empirically demonstrated to deliver substantial benefits at a reduced cost while retaining and enhancing the value of loyal customers has been the elusive Holy Grail of lodging companies for at least the past four decades. Moreover, the cost of today's loyalty programs in the lodging industry is high and growing, while the true loyalty they ostensibly engender is dubious. Extant literature on crowdsourcing and customer loyalty suggests that the two constructs share a number of base theories and several psychological and other antecedents.

The purpose of this study was to ascertain whether lodging companies might be able to leverage these shared theories and antecedents to reap the benefits generated by crowdsourcing the ideation of new products and services while simultaneously enhancing customer loyalty in the process.

After analysis, the results show that shared psychological antecedents of self-esteem, social identity, and perceived knowledge, together with other incentives, significantly and positively affect customers' willingness to participate in product ideation crowdsourcing, which in turn positively affects affective commitment as a mediating driver of customer loyalty. The analysis further shows that the effect that participation in product crowdsourcing has on affective commitment is moderated by the customers' employment status, such that being a managerial level employee will amplify the positive effect on affective commitment while being a non-managerial employee will diminish that amplification.

The study results contribute to the existing theory and literature related to both crowdsourcing and customer loyalty, while the practical application of these results can have a prodigious impact on the lodging industry. Companies should be able to invite their customers to help them cost-effectively develop better products and services with the reasonable expectation that these participants will become even more loyal to the company. Moreover, this loyalty is psychological in nature, and as such is both lower cost and harder to break. Crowdsourced products have been empirically demonstrated to often not only be superior to those developed in-house but also to command a sales and marketing premium by merely letting consumers know that the product or service had, in fact, been the product of people like them.

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1. Introduction and Background

Customer loyalty and *crowdsourcing* are two of the most salient concepts in contemporary business, particularly in the increasingly experiential and services-based lodging industry (Kang et al., 2015).

Customer loyalty is an element, or a goal, that has been sought by governments, businesses, non-profits, religions, fraternal organizations, and other entities from time immemorial. Customer loyalty has been studied by academics for centuries and still, there is no uniform definition. According to Majumdar (p.62), “Customer loyalty is a complex, multidimensional concept” (2005). Jacoby and Chestnut (1978) note in their review of 53 operational definitions that a central theme runs through all concepts of customer loyalty. Specifically, that loyalty is related to the proportion of expenditure devoted to a specific brand or store (Gee et al., 2008; Jacoby & Chesnut, 1978). This central theme of loyalty is focused almost exclusively on behavior outcomes, and more specifically on the proportion of spending devoted to a specific brand or store. The research does not appear sufficient:

The present status of brand loyalty research can be characterized as that of a construct undergoing substantial revision and redirection in measurement orientation. From an overly behavioral macro approach, it is gradually making the transition to a more micro understanding of the cognitive mechanisms underlying choice behavior. If brand loyalty is ever to be managed, not just measured, it will have to be elaborated in a much more detailed description of cognitive activities. (Dick & Basu, 1994).

More recent research into customer loyalty has focused on incorporating the cognitive antecedents effecting the relative attitude leading to a purchase, as well as behavioral outcomes in terms of purchase frequency, switching behaviors and word-of-mouth (Dick & Basu, 1994; Oliver, 1997, 1999).

Despite the lack of an agreed-upon definition, or even an agreed-upon method to operationalize the construct, Customer loyalty is known to be an extremely relevant concept within the context of the U.S. lodging industry. As one of the most renowned scholars of the subject, Richard Oliver defines customer loyalty as “A deeply held commitment to rebuy or repatronize a preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behavior” (Oliver, 1997). As this study is particularly interested in the cognitive and affective antecedents that effect relative attitude and, hence loyalty, this definition was deemed adequate for the purposes of this research.

As a concept, crowdsourcing is not necessarily novel. After all, is not a democratic form of government based upon the “wisdom of the crowd” to collectively decide whom shall best represent the interests of the people? However, the internet has so facilitated ascertaining the input of multitudes of people, such that the modern phenomenon of crowdsourcing has development among a variety of contexts. The context studied in this paper is the crowdsourcing of new product ideation within the U.S. lodging industry.

Howe is often credited for coining the term crowdsourcing as it is commonly understood, defining it in a 2006 article published in *Wired* magazine as:

Simply defined, crowdsourcing represents the act of a company or institution taking a function once performed by employees and outsourcing it to an

undefined (and generally large) network of people in the form of an open call. This can take the form of peer-production (when the job is performed collaboratively) but is also often undertaken by sole individuals. The crucial prerequisite is the use of the open call format and the large network of potential laborers. (Brabham, 2008; Howe, 2006).

When considered separately, harnessing crowdsourcing or customer loyalty has been empirically demonstrated to produce benefits throughout the public and private sectors. This is also true within the context of the U.S. lodging industry. However, consistently achieving these benefits has proven to be an elusive endeavor, particularly with regard to customer loyalty. Moreover, the associated costs, particularly with respect to enhancing customer loyalty are not only more readily quantified, but also growing. Given this, any research that produces a potential means by which the benefits of crowdsourcing and customer loyalty can be enhanced, ideally at a lower cost, would be of substantial benefit to lodging companies in the United States.

While the benefits and costs of crowdsourcing and customer loyalty will be expanded upon in the subsequent discussion of the existing literature, it is important to note that both constructs have been empirically demonstrated to have important psychological antecedents (Dick & Basu, 1994; Oliver, 1997). If this study could demonstrate that any of these antecedents are shared by these two constructs, there could be profound implications for the creation of a mutually reinforcing cycle in which such antecedents could be activated to not only increase potential customers' willingness to participate in a product ideation crowdsourcing but also enhance their loyalty in the process.

The first step in discovering whether such a potentially mutually reinforcing cycle exists is to determine the degree to which certain psychological antecedents are significantly positively related to the individuals participating in the crowdsourcing of new product ideation and then determine whether such participation enhances these individuals' loyalty to a lodging company or brand. Moreover, a focus on the psychological antecedents, as opposed to the behavioral outcomes, would appear to be warranted as existing research indicates that psychologically oriented factors contributing to a positive relative attitude can generate more enduring loyalty at a relatively lower cost, while motivating individuals to participate in crowdsourcing.

Cultivating customer loyalty is one of the key goals of marketing (Kang et al., 2015), as there are a number of loyalty benchmarks in the literature that underscore the value of developing and retaining loyal customers. For example, it has been estimated that the top one percent of a typical company's customers can account for as much as 50% of their profit and that it costs firms between five and six times as much to acquire a new customer as it does to retain an existing one (Gupta et al., 2004; Watson et al., 2015).

As customer loyalty has become even more of a focus since the 1990's, the practice of relationship marketing has generally gained traction in business, manifesting itself most especially in the creation of loyalty programs (McCall & Voorhees, 2010; Parvatiyar & Sheth, 2000). By 2012 there were already some 2.65 billion loyalty program memberships held by consumers (Berry, 2013), and 42% of customers indicated that they used their memberships for a greater portion of their purchases (Intel, 2013).

The hotel industry is no exception when it comes to the perceived value of loyalty programs, as the leading global hotel brands have invested hundreds of millions of dollars

in their creation. And yet, as with other industries, hotel companies are not sure of the true cost/benefit of their loyalty programs. The marketing literature posits that loyal customers (i.e., the customers contained in the loyalty program database) are considered to be assets, the value of which is rather imprecisely captured under the concept of brand equity. Reliably quantifying and capturing the value of these loyal customers as tangible assets on a company's balance sheet is still an elusive exercise from an accounting point of view (Shugan, 2005, Aaker, 1991). Again, hotel companies are no exception.

On the other hand, the liabilities created by the accumulating obligation to provide future products and services (e.g., unused points) to customers under loyalty program schemes, are significantly more easily captured on corporate balance sheets, leading to an increasingly burdensome problem for hotel companies (Shugan, 2005). These mounting liabilities have resulted in a variety of new tactics to reduce these liabilities by increasing the liquidity of these obligations. Some of the more common tactics that companies are using to make it easier for customers to 'burn' their points include specialized points-based discounts, product upgrades, blended cash/points pricing schemes, upselling strategies and partnerships with other travel, consumer retail and other non-hotel related companies. Consequently, a significant challenge facing the lodging industry is in devising strategies to increase the number and loyalty of their customers (e.g., assets) without increasing the corresponding liabilities on their balance sheets. Meeting this challenge leads us away from a discussion of traditional customer loyalty, as expressed by the repeat purchasing behaviors that loyalty programs have been demonstrated to generate, albeit at high cost, towards gaining a better understanding of

the potentially enduring loyalty that may result from a more deeply held, psychological attachment to a particular brand or company.

The lodging industry is a particularly well-suited context in which to test the positive relationship that may exist between participation in crowdsourcing and enhancing customer loyalty because the lodging product is relatively simple and widely understood. Moreover, the lodging product is increasingly experiential in nature and, almost by definition, is at least partially co-created by the guests' experience. This growing personal involvement in co-creating the service experience may enhance customers' feelings of empowerment, thereby potentially activating cognitive and affective perceptions of the brand and fostering a greater sense of community with the brand. Research has shown that the psychological effects of empowerment has a positive effect on product demand and customer loyalty (Fuchs & Schreier, 2011).

As previously mentioned, crowdsourcing is another growing phenomenon that has empirically demonstrated benefits in the realms of new product ideation and development and the generation of superior market performance in terms of sales volume, sales velocity and product pricing (Nishikawa et al., 2017). It is interesting to note that participants in these initiatives crowdsourcing often do so without monetary compensation (Brabham, 2013; Howe, 2009). While monetary compensation can be a contributing factor, research shows that factors relating to the efficacy dimension of self-esteem, social identity, enjoyment and a quest for knowledge also motivate crowdsourcing participation (Brabham, 2010; Zhao & Zhu, 2014). Thus, it would appear that psychological factors, so of which may drive customer loyalty, are among the factors that motivate individuals to participate in crowdsourcing.

Existing research further suggests that not all crowdsourcing is created equal: rather that the design, visibility and implementation of the exercise itself can affect not only its effectiveness, but also the sustained participation of its participants (Brabham, 2010; Brabham, 2013; Howe, 2006; Howe, 2009). An easy-to-use technology platform, an attractive and engaging user interface, a highly visibly competitive process, and good governance procedures are likely to produce better results and improve participants' perception of the sponsoring company (Blohm et al., 2018; Simperl, 2015)

The purpose of this study was to ascertain whether US lodging companies might harness these psychological factors to not only motivate potential customers to participate in product ideation crowdsourcing, but also to simultaneously create a low-cost “force multiplying” effect that enhances their customer loyalty; that is to reap the benefits generated by crowdsourcing the ideation of new products and services while enhancing customer loyalty in the process.

The study sought to determine whether psychological constructs like self-esteem, social identity, and perceived knowledge, combined with financial and nonfinancial incentives, might drive participation in crowdsourcing which in turn would increase affective commitment and, ultimately, enhance customer loyalty. If participation in crowdsourcing could be empirically demonstrated to deliver these customer loyalty benefits, while simultaneously delivering the traditional benefits of crowdsourcing in terms of delivering potentially better products and market performance, the implications for advancing academic theory and practical business would be substantial.

Research Question

The research question for this study is: **What effect does participation in product ideation crowdsourcing have on affective commitment as a mediator of customer loyalty in the lodging industry in the United States?** The answer to this question will advance academic research regarding cognitive, affective and conative antecedents as drivers of customer loyalty (Dick & Basu, 1994; Oliver, 1999) and increases the theoretical links between these antecedents and motivation for participation in crowdsourcing (Brabham, 2013; Chandler & Kapelner, 2013; Zhao & Zhu, 2014; Howe, 2009). The findings could have profound implications for the customer relationships in the U.S. lodging industry.

To conduct the research, a sampling frame was constructed of qualified adults in the United States that had stayed in a hotel within the past 24 months and had been responsible for selecting the hotel in which they had stayed. Following a comprehensive research methodology and literature review, a survey instrument was developed and administered to a random sample (N=320) of adults in the United States who met these criteria. The survey instrument measured latent variables comprising 11 items within the constructs of psychological antecedents, participation in crowdsourcing, perceived experience of the crowdsourcing exercise, affective commitment, and customer loyalty. An additional question placed all respondents within the categorical moderator variable of managerial versus nonmanagerial status. The research question was then framed within a theoretical research model that included eight hypotheses, which were tested using regression and other quantitative analyses. After a presentation of the data and analyses,

implications of the theoretical and practical implications are presented, as well as a discussion of the study's limitations and opportunities for future research.

2. Literature Review

Base Theories of Customer Loyalty and Participation in Crowdsourcing

A review of the literature on customer loyalty and crowdsourcing shows that both constructs are based upon the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1975) and its subsequent extension into the Theory of Planned Behavior (TPB) (Ajzen & Fishbein, 1980). Additional research into TRA and TPB show a shared origin of some of the psychological and behavioral dimensions of TRA and TPB with Albert Bandura's Self-Efficacy: Toward a Unifying Theory of Behavioral Change (1977), Self Determination Theory (Coopersmith, 1968; Gagné & Deci, 2005; Lin et al., 2009; Mowday et al., 1979), and Social Identity Theory (Dahl et al., 2015; Hogg et al., 2012; Stets & Burke, 2000).

TRA posits that prior to taking an action one must at least consider one's perception of one's potential ability – related to self-determination and, hence, self-esteem – to successfully execute the task, and that a successful result of taking the action, a behavior, will positively reinforce one's confidence in, and hence likelihood of, taking action in future instances (Ajzen & Fishbein, 1975; Ajzen & Fishbein, 1980; Lepper et al., 1973); Bandura, 1977). Perceived ability, positive experience and verbal reinforcement are information sources embodied in self-esteem, which is one of the psychological constructs hypothesized here in the research as a driver of the willingness to participate in crowdsourcing (Bandura, 1977; Breytspraak & George, 1982; Cast & Burke, 2002; Coopersmith, 1968; Foddis, 2016).

According to Social Determination Theory (SDT), individuals are motivated to satisfy three basic needs of relatedness, competence, and autonomy (O'Donnell & Brown, 2012). Relatedness concerns our need for interaction and connectedness to others whereas competence refers to an individual's need to feel effective and capable in exercising and expressing his/her capabilities (Ryan & Deci, 2002). The final need state, autonomy, relates to our need to originate our own actions and behaviors (Ryan& Deci, 2002). These needs for relatedness, competence and autonomy are at least in part what drive consumers to relate to a particular brand or brand community and also to participate in some brand-related activity as part of a community (O'Donnell & Brown, 2012).

Customer Loyalty

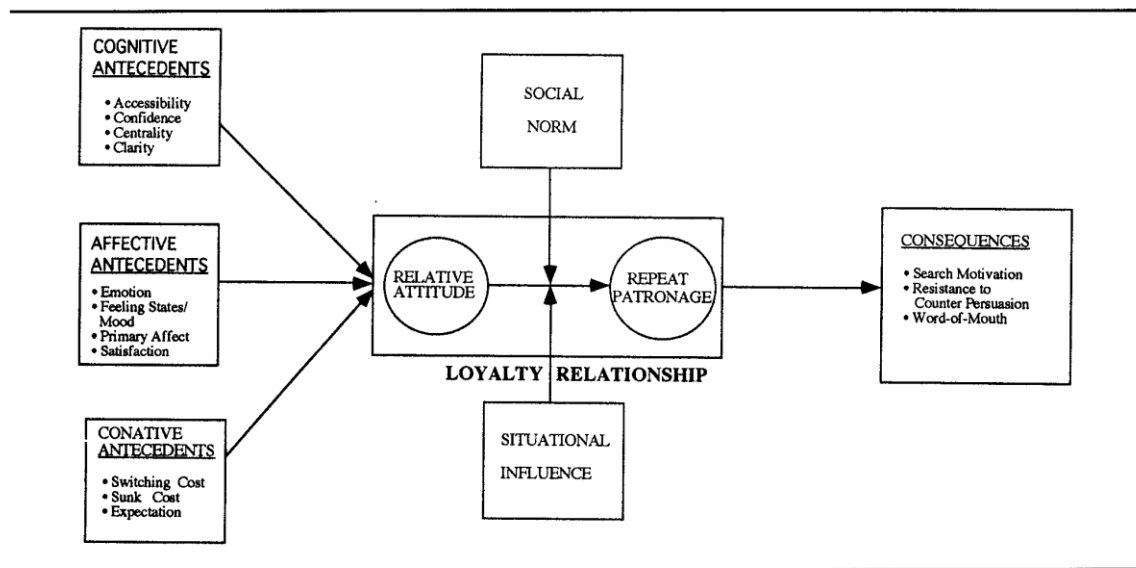
Dick and Basu's seminal work (1994) developed an integrated conceptual framework and working model of assessing and measuring customer loyalty which builds upon TRA and TPB. Dick & Basu's framework was subsequently expanded to include a satisfaction construct by Oliver. (Oliver,1999). Their research into loyalty as an integrative construct based upon psychological and behavioral theory and comprising attitudinal antecedents and behavioral outcomes has become a significant basis for measuring customer loyalty in numerous research projects.

