

The Impact of Food Blogger toward Consumer's Attitude and Behavior in Choosing Restaurant

Adliah Nur.Hanifati

Abstract—Food bloggers become the new influencers in the restaurant industry. It has become a benchmark for people in considering whether the restaurants are worthy to be visited or not. However, the impact of food blogger's recommendation on consumer's attitude and behavior is still uncertain.

This paper presents a study of how bloggers' restaurant reviews affect consumers' attitude and behavior. The factors outlined in this paper were analyzed by adapting the theoretical framework of Technology Acceptance Model (TAM). A survey involving 242 food blog readers were analyzed to investigate the relationship between the perceived usefulness of food blogger's recommendations, the attitude toward using, and the intention of consumer to follow its recommendations.

The data was analyzed using SEM and the model proposed was re-specified. The result indicated that perceived usefulness of food blogger's recommendation had significant affect towards the consumer's intention to follow the recommendation.

Keywords— Blogging, Consumer behavior, Food blogger, TAM.

I. INTRODUCTION

In past few years, blogging has become one of the most popular media to share thought, feelings, opinions, and ideas connected to specific events in everyday life. Blogs can be said as a personal websites, mostly people share about their personal experiences such as holiday or travelling, hobbies, but not infrequently they also wrote their comments after using products and services.

Blogs are one of the top online media to influence people in purchasing decision. Consumers rank blogs as the third below retail and brand sites [1]. According to [1], blogs rank in fourth position as a trusted source of information. The survey showed the most topic searched by respondents in sequence from the top; technology, social and human interest, traveling, entertainment, religion, culinary, politics, health, and sports.

A person who shares and writes about food in a blog is known as food blogger. In fact, food bloggers also have a specialization in their topic about food. Some food bloggers have a hobby in cooking; therefore they share food recipes and put the food they had cooked on the blog. Some others like to do culinary travel, and then they decided to share their experience of having delicious meals in great new places or

restaurants through blog as well.

It was all just a matter of hobbies and passions for food bloggers. Instead of keeping their experience for themselves, they prefer to write it down and share the food experience to their friends and family. But because blogging has been viewed in the perspective of marketing as a new type of electronic word-of-mouth (eWOM) [3] the information from the food bloggers especially the review and recommendation of a certain restaurant or café spread easily to people more than just friends and family.

Moreover, food bloggers are not only using blogs as their media to share their food experiences but also social media specifically Instagram which is an online mobile photo-sharing become one of food bloggers' tools to share. With the easy access of Instagram user to follow and see directly the food bloggers' posts in their timeline, it can make people even more craving looking at the food photos.

In some way, bloggers has some significant impact because 81 percent people seek advices before making a purchase through social site in accordance to the report by myYearbook [2]. In other words, people are not just enjoying that impressive food posting, but food bloggers become an influential person for other people. People can get information about an old restaurant yet recommended to visit or a new great café that are trending in town. Food bloggers become a benchmark for people in considering whether the restaurants are worthy to be visited or not.

As food bloggers become the new influencers of the food industry, many restaurant managements were taking this opportunity by inviting some food bloggers in purpose to review their restaurant. The restaurant managements expect that food bloggers can help them to raise awareness of their brand to customers or even increasing their sales through food bloggers. Hence, food blogging that initially is just a hobby becomes an occupation which can bring out money as well.

Unfortunately, the factors that influence consumer's attitude and behavior towards food blogger's review have not been investigated yet. Therefore, the researcher proposes to explore what actually were the factors that affect consumer in considering restaurant by adapting the theoretical framework of Technology Acceptance Model (TAM). The purpose of this study is to examine the relationship between the perceived usefulness of food blogger's recommendation, the attitude toward using the recommendation, and the behavioral

Adliah Nur Hanifati is with the Bandung Institute of Technology in the faculty of School of Business and Management, Bandung, Indonesia. (+6285655174577; adliah@sbm-itb.ac.id)

intention to follow the recommendation.

II. THEORETICAL FOUNDATION & HYPOTHESIS

A. Blogs, Food Blogging, and Micro-blogging

Blogs are kind of personal web sites which consist of brief text, links, images, and with reader comments that organized in reverse chronological order. Almost over 1.2 million entries of blogs are posted per day in web [20] through the communication processes that exchange comments among blogs.

