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Abstract

There is growing interest in understanding of how User-Generated Content (UGC) empowers online consumer behavior. In this paper, we explore the relationships between Consumer Empowerment and Perceived Control (mediated by Self-Efficacy) over the decision making process using UGC. The results of this study reveal that Perceived Control has an influence on intention to use UGC. The findings also suggest that Consumer Empowerment has the capacity to influence Perceived Control, both directly (primarily via Content Empowerment), and indirectly (via Social Empowerment and Process Empowerment, mediated by Self-Efficacy, which in turn influences Perceived Control).

Keywords

Perceived control, Self-efficacy, Consumer Empowerment, User-Generated Content, Uses & Gratification Theory, Dual-Process Theory

1. Introduction

User-generated content (UGC) has increasingly been seen as one of the vital information sources to web users and has brought an increased impact on electronic commerce (Forman et al. 2008). UGC constitutes the data, information, or media produced by the general public (rather by professionals) on the Internet (Arriga and Levina 2008). UGC is changing the dynamics of the travel industry profoundly using its global word-of-mouth forces (Laboy and Torchio 2007). Gretzel and Yoo (2008) assert that consumer-generated content such as online travel reviews written by tourists on virtual communities are more available and used frequently to transmit travel-related decisions. For instance, a web-based survey carried out by Gretzel and Yoo (2008) showed that 97.7% of Internet users who travel said they read other travellers' reviews during the process of planning a trip. Indeed, the content generated by the Internet users is empowering online travellers in the planning and buying processes of their trips (Schegg et al. 2008).

Consumers feel empowered accessing information and taking independent voluntary action in their own behalf (Freedman 2007). Consumer perception of control can facilitate information acquisition since s/he has the resources to manage such behavioral activities (Pavlou 2002). Hui and Bateson (1991) define perceived control as the degree of control which a consumer

feels during an interaction with a service provider such as a technology-based self-service. In the context of this study, perceived control can be viewed as the amount of control that a consumer feels s/he has in using UGC to aid the decision on which accommodation to book. According to Green, Collins and Hevner (2004), very little is known about how to influence perceived control. Also, Skinner (1996) states that there is a lack of clarity about the study of control in theoretical, empirical, and practical terms.

There has been no prior research that explores how consumer empowerment factors influence perceived control over using UGC to make decisions in the travel industry. By employing the Consumer Empowerment concept (Mendes-Filho and Tan 2009) in the context of UGC, developed from two theories: Uses & Gratifications and Dual-Process, a theoretical model using the concept of Perceived Control and Self-Efficacy as its basis was established. The model is then tested using a pilot survey with 34 students.

2. Theoretical Development
2.1 Uses and Gratifications Theory (U&G)
UGC is described as the data produced by individuals on the Internet, where they exchange opinion/information about a specific content as well as fulfil their social interaction needs (Shao 2009). As well, UGC is immensely gratifying people who consume its content (Shao 2009). The Uses and Gratifications theory (U&G) refers to users who are keenly involved in media usage and interact with the communication media (Luo 2002). U&G research is helpful for explaining the social and psychological motives that influence people to choose a specific media to gratify a set of psychological needs (Katz et al. 1974). Uses and Gratifications theory is also useful for understanding motivations for using the Internet, largely because of its characteristics of active choice of media and user-centered perspective on the relation between users and media (Guo et al. 2008). In addition, Stafford (2003) claims that U&G theory is very useful for diagnosing Internet-making decisions.

Recently Internet research using U&G theory has examined three components related to consumer motivation for using the Internet (Stafford et al. 2004): *content gratifications* is characterized as related to information content, and is derived from the use of mediated messages for their intrinsic value for the receiver; *social gratifications* is characterized by chatting and interacting with people over the Internet, and is generally in the form of normative forces; and *process gratification*s is derived from the use of mediated messages for extrinsic values, in contrast to a specific interest in its content, where people surfing the web are motivated by the process of browsing for enjoyment.

The dimensions from these three U&G components seem very broad and might relate to any content on the Internet. Since UGC is affected by informational and normative factors, the informational and normative influence dimensions from Dual-Process theory seem more appropriate in the UGC context. For the purpose of this research, in order to relate the research model to the UGC context the dimensions for content and social gratifications come from the Dual-Process Theory, and the dimensions for process gratifications come from other U&G studies.

2.2 Dual Process Theory
Dual-Process theory is used to determine how different types of influences (normative and informational) affect the persuasiveness of information (Deutsch and Gerard 1955). Dual-Process theory not only considers the informational social influence, but also the normative

power influence from other audiences (Burnkrant and Cousineau 1975). In other words, informational influence is based on the content of the received information, whereas normative influence is based on the other people's opinions about the received information and how these opinions would affect others' choice preferences (Kaplan and Miller 1987).

