Reviewing the landscape of research on influencer-generated content

Chen, Xiaoyu; Chua, Alton Yeow Kuan

2020

Chen, X., & Chua, A. Y. K. (2020). Reviewing the landscape of research on influencer-generated content. Proceedings of 2020 6th International Conference on Information Management (ICIM), 244-248. doi:10.1109/ICIM49319.2020.244706

<https://hdl.handle.net/10356/141536>

<https://doi.org/10.1109/ICIM49319.2020.244706>

© 2020 IEEE. Personal use of this material is permitted. Permission from IEEE must be obtained for all other uses, in any current or future media, including reprinting/republishing this material for advertising or promotional purposes, creating new collective works, for resale or redistribution to servers or lists, or reuse of any copyrighted component of this work in other works. The published version is available at: <https://doi.org/10.1109/ICIM49319.2020.244706>.

Downloaded on 26 Apr 2023 10:52:18 SGT

Reviewing the Landscape of Research on Influencer-generated Content

Xiaoyu Chen

School of Communication and Information
Nanyang Technological University
Singapore
e-mail: xiaoyu001@ntu.edu.sg

Alton Y.K. Chua

School of Communication and Information
Nanyang Technological University
Singapore
e-mail: altonchua@ntu.edu.sg

Abstract—The purpose of this paper is to review and synthesize scholarly articles on influencer-generated content. Specifically, it attempts to identify: (1) theoretical foundations that have been used, (2) research methods that have been employed, and (3) research foci and future directions. Based on the in-depth content analysis of 167 related articles, this paper finds that 5 commonly used underpinning theories, namely, self-presentation theory, online information processing theory, knowledge persuasion theory, signaling theory, and warranting theory. Primary and secondary research data from diverse sources, quantitative and qualitative analysis approaches have been employed by the articles. Current research foci include three clusters—identifying social media influencers, investigating influencers’ motivations for creating content and assessing the social and economic impacts of influencer-generated content. Correspondingly, three research perspectives—content creator perspective, content generation perspective, and content impacts perspective are adopted to guide the future directions.

Keywords—content analysis; influencer-generated content; online influencers; social media; user-generated content

I. INTRODUCTION

Users create and consume information conveniently on social media through what is known as *user-generated content*. In particular, the content created by social media influencers such as opinion leaders and online celebrities is increasingly viewed as sources of valuable and believable information for people who follow them [1]. This is also a favorable condition to increase the diffusion and impact of the content generated by social media influencers [2].

Firms have been turning to such influencers who can generate impactful content to endorse their brands [3]. This is because they are able to connect target consumers with brands while maintaining direct communication with their following [4]. Also, feedback from these influencers in the form of online consumption reviews was found to influence consumers’ purchasing decisions significantly [5]. As a result, influencer-generated content (IGC) is regarded as persuasive references for information seekers in solving problems and decision-making.

In addition to having gained great interest from the industry, IGC has also received much attention from the academic community. For example, scholars in business and management have joined the bandwagon due to the impact of IGC on online brand images[2], [6]. In contrast, researchers

from social sciences such as communications studies and information science seek to explore how IGC affects others’ communication strategies and information processing[7], [8]. Since the IGC is studied by scholars from diverse disciplines, the underpinning theories and methods used by current research may be varied.

Moreover, the findings from current research need to be discussed further because studies from different areas may lead to multiple research foci and future directions. However, such discussions would not be possible without an in-depth understanding of what is known and what is unknown in this research area. This calls for reviewing the landscape of research on IGC. Therefore, the objective of this paper is to review and synthesize scholarly articles on IGC. Specifically, it attempts to identify: (1) theoretical foundations that have been used, (2) research methods that have been employed, and (3) research foci and future directions that remain unaddressed.

This paper is significant for three reasons. First, it uncovers the underpinning theories used in current research. This helps us understand how to understand IGC by drawing on a given theoretical lens. Second, it offers an overview of the methods used to study IGC. This summary could inform us how to address problems related to IGC as well as serve as a springboard to develop new methodological ideas. Third, it highlights research foci and future directions regarding IGC. In doing so, scholars may be informed to trace the current research interests and tackle the important questions that remain unaddressed.