Dick and Basu's integrated framework posited that customer loyalty may be viewed as the strength of the relationship between an individual's relative attitude and repeat patronage and that this relative attitude is, in turn, a function of cognitive, affective and conative antecedents that are associated with different learning processes (Greenwald et al., 1968; Dick & Basu, 1994). Dick and Basu's integrated framework is shown in Figure 1. The framework depicts the three types of antecedents. The first two, cognitive

and affective, present as psychological antecedents while the third, conative antecedents, encompasses effecting behaviors, such as switching costs, sunk costs and expectations. Dick and Basu's integrated framework further posits that the Loyalty Relationship is comprised of the interaction between Relative Attitude and its impact on Repeat Patronage, but that this loyalty relationship cannot be precisely known because it is moderated by social norms and by situational influences.

Figure 1.

Dick and Basu's Integrated Framework



This study focuses on how participation in crowdsourcing may affect some of these psychological antecedents and situational factors to effect loyalty outcomes. These are defined as follows.

Definitions of Cognitive and Affective Antecedents

Accessibility – is the ease with which an attitude can be retrieved from memory, which, according to the framework, may be viewed as a continuum ranging from

unretrievable to automatically retrieved upon encountering the attitude object (Dick & Basu, 1994; Fazio et al., 1989).

Confidence – attitudinal confidence is the level of certainty associated with an evaluation or attitude (Dick & Basu, 1994). Smith and Swinyard suggested that the source of information regarding an attitude, should play a critical role in attitudinal confidence. Generally, an attitude formed as the result of advertising, for example, would have less confidence than, say, that derived from direct experience (Smith & Swinyard, 1988).

Centrality – is to the degree to which an attitude toward a brand is related to the value system of the individual holding it. According to Sherif and Hovland central attitudes appear to belong to an individual and are “intimately held and cherished.” (1961),

Clarity – is attained when alternatives to the attitude are unacceptable to the individual, while lack of clarity stems from the acceptance of alternative attitudes (Sherif & Hovland, 1961).

Emotions – emotions are associated with intense states of arousal and, as an affective antecedent, are believed to evoke feelings related to the object under consideration (Mandler, 1976).

Satisfaction – a consumer’s post-purchase response to a brand is believed to occur through a matching of expectations and perceived performance (Dick & Basu, 1994). In Dick and Basu’s framework, satisfaction is posited to be an antecedent to loyalty. Other studies have shown satisfaction to be an outcome, a reflection and measure of customer loyalty (Curtis et al., 2011; Oliver, 1997).

Definition of Social/Situational Factors

Social Norms – TRA posits that subjective norms (e.g. people’s belief in what significant others think they should or should not do) is a component of behavioral intention (Ajzen & Fishbein, 1980)

Dick and Basu’s framework proposes that cognitive, affective and conative antecedents effect relative attitude toward a brand, and all else being equal, the stronger the relative attitude toward a brand, the more likely the individual is to overcome countervailing social norms and/or situational contingencies (Dick & Basu, 1994). I will address how the psychological antecedent variables of my research model relate to Dick and Basu’s Integrated Framework in the Research Model and Hypotheses section of this study.

Subsequent loyalty research further extended Dick and Basu's attitudinal and behavioral constructs to encompass the important psychological construct of satisfaction (Oliver, 1999). Oliver's research concluded that, while satisfaction is a necessary step in loyalty formation, it becomes less significant as loyalty begins to set in through other mechanisms. Pointing to research that satisfaction is a necessary but insufficient component of loyalty and that it may even lead to “the satisfaction trap” (Reichheld & Sasser, 1990), Oliver further notes that research conducted by Bain & Company indicated that between 65% and 85% of those customers claiming to be satisfied or very satisfied will defect. Therefore a shift in strategy from mere satisfaction to true loyalty would appear to be a worthwhile endeavor, as it was further noted in a study of companies in over 14 industries, that a 5% increase in customer retention can result an increase in the net present value in profit of between 25 and 95% (Reichheld & Sasser, 1990).

Oliver developed a loyalty framework that built upon that of Dick and Basu but differed primarily in the assertion that, as opposed to cognitive, affective and conative being discreet attitudinal constructs, customers can become more loyal by passing through each of these attitudinal phases (Oliver, 1997) to arrive at *action loyalty*. The loyalty built during the cognitive phase could be combined with that gained during the affective phase to yield true commitment - a deeper level of affective loyalty that is more difficult to dislodge than either cognitive or affective in isolation- by incorporating previously missing elements of personal determinism (fortitude) and social bonding at an personal and institutional level (Oliver, 1999).

Because even committed customers with a high degree of satisfaction are vulnerable to competitor attacks, primarily through competitor strategies designed to create dissatisfaction in and among these committed, loyal and satisfied customers, Oliver proposed three new perspectives posed as questions:

(1) Can the customer elect to be self-isolated from competitive overtures, such that competitive information is blocked or screened?

(2) Can the consumer be socially integrated into a "village" that envelops and directs the consumer's choices in a satisfying way?

(3) Can the consumer effect a self-identity that corresponds only to selected brand and its community, in the manner of religious sects adopting a unique lifestyle (e.g., the Amish)? Being able to affect community of loyalty would lead to what Oliver terms a "preclusive lifestyle" (Oliver, 1999)

Oliver's research posits the strongest type of loyalty – that most immune to competitive attacks – is *immersed self-identity* – that state of determined self-isolation supported within a village of likeminded community, as depicted in Figure 2.

Figure 2

Loyalty Strategies

Four Loyalty Strategies			
Community/Social Support			
		Low	High
Individual Fortitude	Low	Product superiority	Village envelopment
	High	Determined self-isolation	Immersed self-identity

The central proposition of the research model of this study is that the psychological antecedents shared between customer loyalty and participation in crowdsourcing can work together to not only increase individual fortitude but create a sense of community, or village if you will, to essentially build toward that most desired state of immersed self-identity.

There is further a body of research on customer loyalty that examines the temporal aspect of loyalty measures: specifically, whether the measures analyzed were forward or backward looking (Watson et al., 2015). The authors hypothesized that backward-looking measures ought to be a more powerful predictors of loyalty because they benefit from subtle psychological mechanisms that in turn offer predictors of future behavior. Despite the authors' hypothesis regarding forward versus backward looking measures, their review of extant loyalty literature found that less than half included temporal measures were backward-looking (Watson et al., 2015).

The preliminary underlying logic of my research question follows a psychological thread that is at least in part rooted in social identity theory, which suggests that people articulate a sense of self by developing a social identity (Tajfel & Turner, 1985). In addition, while consumers invariably look forward to the benefits of being a member of a community, the backward-looking sense of belonging would appear to be an activator of those powerful psychological triggers alluded to by Watson, et al. Moreover, these factors working together might create a level of loyalty and commitment that may, indeed, be difficult to violate. There are many examples of such consumer communities including: Apple, Weight Watchers, Harley-Davidson, and Jimmy Buffett's parrotheads, among many others.

Oliver suggests that there are five essential criteria to creating this desired state of commitment to a community: They are that:

- (1) the product must be of some unique configuration that makes it desirable
(unique),
- (2) a profitably sized segment of the customer base must find it desirable in this
manner,
- (3) the consumable product must be subject to adoration, at least in the eyes of the
potentially loyal consumers,
- (4) the product must have the capacity to be embedded in a social network, and
- (5) the company must be willing to create, populate and maintain the village
(Oliver, 1999).

This study posits that the increasingly experiential nature of the lodging industry product, which almost by definition requires the involvement of the customer in the co-

creation of his or her own unique experience, would appear to meet most, if not all, of the aforementioned criteria. Finally, Oliver suggested several areas of potential future research, several of which appear to be directly relevant to the research focus of this study. Some of these suggestions (Oliver, 1999) and their potential relevance are:

- What are the options for constructing a village?

Crowdsourcing literature, discussed later, suggests that the creation of an online community can be an effective strategy for constructing a village.

- What product or service categories are most adaptable to the fortitude and village concepts?

The increasingly experiential nature of hospitality and the increasingly important role of the customer in the co-creation of this unique experience, would appear to make the lodging industry an excellent one for developing the individual fortitude and village concepts.

- Is the rate of innovation a factor of loyalty for individual firms?

As value in the industry becomes increasingly linked with the co-creation of unique experiences, lodging companies cannot afford to *not* be at the forefront of innovation.

- Can management cultivate loyalty through mechanisms of fortitude and community?

Properly done, it is proposed that shared psychological antecedents can be leveraged to increase participation in product ideation crowdsourcing and that such participation will positively relate to affective (emotional) commitment and, hence, to customer loyalty. This is especially relevant regarding product ideation

crowdsourcing in which potential customers feel greater involvement in and ownership of the resultant product.

With the growth of the Internet over the past two decades and the migration of the vast majority of travel reservations to web-based platforms, there is an increase in the research conducted regarding online communities and brand loyalty (Jang et al., 2008; Kuo & Hou, 2017; Srinivasan & Moorman, 2005). A general definition of an on-line brand community for these purposes is “a specialized, non-geographically bound community, based upon social relationships among admirers of a brand in cyber-space” (Muniz & O’Guinn, 2001).

One of the more important features of online versus offline communities, is that online communities are usually driven by volitional choice (Jang et al., 2008). In fact, companies are recognizing that these online communities are often an excellent source for great product ideas. It is said, for example, that mountain bikes emerged out of the suggestions, improvements and tweaks made to their conventional bikes by biking enthusiasts (Howe, 2009).

This tie between on-line communities and brand loyalty derives in part from the feelings of empowerment that are generated towards the consumer. Research conducted specifically on the psychological effects of empowerment demonstrated that consumers who were empowered to select the products to be marketed with direct personal engagement showed stronger demand for those products, even though they were of identical quality in objective terms (Fuchs et al., 2010; Fuchs & Schreier, 2011). This seemingly irrational finding can be attributed to consumers having developed stronger feelings of psychological ownership of the products selected. The underlying

psychological components at play were shown to include the impact effect (Spreitzer, 1995), a trophy component (Walthieu et al., 2002), self-efficacy (Pierce, 2001), decision ownership (Barki & Hartwick, 1994) and the endowment effect (Pierce, 2001).

The participation in product ideation crowdsourcing researched in this study is also assumed to be completely voluntary. This, in fact, is precisely what is behind the desire to empirically demonstrate the psychological antecedents that best motivate voluntary participation. Once participants have for whatever reason decided to participate, the company should, for all intents and purposes, have created an on-line community. Having done so, the study posits that the company should leverage the opportunity to develop its relationship with the online community such that the level of commitment among its members grows. Research has shown that as commitment to an online community grows, so too does that communities' commitment to the brand (Blohm et al., 2018; Jang et al., 2008; O'Donnell & Brown, 2012). Research further shows that, even though membership may be voluntary, there is a distinction between grass-roots online communities and those sponsored by companies. Both types have advantages and disadvantages, and it is important that companies know how to exploit the advantages of company sponsored sites while mitigating their disadvantages. Openness, sincerity and honesty are particularly important and valued on company sponsored sites; anything less can actually have a detrimental effect, especially in this age of social media (Blohm et al., 2018; Brabham, 2010; Jang et al., 2008).

The customer loyalty literature review has shown that a significant problem facing companies is in generating enduring customer loyalty without creating attendant balance sheet liabilities. The literature has suggested that:

- customer loyalty is at least as much a psychological construct as it is a behavioral action;
- satisfaction is a necessary but insufficient component in ensuring customer loyalty;
- purposeful self-isolation, supported by a likeminded community, reinforces one's self-identity, and drives fortitude and greater commitment with regard to loyalty; and,
- that loyalty to a brand or company is more important than loyalty to a program.

Research on customer company identification and the effectiveness of loyalty programs, reinforces the points summarized above and particularly that loyalty to the company is more important than loyalty to a program (Kang et al., 2015).

Crowdsourcing

The second dimension of this study is crowdsourcing: specifically, that participation in new product ideation crowdsourcing may have an effect on customer loyalty. In *Wired* magazine in 2006, Howe defined it as “the act of a company or institution taking a function once performed by employees and outsourcing it to an undefined (and generally large) network of people in the form of an open call.” *Merriam Webster Online* defines crowdsourcing as “...the practice of obtaining needed services, ideas, or content by soliciting contributions from a large group of people and especially from the online community rather than from traditional employees or suppliers.” According to Brabham, crowdsourcing may be further defined as “an online, distributed

problem-solving and production model that leverages the collective intelligence of online communities to serve specific organizational goals” (Brabham, 2013).

Crowdsourcing is a practice that can be and has been used for a variety of purposes and across a wide spectrum of domains and contexts. Two particular areas of interest for this research are the drivers of motivation to participate in crowdsourcing and secondly, the effectiveness of crowdsourcing within the realm of new product ideation and development (Afuah & Tucci, 2012; Howe, 2006; Jeppesen & Frederiksen, 2006; Nishikawa et al., 2017). Recent research behind participation in crowdsourcing reveals that the motivations to do so includes four basic factors: 1) financial; 2) community-oriented; 3) task-related; and 4) hedonic (Deng & Joshi, 2016). Moreover, while it has yet to be settled as to whether crowdsourcing is more efficient in new product development than the efforts of in-house design and development teams, a number of studies have empirically demonstrated that the process is becoming more widespread, at least within certain contexts. Based upon certain measures of effectiveness, crowdsourcing can be as or more effective (Afuah & Tucci, 2012; Nishikawa et al., 2017; Sundic & Leitner, 2013).

In addition to the apparent utility of crowdsourcing within the realm of new product development, recent research has also empirically demonstrated that merely marketing crowdsourced products as such can generate significant premiums in product market performance in terms of sales prices, volumes, and velocities (Nishikawa, et al., 2017). These premiums would appear to derive at least in part from the greater perceived ownership of the product, due to personal involvement in its development, as well as the enhanced credibility and authenticity of the product’s benefits perceived by consumers as

the result of the product having been created by “people like us”. (Dick & Basu, 1994; Nishikawa et al., 2017; Oliver, 1999).

This study seeks to determine whether there is a statistically significant positive relationship between participation in product ideation crowdsourcing and enhancing customer loyalty. If so, then enhanced customer loyalty might be added as an additional benefit to the product ideation and market performance benefits that have been empirically associated with crowdsourcing across a variety of industries and specific contexts.

This review of the customer loyalty literature sought to not only better understand customer loyalty as a construct, but to also understand the relative importance of the psychological antecedents of customer loyalty under the prospect that similar psychological motivations might drive customers to voluntarily participate in crowdsourcing activities. As such, this review of crowdsourcing literature sought to better understand which specific customers tended to participate in crowdsourcing initiatives; what distinguishing characteristics might they exhibit in terms of the relative contributions of the participants to the benefits of crowdsourcing; and, most importantly, why these participants were willing to dedicate (often without pecuniary recompense) the time and energy to help a third party – including for-profit companies – to improve their products and/or services.

The expectation was that the literature might reveal three key factors: (1) that the relative value of the contributions of participating crowdsourcing customers would range across a spectrum, rather than be a constant value; (2) that the effect of participants with relatively higher perceived knowledge of the crowdsourcing process and the domain in

which the crowdsourcing exercise was being conducted would differ from that of the typical customer and (3) that the willingness to participate in crowdsourcing might be grounded in psychological factors that were also associated with customer loyalty. The literature review that follows provides an at least partial validation of these conjectures.

The literature on the relative value of crowdsourcing for new product development has empirically demonstrated the usefulness of crowdsourcing in product ideations, both from the perspective of the senior executives within the companies, as well as their customers (Bayus, 2013; Brabham, 2010; Brabham, 2013; Dahl et al., 2015; Howe, 2009). For example, the Doritos brand has used its Crash the Super Bowl contest to crowdsource advertisements for the Super Bowl (Brabham, 2013). In this exercise, participants are invited to post 30-second ads to a website and the entire online community votes on the ads until the best ad wins the contest. The winning ad is aired during the Super Bowl and the creators of the ad are awarded prize money and other gifts, including a trip to the Super Bowl. It is of note that the crowdsourced ads are consistently rated in the five best Super Bowl ads, according to *USA Today's* Ad Meter rankings (Brabham, 2013). According to Brabham, Doritos spends a lot of money promoting the contest and it is unclear whether these costs are more than what they would have to pay to have a Madison Avenue ad agency to produce a commercial (2013).

Other research has shown the usefulness of the crowdsourcing process as opposed to the in-house design and product development teams, including in generating products of greater novelty and customer benefit, even if somewhat less in terms of product feasibility (Poetz & Schreier, 2012). Moreover, this same study indicated that, even though the feasibility of crowdsourced product ideas scored less than those generated by

in-house professionals, the overall high scores obtained did not necessarily indicate that their questionable feasibility would constitute a significant bottleneck to developing the new products.

The researchers' summary on generalizability of their findings and areas of future research included four conclusions directly germane to the research question of this study: (1) the ability and willingness of users to come up with promising ideas for new products might depend upon complexity of the industry or product; (2) a user's motivation and/or willingness to invest in generating new product ideas might be tied to their sense of self-esteem, with current anecdotal evidence suggesting that firm recognition is an important motivational factor; (3) that the crowdsourcing process itself attracted qualified users, usually customers, and generated the best ideas; and (4) future research might also seek to study the potential pitfalls of relying too heavily on customers/users (Poetz & Schreier, 2012). The idea is that participants' self-esteem generated perception of their probable abilities to accomplish any given task, affects their motivation to participate. Further, the act of participating, as well as the recognition of their having done so by firm and community, would appear to relate, respectively, to the performance accomplishment and verbal reinforcement aspects of their perceived self-esteem (Ajzen & Fishbein, 1975; Bandura, 1977; Cast & Burke, 2002; Tajfel & Turner, 1985).