A reader's information evaluation is really affected by informational factors (Wathen and Burkell 2002). However, since user-generated content is submitted by strangers on the Internet, informational elements would not be enough to evaluate its content. In that case, including normative factors would complement the evaluation of the content due the UGC social aggregation capacity. Dual-Process theory is then used in this study to understand how and to what extent both types of influence (informational and normative) affect the persuasiveness of user-generated content.

Both U&G theory and Dual-Process theory are consistent with the Social Influence theories (Bearden et al. 1986; Flanagin and Metzger 2001). These two theories have similarities that make them helpful to conceptualise the UGC issue using the Consumer Empowerment concept (Mendes-Filho and Tan 2009).

The underlying model is about the relationships between three basic things: Information/Knowledge Sources (represented by Consumer Empowerment), Perceived Control/Self-Efficacy, and Intention to use UGC. The model is then tested to determine if there is a relationship between Consumer Empowerment and Perceived Control, and Consumer Empowerment and Self-Efficacy, and ultimately if Perceived Control has the capacity to influence intention to use UGC.

2.3 Consumer Empowerment

Empowerment tends to mean different things to different people (Quinn and Spreitzer 1997). Sehgal and Stewart (2006) argue that a single common conception of empowerment is not appropriate across all disciplines and across all contexts. Empowerment can be defined on an individual level, as the process by which people acquire the necessary psychological resources enabling them goal achievement (Amichai-Hamburguer et al. 2008). Following Rappaport (1987), Consumer Empowerment is defined in the context of this study as "a process by which tourists gain control over their own destiny using the user-generated content to help making decisions".

The research model on Consumer Empowerment is grounded in U&G Theory (Stafford et al. 2004) and Dual-Process Theory (Deutsch and Gerard 1955). The three components of U&G theory (Content, Social, and Process) are proposed to form the concept of Content Empowerment, Social Empowerment and Process Empowerment, respectively in the Consumer Empowerment construct (Mendes-Filho and Tan 2009) shown in Figure 1. Dual-Process Theory is used to help determine the Content Empowerment dimensions (argument quality, source credibility, information consistency, and information framing), and Social Empowerment dimensions (recommendation consistency, and recommendation rating). Process Empowerment dimensions are derived from U&G's process gratifications studies (medium and entertainment).
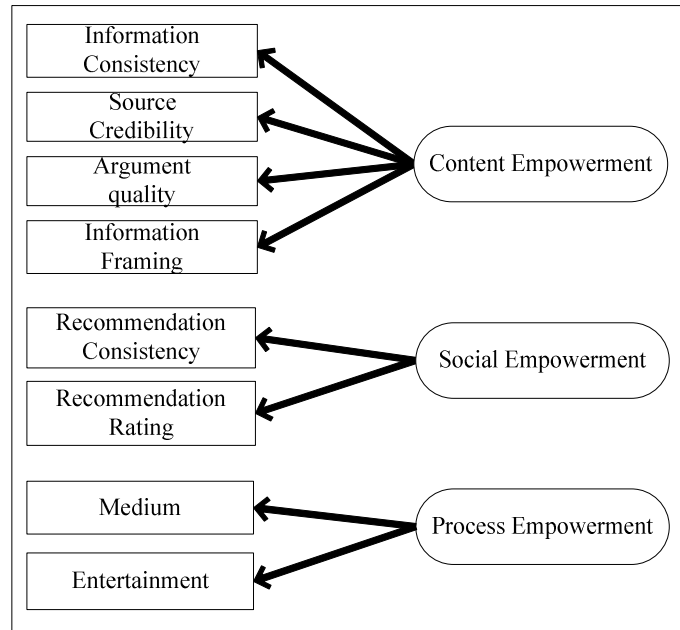
Figure 1. Consumer Empowerment construct (Mendes-Filho and Tan 2009)

Content Empowerment is shaped by four determinants: *information framing* refers to the content of the message, if it is positively framed or negatively framed (Cheung et al. 2009); *argument quality* concerns the quality or strength of the received information (Cacioppo et al. 1983); *source credibility* refers to when people are more acceptable with information that comes from highly credible source, and consequently less likely to accept it when the source has low credibility (Grewal et al. 1994); and *information consistency* indicates the extent to which the current message is consistent with the prior knowledge of the member accessing it (Zhang and Watts 2003).

Social Empowerment is shaped by two determinants: *recommendation consistency* refers to the extent to which the current recommendation is consistent with other contributors' experiences regarding the same product/service evaluation (Zhang and Watts 2003); and *recommendation rating* represents the overall rating provided by other people on a recommendation (Cheung et al. 2009). For Process Empowerment, *entertainment* refers to the extent to which the web media is fun and entertaining to media users (Eighmey and McCord 1998); and *medium* concerns actual use of the medium itself (Cutler and Danowski 1980).