The rest of the paper proceeds as follows. The next section gives a brief overview of the literature search and identification. This is followed by review results, including theoretical foundations, research methods, research foci, and future directions in the literature. After that, the findings are discussed, along with a summary of the current research landscape of IGC and implications.

II. LITERATURE SEARCH AND IDENTIFICATION

Given the broad interests in IGC from multiple disciplines, we searched for scholarly papers from the following 9 databases: ACM Digital Library, Emerald Insight, IEEE Xplore, JSTOR, PsycINFO, Science Direct, Scopus, Web of Science, and Wiley Online Library. The reason for selecting these databases is because these databases contain most of the studies regarding social media and user-generated content across different disciplines[9].

Meanwhile, past research that conducts systematic reviews on themes regarding social media or user-generated content also uses these databases for literature searching[10], [11].

The search process is informed by a standard technique combining keywords with Boolean operators. The search terms in this paper included: (“influencer” OR “influential user” OR “celebrity” OR “opinion leader”) AND (“user-generated content” OR “UGC” OR “social media” OR “internet”). Only publications in the English language are considered. Also, we collected publications from the databases starting from 2008. This is because user-generated content on social media has become a widely discussed topic since 2008 [12]. We thus limited the publication date from 2008 to 2017 (10 years). Whenever more than 1,000 results were returned, only the first 1,000 sorted based on relevance were considered. After that, we only retained publications in peer-reviewed conference and journal articles. In this step, a total of 4,381 results were obtained.

These articles had to be further checked for duplicates. There were several instances of articles obtained across different databases. On encountering such duplicates, only one result of the multiples records was retained. After removing 1,243 duplicates, the remaining 3,138 results (4,381-1,243) were retained. After that, we examined their relevance to the influencer-generated content. For this purpose, we checked the topic relevance of the 3,138 results by manually reading their abstracts. Abstracts are ideal for the purpose because they allow readers to quickly survey the critical elements of whole articles[10], [13]. Irrelevant results, such as those studies that did not focus on social media influencers, were excluded from further analysis. In this step, 128 results were retained.

Furthermore, to find more relevant articles, we conducted a backward and forward citation analysis on a randomly selected sample of papers in the pool[11]. For the backward tracking, we looked at the references in the sample set and checked if we missed any relevant articles. For the forward tracking, we used Google Scholar to identify articles that cited the sample set but were not in our paper pool. After checking the relevance of all the results returned, we obtained 167 results. Finally, the full texts of the 167 articles (128+39) were downloaded further content analysis.

III. THEORETICAL FOUNDATION OF CURRENT RESEARCH

For identifying the theoretical foundations of these articles, two coders were trained to read the pool of articles to tease out the theories used by the articles. First, among the pool of the articles, 47 were chosen using random sampling. Each coder independently identified the theoretical foundations used in a study, if applicable. The intercoder agreements in identifying the theoretical foundations were 96%. After resolving disagreements through discussions, the remaining articles were distributed between the coders equally for the coding (i.e., 60 articles for each one).

For parsimony, this paper presents 5 primary underpinning theories used by the articles, which accounts for about 80% of those articles using theories. The theories are namely, self-presentation theory (also known as impression management theory in some articles), online

information processing theory, knowledge persuasion theory, signaling theory, and warranting theory. Table I shows these theories in respective articles and major findings.

Self-presentation theory seeks to explain why and how people convey some information about themselves or some images to others [14]. This theory argues that people can intentionally present themselves to control the impressions that others form of them in social situations [15]. Online information processing theory refers to the mechanisms under which online content can be created and spread among specific networks[16]. Knowledge persuasion theory holds that consumers’ persuasion knowledge may influence their response to agents’ persuasion attempts in the persuasion episodes[17]. Hence, guided by the theory, social media influencers have to consider consumers’ persuasion knowledge if using IGC to affect attitudes and behavioral intentions. Signaling theory posits that signals can help to reduce information asymmetry between social media influencers and IGC consumers in the pre-consumption stage [18] while warranting theory argues that social media influencers can use IGC to improve the trustworthiness of something that they want to promote to others[19].