Additional research focusing on why and when consumers prefer products of user-driven firms, validates that social identification at least in part underlies this effect (Dahl et al., 2015). The researchers posit that, because consumers are also users, their social identities connect with that of user-designers, and they feel empowerment by

vicariously being involved in the design process. Again, such vicarious involvement would appear to be related to Bandura's self-efficacy construct (Bandura, 1977). The authors' social identification account also effectively predicted when the effect would not materialize, warning that benefits may not materialize when the consumers feel dissimilar to the participating users or when the user-driven firm is only selectively, as opposed to fully, open to participation from all users (observing that consumers may not feel socially included).

As with the social identity theory in customer loyalty research, this notion of social identity account appears to be particularly relevant with respect to the participation in crowdsourcing element of this study. For example, might the potentially superior product ideation benefits associated with a firm identifying and concentrating on its most qualified 'lead-users' outweigh the potential attenuation effects of non-participating consumers perhaps not feeling socially connected? Or, contrarily, might other aspects of social identity theory actually serve to enhance the identification effects of the non-participating consumers (i.e., perhaps consistent with the 'Social Influencer' phenomenon so common today in social media)? Finally, might firms be able to conceive a way in which the crowdsourced user-driven ideation process is managed so as to achieve the benefits of having relied upon the most qualified lead-users, while still enhancing the social identity account of even non-participating users who merely observe and learn about the firm's market philosophy?

The literature regarding these dimensions appear to support the notion that, at least within the context of the increasingly personal, yet still relatively ubiquitous, 'product' of the hotel industry, the social identity accounts of even nonparticipating

consumers could be positively affected, vicariously, by merely letting them know that their own online community had participated in the creation of the product. Further, as the success of the hotel industry becomes ever more dependent upon the guest 'experience' than the physical product, lead-users and influencers may have an even greater effect on non-participating consumers than before.

The crowdsourcing literature reviewed thus far has focused mostly on those users who are most apt to participate and the relative value of their contributions. In addition, there has been discussion of the factors affecting consumers acceptance of user-driven products. As discussed earlier, this portion of literature review focuses on the question of why users participate in such crowdsourcing exercises. In addition to the four motivating factors discussed previously, another recent study on the characteristics of crowdsourcing participants' motivations within Firm-Hosted user communities demonstrated that they likely exhibit three key attributes: (1) likely to be hobbyists (i.e. emotionally engaged; (2) are responsive to firm recognition; and (3) are likely to be 'lead-users' of the firms' products and/or services (Jeppesen & Frederiksen, 2006). Within the lodging industry context of this study a hobbyist might be a consumer who travels a great deal - for leisure, for business or both. In today's hotel industry, it is likely that this travel hobbyist would be a member of one or more hotel loyalty programs and, possibly, is within a higher tier of membership of these programs. In addition, merely inviting such a hobbyist to participate in a crowdsourcing ideation effort could, in and of itself, be considered a form of firm recognition of that hobbyist's already extant association with the company. This recognition might serve as a form of encouragement that would positively reinforce the hobbyist's sense of self-esteem, while the performance

accomplishment and praise of the online community during the crowdsourcing campaign might enhance both self-esteem and social identity of the participant. And, finally, almost by default, such a hobbyist is likely to have a great deal of familiarity with not only the products of the firm hosting the crowdsourcing initiative, but also of the merits and demerits of firm's competitor products, as well.

The last aspect of crowdsourcing investigated in this literature review is the potential role that participants perceive of the crowdsourcing experience itself might have on crowdsourcing's relationship with customer loyalty. In other words, will an experience perceived as having been clear, fun, and fair amplify the effect that crowdsourcing has on customer loyalty? Will the opposite, diminish any positive effect that may have been possible?

A review of the literature on the Technology Acceptance Model (TAM) Theory and the Theory of Planned Behavior (TBA) appears to demonstrate the importance that the crowdsourcing 'experience' can have participants' subsequent affective commitment to a brand (Ajzen & Fishbein, 1975; Davis, 1989). It is specifically important the experience is perceived as having been easy to understand, fun, fair (justice) and transparent. It is also important that the participants be made to feel valued and respected and, ideally, to be part of a special group of people (Zhao & Zhu, 2014; Kuo & Hou, 2017). Therefore, it would appear to be important that any enterprise electing to undertake a crowdsourcing exercise, invest the resources and time into making sure that the experience is a positive one; that they incorporate that into the design and marketing of the crowdsourcing campaign (Brabham, D.C, 2013; Howe, 2009).

This review of the literature on customer loyalty and crowdsourcing sought to understand the psychological antecedents that motivate individuals to voluntarily participate in crowdsourcing initiatives and the subsequent behavioral actions of customer loyalty. The literature supports that both constructs share a number of psychological antecedents. Moreover, given that both constructs are psychologically rooted in self-esteem, perceived knowledge and social identity reinforced by community, the type of loyalty that could be generated by participation in crowdsourcing would appear to be more immune to the counter-persuasions of competitive firms.

One of the most interesting aspects of the research was in the researchers' implications for further research was whether empowerment might also affect other marketing variables. Specifically, the authors' state that "as a start in that direction, we found that *empowerment also increased consumers' future loyalty intentions*", which indicate a potential relationship between participation in crowdsourcing and customer loyalty (Barki & Hartwick, 1994).

3. Research Model and Hypotheses

As the preceding literature review shows, there can be many variables that potentially effect participation in crowdsourcing and customer loyalty to a brand or company. Theory and empirical evidence suggest that not only is there a relationship between crowdsourcing and customer loyalty due to sharing several theoretical bases, but also due to having some shared psychological antecedents embedded within these theories. There is also empirical evidence of the relationship between participation in crowdsourcing and customer loyalty. Moreover, is possible that the relationship between these two constructs could be either bi-directional or, at a minimum mutually reinforcing

such that individuals that are loyal to a brand or product may be more willing to participate in crowdsourcing and/or vice versa.

This study proposes the theory that participation in crowdsourcing will positively effect customer loyalty. Acknowledging that existing loyal customers may be more inclined to participate in a crowdsourcing activity conducted by the firm than non-loyal ones, this study posits that even non-loyal customers, or complete strangers to the firm for that matter, could be enticed to participate in the crowdsourcing exercise for a variety of psychological reasons and end up being more loyal to the company as a result of having participated.

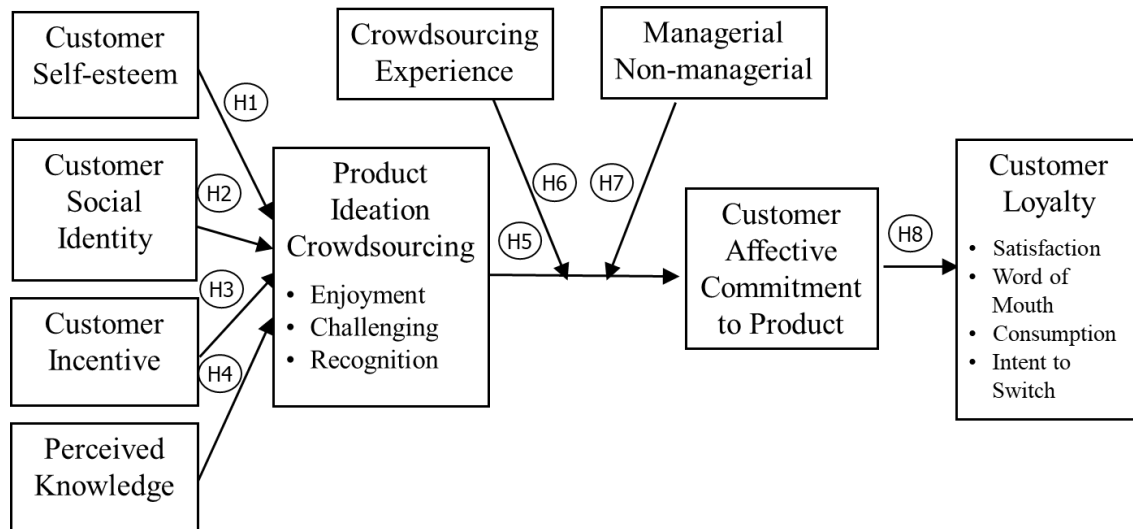
As previously mentioned, the research questions this study seeks to answer is:

What effect does participation in product ideation crowdsourcing have on affective commitment as a mediator of customer loyalty in the lodging industry in the United States?

Figure 3 depicts the proposed model that will be used to test the research theory, followed by a summary description of the model constructs, the research hypotheses, and a summary of how the constructs will be operationalized.

Figure 3.

Proposed Research Model



The central proposition of the research model is that participation in product ideation crowdsourcing is motivated by three psychological and one incentive-based antecedent. This participation in crowdsourcing in turn mediates the positive effect these antecedents have on customers' affective commitment toward a prospective lodging company or brand. This affective commitment in turn mediates the positive affect that participation in crowdsourcing has on customer loyalty.

Table 1 provides a summary definition of each of the constructs, the role each plays in the research model and the theoretical basis supporting each construct.

Table 1

Construct Definitions Grouped by Type with Theoretical and Empirical Basis

Construct	Description	Theory
Independent Variables		
Customer Self-Esteem	Individual's general belief in his/her capabilities to live up to their cultural norms (and execute tasks presented to him/her).	Self Determination Theory, Coopersmith, 1968; Terror Management Theory, Greenberg, J.; Pyszczynski, T.; Solomon, S., 1986
Customer Social Identity	Degree to which a participant's identify and self-esteem is derived by being part of a cohesive group.	Social Identity Theory, Tajfel, 1979; Social Learning Theory, Bandura and Walter, 1963
Customer Incentive	Degree to which an individual is motivated by a variety of financial and non-financial rewards to participate in crowdsourcing	Variety of literature and empirical research
Mediator Variables		
Customer Perceived Expertise	The degree to which a participant in Product Ideation Crowdsourcing perceives he/she has expertise in the focus industry and/or the crowdsourcing domain.	Crowdsourcing, Howe, 1986; Social Identity Theory, Tajfel, 1979; Social Learning Theory, Bandura and Walter, 1963; Technology Acceptance Model, Davis, 1989
Product Ideation Crowdsourcing	The willingness to participate in Product Ideation Crowdsourcing as operationalized by measures of enjoyment, challenge, and recognition.	Crowdsourcing, Howe, 1986; Social Identity Theory, Tajfel, 1979; Social Learning Theory, Bandura and Walter, 1963; Technology Acceptance Model, Davis, 1989
Moderator Variables		
Customer Affective Commitment to a Product	Degree to which an individual is psychological and emotionally committed to an organization, group, product, or brand.	Organizational Commitment, Porter, et al, 1974; Allen and Meyer, 1990; Oliver, 1997; Dick and Basu, 1994
Crowdsourcing Experience	The perceived good or bad experience associated with the Product Ideation Crowdsourcing exercise itself.	Expectancy Disconfirmation Theory (Oliver, 1977); Social Justice Theory (Rawls, 1971); Social Identity Theory (Tajfel, 1979)
Managerial Status	Managerial or Non-managerial	Expectancy Disconfirmation Theory (Oliver, 1977); Social Identity Theory (Tajfel, 1979)
Dependent Variable		
Customer Loyalty	One's propensity to prefer one company or brand over all others. This will be measured by Satisfaction and behavioral outcomes of Word of Mouth (willingness to refer the brand to others); Consumption (intention to increase patronage; Switching Behavior (resistance to competitor overtones).	Theory of Reasoned Action, Fishbein and Ajzen, 1967; Theory of Planned Behavior, Fishbein and Ajzen, 1991; Expectancy Disconfirmation Theory (ECT), Oliver, 1977

Each of the model constructs and their proposed operationalization is summarized as follows.

Customer Self-Esteem – drawn from the base theories of the Self Determination Theory, Terror Management and Self Efficacy, this construct posits that a part of an individual's motivation to do most anything, including to live, is based on the need to prove one's self-worth (Bandura, 1977; Cast & Burke, 2002; Lepper et al., 1973). This in turn is based on humans' inherent inability to escape death and the awareness that such inability exists. Therefore, humans react by making their lives 'mean something' and this is achieved through self-esteem. Self-esteem has dimensions of efficacy and self-worth and tends to be mutually reinforcing: the more one does 'esteem-building' things, the more confidence one has in one's general abilities, which in turn leads to greater self-esteem. This focus on making one's life mean something is, essentially, a way of managing the terror of knowing that, ultimately, we humans all must die. There are numerous scales that have been developed to measure self-esteem (Breytspraak & George, 1982), including the Self-Efficacy Scale (Sherer et al., 1982); and a version of the Self-Perception Questionnaire (Ellis et al., 2002).

Customer Social Identity - a concept drawn from Social Identity Theory (SIT) of 1975, SIT in this context captures the motivation, sense of self-worth and enjoyment that one gains as the result of a natural desire to be, and perception that one is, a part of a group (Ajzen & Fishbein, 1975; Tajfel & Turner, 1985). Numerous scales exist to operationalize the latent variable of social identity, including the Social and Personal Identity (SIPI) scale (Nario-Redmond, 2004) and the Consumer Involvement Profile (CIP) (Laurent & Kapferer, 1985).

Customer Perceived Knowledge – the literature suggests that participants who perceive that they have a degree of expertise with either the product or service that is the subject of the crowdsourcing exercise or of the crowdsourcing process itself not only believe that they can make more valid contributions to the exercise, but also that they tend to do so (Brabham, 2008; Brabham, 2013; Howe, 2009). This latent variable is operationalized via questions in validated surveys designed to measure the construct. (Fedorenko & Berthon, 2017; Feng et al., 2018; Yang et al., 2020).

Customer Incentives – a multifaceted construct that has been empirically demonstrated to be positively related to willingness to participate in crowdsourcing of all types. (Brabham, 2008, 2010; Brabham, 2013; Zhao & Zhu, 2014; Mason & Watts, 2016; Yin & Chen, 2015). Questions designed to measure this latent variable were asked as part of a validated survey instrument.

Customer Affective Commitment – an attitudinal latent variable concerning caring about a product/brand, pride in the product/brand, and willingness to put forth extra effort into the product/brand (Dick & Basu, 1994; Oliver, 1997, 1999). Affective commitment is, therefore, defined primarily in accordance with involvement in and identification with the product/brand and, more specifically, from an identification, association, and attachment with a company's product/brand. Several scales have been developed and modified to measure the latent variable of Affective Commitment, including Organization Commitment Questionnaire (OCQ, OCM) (Gupta & Kim, 2007; Mercurio, 2015; Mowday et al., 1979; Porter et al., n.d.; Starnes, 2003).

Product Ideation Crowdsourcing – crowdsourcing has evolved to include a variety of activities, including among others, raising capital (Crowdfunding), solving complex

problems, generating ideas for new projects, and soliciting feedback/satisfaction on open social media platforms like *Trip Advisor*, *Yelp*, and the like. This research is focused on product ideation crowdsourcing within the United States lodging industry and is operationalized via a validated survey designed to gauge subjects' willingness to participate based on their perception of whether it will have been perceived as being enjoyable, challenging, fair, and appropriately reflective of individual participants' contributions.

Crowdsourcing Experience – an individual's perceived experience as having been positive or negative is based on Expectancy Disconfirmation Theory and Theory of Social Justice (Oliver, 1997; Rawls, 1971). The literature review provided various ways in which this latent moderator variable can be operationalized. Among the dimensions of the crowdsourcing experience operationalized are the perceived ease of use, convenience, gamification, justice and governance (Fedorenko & Berthon, 2017; Feng et al., 2018; Yang et al., 2020).

Managerial versus Non-managerial status – this moderator variable is operationalized via a categorical managerial or non-managerial classification question on the survey instrument.

Customer Loyalty – theory, logic and substantial empirical research has been done to operationalize this latent variable. In general, customer loyalty has been demonstrated to embody psychological and behavioral dimensions (Dick & Basu, 1994; Oliver, 1997, 1999). This study is most concerned with the psychological antecedents Customer Loyalty and its behavioral outcomes of consumption, word of mouth, and intention to switch. Satisfaction is also operationalized as an outcome measure of customer loyalty. Numerous validated survey instruments have been developed and administered to measure Customer

Loyalty and each of these latent variables. (Ngobo, 2017; Oliver, 1999; Suh & Youjae, 2006; Watson et al., 2015).

Research Hypotheses

There are eight hypotheses in the research model, as follows:

- H1 – Customer Self Esteem - as Customer Self-Esteem increases subjects' willingness to participate in Product Ideation Crowdsourcing will also increase.
- H2 – Customer Social Identity - as Customer Social Identity increases subjects' willingness to participate in Product Ideation Crowdsourcing will also increase.
- H3 – Customer Incentives - as Customer Incentives increases subjects' willingness to participate in Product Ideation Crowdsourcing will also increase.
- H4 - Customer Perceived Knowledge - as Customer Perceived Knowledge increases subjects' willingness to participate in Product Ideation Crowdsourcing will also increase.
- H5 – Participation in Product Ideation Crowdsourcing - as Participation in Product Ideation Crowdsourcing increases subjects' Customer Affective Commitment will also increase.
- H6 – Crowdsourcing Experience - subjects' perception of the crowdsourcing exercise will moderate the effect that Participation in Product Ideation Crowdsourcing has on Customer Affective Commitment, such that a good experience will amplify effect and a bad experience will weaken it.

H7 – Managerial – subjects’ status as ‘Managerial’ or ‘Non-managerial’ will moderate the effect that Participation in Product Ideation Crowdsourcing has on Customer Affective Commitment, such that Managerial status will amplify effect and non-Managerial status will weaken it.