2.4 Perceived Control and Self-Efficacy

Rodin (1990) defines perceived control as "the expectation of having the power to participate in making decisions in order to obtain desirable consequences and a sense of personal competence in a given situation" (p.4). Power and control are used in the psychology literature as motivational beliefs and are internal to individuals (Conger and Kanungo 1988).

Individuals who have a need for power have an internal urge to influence and control other people (Conger and Kanungo 1988). Phillips and Gully (1997) state that internals believe in their own abilities to perform behaviors that are necessary to control events and then, set their own goals. Usually internals use information to reduce uncertainty and to accomplish tasks (Lefcourt 1966), due to that they are more aware of the alternatives available to them (Skinner 1996).

Perceived control and self-efficacy are considered similar (Ajzen 1991), but their definitions are not identical (Rodgers et al. 2008), and it is common to assess them separately. Perceived control and self-efficacy are conceptually distinguished in this study. According to Bandura (1977), 'perceived self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments' (p.3). Rodgers et al. (2008) state that self-efficacy is the estimate of one's capability or confidence to execute a well-defined set of behaviors. While Azjen (1991) argues that perceived control is one's perception that one can control the performance of a given behavior, Bandura (1977) states that the concern of self-efficacy is with the behavior itself and not with the outcomes likely to result.

Both perceived control and self-efficacy have been found to be linked to consumer empowerment. According to Zimmerman (1995), individuals can develop a sense of empowerment through direct efforts to gain control over decisions. The author considers this is a fundamental aspect of empowering process. Also, when people are empowered, their individual beliefs in their self-efficacy are strengthened (Bandura 1977). Thus, in the context of this research, the use of UGC can empower tourists to decide where to stay, which means that they gain control over their decisions, and consequently, they feel their self-efficacy is enhanced.

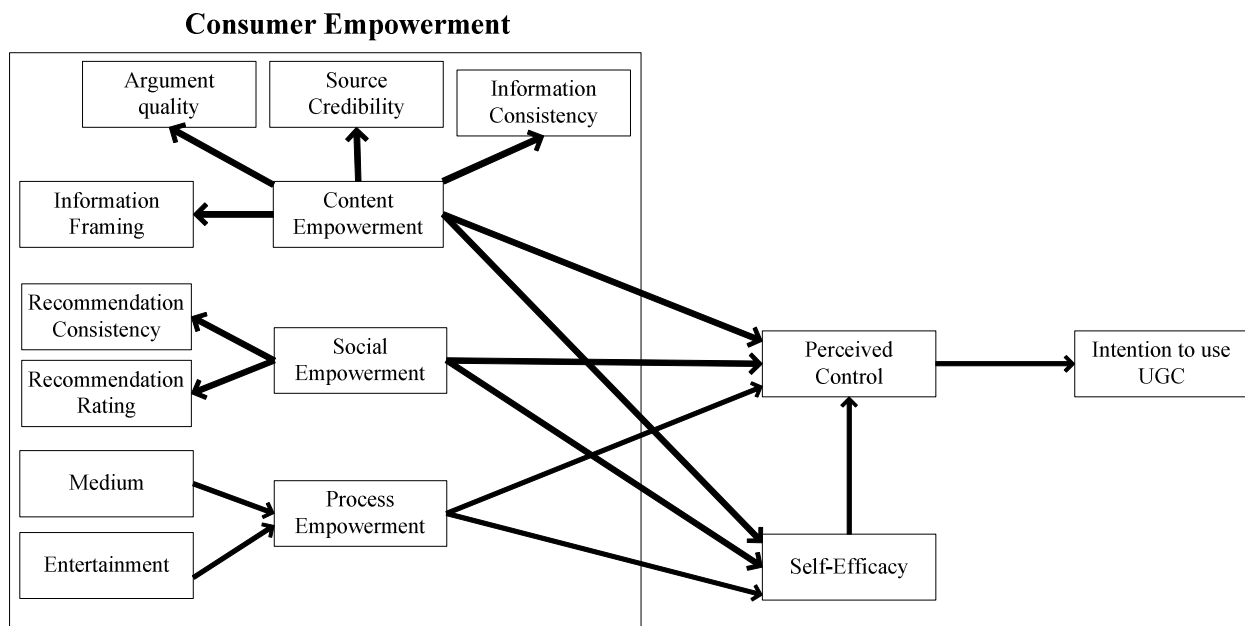The research model proposed in this study is shown in Figure 2.