TABLE I. THEORETICAL FOUNDATIONS OF CURRENT RESEARCH

Theory	Major findings	Reference as examples
Self-presentation theory	Social media influencers tend to profile themselves consciously in order to establish a stable impression on others	[14]
Online information-processing theory	Social media influencers are motivated to generate IGC by a mix of factors including extrinsic and intrinsic motivations, and IGC can be transmitted through word-of-mouths and celebrity-fan relationship	[15]
Knowledge persuasion theory	Social media influencers are able to employ a series of marketing tactics that are embedded in the content they generated (i.e., IGC) to persuade others to engage in certain activities	[16]
Signaling theory	Social media influencers can purposely or unpurposely send a series of online visible signals that inform others of the value of IGC	[17]
Warranting theory	Social media influencers can use the IGC to promote or endorse something, which improves its credibility and believability	[18]

IV. RESEARCH DESIGN USED IN THE CURRENT RESEARCH

For illustrating the research designs of these articles, a prior codebook of two codes were developed deductively for the first level of coding. It comprised two codes: data-collection procedure and data-analysis approach[20]. The data-collection procedure refers to a concise statement of the

means and steps of the collection of the data used by a study. An example of a data-collection procedure is employing a field survey to investigate consumers' engagement in influencer-generated content[4]. The data-analysis approach refers to the methods used for analyzing the data in a study. An example of a data-analysis approach is to use structural equation modeling to analyze the collected data [4].

TABLE II. SUMMARY OF RESEARCH DESIGNS

Category	Dimension	Main constitute
Data-collection procedures	Primary data collection	Data collected from surveys
		Data collected from interviews
		Data collected from experiments and quasi-experiments
	Secondary data collection	Data collected from social media
		Data collected from professional databases
		Data collected from news coverages
Data-analysis approaches	Quantitative analysis	Statistical analysis (descriptive and inferential)
		Mathematical simulation
		Computational analysis
	Qualitative analysis	Content analysis
		Case study
		Netnography

For the second level of coding, two dimensions were used to categorize the data-collection procedures, namely, primary data collection and secondary data collection. The primary data are usually collected from first-hand using, such as surveys[20]. The secondary data can be publicly available data that are relevant to the topic being observed [20]. Similarly, two dimensions were used to categorize the data-analysis approaches, namely, quantitative analysis and qualitative analysis[20]. Quantitative analysis involves numeric measures and statistical tests to generate adequate knowledge, while qualitative analysis is a scientific observation and interpretation to analyze non-numerical data [20].

We present the most used data-collection procedures and data-analysis approaches of these articles, as shown in Table II. In terms of data-collection procedures, we find that the primary data collection of the articles consists of three main methods—survey[21], interviews[7] (and experiments and quasi-experiments[22], [23], the secondary data collection consists of three sources—social media platforms[24], professional databases[25] and news coverages[1].

In terms of data-analysis approaches, the quantitative analysis of the articles includes statistical analysis[26], mathematic simulation[27], and computational analysis[28]. The quantitative analysis includes content analysis[29], case study[30], and netnography [31].

V. RESEARCH FOCI AND FUTURE DIRECTIONS

An inductive approach was adopted to identify the current research foci and future research directions of these articles. This is because the inductive content analysis allows creating new categories for identifying different research foci and future directions[10]. The articles were jointly coded by two coders to derive categories for the research foci and future directions. By employing code connection, similarities and differences were reconciled as much as possible during the analysis.

The inductive process helped derive three main clusters of research foci as well as three primary research perspectives of future directions. All had reasonable levels of inter-coder reliability, and disagreements were addressed through face-to-face conversation among the two coders.

We identify three clusters of research foci: (1) identifying social media influencers, (2) investigating influencers' motivations of creating content, and (3) assessing the social and economic impacts of IGC. As illustrated in Fig. 1, identifying social media influencers accounts for the most dominant cluster. However, the other two clusters—investigating influencers' motivation of creating content and assessing the social and economic impacts of IGC has attracted more scholarly attention in the last three years (2015—2017) based on our content analysis.