H8 – Customer Affective Commitment – as Customer Affective Commitment increases, subjects’ Customer Loyalty will also increase.

4. Methodology

This study is based in a postpositivist perspective that essentially emphasizes the importance of the empiricism of the positivist perspective while simultaneously recognizing, in accordance with interpretivism, the unavoidable human bias inherent in all social research (Fischer, 1998). Post positivist research may be based on quantitative, qualitative or mixed-methods research: its main concern with respect to quantitative research is that potential researcher bias be recognized and that steps be taken to in the research design to eliminate that bias (Fischer, 1998).

In accordance with the post positivist paradigm, it was determined that a quantitative analysis of data obtained from an online cross-sectional survey of a random sample of adults in the United States that met specific criterion with regard to their experience with the lodging industry was the best way to address the research question. Because this study involved human subjects, Institutional Review Board (IRB) approval was sought and received in accordance with Florida International University requirements (Appendix A). The research design, target sample population selection, and analytical methodologies used in the final study were all consistent with that proposed in the IRB application and approved by the IRB.

Concrete steps were taken in the design and testing of the survey instrument to eliminate common method bias. The primary criteria for selection were that the target random sample of adults had to reside in the United States, have English as their primary language, that they had vacationed at least once a year, had stayed in a hotel within the past 24 months, and had been the person that made the decision regarding in which hotel to stay. The only change from the sample selection in the IRB application was the extension from 12 to 24 months as the minimum period in which a hotel stay was required. This is a direct result of greater than anticipated negative impact on travel of COVID-19 pandemic, which lasted longer than anyone could have anticipated.

Developing a valid and reliable survey instrument is one of the most challenging aspects of academic research according to Mackenzie et al. (2011), principally due to the difficulty of defining valid construct domains and developing valid measures. In this study the literature review revealed that most of the constructs to be measured had been researched and validated in a number of previous studies and survey instruments.

The constructs to be studied included psychological antecedents which had been found in customer loyalty and crowdsourcing literature, including Self-Esteem (Breyspraak & George, 1982; Coopersmith, 1968; Greenberg et al., 1986); Social Identity (Bandura, 1977; Dahl et al., 2015; Porter et al., 2006); Customer Incentive (Brabham, 2010; Feng et al., 2018; Gagné & Deci, 2005); and Customer Perceived Knowledge (Jiao et al., 2021; Zhu et al., 2017). Crowdsourcing and various related constructs have been the subject of increasing research over the past couple of decades driven largely by advances in internet technologies. The constructs of crowdsourcing (Brabham, 2010; Fedorenko & Berthon, 2017; Howe, 2006; Zhu et al., 2017); Affective

Commitment (Allen & Meyer, 1990, 1990; Iglesias et al., 2011; Mercurio, 2015; Oliver, 1980) and Crowdsourcing Experience (Troll et al., 2016) have been the subject of considerable research. Affective Commitment, as an antecedent to Customer Loyalty, has been studied for decades (Allen & Meyer, 1990; Iglesias et al., 2011; Schulten & Schaefer, 2015). Lastly, customer loyalty, perhaps because it remains so elusive, has been and continues to be a constant focus of academic research (Dick & Basu, 1994; McCall & Voorhees, 2010; Ngobo, 2017; Oliver, 1980, 1999).

Based upon research of these various constructs, previous validated surveys were identified and utilized to create an initial survey instrument. Questions were drawn from, among others, surveys related to: Self Esteem (Ellis et al., 2002; Nario-Redmond, 2004); Social Identity (Kuo & Hou, 2017) (Kang et al., 2015) (Nario-Redmond, 2004,); Incentives (Brabham, 2010; Feng et al., 2018); Perceived Knowledge (Jiao et al., 2021); Crowdsourcing ((Kim et al., 2012); Affective Commitment (Fullerton, 2003); and Customer Loyalty (Fullerton, 2003; McMullan & Gilmore, 2003) (Goyette et al., 2010) (Suh & Youjjae, 2006).

An initial survey comprised of 78 questions drawn from previously validated surveys and adapted to the context under study, was subjected to an informed consent pilot study of seven adults (four co-workers and three DBA colleagues). A number of revisions were made to wording, order of questions, and length in order to improve the survey. Given that survey involved human subjects, a signed Online Informed Consent form was required prior to starting the survey. Questions were designed to protect anonymity of the survey respondents and random numbers were assigned to each to further ensure anonymity

After the informed pilot study, a revised pilot survey comprising 67 questions, including two qualifying questions (a wrong answer to either of which would terminate the survey), five demographic/informational questions, two questions regarding branding and loyalty programs, and 58 seven-point Likert Scale questions which focused on measuring the constructs of interest. The revised pilot survey was distributed online by Hilton Hotels via the Qualtrics survey platform to a random sample of 1,000 members of its customer data base. The random sample of 1,000 was greater than the 500 estimated in the IRB application, due to an anticipated response rate that was less than originally estimated in the IRB application.

The pilot survey response rate from Hilton customers was very low at 37 responses, which after data cleaning and initial analysis yielded only 15 useable responses. Given the low response rate, the pilot survey was subsequently distributed via a link from Amazon Mechanical Turk to the Qualtrics platform to a random sample of MTurk workers. Amazon Mechanical Turk (MTurk) is a marketplace for completion of virtual tasks that requires human intelligence gives access to a service that provides a diverse, on-demand, scalable workforce that can meet various criteria. In this study the MTurk workers had to meet to the specific selection criteria as outlined in the IRB application and the service ensured participation only of those workers from within the United to States. Because the target population now comprised a random sample of MTurk workers, as opposed to guests in Hilton's database, two additional criteria were added to ensure a high quality of responses.

- MTurk HIT Requester Approval rating of greater than 98 percent
- MTurk Number of HITs approved of at least 50

These criteria were possible as a MTurk worker who has worked on the Amazon Mechanical Turk web site will have statistics associated with them based on how accurately they have completed other Human Intelligence Tests (HITs) and the percentage of HITs they've submitted that have been approved. The reward paid to the MTurk workers was \$1.50 per completed survey and the total requested completed surveys was 75 within a three-day time frame. However, only 65 of the targeted 75 surveys were completed within the survey timeframe. After data cleaning and analysis, only 25 of the 65 completed surveys were deemed useable.

Given the low response rate, the researcher investigated whether it might be possible to combine the Hilton and MTurk responses into a single database of 40 useable responses for purposes of analyzing the survey instrument. Chi Square tests and other statistical analyses were performed on the 15 Hilton and 25 MTurk useable survey responses to ascertain whether there were any significant differences between the two groups. The groups were not found to not be significantly different except with regard to their age and income. Neither of these categories were deemed likely to affect their opinions with respect to their attitudes regarding participation in product ideation crowdsourcing, nor the effect that such participation might have on customer loyalty. Therefore, the Hilton and MTurk responses were combined for a total of useable 40 responses.

A variety of descriptive statistical analyses and an exploratory factor analysis (EFA) was performed on the data to assess the validity of the survey. These analyses, together with feedback from my dissertation chair, resulted in a decision to significantly redesign the survey instrument to reduce its length, facilitate response, and improve

clarity. These changes included the elimination of certain qualifying questions, as a result of the filtering criteria available through the Amazon MTurk platform. In addition, the previous qualification – that those respondents be active members of a hotel loyalty program that had redeemed points for travel within the past 12 months was relaxed, given the severe impact of the COVID-19 pandemic on travel since March 2020. Lastly, format of the survey was changed with regard to the 58 questions intended to measure the model constructs. Instead of 58 individual questions with a seven-point Likert Scale response, a single question with a matrix table sub questions using a five-point Likert Scale response was developed for each of the principal model constructs. This reduced the final number of questions to eight (the three psychological antecedents were collapsed in one question), with 52 matrix style sub-questions.

Subsequent informal pre-tests of the survey instrument indicated that these changes reduced the estimated time to complete by approximately 50% to just over 12 minutes. This dramatic decrease in estimated completion time, together with greater clarity in the questions, we deemed to contribute significantly to the reduction in the number of abandoned and incomplete survey responses. Moreover, item codes were developed for each of the remaining questions to facilitate future analysis. See Appendix B (1, 2, and 3) for item codes mapped to the survey questions.

Given the substantial revisions made to decrease the length and increase the clarity of the survey instrument, the low number of useable surveys obtained in Pilot Study One, and the demonstrated viability of MTurk as a viable survey population, a decision was made to conduct a second pilot survey.

In Pilot Study Two, the revised survey was sent to MTurk workers meeting the survey criteria. Pay per completed was increased to \$2.50 in order to obtain the target 150 responses within a condensed 3-day time frame. After data normalization, cleaning and analysis, a total of 102 complete and useable responses were obtained. Appendix C shows descriptive statistics of the Pilot Study Two responses where $N = 102$.

An EFA was conducted on the seven constructs associated with the independent variables of Self Esteem, Social Identity, Incentives and Perceived Knowledge (Psychological Antecedents), Participation in Crowdsourcing, Perceived Experience and Affective Commitment (Mediator and Moderator Variables). As a categorical variable, an EFA was not performed on the hypothesized Managerial/Non-Managerial moderator variable. The constructs associated with the dependent variable Customer Loyalty (Satisfaction, Consumption, Word of Mouth and Switching Behaviors) were analyzed separately and not included in this initial EFA.

The initial EFA confirmed a seven-factor structure and six of the seven had Kaiser's requirement of eigenvalues greater than 1. The seventh factor had an eigenvalue of .937 and so the model was retained. The model suggested that the items that loaded onto factors 1, 3, 5 and 6 represented well for Participation in Crowdsourcing, Customer Self-Esteem, Customer Social Identity and Customer Incentives. However, there was a high degree of cross loading between Customer Perceived Experience and Affective Commitment and some cross loading of Knowledge. The seven-factor model explained 72.1% of the variance. Reliability analysis yielded an acceptable Cronbach's Alpha of .88. (See Appendix D)

Given some of the ambiguity associated with the seven-factor model discussed above, additional further analyses were performed on separate groupings of the principal model constructs of 1) the Psychological Antecedents, 2) Mediators and Moderators, and 3) Customer Loyalty. As shown in Table 2, the items loaded well onto a total of 11 factors.

Within Psychological Antecedents, item loadings suggested a four-factor model with Factor 1 representing Customer Social Identity, Factor 2 Customer Self Esteem, Factor 3 Customer Incentives and Factor 4 Customer Perceived Knowledge. Eigenvalues greater than Kaiser's requirement of 1 were obtained for all items, which explained 65.6% of the variance. KMO Bartlett score of .776 was obtained and reliability analysis indicated an acceptable Cronbach's Alpha of 0.81.

Within Mediators and Moderators, item loadings suggested a three-factor model with Factor 1 representing Participation in Crowdsourcing, Factor 2 Affective Commitment and Factor 3 Customer Perceived Experience. Eigenvalues greater than Kaiser's requirement of 1 were obtained for all items, which explained 66.5% of the variance. KMO Bartlett score of .814 was obtained and reliability analysis indicated an acceptable Cronbach's Alpha of 0.88. As previously mentioned, the hypothesized moderator variable Managerial/Non-Managerial is categorical and therefore was not considered in the EFA.

Table 2

EFA Constructs Pilot Two Survey Instruments 11 Factors

Item Code	Factors											KMO-Bartlett	Variance Explained	α a	
	Psychological Antecedents			Mediators and Moderators					Loyalty						
	Social Identity	Self Esteem	Incentive	Perceived Knowledge	Participation in Crowdsourcing	Affective Commitment	Perceived Experience	Managerial Status	Satisfaction	Consumption	Word of Mouth	Switching			
Psychological Antecedents													0.776	0.656	0.81
PA-Social 19-4	0.86														
PA-Social 19-5	0.80														
PA-Social 19-3	0.68														
PA-Esteem 19-7		0.86													
PA-Esteem 19-10		0.79													
PA-Esteem 19-11		0.69													
PA-Esteem 19-8		0.64													
PA-Incentive 19-13			0.76												
PA-Incentive 19-12			0.76												
PA-Incentive 19-15			0.56												
PA-Knowledge 20-4				0.82											
PA-Knowledge 20-1				0.77											
PA-Knowledge 20-5				0.68											
PA-Knowledge 20-4				N/A											
Mediator and Moderator Variables													0.814	0.665	0.88
Crowdsourcing 21-4					0.80										
Crowdsourcing 21-1					0.78										
Crowdsourcing 21-5					0.71										
Crowdsourcing 21-3					0.68										
Commitment 23-2						0.80									
Commitment 23-3						0.79									
Commitment 23-6						0.79									
Commitment 23-8						0.60									
Experience 24-2							0.83								
Experience 24-4							0.77								
Experience 24-5							0.58								
Managerial								N/A							
Loyalty													0.804	0.691	0.79
Satisfaction 25-1									0.80						
Satisfaction 25-4									0.66						
Satisfaction 25-2									0.52						
Consumption 27-3										0.82					
Consumption 27-6										0.76					
Consumption 27-2										0.75					
Consumption 27-1										0.67					
Word of Mouth 26-7											0.88				
Word of Mouth 26-3											0.85				
Switching Recoded 28-3												0.94			
Switching Recoded 28-2								N/A				0.56			

a. Note. The extraction method was principal axis factoring with an oblique (Varimax and Kaiser normalization) rotation. Only factor loadings above .5 are shown.

Within Customer Loyalty, item loadings suggest that a four-factor model in which Factor 1 represents Satisfaction, Factor 2 Consumption, Factor 3 Word-of-Mouth, and Factor 4 Switching Behavior. Eigenvalues greater than Kaiser's requirement of 1 were obtained for all items and 69.1% of the variance was explained. KMO Bartlett score of .804 and a reliability analysis indicated an acceptable Cronbach's Alpha of 0.79.

Analysis of the data obtained in Pilot Study Two, confirmed an 11 factor model, which is consistent with the constructs proposed in the research model. Table 3 shows the 37 retained coded items comprising the 11 constructs, as well as their theoretical bases and some descriptive statistics.

Table 3*Descriptive Statistics of Pilot Study Two Data (N=320)*

Construct (Reference)	Item Code	Mean	S.D.
Independent Variables - Psychological Antecedents			
Social Identity	PA-Social 19-1	3.95	0.73
Tajfel (1979), Bandura and Walter (1963)	PA-Social 19-2	3.71	0.98
	PA-Social 19-3	4.01	0.87
Self Esteem	PA-Esteem 19-4	4.39	0.69
Coopersmith (1968)	PA-Esteem 19-5	4.17	0.78
Greenberg, J.; Pyszczynski, T.; Solomon, S. (1986)	PA-Esteem 19-6	4.30	0.73
	PA-Esteem 19-7	4.10	0.77
	PA-Esteem 19-8	4.39	0.63
Incentive	PA-Incentive 19-9	4.10	0.76
Brabham (2008); Howe (2006)	PA-Incentive 19-10	4.11	0.83
	PA-Incentive 19-11	4.40	0.73
Perceived Knowledge	PA-Knowledge 20-1	4.38	0.60
Howe (2006); Tajfel (1979); Bandura and Walter (1963)	PA-Knowledge 20-2	4.14	0.75
Bandura and Walter (1963); Davis (1989)	PA-Knowledge 20-3	3.63	1.08
Mediator and Moderator Variables			
Participation in Crowdsourcing	PA-Crowdsourcing 21-2	4.53	0.62
Howe (2006); Brabham (2008); Bandura and Walter (1963)	PA-Crowdsourcing 21-3	4.02	0.82
Davis (1989)	PA-Crowdsourcing 21-4	4.46	0.59
Affective Commitment	PA-Commitment 23-1	4.43	0.59
Porter, et al (1974); Allen and Meyer (1990); Oliver (1997)	PA-Commitment 23-2	4.48	0.64
Dick and Basu (1994)	PA-Commitment 23-3	4.44	0.67
	PA-Commitment 23-4	4.51	0.57
Perceived Experience	PA-Experience 24-1	4.48	0.61
Rawls (1971); Tajfel (1979); Oliver (1977);	PA-Experience 24-2	4.56	0.64
	PA-Experience 24-3	4.33	0.67
Managerial Level ^b		N/A	N/A
Dependent Variable - Customer Loyalty			
Satisfaction	Loyalty-Satisfaction 25-1	4.22	0.648
Fishbein and Azjen (1967); Fishbein and Azjen (1991)	Loyalty-Satisfaction 25-2	4.29	0.751
Oliver (1977)	Loyalty-Satisfaction 25-3	4.36	0.680
Consumption	Loyalty-Consumption 27-1	4.28	0.670
Fishbein and Azjen (1967); Fishbein and Azjen (1991)	Loyalty-Consumption 27-2	4.16	0.782
Oliver (1977)	Loyalty-Consumption 27-3	4.22	0.838
	Loyalty-Consumption 27-4	4.29	0.759
	Loyalty-Consumption 27-5	4.28	0.674
Word of Mouth	Loyalty-WOM 26-1	4.36	0.680
Oliver (1977); Oliver(1997)	Loyalty-WOM 26-2	3.88	0.883
	Loyalty-WOM 26-3	4.11	0.882
	Loyalty-WOM 26-4	3.73	0.977
Switching	Loyalty-Switch 28-1	3.67	0.98
Oliver (1977); Oliver(1997)	Loyalty-Switch 28-2.	3.86	1.14
	Recorded		
	Loyalty-Switch 28-3.	2.45	1.04
	Recorded		

5. Data Analysis and Results

The final study survey was modified based upon the results of Pilot Study Two. The final survey comprised a total 48 questions, including three qualifying questions, seven demographic questions, two brand and loyalty program preference questions, one question to help ensure integrity of results, and 35 sub questions to measure the 11 constructs of the research model. The full survey is attached as Appendix E

The survey was distributed via a link from Amazon Mechanical Turk to the Qualtrics web platform to a random sample of MTurk workers subject to specific selection criteria, as follows:

- Adults over the age of 18
- Location within the United States
- Vacation once per year
- HIT Requester Approval rating of greater than 98 percent
- Number of HITs approved or more than 50

The reward paid was increased to \$2.50 per completed survey to increase response rate and the total requested completed surveys was 250 within a 72-hour time frame. 250 surveys were completed within the time frame. An average time of 13.43 minutes was spent completing the survey. This was deemed reasonable given the previous survey pre-tests.