Figure 2. Research Model

3. Method
3.1 Instrument Development
The technique chosen to empirically test the research model was a field study, instrumented via a questionnaire. The development of the survey instrument is described as followed. First, a group of questions were asked to 10 backpackers during a focus group interview to verify the importance of the proposed components of Consumer Empowerment construct in the UGC context. Next, the survey questions were compiled from validated instruments based on a literature review, and wording was modified to fit the UGC context to be studied. The instrument was then reviewed by academics with knowledge of survey design, and IS. Items were removed and minor wording changes were made prior to the data collection.

The questions themselves are anchored seven point Likert scales, ranging from 1 (strongly disagree) to 7 (strongly agree). For example, a question for a Perceived Control item is the following: *Reading UGC reviews before booking accommodation is completely under my control.* The pilot survey included 41 items representing the six constructs: Content Empowerment (Cacioppo et al. 1983; Cheung et al. 2009; Grewal et al. 1994; Zhang and Watts 2003); Social Empowerment (Cheung et al. 2009; Zhang and Watts 2003); Process Empowerment (Cutler and Danowski 1980; Eighmey and McCord 1998); Self-Efficacy (Compeau and Higgins 1995; Taylor and Todd 1995); Perceived Control (Taylor and Todd 1995); Intention to use (Taylor and Todd 1995).

3.2 Sample

The resulting survey was then pilot tested using students from a large public university in New Zealand. All surveys were confidential and no identifying personal information was required. A total of 54 students participated in the survey, but 20 were excluded because they had never used UGC to help them making booking decision. Thus the total sample size was 34, where 38% were master students, 36% undergraduate students, and 26% PhD students. Most respondents (67%) were between 21 and 30 years-old, and 53% were male; 91% had more than seven years of computer experience.

4. Results

The research model was tested using Partial Least Square (PLS), a structural modeling technique that is suited for its ability to handle formative constructs, and reputed robustness in handling small sample sizes (Straub et al. 2002), as well for highly complex predictive models (Chin 1998). PLS Graph v3.0 was used to evaluate both the measurement properties and relationships specified in the structural model. The paths within the structural model were established by evaluating the research model in PLS allow us to assess if there are relationships among the constructs representing Consumer Empowerment (Content, Social, and Process), Self-Efficacy, Perceived Control, and Intention to use UGC.

Significance tests for the path coefficients are not directly provided by the PLS method. To estimate the significance of path coefficients, a bootstrapping technique to generate 200 samples of 34 data points each was used. This approach is consistent with recommended practices for estimating significance of path coefficients and has been used in other IS studies (Compeau and Higgins 1995).

In PLS, the predictive power of the research model is evaluated by examining the explained variance (R^2) for the endogenous constructs (Chin 1998). Constructs in the research model are modeled as either reflective or formative - Jarvis et al.'s (2003) guidelines were used to determine this. Constructs are formative if the direction of causality is from the indicators to the constructs; indicators do not need to be interchangeable, and need not covary; the nomological net of indicators can also differ. Reflective constructs are modeled if the direction of causality is from the construct to the indicators, in which case the indicators would covary and be interchangeable.

Based on these guidelines, formative and reflective constructs are represented in the measurement model as follows. At the first-order level, except for medium, each of the lower-level dimensions for content empowerment, social empowerment and process empowerment are assessed as reflective constructs. The dimensions are then aggregated into

their respective constructs, and the latter assessed as higher-order formative constructs (Figure 1).

Using the pilot data obtained from the completed surveys, the PLS analyses involve two stages. Firstly, the measurement model is tested to ensure the constructs have sufficient psychometric validity. The structural model is then assessed through the path coefficients and the R^2 values.

4.1 Measurement Model

In PLS, a discriminant validity analysis is conducted by creating average variance explained (AVE) statistics and comparing these with the correlations of the latent variables in the instrument (Gefen et al. 2000). The diagonal elements of the correlation matrix in table 1 (which are the square root of AVE), all exceed the off-diagonal elements, indicating satisfactory discriminant validity (Chin 1998). Also, the composite reliability of all constructs is 0.7 or higher (table 1), which indicates the constructs are within accepted limits and reliable (Gefen et al. 2000). Loadings represent the influence of individual scale items on reflective constructs, whereas weights are considered to evaluate the role of each formative indicator to measure the constructs in the model (Chin 1998).

Information framing (0.738), argument quality (0.811), source credibility (0.545), and information consistency (0.852) had significant influence on content empowerment. Recommendation consistency (0.919) and recommendation rating (0.693) were significant determinants of social empowerment. Medium (-0.550) and entertainment (0.784) had influence on process empowerment. However, medium (at $p <= 0.20$) and source credibility (comparing with the other item loadings under content empowerment) did not demonstrate good measurements, and should be revisited. Item loadings for the reflective constructs, that is, perceived control (0.801 and 0.792), intention (0.924 and 0.959), and self-efficacy (0.921 and 0.947) are considerate adequate for the assessment of the measurement model. The recommended threshold for loadings is 0.70 (Chin 1998).