Figure 1. Research foci by keywords clustering.

Note: Percentages add to more than 100 because the research foci of some articles had to be coded into multiple groups

We analyze the content of the articles in the parts of limitations and future work and derived several important research directions worthy of exploration. Three perspectives are used to guide the future research directions of IGC.

First, from the content creator perspective, there are two main directions—(1) to confirm and elucidate the heterogeneity of social media influencer, and (2) to assess the relative importance among the influencers on a given platform. These directions help deepen the understanding of the identified social media influencers in current research.

Second, from the content generation perspective, there are two main directions— (1) to compare content generation motivators between influencers and regular content creators, and (2) to propose effective interventions to drive influencers to generate high-quality content. These directions help

deepen the understanding of the influencers' motivations for creating content.

Third, from content impacts perspective, there are two main directions—(1) to compare the impacts of IGC on users' engagement in a given community and purchasing decision-making, (2) to explore IGC facilitates digital business practices such as online products or services promotion. These directions help deepen the understanding of the social and economic impacts of IGC.

To delve more profound, drawing on the keywords of the articles, we also show keywords clustering as shown in Fig. 2. Some of the most frequently occurring words include such as “social media”, “celebrity”, “identity”, and “impact”.

Figure 2. Research foci by keywords clustering.

VI. DISCUSSION AND CONCLUSION

Three main findings are gleaned from this paper. First, this study identified five underpinning theories in IGC literature. These include self-presentation theory, online information processing theory, knowledge persuasion theory, signaling theory, and warranting theory. Major findings based on these theories include: (1) social media influencers tend to profile themselves consciously in order to establish a stable impression on others; (2) social media influencers are motivated to generate IGC by a mix of factors including extrinsic and intrinsic motivations, and IGC can be transmitted through word-of-mouths and celebrity-fan relationship; (3) social media influencers are able to employ a series of marketing tactics that are embedded in the content they generated (i.e., IGC) to persuade others to engage in certain activities; (4) social media influencers can send a series of online visible signals that inform others of the value of IGC; (5) Social media influencers can use the IGC to promote or endorse something, which improves its credibility and believability.

Second, scholars have adopted many diverse sources to collect research data, including primary and secondary data. For example, primary research data come from surveys,

interviews, experiments, and quasi-experiments. Secondary research data come from related social media platforms, professional databases, and news coverages. Also, current research used a wide variety of data analysis approaches, including quantitative and qualitative methods, to address the research questions regarding IGC.

Third, current research focuses on three clusters: (1) identifying social media influencers, (2) investigating influencers' motivations of creating content, and (3) assessing the social and economic impacts of IGC. Correspondingly, three research perspectives are adopted to guide future directions. First, from the content creator perspective, it is essential: (1) to confirm and elucidate the heterogeneity of social media influencer, and (2) to assess the relative importance among the influencers on a given platform. Second, from the content generation perspective, it is essential: (1) to compare content generation motivators between influencers and regular content creators, and (2) to propose effective interventions to drive influencers to generate high-quality content. Third, from the content impact perspective, it is essential: (1) to compare the impacts of IGC on users' engagement in a given community and purchasing decision-making, (2) to explore IGC facilitates digital business practices such as online products or services promotion.

These findings can inform researchers of interest and related marketers. For the researchers, the findings confirm the importance of using appropriate theoretical lens to shed light on the power of social media influencers and the content they generated. Also, the multiple methods, especially mixed-method designs, are encouraged to be employed to address the unexplored questions, such as the motivations and impacts of generating online content. For marketers, the identified underpinning theories and proposed future research directions can help them better understand social media influencers and their role in brand promotions.

The findings of this paper are constrained by two limitations, which should be acknowledged. First, scholarly articles only in English were considered for this study. Second, the search process did not include doctoral dissertations. We also derived two implications from the literature review. First, research on IGC has attracted not only intra-disciplinary but also inter-disciplinary scholarly attention. Different scholars from theoretical backgrounds have collaborated to address this issue. Second, research on IGC has used a variety of data sources and methods to address this issue, but the mixed method designs that combine quantitative and qualitative approaches in a single study are still few.