Food blogging typically represents gourmet interest in cooking; it is part of a wider advance in forms of writing about food [12]. The person who did the food blogging is known as food blogger. Food bloggers tend to write about travel and restaurants including home personal food diaries and their own recipes [4]. Although many food bloggers are most likely to be seen as hobby, but some could be seen as amateur pursuits. Both hobbyist and amateur could have a commercial public in which they are equivalents in the media, newspapers, books, and TV [5].

In contrast to the blogging activities, micro-blogging provides a quick and easy way to send a short text message from computer or mobile devices [6]. Between 2009 and 2011, the use of micro-blogging is increasing up to 62%. Twitter is an example of micro-blogging that is trending worldwide and the cause of micro-blogging to become popular. It is not just a short text that considered as micro-blogging, but photo-sharing is also become the new type of micro-blogging [7]. Indeed, Facebook and Instagram are examples of the micro-blogging tools.

B. Technology Acceptance Model

The technology acceptance model (TAM) is a model intended to explain the acceptance of information system or information technology (IS/IT) which adopted by the theory of reasoned action (TRA) [13]. This model assumes that individual belief influences attitude, which in turn forms a behavioral intention. The original TAM consists of external variables, perceived usefulness (PU), perceived ease of use (PEOU), attitude toward using (ATU), behavioral intention to use (BI), and actual system use (AU). The definition of perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance, while the perceived ease of use is the degree to which a person believes that using a particular system would be effortless [13]. According to him, perceived usefulness and perceived ease of use are major beliefs that influence attitude toward system use and eventually lead to actual system use. The ATU directly affects user’s BI, which in turn influences AU.

As technology acceptance model (TAM) focuses on the system use, it is recently applied in the broad area of information technology including e-commerce. E-commerce is a transaction of buying or selling of products and services over the Internet. There has been many studies which apply TAM to study perceived usefulness and acceptance towards the e-commerce itself [15], or the effects of blogger recommendation on customers’ online shopping intention

[16]. Based on [15] studies, only perceived usefulness (PU) affected intended use for purchase, while perceived ease of use (PEOU) has no significant effect on it. For the [16] results, perceived usefulness (PU) of recommendations significantly influences attitude. The study indicates that attitude toward online shopping to be the most important determinant of a user’s behavioral intention.

This study used adapted TAM as a theoretical framework to examine the effects of food bloggers. TAM can be applied in this study to assess consumer perceived usefulness in the online environment which is the review of restaurants made by food blogger. In the context of food blogging, the usefulness is perceived as usefulness of food blogger recommendations. Therefore, this study redefined the usefulness as “the degree to which a consumer believes that adopting a food blogger recommendation would enhance their knowledge of particular restaurants”. The attitude will be defined as “the degree of blog readers’ positive feelings about the information given from food blogger”. This attitude will influence the consumer intention, therefore, for the behavioral intention to use (BI) in the TAM refer to the behavioral intention of the consumer to follow the blogger recommendation and is become “the degree of blog reader’s intention to follow food blogger recommendation in the future”. The proposed research model and summarized construct of this study shown in Table I and Fig. 1.

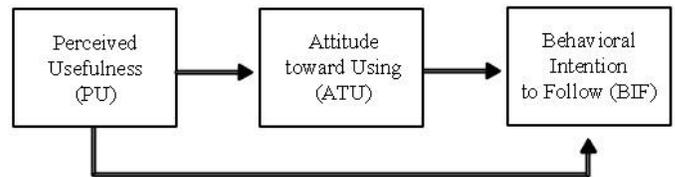


Fig. 1 Proposed research model

TABLE I
CONSTRUCT DEFINITION

Construct	This Study	Chin-Lung Hsu et al. studies’ [16]
Perceived Usefulness	The degree to which a consumer believes that adopting a food blogger recommendation would enhance their knowledge of particular restaurants	The degree to which a blog reader believes that adopting a blogger recommendation would enhance his or her online shopping performance
Attitude toward Using	The degree of blog readers’ positive feelings about the information given from food blogger	The degree of blog readers’ positive feelings about shopping online
Behavioral Intention to Follow	The degree of blog reader’s intention to follow food blogger recommendation in the future	The degree to which blog readers believe that they will shop again online

Based on the explanation, therefore researcher create hypothesis as follow:

H1: Perceived usefulness of food blogger’s recommendation will positively affect consumer’s attitudes.