Given that the only difference in the survey instruments used in Pilot Study Two and the final survey was the removal of three questions measuring the constructs and the addition of one question intended to help ensure survey integrity, and that the selection criterion for the MTurk HIT workers was identical in both cases, it was posited that it

would be possible to combine the useable responses from Pilot Study Two with the final survey responses. Chi Square tests and other statistical analyses were performed on the Pilot Study Two and the survey data to ascertain whether there were any significant differences between the two groups. Table 4 shows the results of the Chi Square tests and demonstrates that the groups were not significantly different except with regard to their household income. This difference was considered to be the likely result of a larger sample size and hence a tendency for a greater portion of the respondents to be in the middle-income brackets. Moreover, this difference was not deemed likely to affect respondents' opinions with respect to their attitudes regarding participation in product ideation crowdsourcing or on customer loyalty. Therefore, the 102 responses from Pilot Study Two were combined with the 250 responses from the final survey for a total of useable 352 useable responses.

Table 4

Pilot Study Sample vs Final Study Sample

	Pearson's Chi Square	
	Value	Asymptomatic Significance
Gender	3.44	0.18
Age	2.08	0.56
Geographic Region	4.73	0.32
Household Income	9.96	0.04
Total Nights in Past 24 months	3.89	0.14
Purpose of Stay	1.60	0.66

Upon data cleaning, normalization, and statistical analyses, 32 outlier responses were removed from the final data set, yielding a final total of 320 useable responses.

Table 5 provides descriptive statistics on the final survey population. Significant results are:

- Gender – the sample population was evenly split between males and females at 50.3 and 49.4 %, respectively. One individual identified as non-binary.
- Managerial versus Non-Managerial – two thirds of the respondents were in managerial positions.
- Geographic Region – at 30%, almost one third of respondents were from the Southeast United States. The Midwest, including Texas, comprised the next largest concentration. This is not surprising given the rapid growth in population in the Sunbelt.
- Age – the sample population spanned all age groups (representing Gen Z, Millennials, Gen X, and Boomers). The distribution by age was slightly skewed toward Millennials, which at almost 52% is the largest concentration of respondents. This seems logical as they not only comprise the largest generational cohort but may also be most likely to engage in MTurk work.
- Household Income – respondents were a relatively affluent group with the largest percentage (44.1%) earning between \$50,000 and \$99,000 annually per household. Somewhat surprisingly, a greater percentage earned between \$100,000 and \$249,000 per year than those earning between \$25,000 and \$49,999 per year.
- Purpose of Stay – more than two thirds of respondents traveled primarily for leisure, followed by business travelers at 28.7%

- Total Nights in Past 24 Months – consistent with the above, almost half of the respondents stayed less than 10 nights in a hotel over the past 24 months. It is difficult to know the effect COVID-19 had on these numbers, but this does not appear to be a group of ‘road warriors’.

Table 5

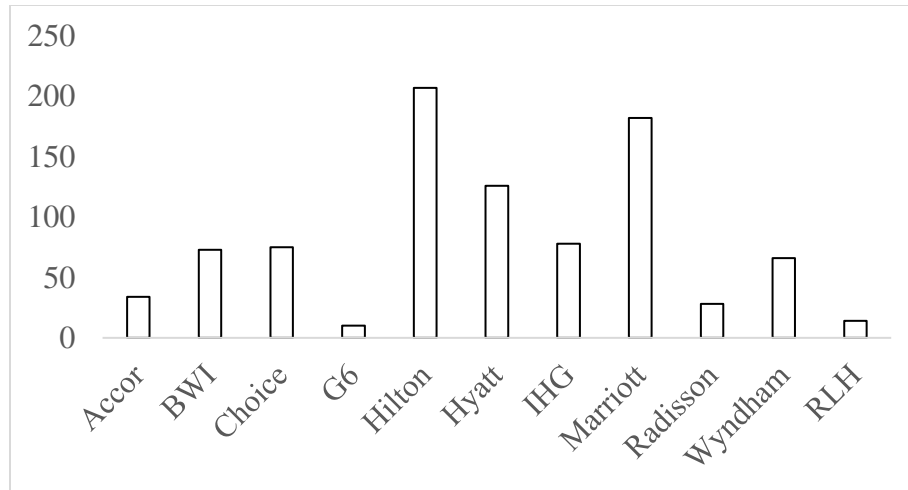
Main Sample Study Characteristics (N=320)

Baseline Characteristics					
Gender	Male	Female	Non-Binary		
Number	161	158	1		
Percent	50.3%	49.4%	0.3%		
Managerial Level	Managerial	Non-managerial			
Number	208	112			
Percent	65.0%	35.0%			
Geographic Origin	Northeast	Midatlantic	Southeast	Midwest inc. TX	West
Number	51	15	96	91	67
Percent	15.9%	4.8%	30.0%	28.4%	20.9%
Age	18-22	23-38	39-54	55-73	
Number	3	166	105	46	
Percent	1.0%	51.9%	32.8%	14.3%	
Income	< \$24,999	25,000 - \$49,999	\$50,000 - \$99,000	\$100,000 - \$249,999	> \$250,000
Number	18	76	141	77	8
Percent	5.5%	23.8%	44.1%	24.1%	2.5%
Main Purpose of Hotel Stay	Leisure	Business	Group	Other	
Number	218	92	7	3	
Percent	68.1%	28.7%	2.2%	1.0%	
Hotel Stays over past 24 months	1-10 nights	11-20 night	>20 nights		
Number	159	103	58		
Percent	49.7%	32.2%	18.1%		

Respondents were also asked to choose their preferred three brands from a group of ten of the most prominent global hotel brands. Figure 4 shows the results for preferred brands.

Figure. 4

Preferred Brand Results



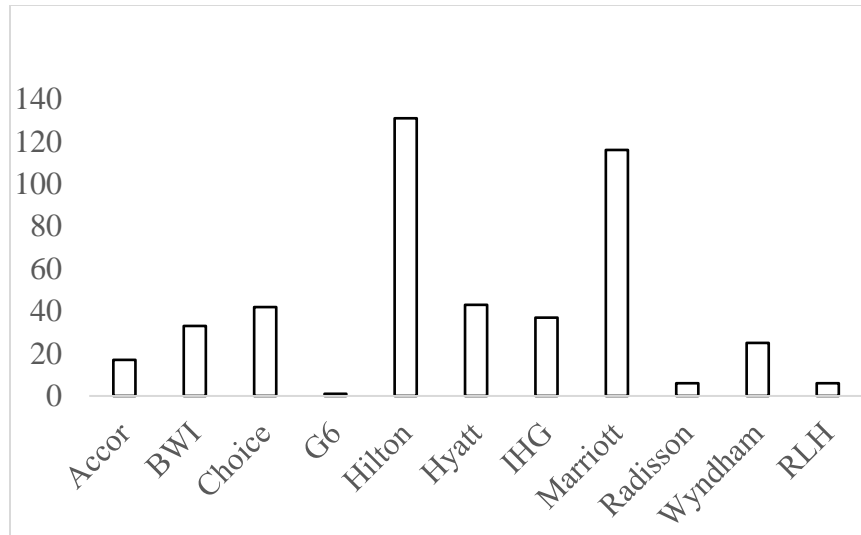
Note. N=320

The results show that Hilton and Marriott are the preferred hotel brands by a significant margin. This is generally consistent with the industry statistics in that these are the two largest hotel brands in the world. The Hilton is preferred over the Marriott brand which is somewhat surprising because Marriott is the larger brand. Hyatt Hotels registered an outsized showing as well, considering Hyatt has far fewer hotels than either the IHG, Wyndham or Best Western brands. Accor, another one of the world’s largest hotel brands, showed little preference. This is not necessarily surprising, given that Accor is primarily a European brand with a comparatively small, albeit growing, presence in the United States.

Respondents were also asked whether they were members of the loyalty programs of any of the preferred three brands that they had chosen. Figure 5 shows the results for loyalty programs.

Figure 5

Loyalty Program Membership



Note. N = 320

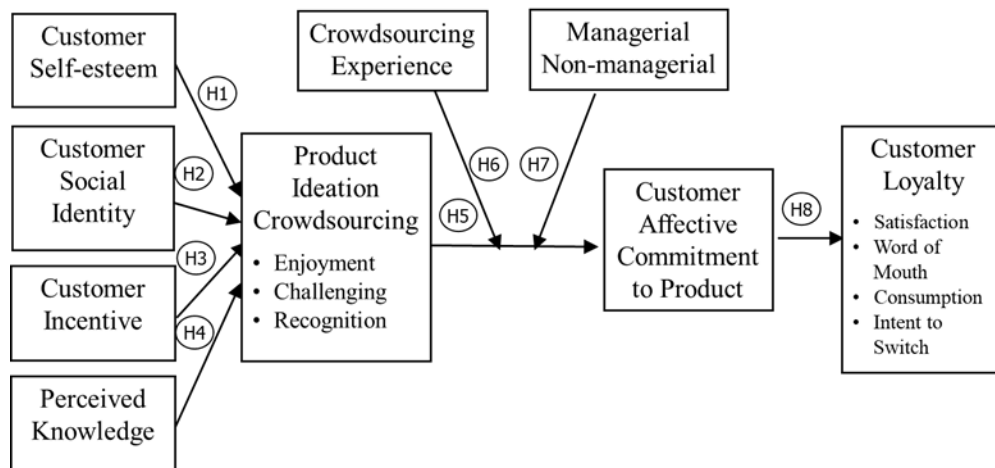
The results of the loyalty programs are broadly consistent with those of the three preferred brands. The gap between Hilton and Marriott appears to have narrowed with respect to membership in the brands' loyalty programs. Hyatt Hotels' loyalty program does not appear to be strong relative to the strength of its brand. Other proportions generally appear to be in line with brand preference.

Figure 6 depicts the research model and hypotheses. The model shows the hypothesized direction of the relationships from the Psychological Antecedents through to Customer Loyalty. The Psychological Antecedents are directly and positively related to Participation in Crowdsourcing. Their relationship to Affective Commitment is then

mediated by Participation from Crowdsourcing, which in turn is mediated by Affective Commitment in its positive relationship to Customer Loyalty. The direct positive relationship between Crowdsourcing and Affective Commitment is hypothesized to be moderated by the Customer Perceived Experience of the Crowdsourcing exercise and also by whether one is a managerial level employee or not. As previously explained, while these relationships could be bi-directional or mutually reinforcing, the hypothesized direction of these relationships is supported by the literature and logic. The basic hypothesis is that an individual could have no knowledge of, much less loyalty to a particular hotel brand, and end up being more loyal as the result of having participated in the crowdsourcing exercise, especially if that crowdsourcing experience is perceived as having been positive. The hypothesized direction of these relationship is predicated upon psychological antecedents posited to be shared between the two constructs.

Figure 6

Research Model



The research model was tested using a quantitative analysis of the data. Each hypothesis was tested using regression analysis from IBM’s program Statistical Package

for the Social Sciences (SPSS). Hypotheses 1 through 5 and 8 were tested using simple linear regression. Hypotheses 6 and 7 were tested using simple linear regression, having first created means-centered variables to measure the hypothesized interaction between Customer Perceived Experience and means-centered Participation in Crowdsourcing, and between the categorical Managerial/Non-managerial and means-centered Participation Crowdsourcing. Table 6 shows the summary results.

Table 6
Summary of Results of Hypotheses

No	Hypothesis	Result	Adjusted R ²	Significance
H1	As Customer Self-Esteem increases subjects' willingness to participate in Product Ideation Crowdsourcing will also increase.	Supported	0.236	p <.001
H2	As Customer Social Identity increases subjects' willingness to participate in Product Ideation Crowdsourcing will also increase.	Supported	0.122	p <.001
H3	As Customer Incentives increases subjects' willingness to participate in Product Ideation Crowdsourcing will also increase.	Supported	0.238	p <.001
H4	As Customer Perceived Knowledge increases subjects' willingness to participate in Product Ideation Crowdsourcing will also increase.	Supported	0.113	p <.001
H5	As Participation in Product Ideation Crowdsourcing increases subjects' Customer Affective Commitment will also increase	Supported	0.301	p <.001
H6	Subjects' perception of the crowdsourcing exercise will moderate the effect that Participation in Product Ideation Crowdsourcing has on Customer Affective Commitment, such that a good experience will amplify effect and a bad experience will weaken it.	Not Supported		
H7	Subjects' status as 'Managerial' or 'Non-managerial' will moderate the effect that Participation in Product Ideation Crowdsourcing has on Customer Affective Commitment, such that Managerial status will amplify effect and Non-Managerial status will weaken it.	Supported	0.314	p <.05
H8	As Customer Affective Commitment to a Product increases subjects' Customer Loyalty will also increase.	Supported	0.465	p <.001

The first hypothesis proposed that there is a positive direct effect between Customer Self-Esteem and Participation in Crowdsourcing. Customer Self-esteem in this context refers more broadly to a person's overall positive view of him or herself (Cast & Burke, 2002; Gecas, 2022; Rosenberg, 1965), and the hypothesis suggests that as a person's self-esteem increases, their motivation to participate in crowdsourcing will also increase. Much has been written about how one's self esteem is comprised of two primary components: - self-worth and self-efficacy (Cast & Burke, 2002; Coopersmith, 1968; Gecas, 2022). Moreover, empirical studies have shown that people will often engage in activities that provide verification, or reinforce their positive self-esteem (Coopersmith, 1968; Coopersmith, 1967; Stets & Burke, 2000). This includes participating in group activities in which the extrinsic validation of the group acts as an important reinforcer of one's self-esteem. It is important to note that extrinsic group-based validation of one's worth can often be even more powerful than one's intrinsic validation because it is deemed as being more genuine (Coopersmith, 1967; Stets & Burke, 2000; Tafarodi & Swann., 1995). Hypothesis 1 showed a statistically significant Adjusted R² of .236 (p < .001) indicating that Customer Self-Esteem would appear to be a factor in increasing Participation in Crowdsourcing.

Hypothesis 2 proposed that as a person's Customer Social Identity increases so too will their willingness to Participate in Crowdsourcing. While the literature reveals that there are elements of social identity within the construct of Customer Self-esteem (Cast & Burke, 2002; Stets & Burke, 2000; Tafarodi & Swann, 1995), both literature and empirical analysis of the data supports considering Customer Social Identity as a stand-alone construct (Ajzen & Fishbein, 1980; Hogg et al., 2012; Rosenberg, 1965).

Moreover, this notion of identifying as part of a group, of gaining an sense of identity through being part of a group is believed to be one of the psychological antecedents effecting customer loyalty (Dick & Basu, 1994; Oliver, 1999; Suh & Youjae, 2006).

Hypothesis 2 showed a statistically significant Adjusted R^2 of .112 ($p < .001$) supporting the notion that increasing one's sense of social identity with or to a particular enterprise or task does increase one's willingness to participate in product ideation crowdsourcing.

Hypothesis 3 proposed that Customer Incentives (financial and non-financial) can positively affect Participation in crowdsourcing. Anyone who participates in any activity must be motivated to do so. Nobel Prize winning economist Ludwig von Mises (1949) asserts that any human action is an economic decision that derives from the desire to shift one's state from that of uneasiness to that greater comfort. While the decision one makes may or may not succeed in alleviating his or her state of uneasiness, it is the motivating factor behind all human action and it is made based upon the rational evaluation of the options at hand and an estimation of the causal outcome that should alleviate the current state of unease. Customer Incentives may be used as a means by which this state of uneasiness may be induced in an individual. For example, if the incentive is financial, then the state of uneasiness is induced by knowing that one's current financial state may be improved by participating in a particular activity. Work, lotteries, and other forms of gambling are predicated upon inducing this state of uneasiness.

Research into participation in crowdsourcing supports the premise that both financial and non-financial incentives may be used to induce one to participate in crowdsourcing (Brabham, 2010; Brabham, 2008; Chandler & Kapelner, 2013; Zhao & Zhu, 2014; Sundic & Leitner, 2013). The Customer Incentive construct in this research

was operationalized using both financial and non-financial measures. Some of the psychological elements that comprise Customer Self-esteem and a sense of Customer Social Identity were posited as psychological incentives to motivate a person and increase his or her willingness to participate in crowdsourcing. Hypothesis 3 showed a statistically significant Adjusted R^2 of .238 ($p < .001$) that the use of Customer Incentive does increase one's Participation in Crowdsourcing.