REFERENCES

- [1] K. Freberg, K. Graham, K. McGaughey, and L. A. Freberg, "Who are the social media influencers? A study of public perceptions of personality," *Public Relat. Rev.*, vol. 37, no. 1, pp. 90–92, Mar. 2011.
- [2] D. Jiménez-Castillo and R. Sánchez-Fernández, "The role of digital influencers in brand recommendation: Examining their impact on engagement, expected value and purchase intention," *Int. J. Inf.*

Manage., vol. 49, pp. 366–376, Dec. 2019.

- [3] N. J. Evans, J. Phua, J. Lim, and H. Jun, “Disclosing Instagram Influencer Advertising: The Effects of Disclosure Language on Advertising Recognition, Attitudes, and Behavioral Intent,” *J. Interact. Advert.*, vol. 17, no. 2, pp. 138–149, Jul. 2017.
- [4] C. Lou and S. Yuan, “Influencer Marketing: How Message Value and Credibility Affect Consumer Trust of Branded Content on Social Media,” *J. Interact. Advert.*, vol. 19, no. 1, pp. 58–73, Jan. 2019.
- [5] P. B. Goes, M. Lin, and C. Au Yeung, “‘Popularity Effect’ in User-Generated Content: Evidence from Online Product Reviews,” *Inf. Syst. Res.*, vol. 25, no. 2, pp. 222–238, Jun. 2014.
- [6] R. Iyengar, C. Van den Bulte, and T. W. Valente, “Opinion Leadership and Social Contagion in New Product Diffusion,” *Mark. Sci.*, vol. 30, no. 2, pp. 195–212, Mar. 2011.
- [7] E. Djafarova and C. Rushworth, “Exploring the credibility of online celebrities’ Instagram profiles in influencing the purchase decisions of young female users,” *Comput. Human Behav.*, vol. 68, pp. 1–7, Mar. 2017.
- [8] J. Zhao, H. Gao, Y. Li, and J. Liu, “Which factors affect the duration of hot topics on social media platforms?,” *Qual. Quant.*, vol. 51, no. 5, pp. 2395–2407, Sep. 2017.
- [9] Y. Zhao and Q. Zhu, “Evaluation on crowdsourcing research: Current status and future direction,” *Inf. Syst. Front.*, vol. 16, no. 3, pp. 417–434, 2014.
- [10] A. Pal and A. Y. K. Chua, “Reviewing the Landscape of Research on the Threats to the Quality of User-generated Content,” *Proc. 79th ASIS&T Annu. Meet. Creat. Knowledge, Enhancing Lives Through Inf. Technol.*, pp. 77:1–77:9, 2016.
- [11] Y. Zhang, Y. Sun, and B. Xie, “Quality of health information for consumers on the web: A systematic review of indicators, criteria, tools, and evaluation results,” *J. Assoc. Inf. Sci. Technol.*, vol. 66, no. 10, pp. 2071–2084, Oct. 2015.
- [12] A. M. Kaplan and M. Haenlein, “Users of the world, unite! The challenges and opportunities of Social Media,” *Bus. Horiz.*, vol. 53, no. 1, pp. 59–68, Jan. 2010.
- [13] H. Zheng, X. Chen, and X. Duan, “An Overview of Altmetrics Research: A Typology Approach,” in *Digital Libraries at the Crossroads of Digital Information for the Future. ICADL 2019*, Springer, Cham, 2019, pp. 33–39.
- [14] K. D. Trammell and A. Keshelashvili, “Examining the New Influencers: A Self-Presentation Study of A-List Blogs,” *Journal. Mass Commun. Q.*, vol. 82, no. 4, pp. 968–982, Dec. 2005.
- [15] A. Audrezet, G. de Kerviler, and J. Guidry Moulard, “Authenticity under threat: When social media influencers need to go beyond self-presentation,” *J. Bus. Res.*, Jul. 2018.