H2: Consumer's attitudes will positively affect their behavioral intention to follow the food blogger's recommendation.

H3: Perceived usefulness of food blogger's recommendation will positively affect behavioral intention to follow its recommendation.

III. METHODOLOGY

A. Data Collection

A questionnaire was designed and conducted through online survey with the URL of bit.ly/foodbloggerindo. This link was distributed randomly and also posted via twitter by two food bloggers; @wanderbites and @lohsharon.

A total of 477 responses were collected, but there are 109 respondents who are not a food blog reader. This study was conducted only using female respondents as the male respondents was around 20% among the whole respondents. Another consideration of researcher decided not to use the male respondent is because the pattern of male responses incline to be the same. Besides, this decision was made in order to minimize problems occurred. After data screening, the usable responses was only 242. The demographic profile of the respondents is shown in Table II.

TABLE II
DEMOGRAPHIC PROFILE

Measure	Items	Frequency	%
Gender	Female	242	100
Age	Under 20	145	59.91
	21-25	97	40.08
Amount of visiting restaurant in range of 3 months	1-3 times	51	21.38
	3-6 times	59	24.38
	6-9 times	57	23.55
	>10 times	75	30.99
Experience in reading food blog (years)	< 1 year	107	44.21
	1-2 years	87	35.95
	2-3 years	25	10.33
	> 3 years	23	9.5
Experience in following food blogger's recommendation	Never	32	13.22
	< 3 months	68	28.1
	3-6 months	52	21.49
	6-12 months	48	19.83
	1-2 years	27	11.15
Amount of following food blogger's recommendation in 6 months ago	> 2 years	15	6.19
	0 times	23	9.5
	1-2 times	106	43.8
	3-4 times	58	23.97
	5-6 times	22	9.09
Most frequent media used to read food blog information	>6 times	33	13.64
	Blog	51	78.93
	Instagram	191	21.07

B. Measurement

There are two types of questionnaire used in this study. The construct item was using five point of Likert scale offered with the neutral point being neither agree nor disagree, ranging from "strongly disagree" (1) to "strongly agree" (5) to measures the consumers' perception towards the perceived usefulness, attitude, and behavioral intention. The second type of questionnaire is the demographic questions and the respondents' behavior in general.

Before conducting the main survey, a pilot test was derived involving 80 respondents. The result of the pilot test showed that the validity and reliability was acceptable with rules of thumb if corrected-total item correlation above 0.2199 which seen from R-table and Cronbach's Alpha more than 0.6 (Fronell, 1982). Later on, the data was analyzed by using Structural Equation Modeling (SEM).

IV. RESULTS

A. Measurement and Structural Model

The structural model was tested using AMOS 22. Table III presents the goodness-of-fit which indicates how well the specified model reproduces the covariance matrix among the indicator items [8].

TABLE III
CFA MODEL FIT

Indices	Result	Rules of Thumb	Comments
Chi-Square	70.186	-	-
DF	24	-	-
p-value	0.000	>0.05	Poor fit
CMIN/DF	2.924	Below 3 is good, 3-5 is acceptable	Good
RMR	0.044	<0.1 is considered good	Good
SRMR	0.0619	Not below -4.0 or above 4.0	Good
RMSEA	0.089	Below 0.01 is good, 0.03-0.08 is acceptable	Good
GFI	0.938	>0.9 is considered good	Good
NFI	0.903	Perfect fit produce 1	Good
TLI	0.899	Values range between 0-1, higher values indicating better fit	Good
CFI	0.933		Good

From the data in Table III, the p-value of Chi-Square indicates that it is significant and therefore it is considered as poor fit. However, Chi-Square indicator may be affected by the sample size. The larger the sample size, the harder to get non-significant Chi-Square. Hence, multiple indices of different types were used to test the goodness-of-fit. And the other indices indicate that this model has a good fit.