	Mean (SD)	Composite Reliability	PC	IN	SE	CE	SO	PE
Perceived Control	4.87 (1.36)	0.777	**0.797**					
Intention to use UGC	4.77 (1.30)	0.940	0.627	**0.942**				
Self-Efficacy	5.37 (1.23)	0.932	0.572	0.378	**0.934**			
Content Empowerment	4.63 (1.06)	0.830	0.383	0.430	0.310	**0.746**		
Social Empowerment	4.47 (1.06)	0.794	0.309	0.453	0.105	0.543	**0.814**	
Process Empowerment	4.50 (1.50)	0.702	0.303	0.325	0.236	-0.054	0.041	**0.739**

Table 1. Discriminant Validity and Descriptive Statistics

4.2 Structural Model

The structural model tests the path coefficients and the R^2 values. Path coefficients indicate the strengths between the dependent and independent variables, whereas the R^2 values represent the amount of variance explained by the independent variables. They both (path coefficients and R^2 values) indicate how well the data support the proposed research model. Figure 3 shows the results of assessment of the structural model.

In PLS, the path coefficients represent standardized regression coefficients. According to Pedhazur (1997), 0.05 is the suggested lower limit of significance for regression coefficients. However, path coefficients of 0.20 and above are preferable in a more conservative position. Also, since this study is only an exploratory work, paths significance at $p \leq 0.20$ are fine. Except for the paths from content empowerment to self-efficacy and social empowerment to perceived control (where $p > 0.20$), all path coefficients specified in the model (shown in Figure 3) are significant, thus satisfying both the conservative criteria and the suggested lower threshold for significance.

The model explains a significant amount of variation in the dependent variable, intention to use UGC ($R^2 = 0.394$). Perceived control (0.627) had a significant influence on intention to use accounting for 39% of the variance in intention. For perceived control, 0.435 of the variance is explained not only via self-efficacy (0.458), content empowerment (0.162), and process empowerment (0.196), but also by the indirect effects of social empowerment (-0.115) and process empowerment (0.262) through self-efficacy ($R^2 = 0.169$).
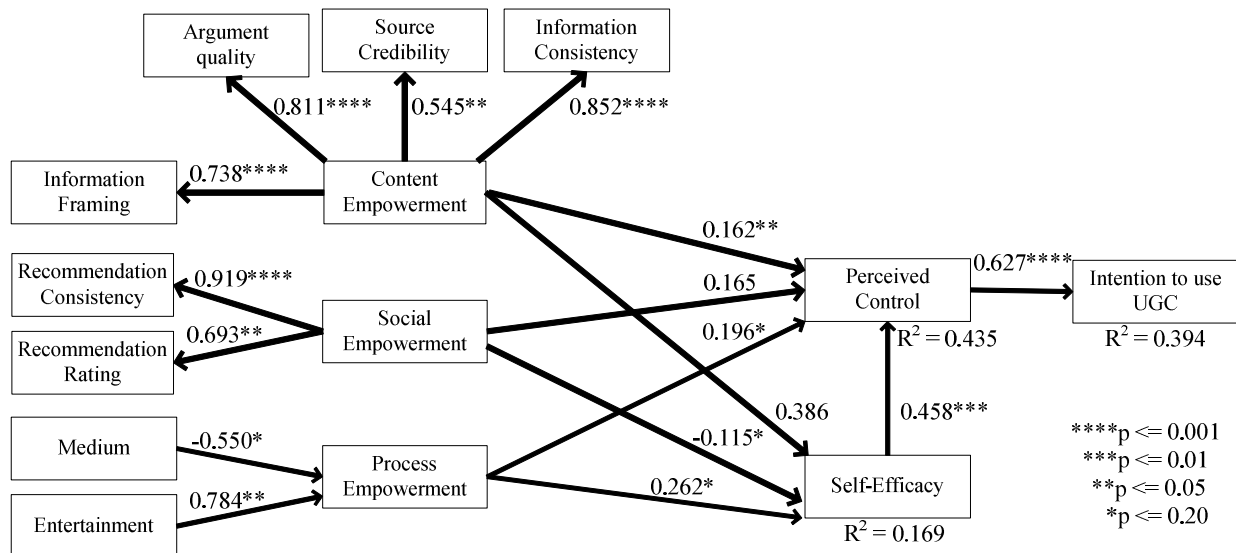

Figure 3. Research Model Results

5. Discussion

The findings provide a preliminary test of the viability of the research model within the context of UGC. The results are consistent with the proposed Consumer Empowerment construct (Content, Social, and Process) influencing perceived control and mediated by self-efficacy.