Hypothesis 4 proposed that the more one perceived oneself to be knowledgeable in either the lodging industry (research context) or in the process of crowdsourcing, the more one will be willing to participate in crowdsourcing. Research into crowdsourcing has shown that people often participate to either demonstrate, to themselves and others, their particular expertise in a certain area, or to use the crowdsourcing exercise as a means to increase their knowledge of or expertise in a certain domain (Brabham, 2010; Chandler & Kapelner, 2013; Zhao & Zhu, 2014; Gagné & Deci, 2005). In fact, an area of growing concern in crowdsourcing, particularly in the area of product ideation and innovation crowdsourcing, is the potential for dominance and intimidation within the crowdsourcing platform, of a relatively small group of so-called experts (Leimeister et al., 2009; Poetz & Schreier, 2012; Sundic & Leitner, 2013). This potentially negative aspect of crowdsourcing must be anticipated and considered in the design and operation of the crowdsourcing exercise in order to gain maximum benefit from this particular form of crowdsourcing. Hypothesis 4 - that an increase Customer Perceived Knowledge increases Participation in Crowdsourcing was supported, showing a statistically significant R^2 of .113 ($p < .001$).

Hypothesis 5 proposed that increased Participation in Crowdsourcing will increase one's Affective Commitment relative to the entity conducting the crowdsourcing exercise. The construct of Participation in Crowdsourcing was operationalized via a framing vignette in which the subjects were asked to imagine that they had now participated in a crowdsourcing exercise and that that exercise had been perceived as being fun, easy, transparent, and fair; that the technology platform of the exercise had been intuitive and easy to use; that interactivity amongst the participants had not only been encouraged but attained; and that the participants had had a voice in transparently evaluating each other's ideas. Based upon this framing, Hypothesis 5 was predicated on the notion that Participation in Crowdsourcing, under the condition set out above, would increase their Affective Commitment, as a result of feeling themselves to be a more a part of the sponsoring entity, and that even if their individual ideas had not been chosen, they would feel a closer association with the sponsoring company and hence greater Affective Commitment.

Affective commitment is a critical component of loyalty of an employee or customer to an entity or enterprise in that it stems from greater engagement and stronger emotional ties (Allen & Meyer, 1990, 1990; Fernandez-Lores et al., 2016; Iglesias et al., 2011; Schulten & Schaefer, 2015). The shared experience of Participation in Crowdsourcing was hypothesized to increase Affective Commitment as a result of feeling valued by the company and having "skin in the game". Hypothesis 5 was significantly supported with an Adjusted R^2 of .301 ($p < .001$).

Hypotheses 6 and 7 pertain to the moderating effect that subjects' perception of the Crowdsourcing Experience and their status as a Managerial/Nonmanagerial would

have on the relationship between Participation in Crowdsourcing and Affective Commitment.

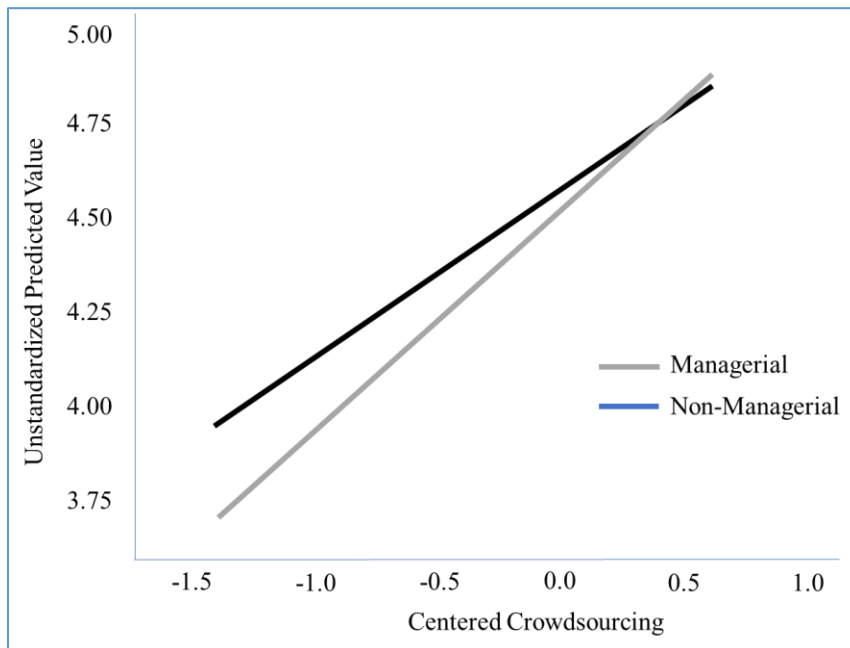
Hypothesis 6 was based upon previous research (Troll et al., 2016) and posited that a subject's perceived Crowdsourcing Experience would moderate the relationship such that positive experience would amplify the positive effect of Participation in Crowdsourcing on Affective Commitment, whereas a negative experience would diminish it. Hypothesis 6 was not supported by the data. Some potential implications of this inability to reject the null hypothesis and suggestions for areas of future research will be discussed in subsequent sections of this dissertation.

Hypothesis 7 proposed that subject's status as Managerial/Nonmanagerial would moderate the effect of Participation in Crowdsourcing on Affective Commitment such that status as a manager would amplify the affect, while that of a non-manager would diminish it. This hypothesis was supported with a statistically significant Adjusted R^2 of .314 ($p < .05$). This hypothesis was predicated on the assumption that managerial workers would generally have traveled more and, thus, would generally feel more vested in Participation in Crowdsourcing.

Figure 7 depicts the interaction effect between Managerial/Nonmanagerial and Participation in Crowdsourcing on Affective Commitment. It shows that, while the affective commitment of both managers and non-managers increases with their Participation in Crowdsourcing, that positive effect is more pronounced in managers. Lodging companies seeking to gain maximum utility out of their crowdsourcing initiatives may wish to consider this in the design of their initiative, particularly as it relates to increasing the Affective Commitment of participants.

Figure 7

Managerial/Nonmanagerial and Participation Affective Commitment



Hypothesis 8 proposed that Affective Commitment would be positively related to Customer Loyalty such that increases in Affective Commitment would increase Customer Loyalty. Previous research demonstrates the relationship between Affective Commitment and Customer Loyalty (Dick & Basu, 1994; Ngobo, 2017; Oliver, 1999). This hypothesis was supported with a statistically significant Adjusted R^2 of .465 ($p < .001$).

The position of Participation of Crowdsourcing within the research model suggests that the effects of these psychological antecedents on loyalty are mediated first by Participation in Crowdsourcing and then by Affective Commitment.

As previously noted, position of Participation in Crowdsourcing and Affective Commitment within the research model suggests that these constructs are mediating

dependent variables. More specifically, that Participation in Crowdsourcing mediates the relationship between the psychological antecedent independent variables and Affective Commitment and that Affective Commitment mediates the relationship between Participation in Crowdsourcing and Customer Loyalty. Regression analysis was used to test the mediating effect and found that in both instances there was a mediating effect. This is shown in Table 7.

Table 7

Mediation Summary of Results of Crowdsourcing and Affective Commitment

Relationship	Before Mediation		After Mediation	
	Unstandardized Coefficient	Significance	Unstandardized Coefficient	Significance
Crowdsourcing as a Mediator of:				
- Self Esteem on Affective Commitment.	$\beta = .38$	$p < .001$	$\beta = .19$	$p < .001$
- Social Identity on Affective Commitment.	$\beta = .27$	$p < .001$	$\beta = .15$	$p < .001$
- Incentives on Affective Commitment.	$\beta = .39$	$p < .001$	$\beta = .23$	$p < .001$
- Perceived Knowledge on Affective Commitment.	$\beta = .29$	$p < .001$	$\beta = .15$	$p < .001$
Affective Commitment as a Mediator of:				
- Crowdsourcing on Loyalty	$\beta = .45$	$p < .001$	$\beta = .16$	$p < .001$

As can be seen in Table 7, the unstandardized coefficient of the direct relationship between each of the independent variables and Affective Commitment is greater than it is after introduction of Participation in Crowdsourcing. This indicates that some portion of that direct relationship is being mediated by Participation in Crowdsourcing. Moreover, all of these relationships are statistically significantly ($p < .001$). The same is true of Affective Commitment in its role as a mediator of the relationship between Participation

in Crowdsourcing and Customer Loyalty, where the unstandardized coefficient decreases from .45 to .16 ($p < .001$).

6. Discussion and Implications

This study provides a contribution to the existing literature on crowdsourcing and customer loyalty in several ways. Much of the existing literature concerning customer loyalty has focused on measurement the behavioral outcomes of customer loyalty (Dick & Basu, 1994; Oliver, 1997), while the literature regarding crowdsourcing, a considerably newer phenomenon enabled by internet technologies, has focused principally on why people participate in crowdsourcing and the benefits that crowdsourcing can produce for entities ranging from companies to governments. In the 1990s Dick and Basu and Richard Oliver began to shift the focus to the antecedent predictors of customer loyalty, particularly as they effect the relative attitude of consumers toward a brand or product and ability of that relative attitude to mitigate the moderating effect of social and situational factors. Subsequent literature revealed that many of antecedent predictors of customer loyalty are psychological and that psychological antecedents, and the theories upon which they are based, are shared as motivating factors in the Participation in Crowdsourcing. There appears to be a gap in the research as to whether these shared antecedents might allow companies and a range of other entities to enjoy the benefits produced by crowdsourcing while simultaneously developing more loyal customers. Exploring this potential connection between these two heretofore seemingly disconnected constructs was the goal of this research. It is hoped that the results supported herein might contribute to the body of knowledge from both a theoretical and practical perspective.

Theoretical Implications

Dick and Basu's seminal work to establish an integrative framework on customer loyalty posits that customer loyalty is the relationship between relative attitude and purchasing behaviors (Dick & Basu, 1994). Cognitive, affective and conative antecedents are viewed as forming one's relative attitude and loyalty along with motivational, perceptual and behavioral consequences (Dick & Basu, 1994). This can be seen in Figure 1.

This is important, as the emphasis on building loyalty is placed on relative attitude and the antecedents that effect it. It is the relative attitude, moderated by social norms and situational influences, that drives repeat patronage and leads to loyalty consequences, such as search motivation, resistance to counter persuasion and word-of-mouth. Other research on customer loyalty supports the importance of affective and cognitive antecedents (Jacoby & Chesnut, 1978; Oliver, 1997, 1999). Literature on crowdsourcing also showed that psychological antecedents such as emotion, confidence, expectation and centrality, together with self-esteem, are among those shared as motivations to participation in crowdsourcing (Brabham, 2010; Zhao & Zhu, 2014; Gagné & Deci, 2005). Moreover, many of these antecedents are derived from base theories of social identity, self-determination, and expectancy (Ajzen & Fishbein, 1980; Bandura, 1977; Stets & Burke, 2000).

The logic of shared theory and psychological antecedents served as the basis for the fundamental research question of whether participation in crowdsourcing would enhance customer loyalty. The results of the research demonstrated this to be the case, as Customer Self-Esteem, Customer Social Identity, Customer Incentive, and Customer

Perceived Knowledge were all shown to positively related to subjects' Participation in Crowdsourcing. These findings underscore the importance of psychological factors in motivating human behavior – whether related to customer loyalty or participation in crowdsourcing. Moreover, the study demonstrated that Participation in Crowdsourcing positively effects Affective Commitment, which in turn was positively related to Customer Loyalty as measured by the theoretical psychological and behavioral consequences of satisfaction, consumption, resistance to counter persuasion (switching) and a willingness to speak positively about the company and/or brand (word-of mouth). As such, this study contributes to existing theory related in both customer loyalty and crowdsourcing.

The hypothesis that perceived Customer Experience would moderate the effect of Participation in Crowdsourcing on Affective Commitment was not supported. The key theory supporting this hypothesis is Expectancy Disconfirmation Theory (Oliver, 1997), which essentially posits that consumers have expectations when they consume a product or service and that these expectations can either be positively or negatively disconfirmed. If a product or service exceeds expectations, this is positive disconfirmation and leads to greater satisfaction and, hence, creates the potential for greater loyalty. Negative disconfirmation has the opposite effect.

The hypothesis was rooted in the notion that the affective commitment of a subject who had felt motivated to participate in a crowdsourcing exercise for the reasons proposed in Hypotheses 1 through 4, could either be amplified or diminished based upon the positive or negative disconfirmation of his/her expectations with regard to the perceived crowdsourcing experience: a positive experience would disconfirm

expectations and elicit greater affective commitment for the sponsoring company. The opposite was also hypothesized to occur. There could be any number of reasons why this theoretical proposition was not supported. Perhaps subjects did not form an expectation with regard to the crowdsourcing exercise, viewing it rather as a task than a product or service. Perhaps subjects did not have sufficient familiarity with crowdsourcing, as a concept, to form an expectation. Nonetheless, exploring this hypothesized relationship could form the basis for future research.

Despite the theoretical contributions of this research, the challenge of building enduring customer loyalty remains. There is ample evidence that even the most satisfied customers will purchase from a competitor and are vulnerable to the counter persuasions of competitive firms (Oliver, 1999). There is also ample evidence that, despite the billions of dollars that companies spend on loyalty programs, few of these programs have proven to be very effective at engendering enduring psychological loyalty (Shugan, 2005). Perhaps, then, it is this illusive psychological loyalty that enables companies and entities like Harley-Davidson, Apple, sports teams, and rock bands to persuade their customers to not only keep coming back, but also to pay market premiums for their products. This study contributes to the theory that supports this emphasis on psychological antecedents.

Crowdsourcing is a relatively new phenomenon that has been demonstrated to produce real benefits in terms of new product ideation, innovation, problem solving, fund raising, policy-making and point of sale market premia (Brabham, 2008; Howe, 2006; Leimeister et al., 2009; Nishikawa et al., 2017). The findings of this study add to theory and literature in linking the psychological constructs between crowdsourcing and loyalty.

In so doing, this study not only opens new areas of academic research, but also has practical implications.

Practical Implications

From a practical perspective, this study has numerous implications. The most important of these implications is in using this theoretical framework to derive the empirical benefits of product ideation crowdsourcing while enhancing customer loyalty, at least within the U.S. lodging industry. Secondly, U.S. lodging companies can expect to generate a greater psychological affinity to their companies as the result of a well-executed crowdsourcing campaign, possibly at a lower cost. Lastly, psychological loyalty has proven to be more enduring than the dubious, if not spurious, loyalty that often results from expensive loyalty programs (Shugan, 2005).

What follows are the considerations derived from the study research and findings that lodging companies should consider as they contemplate a product ideation crowdsourcing campaign.

Crowdsourcing participants

While the research was based upon a random sample of MTurk HIT workers who vacationed for leisure and had stayed in a hotel at least once during the past 24 months, the lack of meaningful differences between the subjects drawn from Hilton's customer database and the sample population, indicate that there is no reason that hotel companies cannot draw from the own customer base to field a crowdsourcing endeavor. To the contrary, for the reasons outlined herein, merely inviting customers to participate may activate psychological factors that could enhance a feeling of connectedness with the company. Moreover, drawing from customers could result and a population with greater

perceived knowledge, thereby yielding not only a greater participation rates but also higher quality ideas.

Incentives

Financial and non-financial incentives were demonstrated to be positively associated with a willingness to participate in crowdsourcing. Lodging companies are in a great position to offer free stays, an enhanced tier of membership on their loyalty program and other incentives to encourage participation. Should they go outside their customer databases, these incentives could be a way of stimulating trial from people who are not yet customers – perhaps even from competitors.

Crowdsourcing design

While the hypothesized moderating effect of participants' perceived experience with the crowdsourcing exercise was not proven to be statistically significant, literature suggests that lodging companies should be very thoughtful in the design of the crowdsourcing exercise. Ideally, it will be organized such that it is perceived as being fun, competitive, transparent, and fun. Communications should be frequent. Participants should be given a role in evaluating the quality of ideas. Bringing in elements of online gaming should be considered to keep the process interesting.

Crowdsourcing platform

Most crowdsourcing is implemented online via a third-party technology platform. Regardless, lodging companies should ensure that the platform is stable and secure and that the user interface is simple and easy to use.

Concentration of participants

According to the literature, it is likely that a smaller group of super-users will come to dominate the process, especially with regard to ideation crowdsourcing (Sundic & Leitner, 2013). While these users do tend to contribute high quality ideas, they can also somewhat defeat the central purpose of crowdsourcing – tapping the wisdom of the crowd, by unintentionally dissuading participation or causing an unduly high level of attrition throughout the process by focusing too heavily on ‘super-users’. Moreover, sometimes the best ideas come from inexperienced participants bringing a wholly new perspective to the problem (Brabham, 2008).

Clarity and Security

Lodging companies should be very clear about compensation and ownership of any intellectual property that ensues from the crowdsourcing exercise. They should also consider and prepare for the possibility that competitors could infiltrate the platform and try to steal ideas or other intellectual property.

Experimentation

Given the size of some lodging companies databases, lodging companies may wish to run several crowdsourcing campaigns to see which yield the best results. For example, there is no reason why they cannot run different campaigns that range from those involving non-customers those that include only their highest loyalty tier.

Research and Analysis

Companies should consider testing the results of this study by surveying the attitudes and tracking loyalty behaviors of crowdsourcing participants to see if and to what degree loyalty has been enhanced.

Return on Investment Analyses

Companies should measure and track the costs and benefits of these crowdsourcing exercises and the loyalty outcomes to ascertain the ROI of any given campaign.

This list is not exhaustive and is meant to be suggestive only. Companies should consider the results of this study within the context of their own unique situation and adapting the same as they wish to their own particular needs.

