Sun, Y., Shao, X., Nie, K., Qi, Y. & Guo, Y. (2018). Why do customers buy products on social commerce platform? A study from affordance theory. In *Proceedings of The 18th International Conference on Electronic Business* (pp. 731-738). ICEB, Guilin, China, December 2-6.

# Why Do Customers Buy Products on Social Commerce Platform? A Study from Affordance Theory

(Full Paper)

Yuan Sun\*, Zhejiang Gongshang University, China, zorrnsun@163.com Xiang Shao, Zhejiang Gongshang University, China, 1136818207@qq.com Kun Nie, Zhejiang Gongshang University, China, niekun@mail.zjgsu.edu.cn Yu Qi, Zhejiang Gongshang University, China, userqiyu@aliyun.com Yue Guo, King's College London & Hohai University, yue.guo@kcl.ac.uk

# **ABSTRACT**

This study examines the influence mechanism of the factors of influencing live streaming shopping which is a new social commerce mode for customer purchase based on the affordance theory. Our research examines how visibility affordance, metavoicing affordance and guidance shopping affordance which are three main affordances in live streaming shopping influence the customers' purchase intention. The results show that visibility affordance, metavoicing affordance and guidance shopping affordance will positively impact customer purchase intention. And our research is of great help in live streaming shopping research in social commerce research field. Also, our research provides some advices for social commerce operators.

*Keywords*: Affordance theory, visibility, metavoicing, guidance shopping, purchase intention.

# INTRODUCTION

Live streaming shopping as a new social commerce mode has made rapid development. According to the 2017 China online live streaming performance development reports, the overall revenue of China's online live performance market reached 30.45 billion yuan in 2017, up 39% from 218.5 billion yuan in 2016. E-commerce platforms and social commerce platforms quickly followed the trend of live streaming, and Alibaba, JuMeiyouping, Vipshop, MoGujie and other e-commerce platforms of all sizes have devoted themselves to this field, which led to the birth of the live streaming shopping. Different from other live streaming, streamers can introduce products to customers in live streaming shopping and streamers can interact with customers in real time about products and promote their purchase. Live streaming has become one of the important ways for customers to shopping on social commerce platforms. So, it's important to understand what factors influence customers' shopping behavior in live streaming shopping.

Purchasing as one of the most important user's behaviors, there are a lot of studies have investigated the factors influencing customers' purchase intention. But there are few studies have investigated why customer purchase in live streaming shopping. Yu et al. (2018) found customer engagement had positive impacts on customers to purchase virtual gifts in live streaming. What's more, Yu et al. (2018) thought because interaction in live streaming is in real time, previous researches can't explain why customer purchase in live streaming. Based on this point, we think previous researches can't completely explain customers buy products in live streaming shopping because it realizes the real time interaction and customers can see the sellers in live streaming shopping. And some studies have indicated that affordance can explain why customer buy products on social commerce platforms (Dong & Wang, 2018; Lin et al., 2018). However, why customer like purchasing on live streaming, and if the affordance of social commerce has some impact on customers' purchase intention in the context of live streaming shopping are unknown.

To fill up the gap, our research takes visibility affordance, metavoicing affordance, and guidance shopping affordance as IT affordance in live streaming shopping based on previous research (Dong & Wang, 2018), to explain why customer purchase products by live streaming shopping. Our research will provide a new view in studying live streaming and enrich social commerce research.

# THEORETICAL FRAMEWORK

# **Affordances Lens**

Different research fields have different definitions of affordance. In the field of information system, affordance is defined as "the possibility that an object provides an individual to realize a certain behavior" (Volkoff et al., 2013). In the social media field, affordance refers to "the potential of behaviors that constitute the interaction between users and social media" (Cabiddu, Carlo, & Piccoli, 2014). In social commerce, Dong, Wang, and Benbasat (2016) define the affordance as the possibility that information technology helps customer purchase, and our study adopt this concept.

The characteristics of affordance may vary depending on the use and context (Koroleva & Kane, 2017). And the theory of

<sup>\*</sup>Corresponding author

affordance has been widely used to better understand the relationship between information technology and social practice (Treem & Leonardi, 2012). Affordance has been widely studied in social media researches (Argyris & Monu, 2015; Treem & Leonardi, 2012), but is few in social commerce. Koroleva and Kane (2017) research the relational affordance under the context of Facebook. Lin et al. (2018) thought that the affordance of social commerce includes interactivity, stickiness and word of mouth, and the affordance of social commerce would have a positive impact on swift guanxi which is positively associated with the customers' purchase intentions through swift guanxi. Dong and Wang (2018) researched how visibility affordance, metavoicing affordance, triggered attending affordance, guidance shopping affordance, social connecting affordance and trading affordance in social commerce platform build strong ties and weak ties between customers and sellers. While as a new social commerce mode, which affordance impact customer behavior in live streaming shopping is unknown.