Using pilot data, this model accounts for most of the variation in intention to use UGC ($R^2 = 0.394$). The results of this study reveal that perceived control has an influence on intention to use UGC to aid the decision on which accommodation to book. This is supported by the concept of perceived control in having the power to participate in making decisions (Rodin 1990). People are empowered by creating or giving opportunities to control their own destiny, and therefore influencing the decisions that affect their lives (Zimmerman 1995).

Content empowerment (characterized as related to information content) is shown as significant factor in determining perceived control. Baronas and Louis (1988) argue the desire for control lies behind peoples' attempts to gain information from the environment. An individual tends to feel and behaves more positively when s/he perceives that there is more control in the environment (Hui and Bateson 1991). It is expected that people who exert control in online environments, and consequently use the Internet to gather information to make better decisions feel more empowered in the consumer domain (Hoffman et al. 2003).

The results of this study reveal that self-efficacy has an influence on perceived control. This is supported by Bandura's (1977) study, where self-efficacy is defined as "people's beliefs about their capabilities to exercise control over their own level of functioning and over events that affect their lives"(p.257). Also, self-efficacy is the confidence that one can control the outcome of one's behavior (Bandura 1977).

Indirect effects are also observed for social empowerment and process empowerment through self-efficacy. However, both effects (social empowerment and process empowerment) are only significant at $p \leq 0.20$. Thus, further investigation of the indirect effects is recommended for future research.

5.1 Limitations

Even though some interesting trends are brought to light, there are some limitations to this study that should be noted. Since these results are the preliminary results of a pilot study only, findings cannot be generalized until the actual data collection is carried out. Also, more data is always desirable. It would be useful to increase the sample, both in terms of number of respondents and using a focusing sample profile rather than students. Further work is also needed to develop the measurement model, and understand better paths at $p \leq 0.20$ in the structural model. Finally, a pilot study can yield inaccurate predictions or assumptions on the basis of the data.

5.2 Implications for Research and Practice

This study yields three implications for research. First, this study contributes to a more comprehensive understanding of the Empowerment concept. Second, the results illustrate an example of how to influence perceived control in empirical terms, since very little is known about this in the literature. Third, the outcomes from this pilot study might be useful to others embarking on research using similar methods and instruments.

The research model provides a mechanism for understanding the perceived control over the decision making process using UGC by empowered consumers. This can provide important guidance to service providers in the accommodation/travel sectors. For example, the model can help them understand how the characteristics (e.g. source credibility, argument quality, recommendation rating) and use of these UGC sites ultimately influence consumer decision making.

6. Conclusion

The study results provide empirical support for the research model, suggesting that Consumer Empowerment influences Perceived Control (and mediated by Self-Efficacy) over the decision making process when using UGC. A preliminary pilot study is used to test the model, and data is analyzed using structural equation modeling. PLS is a useful analysis tool given the use of formative constructs, while also suitable for the relatively small sample of 34

observations. Results substantiate the relationship between Consumer Empowerment (Content and Process) and Perceived Control, and Consumer Empowerment (Social and Process) and Self-Efficacy.

The study discussed in this paper is still underway. The results are not intended to provide any definitive inferences on the empowering consumer decision making in the UGC context. Examination of the pilot study data appears promising though. The next phase of this research is to take lessons learned in the pilot study and perform primary data collection. The survey instrument is being revised, and it will then be administered to a larger population for final analysis.

References

Ajzen, I. 1991. "The Theory of Planned Behavior," *Organizational behavior and human decision processes* (50:2), pp 179-211.

Amichai-Hamburguer, Y., McKenna, K.Y.A., and Tal, S.-A. 2008. "E-Empowerment: Empowerment by the Internet," *Computers in Human Behavior* (24:5), pp 1776-1789.

Arriga, M., and Levina, N. 2008. "Social Dynamics in Online Cultural Fields," *29th International Conference on Information Systems (ICIS'08)*, Paris.

Bandura, A. 1977. "Self-Efficacy: Toward a Unifying Theory of Behavioral Change," *Psychological Review* (84:2), pp 191-215.

Baronas, A., and Louis, M. 1988. "Restoring a Sense of Control During Implementation: How User Involvement Leads to System Acceptance," *MIS Quarterly* (12:1), pp 111-124.

Bearden, W.O., Calcich, S.E., and Netemeyer, R. 1986. "An Exploratory Investigation of Consumer Innovativeness and Interpersonal Influences," *Advances in Consumer Research* (13:1), pp 77-82.