Limitations and Future Research

This study provides insights into two important and current issues in academic research and the U.S. lodging industry: crowdsourcing and customer loyalty. There are several limitations associated with this research which should be noted. Firstly, the context of this research is the lodging industry in the United States and the results may not generalize to any other industry. That said, given the nature of the research, certain aspects of the study may generalize to industries and institutions outside the United States lodging industry. Future research may wish to study the extent to which the study's findings can extend to other geographical contexts.

This study and the constructs researched were predicated on an extensive review of the existing literature, but this review may in no way be considered exhaustive. There are undoubtedly many other studies that were not reviewed and reviewing them may have produced additional or fewer constructs, as well as the survey questions that were used to measure them. Moreover, latent variables are inherently difficult to measure (MacKenzie et al., 2011). The statistical techniques used to validate the survey items did not yield perfect results. There were cross loadings of the various factors and Kaiser's suggested

eigenvalue of 1 was not obtained on one of the survey constructs in the initial seven factor EFA. Further refining the survey instrument could be an area for future research.

This research relied upon a survey of a random sample of MTurk HIT workers, selected based upon a specific set of criteria. Even though various statistical and other techniques were used to eliminate non-human responses and outlier responses, it is possible that the data set was not perfect, which could possibly affect the conclusions. Every effort was made to eliminate common method bias but it is possible that not all was eliminated.

There are numerous avenues for future research in the area of crowdsourcing intersecting with and leading to enhanced customer loyalty. In summary, this study itself could be extended to include a larger sample of hotel guests or hotel loyalty members of a certain tier to see what differences may appear. Future research could concentrate on building a better survey instrument to further validate the study and perhaps craft an instrument that even more accurately reflects the constructs under measurement. The study could be extended to include other countries or other regions, to see how cultural or economic conditions may affect study results. Lastly, future research could be conducted in other industries to see whether and how the results vary.

7. Conclusion

This study sought to answer the question, what effect does participation in product ideation crowdsourcing have on affective commitment as a mediator of customer loyalty in the U.S. lodging industry? The genesis of the question lay in the prospect that lodging companies might be able to leverage the empirically demonstrated benefits of crowdsourcing to produce an additional benefit of enhanced customer loyalty, which has

long been one of the industry's thorniest and most persistent problems. The findings of this study demonstrate that participation in crowdsourcing has a significant and positive effect on customer loyalty. It is, therefore, reasonable to assume that lodging companies could leverage a product ideation crowdsourcing campaign to not only produce potentially better ideas at a lower cost, but also enhance the loyalty of the crowdsourcing participants in the process.

The study results further show that the psychological antecedents of Customer Self-Esteem, Customer Social Identity and Customer Perceived Knowledge, together with Customer Incentives, directly and positively effect Participation in Crowdsourcing and that this participation mediates the effect of these antecedents on Affective Commitment. Affective Commitment was shown to have a direct positive effect on Customer Loyalty, while mediating the effect that Participation in Crowdsourcing had on Customer Loyalty. Lastly, the study shows that the managerial status of crowdsourcing participants moderates the direct relationship between Participation in Crowdsourcing and Affective Commitment, such that managerial level participants amplify the effect and nonmanagerial participants diminish it.

. While this this study pertains only to the lodging industry in the United States, its results may have implications for other geographies and commercial and public domains and, therefore, provides a basis for future research in a variety area. The study helps fill a gap in the research and the findings further support and contribute to the theories undergirding existing literature regarding crowdsourcing and customer loyalty. From a practical sense, lodging companies can build on the study results to design

product ideation crowdsourcing campaigns with the potential to elicit superior ideas at a lower cost while enhancing the loyalty of crowdsourcing participants

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APPENDICES

APPENDIX A



Office of Research Integrity
Research Compliance, MARC 414

MEMORANDUM

To: Dr. George Marakas
CC: Clay Dickinson
From: Maria Melendez-Vargas, MIBA, IRB Coordinator *W*
Date: June 11, 2021
Protocol Title: "C2D - Dickinson - Product Ideation Crowdsourcing and its Effect on Customer Loyalty in United States Hotel Industry"

The Social and Behavioral Institutional Review Board of Florida International University has approved your study for the use of human subjects via the **Expedited Review** process. Your study was found to be in compliance with this institution’s Federal Wide Assurance (00000060).

IRB Protocol Approval #: IRB-21-0227 **IRB Approval Date:** 06/08/21
TOPAZ Reference #: 110350 **IRB Expiration Date:** 06/08/24

As a requirement of IRB Approval you are required to:

- 1) Submit an IRB Amendment Form for all proposed additions or changes in the procedures involving human subjects. All additions and changes must be reviewed and approved by the IRB prior to implementation.
- 2) Promptly submit an IRB Event Report Form for every serious or unusual or unanticipated adverse event, problems with the rights or welfare of the human subjects, and/or deviations from the approved protocol.
- 3) Utilize copies of the date stamped consent document(s) for obtaining consent from subjects (unless waived by the IRB). Signed consent documents must be retained for at least three years after the completion of the study.
- 4) **Receive annual review and re-approval of your study prior to your IRB expiration date.** Submit the IRB Renewal Form at least 30 days in advance of the study’s expiration date.
- 5) Submit an IRB Project Completion Report Form when the study is finished or discontinued.

HIPAA Privacy Rule: N/A

Special Conditions: N/A

For further information, you may visit the IRB website at <http://research.fiu.edu/irb>.

MMV/em

APPENDIX B1

Pilot Study Two - Survey Questions and Coded Constructs Psychological Antecedents

Q	Construct	
Q19_1	PA-Social 19-1	I perceive a personal sense of community between myself and my preferred hotel brand.
Q19_2	PA-Social 19-2	Being selected to participate in a crowdsourcing exercise would make me feel recognized as a member of the hotel brand community.
Q19_3	PA Social 19-3	Being personally and publicly recognized for my product idea would make me feel more a member of the hotel brand community.
Q19_4	PA-Social 19-4	I feel complimented when I hear other people say good things about my preferred brand's community.
Q19_5	PA-Social 19-5	I feel recognized by my preferred brand as being a member of its community.
Q19_6	PA-Esteem 19-6	When someone describes me, I generally know whether they are right or wrong.
Q19_7	PA-Esteem 19-7	I generally learn things quickly.
Q19_8	PA-Esteem 19-8	If I really try, I can accomplish most anything I want to.
Q19_9	PA-Esteem 19-9	I am confident that would be able to successfully participate in a crowdsourcing exercise.
Q19_10	PA-Esteem 19-10	Even if the crowdsourcing exercise involved unfamiliar tasks, I would probably do well at most of them.
Q19_11	PA-Esteem 19-11	Successfully accomplishing tasks I set out to do is very important to me.
Q19_12	PA-Incentive 19-12	The satisfaction of having my product idea chosen would be important in motivating me to participate in crowdsourcing.
Q19_13	PA-Incentive 19-13	Having my product idea recognized by the company would motivate me to participate in a crowdsourcing exercise.
Q19_14	PA-Incentive 19-14	A monetary reward would be important in motivating me to participate in a crowdsourcing exercise.
Q19_15	PA-Incentive 19-15	Personal recognition from the community of participants would be important in motivating me to participate in a crowdsourcing exercise.
Q20_1	PA-Knowledge 20-1	My personal travel experiences would enable me to provide high quality ideas to new product ideation in the hotel industry.
Q20_2	PA-Knowledge 20-2	My previous experience with crowdsourcing itself would qualify me to provide high quality ideas to any new product ideation crowdsourcing exercise.
Q20_3	PA-Knowledge 20-3	I often complete the online customer feedback surveys sent by hotel companies after a stay at one of their properties.
Q20_4	PA-Knowledge 20-4	In general, I consider myself to be a knowledgeable user of social media platforms.
Q20_5	PA-Knowledge 20-5	Expertise with a variety of social media platforms would likely have little effect on a person's ability to participate in an online crowdsourcing exercise.

APPENDIX B2

Pilot Study Two - Survey Questions and Coded Constructs Mediators and Moderators

Q	Construct	
Q23_1	Crowdsourcing 23-1	I plan to participate in the tasks of this crowdsourcing exercise.
Q23_2	Crowdsourcing 23-2	I believe that participating in this crowdsourcing exercise will be an enjoyable experience.
Q23_3	Crowdsourcing 23-3	I will try my best to engage in tasks of this crowdsourcing exercise rather than abandon them.
Q23_4	Crowdsourcing 23-4	Participating in the crowdsourcing exercise means a lot to me.
Q23_5	Crowdsourcing 23-5	I plan to maintain a high level of participation while completing the tasks of this crowdsourcing exercise.
Q25_1	Commitment 25-1	I feel a strong sense of connection with my preferred hotel brand.
Q25_2	Commitment 25-2	My preferred hotel brand is a good hotel company to do business with.
Q25_3	Commitment 25-3	The service of my preferred hotel brand meets my expectations.
Q25_4	Commitment 25-4	My preferred hotel brand is reliable in terms of service and product.
Q25_5	Commitment 25-5	If I like a particular hotel brand, I rarely switch just to try something different.
Q25_6	Commitment 25-6	The performance of my preferred hotel brand exceeds my expectations.
Q25_7	Commitment 25-7	Overall, I am now more satisfied with my preferred hotel brand.
Q25_8	Commitment 25-8	Inviting me to participate in this Crowdsourcing exercise demonstrates that my preferred hotel brand cares about my satisfaction.
Q25_9	Commitment 25-9	I am pleased to do business with the hotel company undertaking this Crowdsourcing exercise.
Q26_1	Experience 26-1	A user-friendly, intuitive technology platform is an important element of a crowdsourcing exercise
Q26_2	Experience 26-2	The ability to easily interact with the sponsoring company or other participants is an important to successful crowdsourcing
Q26_3	Experience 26-3	A sense of fairness and transparency is an important element of a successful crowdsourcing exercise
Q26_4	Experience 26-4	The crowdsourcing experience itself would have little effect on my perception of the sponsoring company
Q26_5	Experience 26-5	Participants' perception of the crowdsourcing experience is associated with the perceived image of the sponsoring company
Q26_6	Experience 26-6	Regardless of whether my contribution is selected, a fun, fair and easy crowdsourcing experience would positively affect my perception of the sponsoring company.

APPENDIX B3

Pilot Study Two - Survey Questions and Coded Constructs Customer Loyalty

Q	Construct	
Q27_1	Loyalty - Satisfaction 27-1	The performance of my preferred hotel brand exceeds my expectations.
Q27_2	Loyalty - Satisfaction 27-2	Overall, I am now more satisfied with my preferred hotel brand.
Q27_3	Loyalty - Satisfaction 27-3	Inviting me to participate in this Crowdsourcing exercise demonstrates that my preferred hotel brand cares about my satisfaction.
Q27_4	Loyalty - Satisfaction 27-4	I am pleased to do business with the hotel company undertaking this Crowdsourcing exercise.
Q28_1	Loyalty - WOM 28-1	Participating in a crowdsourcing exercise with my preferred hotel brand would likely cause me to speak more frequently about the company to others.
Q28_2	Loyalty - WOM 28-2	I recommend my preferred hotel brand to others
Q28_3	Loyalty - WOM 28-3	I seldom do more than just mention the name of my preferred hotel brand.
Q28_4	Loyalty - WOM 28-4	I have spoken negatively to others about my preferred hotel brand
Q28_5	Loyalty - WOM 28-5	I discuss with others the positive service aspects of the hotels of my preferred hotel brand.
Q28_6	Loyalty - WOM 28-6	I discuss with others the positive physical aspects of the hotels of my preferred hotel brand,
Q28_7	Loyalty - WOM 28-7	I frequently speak about my preferred hotel brand to others
Q29_1	Loyalty - Consumption 29-1	My being selected to participate in a crowdsourcing exercise would likely increase my intention to stay at one of the sponsoring company's hotels
Q29_2	Loyalty - Consumption 29-2	My participation in a crowdsourcing exercise would likely increase the number of times I would be willing to stay at one of sponsoring company's hotels.
Q29_3	Loyalty - Consumption 29-3	Using my idea in a new brand, product or service of the sponsoring hotel company would likely increase the number of nights I would be willing to stay in one of their hotels
Q29_4	Loyalty - Consumption 29-4	Special recognition from the crowdsourcing community would likely increase the share of nights that I would be willing to stay in one of their hotels.
Q29_5	Loyalty - Consumption 29-5	Monetary compensation for my specific contribution would likely increase the share of nights that I would be willing stay in one of their hotels.
Q29_6	Loyalty - Consumption 29-6	If the hotel company sponsoring this Crowdsourcing exercise was also my preferred hotel brand, it would likely positively affect the level of business I would be willing to them
Q30_1	Loyalty - Switch 30-1	I seldom consider switching to from my preferred to another hotel brand.
Q30_2	Loyalty - Switch 30-2	I get bored staying with my preferred hotel brand, even if the service is good.
Q30_3	Loyalty - Switch 30-3	I would try another hotel brand if that other brand offered better product features than my preferred hotel brand.
Q30_4	Loyalty - Switch 30-4	My participation in the crowdsourcing exercise of a major hotel company makes it more likely that I would switch from my preferred hotel brand.

APPENDIX C

Descriptive Statistics of Pilot Study Two Data (N=102)

Construct (Reference)	Item Code	Mean	S.D.
Independent Variable - Psychological Antecedents			
Social Identity	PA-Social 19-3	4.28	0.081
Tajfel (1979), Bandura and Walter (1963)	PA-Social 19-4	3.71	1.011
	PA-Social 19-5	3.91	1.054
	PA-Social 19-7	4.25	0.740
Self Esteem	PA-Esteem 19-7	4.25	0.740
Coopersmith (1968)	PA-Esteem 19-8	3.93	0.882
Greenberg, J.; Pyszczynski, T.; Solomon, S. (1986)	PA-Esteem 19-10	3.97	0.814
	PA-Esteem 19-11	4.35	0.684
	PA-Esteem 19-12	4.04	0.832
Incentive	PA-Incentive 19-12	4.04	0.889
Brabham (2008); Howe (2006)	PA-Incentive 19-13	4.04	0.889
	PA-Incentive 19-15	3.96	0.889
	PA-Knowledge 20-1	4.38	0.690
Perceived Knowledge	PA-Knowledge 20-1	4.38	0.690
Howe (2006); Tajfel (1979); Bandura and Walter (1963)	PA-Knowledge 20-3	4.09	0.690
	PA-Knowledge 20-4	4.26	0.717
	PA-Knowledge 20-5	3.64	1.176
Mediators and Moderators			
Participation in Crowdsourcing	Crowdsourcing 21-1	4.24	0.823
Howe (2006); Brabham (2008); Bandura and Walter (1963)	Crowdsourcing 21-3	4.40	0.787
	Crowdsourcing 21-4	3.97	0.826
	Crowdsourcing 21-5	4.35	0.670
Davis (1989)	Crowdsourcing 21-5	4.35	0.670
Affective Commitment	Commitment 23-2	4.40	0.721
Porter, et al (1974); Allen and Meyer (1990); Oliver (1997)	Commitment 23-3	4.48	0.625
	Commitment 23-6	4.22	0.712
	Commitment 23-8	4.44	0.638
Dick and Basu (1994)	Commitment 23-8	4.44	0.638
Perceived Experience	Experience 24-2	4.37	0.730
Rawls (1971); Tajfel (1979); Oliver (1977);	Experience 24-4	4.39	0.663
	Experience 24-5	4.21	0.800
	Experience 24-5	4.21	0.800
Managerial Level ^b			
Dependent Variable - Customer Loyalty			
Satisfaction	Satisfaction 25-2	4.31	0.675
Fishbein and Azjen (1967); Fishbein and Azjen (1991)	Satisfaction 25-1	4.15	0.666
	Satisfaction 25-4	4.32	0.692
	Satisfaction 25-4	4.32	0.692
Word of Mouth	WOM 26-3	3.88	0.947
Oliver (1977)	WOM 26-7	3.67	1.075
	WOM 26-7	3.67	1.075
Consumption	Consumption 27-1	4.16	0.714
Fishbein and Azjen (1967); Fishbein and Azjen (1991)	Consumption 27-2	4.18	0.825
	Consumption 27-3	4.20	0.797
	Consumption 27-4	4.10	0.827
Oliver (1977)	Consumption 27-4	4.10	0.827
	Consumption 27-6	4.26	0.717
	Consumption 27-6	4.26	0.717
Switching Behavior	Switch_28_2_Recoded	3.81	1.241
Oliver (1977); Oliver(1997)	Switch_Q28_3_Recode	2.58	1.138
	Switch_Q28_3_Recode	2.58	1.138

Note: a. Reliability statistics area at the construct level. b. Moderator managerial is a categorical variable

APPENDIX D

Initial Exploratory Factor Analysis - Pilot Two Survey Instrument (7 factors)

Item Code	Factors							
	Psychological Antecedents				Mediators and Moderators			
	Social Identity	Self Esteem	Incentive	Perceived Knowledge	Participation in Crowdsourcing	Affective Commitment	Perceived Experience	Managerial Status
PA-Social 19-4	0.88							
PA-Social 19-5	0.74							
PA-Social 19-3								
PA-Esteem 19-10		0.77						
PA-Esteem 19-7		0.76						
PA-Esteem 19-8		0.64						
PA-Esteem 19-8				0.61				
PA-Incentive 19-12			0.86					
PA-Incentive 19-13			0.72					
PA-Incentive 19-15								
PA-Knowledge 20-1				0.73				
PA-Knowledge 20-4	0.60			0.70				
PA-Knowledge 20-1					0.68	0.82		
PA-Knowledge 20-5								
Crowdsourcing 21-1					0.83			
Crowdsourcing 21-3					0.77			
Crowdsourcing 21-5					0.71			
Crowdsourcing 21-5					0.68			

Table continues

Table continued

Item Code	Factors							
	Psychological Antecedents				Mediators and Moderators			
	Social Identity	Self Esteem	Incentive	Perceived Knowledge	Participation in Crowdsourcing	Affective Commitment	Perceived Experience	Managerial Status
Commitment 23-6						0.70	0.63	
Commitment 23-2						0.72		
Commitment 23-3								
Commitment 23-8								
Experience 24-2							0.76	
Experience 24-5							0.68	
Experience 24-6						0.64		
Experience 24-4								
Managerial								N/A

a. Note. The extraction method was principal axis factoring with an oblique (Varimax and Kaiser normalization) rotation. Only factor loadings above .5 are shown.