The construct validity is the next step of SEM after defining the goodness-of-fit. Table IV presents the convergent validity of this study. The factor loadings and the AVE should be more than 0.5 [14]. All the factors loading result shows that it meets the criteria except for ATU3 which values are 0.499. Nevertheless, it is still acceptable as it only differs in 0.001. While the AVE values are less than 0.5 which indicates that on average, more error remains in the items than variance explained by the latent factor structure imposed on the measure [8]. The composite reliability (CR) has no issue, it is all above 0.6 [14].

TABLE IV
CONVERGENT VALIDITY

Constructs	Indicators	Factor Loadings	CR	AVE
Perceived Usefulness	PU1	0.654	0.780	0.472
	PU2	0.754		
	PU3	0.620		
	PU4	0.712		
Attitude toward Using	ATU1	0.744	0.706	0.452
	ATU2	0.744		
	ATU3	0.499		
Behavioral Intention to Follow	BIF1	0.811	0.636	0.476
	BIF2	0.542		

Discriminant validity which is used to provides evidence that a construct is truly distinct from other constructs shown in Table V. The result is not satisfying as the AVE is less than both the MSV and ASV and the square root of the AVE for two constructs is less than one the absolute value of the correlations with another factor except for the Behavioral Intention to Follow. It means that a construct is not different from one to another construct. In other words, the constructs proposed by researcher was not valid. However, it seems that the construct between perceived usefulness and attitude toward using is the issues in which it cannot capture some phenomena other measures do not. In Table V, the * symbol indicates that the values have issues.

TABLE V
DISCRIMINANT VALIDITY

	AVE	MSV	ASV	Attitude toward Using	Perceived Usefulness	Behavioral Intention to Follow
Attitude toward Using	0.452*	0.769*	0.769	0.672*		
Perceived Usefulness	0.472*	0.769*	0.769	0.877	0.687*	
Behavioral Intention	0.476*	0.475	0.475	0.689	0.547	0.690

B. Re-specified Model

Nevertheless, as the problem of discriminant validity occurs only between perceived usefulness and attitude toward using, researcher re-specified the model by deleting the construct of attitude toward using. Table VI, Table VII and Table VIII present the model fit, convergent validity, and discriminant validity using pattern matrix.

The model fit of re-specified model is much better than the previous one. The incremental fit indices which represent by NFI, TLI, and CFI were so close with the perfect fit that is 1. On the other hand, the convergent validity of re-specified model did not vary compared to the previous one. No much issue except for the AVE. Still, both the AVE values of the new construct are below 0.5. But, the AVE of behavioral intention to follow is increasing and it is become acceptable. However, the AVE of perceived usefulness is not far below 0.5. If AVE of the resulting measure is within a few points 0.5, this may not always be fatal to publishing a model test. Experience suggests that not all reviewers accept AVE as the measure of convergent validity; some prefer reliability that may be a sufficient demonstration of convergent validity [9].

TABLE VI
CFA MODEL FIT OF RE-SPECIFIED MODEL

Indices	Result	Rules of Thumb	Comments
Chi-Square	8.522	-	-
DF	8	-	-
p-value	0.000	>0.05	Poor fit
CMIN/DF	1.065	Below 3 is good, 3-5 is acceptable	Good
RMR	0.019	<0.1 is considered good	Good
SRMR	0.0619	Not below -4.0 or above 4.0	Good
RMSEA	0.016	Below 0.01 is good, 0.03-0.08 is acceptable	Good
GFI	0.989	>0.9 is considered good	Good
NFI	0.976	Perfect fit produce 1	Good
TLI	0.997	Values range between 0-1, higher values indicating better fit	Good
CFI	0.998		Good

TABLE VII
CONVERGENT VALIDITY OF RE-SPECIFIED MODEL

Constructs	Indicators	Factor Loadings	CR	AVE
Perceived Usefulness	PU1	0.672	0.781	0.472
	PU2	0.753		
	PU3	0.620		
	PU4	0.697		
Behavioral Intention to Follow	BIF1	0.855	0.651	0.498
	BIF2	0.514		

The problems of discriminant validity of the previous model were indeed because of no distinction between the attitude toward using and perceived Usefulness. In the new construct, the pattern is obviously different between the Perceived Usefulness and the Behavioral Intention to follow as shown in Table VIII. In other words, each measurement is unrelated to each other which indicate as good discriminant validity.