- [16] M. R. Subramani and B. Rajagopalan, “Knowledge-sharing and influence in online social networks via viral marketing,” *Commun. ACM*, vol. 46, no. 12, p. 300, Dec. 2003.
- [17] M. Friestad and P. Wright, “The Persuasion Knowledge Model: How People Cope with Persuasion Attempts,” *J. Consum. Res.*, vol. 21, no. 1, p. 1, Jun. 1994.
- [18] C. M. K. Cheung, B. S. Xiao, and I. L. B. Liu, “Do actions speak louder than voices? The signaling role of social information cues in influencing consumer purchase decisions,” *Decis. Support Syst.*, vol. 65, pp. 50–58, Sep. 2014.
- [19] R. A. Hayes and C. T. Carr, “Does Being Social Matter? Effects of Enabled Commenting on Credibility and Brand Attitude in Social Media,” *J. Promot. Manag.*, vol. 21, no. 3, pp. 371–390, May 2015.
- [20] V. Venkatesh, S. Brown, and Y. Sullivan, “Guidelines for Conducting Mixed-methods Research: An Extension and Illustration,” *J. Assoc. Inf. Syst.*, vol. 17, no. 7, pp. 435–494, Aug. 2016.
- [21] A. Erz, B. Marder, and E. Osadchaya, “Hashtags: Motivational drivers, their use, and differences between influencers and followers,” *Comput. Human Behav.*, vol. 89, pp. 48–60, Dec. 2018.
- [22] S. Aral and D. Walker, “Identifying Influential and Susceptible Members of Social Networks,” *Science (80-.)*, vol. 337, no. 6092, pp. 337–341, Jul. 2012.
- [23] C. Yi, Z. (Jack) Jiang, and I. Benbasat, “Designing for Diagnosticity and Serendipity: An Investigation of Social Product-Search Mechanisms,” *Inf. Syst. Res.*, vol. 28, no. 2, pp. 413–429, Jun. 2017.
- [24] C. Abidin, “‘Aren’t These Just Young, Rich Women Doing Vain Things Online?’: Influencer Selfies as Subversive Frivolity,” *Soc. Media + Soc.*, vol. 2, no. 2, p. 205630511664134, 2016.
- [25] L. Ang, “Community relationship management and social media,” *J. Database Mark. Cust. Strateg. Manag.*, vol. 18, no. 1, pp. 31–38, Mar. 2011.
- [26] I. Chae, A. T. Stephen, Y. Bart, and D. Yao, “Spillover Effects in Seeded Word-of-Mouth Marketing Campaigns,” *Mark. Sci.*, vol. 36, no. 1, pp. 89–104, Jan. 2017.
- [27] N. Mohammadi, Q. Wang, and J. E. Taylor, “Diffusion Dynamics of Energy Saving Practices in Large Heterogeneous Online Networks,” *PLoS One*, vol. 11, no. 10, p. e0164476, Oct. 2016.
- [28] W. X. Zhao, J. Liu, Y. He, C.-Y. Lin, and J.-R. Wen, “A computational approach to measuring the correlation between expertise and social media influence for celebrities on microblogs,” *World Wide Web*, vol. 19, no. 5, pp. 865–886, Sep. 2016.
- [29] X. Chen, S. Deng, S. Gui, and S. Fu, “Exploring the relationship between information characteristics and users’ behavior in a Chinese social Q&A community: evidence from Zhihu,” *Wuhan Daxue Xuebao (Xinxi Kexue Ban)/Geomatics Inf. Sci. Wuhan Univ.*, vol. 41, pp. 101–105, 2016.
- [30] J. Chongwatpol, “Data Analysis and Decision Making: A Case Study of Re-accommodating Passengers for an Airline Company,” *J. Inf. Technol. Teach. Cases*, vol. 6, no. 1, pp. 23–35, May 2016.
- [31] J. Björk and M. Magnusson, “Where Do Good Innovation Ideas Come From? Exploring the Influence of Network Connectivity on Innovation Idea Quality,” *J. Prod. Innov. Manag.*, vol. 26, no. 6, pp. 662–670, Nov. 2009.