Dissertation Survey

Crowdsourcing and Customer Loyalty

Start of Block: Consent Form

Q1 ADULT ONLINE CONSENT TO PARTICIPATE IN A RESEARCH STUDY Crowdsourcing and Customer Loyalty

SUMMARY INFORMATION

Things you should know about this study:

Purpose: The purpose of the study is to assess the effect that participation in product ideation crowdsourcing may have on customer loyalty.

Procedures: If you choose to participate, you will be asked to complete an online survey concerning participation in product ideation crowdsourcing and customer loyalty.

Duration: This survey should take approximately 10 minutes to complete.

Risks: The main risk or discomfort from this research is merely the time spent completing the survey.

Benefits: The main benefits to you from this research is the experience and possible satisfaction of having participated in a survey that advances our collective understanding of crowdsourcing as an emerging platform for the ideation of products and the effect that such participation may have on customer loyalty.

Alternatives: There are no known alternatives available to you other than not taking part

this study.

Participation: Taking part in this research project is voluntary. Please carefully read the entire document before agreeing to participate.

PURPOSE OF THE STUDY

The purpose of this study is to advance our understanding of participation in product ideation crowdsourcing and its effects on customer loyalty.

NUMBER OF STUDY PARTICIPANTS If you decide to participate, you will be one of approximately 200 people in this research study.

DURATION OF THE STUDY Your participation will involve approximately 10 minutes. Analysis of survey results is expected to take approximately three months.

PROCEDURES If you agree to participate in the survey, we will ask you to do the following things: 1. Read summarized scenarios before certain survey sections. 2. Complete the survey questions to the best of your ability.

RISKS AND/OR DISCOMFORTS The study has the following possible risks to you: Firstly, your time required to complete the survey. Secondly, the possible frustration at feeling that you may not fully understand some of the survey questions.

BENEFITS The study has the following possible benefits to you: The possible satisfaction of knowing that you have contributed to the general body of knowledge surrounding product ideation crowdsourcing and its potential effect on customer loyalty.

ALTERNATIVES There are no known alternatives available to you other than not taking part in this study.

CONFIDENTIALITY The records of this study will be kept private and will be protected to the fullest extent provided by law. In any sort of report we might publish, we will not include any information that will make it possible to identify you. Research records will be stored securely, and only the researcher team will have access to the records. However, your records may be inspected by authorized University or other agents who will also keep the information confidential. You will be provided a randomly assigned identification number, which will be linked to your completed survey. All access to survey results will be made via this randomly assigned number.

USE OF YOUR INFORMATION Your information collected as part of the research will not be used or distributed for future research studies even if identifiers are removed.

COMPENSATION & COSTS You will not receive a payment for your participation in this survey. There are no costs to you for participating in this study.

RIGHT TO DECLINE OR WITHDRAW Your participation in this study is completely voluntary. You are free to participate in the study or withdraw your consent at any time during the study. You will not lose any benefits if you decide not to participate or if you quit the study early. The investigator reserves the right to remove you without your consent at such time that he/she feels it is in the best interest of the research.

RESEARCHER CONTACT INFORMATION If you have any questions about the purpose, procedures, or any other issues relating to this research study you may contact Clay B. Dickinson at mobile number (404) 402 9285 or by email at cdick020@fiu.edu.

IRB CONTACT INFORMATION If you would like to talk with someone about your rights of being a subject in this research study or about ethical issues with this research study, you may contact the Florida International University Office of Research Integrity by phone at 305-348-2494 or by email at ori@fiu.edu.

PARTICIPANT AGREEMENT I have read the information in this consent form and agree to participate in this study. I have had a chance to ask any questions I have about this study, and they have been answered for me. I understand that I will be given a copy of this form for my records.

Consent to Participate (4)

Decline to Participate (7)

End of Block: Consent Form

Start of Block: Decline

Q2

Thank you for taking the time to read the Online Adult Consent Form and declining to participate. If you change your mind and wish to participate in this research study during next few days, please click on the link in the email then accept the Consent Form to participate in this research study.

End of Block: Decline

Start of Block: Introduction and Scenario

Q3 Thank you for agreeing to participate in this survey!!

Internet technologies have made it easier than ever for institutions of all types to "**tap the wisdom of the crowd**" through a process known as *Crowdsourcing*.

From raising funds to designing new products and services, organizations are increasingly reaching out beyond their walls for direct consumer input.

The specific Crowdsourcing process that seeks to create new or improve existing brands, products and/or services is broadly referred to as '**Product Ideation Crowdsourcing**'.

End of Block: Introduction and Scenario

Start of Block: Qualifying Questions

Q4 On at least one occasion in which I have stayed overnight in a hotel within the last 24 months, I have been responsible for the choice of the hotel in which I stayed.

Yes (1)

No (2)

Q5 I am a member of at least one hotel company's loyalty program.

Yes (1)

No (2)

Q6 I have in the past or may at some time in the future use loyalty points to purchase a hotel stay or some other product or service from a hotel company.

Yes (1)

No (2)

Q7 I estimate the total nights I have spent in hotels over the past 24 months to be

1 to 10 nights (1)

11 to 20 nights (2)

More than 20 nights (3)

Q8 The main purpose of most of my hotel stays has usually been

- Leisure (1)
- Business (2)
- Group (3)
- Other reason (4)

End of Block: Qualifying Questions

Start of Block: Disqualified Thank You

Q9 Thank you very much for participating in this survey.

End of Block: Disqualified Thank You

Start of Block: Demographic Information

Q10 My gender is

- Male (3)
 - Female (4)
 - Non-binary / third gender (5)
 - Prefer not to say (6)
-

Q11 My age is

- 18 to 22 (1)
 - 23 to 38 (2)
 - 39 to 54 (3)
 - 55 to 73 (4)
 - 74 or older (5)
-

Q12 I currently reside in

- Northeast (1)
 - Mid Atlantic (2)
 - Southeast (3)
 - Midwest (including Texas) (4)
 - West (5)
-

Q13 My household income is

- Less than \$24,999 (1)
 - \$25,000 to \$49,999 (2)
 - \$50,000 to \$99,999 (3)
 - \$100,000 to \$249,999 (4)
 - Greater than \$250,000 (5)
-



Q14 Please indicate your occupation:

- Managerial, professional (1)
 - Non-managerial (2)
-



Q15 Please select your top three hotel companies from the list below.

- Accor Hotels and Resorts (Sofitel, Fairmont, SLS, Novotel, Ibis, Raffles, Pullman, etc.) (1)
- Best Western Hotels and Resorts (BW Inn, BW Premium, Glo, etc.) (14)
- Choice Hotels International (Comfort Inn, Sleep Inns, Quality Inns, Mainstay, Ascend Collection, etc.) (2)
- G6 Hotels (Motel 6, Studio 6, etc.) (9)
- Hilton Hotels and Resorts (Hilton, Hampton Inn, Hilton Garden Inn, Homewood Suites, Doubletree, Conrad, Waldorf-Astoria, Curio, etc.) (4)
- Hyatt Hotels and Resorts (Hyatt, Hyatt Place, Park Hyatt, Unbound Collection, etc.) (5)
- Intercontinental Hotels Group (Holiday Inn, HI Express, Intercontinental, Crowne Plaza, Staybridge Suites, Kimpton, etc.) (3)
- Marriott International (Marriott, Sheraton, Ritz-Carlton, Courtyard, W, Fairfield Inn, Autograph, Aloft, AC Hotels, etc.) (6)
- Radisson Hotels and Resorts (Radisson, Country Inns and Suites; Park Plaza, etc.) (8)
- Wyndham Hotels and Resorts (Wyndham, Howard Johnsons, Garden Inn, Tryp, Ramada, Econolodge, Super 8, etc.) (7)
- Red Lion Hotels and Resorts (Red Lion, Signature Inns, America's Best Value Inn, etc.) (10)



Q16 Of these three companies, please select those for which you are a member of their loyalty program

- Accor Hotels and Resorts (Sofitel, Fairmont, SLS, Novotel, Ibis, Raffles, Pullman, etc.) (1)
- Best Western Hotels and Resorts (BW Inn, BW Premium, Glo, etc.) (2)
- Choice Hotels International (Comfort Inn, Sleep Inns, Quality Inns, Mainstay, Ascend Collection, etc.) (3)
- G6 Hotels (Motel 6, Studio 6, etc.) (4)
- Hilton Hotels and Resorts (Hilton, Hampton Inn, Hilton Garden Inn, Homewood Suites, Doubletree, Conrad, Waldorf-Astoria, Curio, etc.) (5)
- Hyatt Hotels and Resorts (Hyatt, Hyatt Place, Park Hyatt, Unbound Collection, etc.) (6)
- Intercontinental Hotels Group (Holiday Inn, HI Express, Intercontinental, Crowne Plaza, Staybridge Suites, Kimpton, etc.) (7)
- Marriott International (Marriott, Sheraton, Ritz-Carlton, Courtyard, W, Fairfield Inn, Autograph, Aloft, AC Hotels, etc.) (8)
- Radisson Hotels and Resorts (Radisson, Country Inns and Suites; Park Plaza, etc.) (9)
- Wyndham Hotels and Resorts (Wyndham, Howard Johnsons, Garden Inn, Tryp, Ramada, Econolodge, Super 8, etc.) (10)
- Red Lion Hotels and Resorts (Red Lion, Signature Inns, America's Best Value Inn, etc.) (11)

Q17 Please write your favorite color in the space below

End of Block: Demographic Information

Start of Block: Scenario

Q18 In completing this section of the survey, **please keep in mind the following scenario:**

You have been selected by a leading hotel company to participate in a crowdsourcing exercise to help create the next great hotel brand, product, or service.

The crowdsourcing exercise has been modeled after common social media platforms like Facebook, Instagram, and Snapchat to make it easy, fun, and highly visible.

Open communication and interactivity between you, the sponsoring hotel company, and among other participants is strongly encouraged. Ideas generated by you and other participants will be transparently evaluated by the hotel company and the crowdsourcing participants using a 'like' type feature common among social media platforms.

Lastly, consistent with best practices, the hotel company may offer a variety of monetary and non-monetary incentives to reward the best ideas and to motivate active participation in the Crowdsourcing exercise.

End of Block: Scenario

Start of Block: Psychological Antecedents



Q19 Keeping in mind the scenario, please read each of the following questions and select the answer that best reflects your opinion.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I perceive a personal sense of community between myself and my preferred hotel brand. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel complimented when I hear other people say good things about my preferred brand's community. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel recognized by my preferred brand as being a member of its community. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I generally learn things quickly. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I try, I can accomplish almost anything I want to. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am confident that I would be able to successfully participate in a crowdsourcing exercise. (9)

Even if the crowdsourcing exercise involved unfamiliar tasks, I would probably do well at most of them. (10)

Successfully accomplishing the tasks I set out to do is very important to me. (11)

Having my product idea selected by the sponsoring hotel company is an important incentive in motivating me to participate in crowdsourcing. (12)

Having my product idea recognized by the sponsoring hotel company is an important incentive in motivating me to participate in crowdsourcing.
(13)

A monetary reward is an important incentive in motivating me to participate in crowdsourcing.
(14)

End of Block: Psychological Antecedents

Start of Block: Perceived Knowledge



Q20 Keeping in mind the scenario, please read each of the following questions and select the answer that best reflects your opinion.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
<p>Expertise gained from a great deal of personal travel experience enables better ideas for new product ideation in the hotel industry. (8)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>Expertise gained from a great deal of personal experience with the sponsoring hotel company's brands, products, and services enables better ideas for new product ideation in the hotel industry. (15)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

A lack of expertise gained from prior experience in either travel, crowdsourcing, social media, or brand familiarity **constrains** the contribution of better ideas for new product ideation in the hotel industry (16)



End of Block: Perceived Knowledge

Start of Block: Participation in Crowdsourcing



Q21 Keeping in mind the scenario, please read each of the following questions and select the answer that best reflects your opinion.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I plan to participate in all of the tasks of this crowdsourcing exercise. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will try my best to engage in the tasks of this crowdsourcing exercise rather than abandon them. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participating in the crowdsourcing exercise means a lot to me. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I plan to maintain a high level of participation while completing the tasks of this crowdsourcing exercise. (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

End of Block: Participation in Crowdsourcing

Start of Block: Post Participation Scenario

Q22 As you answer these next questions, **imagine that you have now completed your participation in the Crowdsourcing exercise.** The experience had the following attributes: The most promising ideas were fairly and transparently evaluated. The crowdsourcing process was competitive, yet very organized. The instructions were clear and the technology platform was easy to navigate. There was a lot of interaction and open communication between and among the participants and the sponsoring company.

In summary, the crowdsourcing ‘experience’ has been easy, fair, fun, and engaging.



Q23 Having completed the crowdsourcing exercise, when answering the following questions, please keep in mind your preferred hotel brand.

	Strongly Disagree (1)	Disagree (2)	Neither Agree nor Disagree (3)	Agree (4)	Strongly Agree (5)
My preferred hotel brand is a good hotel company to do business with. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The service of my preferred hotel brand meets my expectations. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inviting me to participate in this Crowdsourcing exercise demonstrates that my preferred hotel brand values my opinion. (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be pleased to do business with the hotel company undertaking this Crowdsourcing exercise. (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Post Participation Scenario

Start of Block: Crowdsourcing Experience



Q24 Having completed this crowdsourcing exercise, please read each of the following questions and select the answer that best reflects your opinion.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
A user-friendly, intuitive technology platform is important to a successful crowdsourcing exercise. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fairness and transparency is important to a successful crowdsourcing exercise (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participants' perception of the crowdsourcing experience also affects their perceived image of the sponsoring company (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Crowdsourcing Experience

Start of Block: Satisfaction



Q25 Having completed the crowdsourcing exercise, please read each of the following questions and select the answer that best reflects your opinion.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly Agree (5)
The performance of my preferred hotel brand exceeds my expectations. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having participated in this crowdsourcing exercise, I am now more satisfied with my preferred hotel brand. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Implementation of the ideas generated by this crowdsourcing exercise would increase my satisfaction with the sponsoring hotel company exercise. (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Satisfaction

Start of Block: Word of Mouth



Q26 Having completed the crowdsourcing exercise, please read each of the following questions and select the answer that best reflects your opinion.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I recommend my preferred hotel brand to others (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I usually do more than just mention the name of my preferred hotel brand. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not speak negatively to others about my preferred hotel brand (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I frequently speak about my preferred hotel brand to others (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Word of Mouth

Start of Block: Consumption



Q27 Having completed the crowdsourcing exercise, please read each of the following questions and select the answer that best reflects your opinion.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
My participation in a positive crowdsourcing exercise would increase my intention to stay at one of the sponsoring company's hotels. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My participation in a positive crowdsourcing exercise would increase the number of times I would be willing to stay at one of sponsoring company's hotels. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having my product idea selected would increase the number of nights I would be willing to stay with the sponsoring hotel company. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Special recognition of my contribution from the sponsoring hotel company would increase the number of nights that I would be willing to stay at their hotels. (11)

If my preferred hotel brand were also the company sponsoring this Crowdsourcing exercise, it would positively affect the level of business I would be willing to them (13)

End of Block: Consumption

Start of Block: Intent to Switch



Q28 Having completed the crowdsourcing exercise, please read each of the following questions and select the answer that best reflects your opinion.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I seldom consider switching from my preferred hotel brand. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get bored staying with my preferred hotel brand, even if the service is good. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would try another hotel brand if they appeared to offer better product features than my preferred hotel brand. (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Block: Intent to Switch

Start of Block: Thank you

Q29 Thank you very much for participating in this survey. Your validation code for mTurk is \$(e://Field/random).

Please press 'Next' button in order to receive your payment.

If you would like to withdraw your responses from the research study, please send an email to the researcher Clay Dickinson [cdick020@fiu.edu] with the same code shown above.

End of Block: Thank you

VITA

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- 1975-1979 B.A., International Studies, Latin America Language and Area Studies
The American University
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- 1983-1984 Master in International Management (M.I.M.)
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- 1984 Master of Business Administration (M.B.A.)
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- 2000 - 2001 Master of Science – Management of Technology
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- 1985 -2008 Various Consulting, Senior Management and Executive positions at KPMG, Intercontinental Hotels Group, IBM, and EDS
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- 2008 - 2022 Executive Managing Director - Caribbean & Latin America
JLL, Inc.
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- Dickinson, C. B., & Ferroni, L. (n.d.). Lodging Market: Overcoming Constraints to Gain First Mover Advantage. *Cornell Real Estate Review*, Vol. 10, July 2012.
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