TABLE VIII
PATTERN MATRIX OF RE-SPECIFIED MODEL

	Component 1	Component 2
PU1	0.724	
PU2	0.748	
PU3	0.839	
PU4	0.777	
BIF1		0.755
BIF2		0.916

Since the model is changed, the hypothesis that can be analyze is only the H3 which is *perceived usefulness of food blogger's recommendation will positively affect behavioral intention to follow its recommendation*. The result of the path analysis is shown in Table IX.

TABLE IX
FINDINGS

	β	S.E.	p-value
PU → BIF	0.528	0.106	0.001

The result shows that perceived usefulness is significant and positively affects behavioral intention to follow. The β value is 0.528 which is greater than the p-value of 0.001. It indicates that the null hypothesis should be rejected and therefore accepting the H3. The new model with the result of calculation is shown in Fig. 2.



Fig.2 Re-specified Model

V. DISCUSSION AND CONCLUSION

Unfortunately, the construct model was facing some problems in the discriminant validity. The perceived usefulness and attitude toward using constructs were not distinct enough as a measurement. In other words, both constructs measures the same thing. As it becomes invalid, the proposed model cannot be used anymore. The construct of attitude toward using is then deleted and the model which left of perceived usefulness and behavioral intention was fortunately valid. Nevertheless, the construct of attitude toward using is deleted rather than to be merged is because the items of each construct was actually has its own values to be captured.

There are some possibilities that cause error in the discriminant validity. The language and the sentences used in the questionnaire might be one of the potentials of error cause since the questionnaire made by researcher was adapted from previous research which language is in English and then translated to Indonesian. Another possibility is that respondents may interpret different from what the researcher meant to which leads to error in the discriminant validity.

However, the research problem can be solved by deleting the construct of attitude toward using. Even though the model becomes different from the proposed model, researcher was still able to examine the relationship between perceived usefulness and behavioral intention. The model differs is only at the mediator. This means that the new model examine the direct effect only.

The result of the new model is corresponding with the researcher's hypothesis. Perceived usefulness of food blogger's recommendation significantly influenced consumer's behavioral intention to follow its recommendation. But, this result is not the same with the previous studies [16], which found that perceived usefulness did not affect directly to behavioral intention. However, it is not a surprise since the behavioral intention and perceived usefulness of this research is somewhat different with the studies of [16]. The perceived usefulness in the [16] studies is blogger's recommendation which cover broader categories of product and services whereas in this study is specific to food blogger's recommendation in which it only provides information of food and restaurant categories. As well as the behavioral intention, [16] studies is indicated to purchase online while in this study is intention to follow its recommendation.

Generally, visiting restaurant more than 10 times on a range of three months is the highest percentage compared to others.

In addition, media of reading food blogger's recommendation that mostly used by respondents is Instagram. Instagram which makes people easier to read information from the food blogger indeed influence reader to follow their recommendation. As most of the readers itself are likely to visit restaurants, therefore, it is not surprising if perceived usefulness of food blogger's recommendation directly affects their intention to follow its recommendation. It is rational that when consumer found out that food blogger's recommendation was useful, they intend to follow its recommendation. Following the food blogger's recommendation means that they visit the restaurant based on the recommendation. Hence, consumer considers choosing a certain restaurant when they feel that food blogger's recommendation to be useful.

VI. LIMITATION AND FUTURE RESEARCH

Results should be treated with carefulness for several reasons. First, the proposed model in this construct was not able to be examined as the discriminant validity did not meet the standard. The model became two construct and examine only direct effect, the significant effect of perceived usefulness and behavioral intention might be reduce when any other construct or mediator is included. Therefore future research should consider other possibilities of items or external factors that might influence the relationship between perceived usefulness and behavioral intention. In addition, future research should also be careful in constructing the questionnaire in order to prevent the same mistakes of this research.

Lastly, the respondents of this study were female and subjected only for Indonesian food blog reader. Hence, the attitude, behavior, culture, and lifestyle may differ with the male gender and other countries. The gender respondents better to be balance or at least not diverge too much in the future research. In addition, the sample was self-selected and only respondents with food blog experience answered the questionnaires. Thus a bias may exists.

ACKNOWLEDGEMENT

First and foremost, I would like to thank Mrs. Ira Fachira, Ph.D for her support and encouragement. Her patience in advising me was uncountable. Thank you for her expert advice throughout this research paper.