Burnkrant, R.E., and Cousineau, A. 1975. "Informational and Normative Social Influence in Buyer Behavior," *Journal of Consumer Research* (2:3), pp 206-215.

Cacioppo, J.T., Petty, R.E., and Morris, K.J. 1983. "Effects of Need for Cognition on Message Evaluation, Recall, and Persuasion," *Journal of Personality and Social Psychology* (45:4), pp 805-818.

Cheung, M.-Y., Luo, C., Sia, C.-L., and Chen, H. 2009. "Credibility of Electronic Word-of-Mouth: Informational and Normative Determinants of on-Line Consumer Recommendations," *International Journal of Electronic Commerce* (13:4), pp 9-39.

Chin, W.W. 1998. "The Partial Least Squares Approach for Structural Equation Modeling," in: *Modern Methods for Business Research,* G.A. Marcoulides (ed.). New Jersey: Mahwah, pp. 295-336.

Compeau, D.R., and Higgins, C.A. 1995. "Application of Social Cognitive Theory to Training for Computer Skills," *Information Systems Research* (6:2), pp 118-143.

Conger, J.A., and Kanungo, R.N. 1988. "The Empowerment Process: Integrating Theory and Practice," *Academy of Management Review* (13:3), pp 471-482.

Cutler, N.E., and Danowski, J.A. 1980. "Process Gratification in Aging Cohorts," *Journalism Quarterly* (57:2), pp 269-276.

Deutsch, M., and Gerard, H.B. 1955. "A Study of Normative and Informational Social Influence Upon Individual Judgment," *Journal of Abnormal and Social Psychology* (51), pp 629-636.

Eighmey, J., and McCord, L. 1998. "Adding Value in the Information Age: Uses and Gratifications of Sites on the World Wide Web," *Journal of Business Research* (41:3), pp 187-194.

Flanagin, A.J., and Metzger, M.J. 2001. "Internet Use in the Contemporary Media Environment," *Human Communication Research* (27:1), pp 153-181.

Forman, C., Ghose, A., and Wiesenfeld, B. 2008. "Examining the Relationship between Reviews and Sales: The Role of Reviewer Identity Disclosure in Electronic Markets," *Information Systems Research* (19:3), pp 291-316.

Freedman, J.B. 2007. "What Motivates Voluntary Engagement in Cooperative Information Systems," *40th Annual Hawaii International Conference on System Sciences (HICSS'07)*.

Gefen, D., Straub, D.W., and Boudreau, M.-C. 2000. "Structural Equation Modeling and Regression: Guidelines for Research Practice," *Communications of the Association for Information Systems* (4:7), pp 1-80.

Green, G.C., Collins, R.W., and Hevner, A.R. 2004. "Perceived Control and the Diffusion of Software Process Innovations," *Journal of High Technology Management Research* (15:2), pp 123-144.

Gretzel, U., and Yoo, K.H. 2008. "Use and Impact of Online Travel Reviews," in: *Information and Communication Technologies in Tourism 2008,* P. O'Connor, W. Höpken and U. Gretzel (eds.). Innsbruck: Springer, pp. 35-46.

Grewal, D., Gotlieb, J., and Marmorstein, H. 1994. "The Moderating Effects of Message Framing and Source Credibility on the Price-Perceived Risk Relationship," *Journal of Consumer Research* (21 1), pp 145-153.

Guo, Z., Cheung, K., and Tan, F.B. 2008. "Motivations for Using Cmc and Non-Cmc Media in Learning Contexts: A Uses and Gratifications Approach," *29th International Conference on Information Systems (ICIS'08)*, Paris.

Hoffman, D.L., Novak, T.P., and Schlosser, A.E. 2003. "Locus of Control, Web Use, and Consumer Attitudes toward Internet Regulations," *Journal of Public Policy & Marketing* (22:1), pp 41-57.

Hui, M.K., and Bateson, J.E.G. 1991. "Perceived Control and the Effects of Crowding and Consumer Choice on the Service Experience," *Journal of Consumer Research* (18:2), pp 174-184.

Jarvis, C.B., Mackenzie, S.B., and Podsakoff, P.M. 2003. "A Critical Review of Constructs Indicators and Measurement Model Misspecification in Marketing and Consumer Research," *Journal of Consumer Research* (30:2), pp 199-218.

Kaplan, M.F., and Miller, C.E. 1987. "Group Decision Making and Normative Versus Informational Influence: Effects of Type of Issue and Assigned Decision Rule," *Journal of Personality and Social Psychology* (53:2), pp 306-313.

Katz, E., Blumler, J.G., and Gurevitch, M. 1974. "Utilization of Mass Communication by the Individual," in: *Current Perspectives and Gratifications Research,* J.G. Blumler and E. Katz (eds.). Beverly Hills: Sage, pp. 19-32.