I sincerely thank my parents and my brothers for their lovable support and limitless prayer. Without them, I would not be able to pass through any difficulties.

Lastly, thanks to my struggle partner, Cynthia Dwi Rizqia, for joining this conference together with me.

REFERENCES

- [1] IndoPacific Edelman, 2009. [Online]. Available: <http://www.slideshare.net/edelmanindonesia/2009-indonesia-blogger-survey>. [Accessed 10 February 2015].
- [2] T. Wegert, "Reach Your Customer while Social Media Peaks," 28 January 2010. [Online]. Available: <http://www.clickz.com/clickz/column/1699974/reach-your-customers-while-social-media-peaks>. [Accessed 20 January 2015].
- [3] D. Osman, J. Yearwood and P. Vamplew, "Weblogs for Market Research: finding more relevant opinion documents using system fusion," *Online Information Review*, pp. 873-888, 2009.

- [4] L. Robinson, "The art of food blogging," [Online]. Available: www.timesonline.co.uk/tol/life_and_style/food_and_drink/real_food/article5753558.ece. [Accessed 8 February 2015].
- [5] R. A. Stebbins, *Amateurs, Professionals, and Serious Leisure*, McGill Queen's University Press, 1992.
- [6] V. Stevens, "Trial by Twitter: The Rise and Slide of the Year's Most Viral Microblogging platform," *TESL-EJ*, 2008.
- [7] C. Turner and B. Lipscombe, "WallBlog," 27 September 2011. [Online]. Available: <http://wallblog.co.uk/2011/09/27/instagram-10m-reasons-why-photo-sharing-is-the-new-micro-blogging/>. [Accessed 28 March 2015].
- [8] J. F. Hair, W. C. Black, B. J. Babin, R. E. Anderson and R. L. Tatham, *Multivariate Data Analysis*, Pearson Education International, 2006.
- [9] R. A. Ping, "Is there any way to improve Average Variance Extracted (AVE) in a Latent Variable (LV) X? (Revised)," 2009.
- [10] *Trend Tracker | The rise of the food bloggers*, New Delhi: HT Media Ltd, 2014.
- [11] D. Osman, J. Yearwood and P. Vamplew, "Weblogs for market research: finding more relevant opinion documents using system fusion," *Online Information System*, vol. 33, no. 5, pp. 873-888, 2009.
- [12] A. M. Cox and M. K. Blake, "Information and food blogging as serious leisure," *Emerald Group Publishing, Limited*, vol. 63, no. 2/3, pp. 204-220, 2011.
- [13] F. Davis, "'Perceived usefulness, perceived ease of use, and user acceptance of information technology," *MIS Quarterly*, vol. 13, no. 3, pp. 319-340, 1989.
- [14] C. Fornell and D. F. Larcker, "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error," *Journal of Marketing Research*, vol. 18, no. 1, pp. 39-50, 1981.
- [15] D. Gefen, E. Karahanna and D. W. Straub, "Trust and TAM in online shopping: An integrated model," *MIS Quarterly*, vol. 27, no. 1, pp. 51-90, 2003.
- [16] C.-L. Hsu, J. Chuan-Chuan Lin and H.-S. Chiang, "The effects of blogger recommendations on customers' online shopping intentions," *Internet Research*, vol. 23, no. 1, pp. 69-88, 2013.
- [17] C.-L. Hsu and H.-P. Lu, "Why do people play on-line games? An extended TAM with social influences and flow experience," *Elsevier*, vol. 41, pp. 853-868, 2003.
- [18] C. I. Nachtigal, U. Kroehne, F. Funke and R. Steyer, "(Why) Should We Use SEM? Pros and Cons of Structural Equation Modeling," *Methods of Psychological Research Online*, vol. 8, no. 2, pp. 1-22, 2003.
- [19] M. Bedell, "Now is the Time to Promote Your Food Blog on Instagram," *profoodblogger*, 29 April 2014. [Online]. Available: <http://profoodblogger.com/now-is-the-time-to-promote-your-food-blog-on-instagram/>. [Accessed 28 March 2015].
- [20] S. C. Herring, L. Ann Scheidt, S. Bonus and E. Wright, "Bridging the gap: A genre analysis of weblogs," *IEEE*, p. 11, 2004.