Laboy, F., and Torchio, P. 2007. "Web 2.0 for the Travel Marketer and Consumer." *E-Site Marketing* Retrieved 17/12/2007, from www.esitemarketing.com/web2-travel-marketing.php

Lefcourt, H.M. 1966. "Internal Versus External Control of Reinforcement: A Review," *Psychological Bulletin* (65:4), pp 206-220.

Luo, X. 2002. "Uses and Gratifications Theory and E-Consumer Behaviors: A Structural Equation Modeling Study," *Journal of Interactive Advertising* (2:2), pp 44-54.

Mendes-Filho, L., and Tan, F.B. 2009. "User-Generated Content and Consumer Empowerment in the Travel Industry: A Uses & Gratifications and Dual-Process Conceptualization," *13th Pacific Asia Conference on Information Systems (PACIS'09)*, Hyderabad, India.

Pavlou, P.A. 2002. "What Drives Electronic Commerce? A Theory of Planned Behavior Perspective," *Academy of Management Conference*, Denver, CO.

Pedhazur, E.J. 1997. *Multiple Regression in Behavioral Research: Explanation and Prediction.* Forth Worth, TX: Harcourt Brace.

Phillips, J.M., and Gully, S.M. 1997. "Role of Goal Orientation, Ability, Need for Achievement, and Locus of Control in the Self-Efficacy and Goal-Setting Process," *Journal of Applied Psychology* (82:5), pp 792-802.

Quinn, R.E., and Spreitzer, G.M. 1997. "The Road to Empowerment: Seven Questions Every Leader Should Consider," *Organizational Dynamics* (26:2), pp 37-49.

Rappaport, J. 1987. "Terms of Empowerment/Exemplars of Prevention: Toward a Theory for Community Psychology," *American Journal of Community Psychology* (15:2), pp 121-148.

Rodgers, W.M., Conner, M., and Murray, T.C. 2008. "Distinguishing among Perceived Control, Perceived Difficulty, and Self-Efficacy as Determinants of Intentions and Behaviours," *British Journal of Social Psychology* (47:4), pp 607-630.

Rodin, J. 1990. "Control by Any Other Name: Definitions, Concepts, and Processes," in: *Self-Directedness: Cause and Effects Throughout the Life Course,* J. Rodin, C. Schooler and K.W. Schaie (eds.). Hillsdale, NJ: Erlbaum, pp. 1-15.

Schegg, R., Liebrich, A., Scaglione, M., and Ahmad, S.F.S. 2008. "An Exploratory Field Study of Web 2.0 in Tourism," in: *Information and Communication Technologies in Tourism 2008,* P. O'Connor, W. Höpken and U. Gretzel (eds.). Innsbruck: Springer, pp. 152-163.

Sehgal, R., and Stewart, G. 2006. "Using Qualitative Analysis for Deriving Evidence Based Construct Definition: A Case Narrative of User Empowerment," in: *Quality and Impact of Qualitative Research,* A. Ruth (ed.). Gold Coast: Griffith University, pp. 116-128.

Shao, G. 2009. "Understanding the Appeal of User-Generated Media: A Uses and Gratification Perspective," *Internet Research* (19:1), pp 7-25.

Skinner, E.A. 1996. "A Guide to Constructs of Control," *Journal of Personality and Social Psychology* (71:3), pp 549-570.

Stafford, T.F. 2003. "Differentiating between Adopter Categories in the Uses and Gratifications for Internet Services," *IEEE Transactions on Engineering Management* (50:4), pp 427-435.

Stafford, T.F., Stafford, M.R., and Schkade, L.L. 2004. "Determining Uses and Gratifications for the Internet," *Decision Sciences* (35:2), pp 259-288.

Straub, D., Hoffman, D., Weber, B., and Steinfield, C. 2002. "Measuring E-Commerce in Net-Enabled Organizations," *Information Systems Research* (13:2), pp 115-124.

Taylor, S., and Todd, P.A. 1995. "Understanding Information Technology Usage: A Test of Competing Models," *Information Systems Research* (6:2), pp 144-176.

Wathen, C.N., and Burkell, J. 2002. "Believe It or Not: Factors Influencing Credibility on the Web," *Journal of the American Society for Information Science and Technology* (53:2), pp 134-144.

Zhang, W., and Watts, S. 2003. "Knowledge Adoption in Online Communities of Practice," *24th International Conference on Information Systems (ICIS'03),* A. Massey and J.I. DeGross (eds.), Seattle, pp. 96-109.

Zimmerman, M.A. 1995. "Psychological Empowerment: Issues and Illustrations," *American Journal of Community Psychology* (23:5), pp 581-599.