In our research, the visibility affordance, metavoicing affordance and guidance shopping affordance are adopted as IT (IT in social commerce) affordances. Dong et al. (2016) thought that visibility affordance meets the consumer's motivation approaching the product but not to do some works when they take part in social commerce activities, and the technical ability required by visibility affordance is to list the related attributes of the product. In social commerce, the sellers can send pictures which contain the related attributes of the product to customers. Dong et al. (2016) believes that metavoicing affordance can meet the consumer's needs to acquire useful product information, and the technology required is communicating tools. In social commerce, the customers can communicate with sellers by the live chat room (Lv, Jin, & Huang, 2018), and also can comment on the product reviews section. What shopping guide affordance satisfies is that customers can obtain more satisfied products through not too much efforts to find, and the required technical expenditure is to provide personalized service to customers (Dong et al., 2016). In social commerce, the seller will introduce product information to guide customers to buy, and guide customers to buy through live chat tools (for example, AliTM of Taobao.com). So, based on the background of social commerce and previous studies, we believe that the affordance in the context of live streaming in social commerce includes visibility affordance, metavoicing affordance and guidance shopping affordance (Dong et al., 2016). Visibility affordance is about the possibility letting customers know about that the product in visible; metavoicing affordance refers to the possibility for customers to respond to product content; Shopping guidance affordance refers to the possibility of helping customers make purchasing decisions by providing personalized service (Dong et al., 2016). We believe that visibility affordance, metavoicing affordance, guidance shopping affordance as a kind of affordance, customers will be exposed to them when taking part in online shopping activities. So, in our research, we take visibility affordance, metavoicing affordance and guidance shopping affordance as external factors in live streaming shopping.

# **Customer Purchase Intention**

Customer purchase decisions are one of the most important indicators in online shopping (Hu et al., 2016). In social commerce, purchase intention is the most important indicator of customers' consumption decisions. Han, Xu, and Chen (2018) classified and summarized 407 articles on social commerce and found that 199 papers which cover 48.9% of past studies studied customer behavior. In some researches, purchase behavior was taken as the customers' response to shopping environment in social commerce (Zhang & Benyoucef, 2016). Because live streaming shopping is a new mode in social commerce, we think purchase intention is also an important indicator of customer behavior in live streaming shopping based on the previous researches.

## **Live Streaming**

Resent researches on live streaming mainly focus on user motivations, factors influencing users' use of live broadcasting, and user behaviors. To know what motivations of users using live streaming is important in researching the new research field. Sjöblom and Hamari (2017) classified six users' motivations to watch others who play video games through live streaming. Chen and Lin (2018) found the entertainment factors is the main factors influencing the users usage intention, and also found the users would watch different streamers between different genders. Hilvert-Bruce et al. (2018) classified eight user motivations to watch live streaming. Based on previous researches about using live streaming motivations, we can find customers use the live streaming is mainly because utilitarian motivations, hedonic motivations and social motivations. Different other studies researching user's motivations in using live streaming, Zhao et al. (2018) researched why streamers use the live streaming from the intrinsic motivations and extrinsic motivations perspective. About influencing factors and users behavior in live streaming researches, Yu et al. (2018) investigated the impact of viewer engagement on gift giving behavior. But what factors impact customers engagement is known. Liking other types of social commerce, customer engagement is important for the performance of live streaming shopping. To fill up this gap, Wongkitrungrueng and Assarut (2018) researched how live streaming help customer engage in live streaming shopping from the Perceived value perspective. Live streaming shopping is different from other live streaming, customers behavior on live streaming shopping is shopping which like in social commerce. Wongkitrungrueng and Assarut (2018) only researched why customers engage in live streaming shopping, but customers may don't purchase products even they engage in live streaming shopping. From this perceptive, what factors influence customer's purchase intention is still unknown after they engage in live streaming shopping. This research studies what factors impact customer purchase intention in live streaming shopping from the affordance perspective to fill the gap.

The online social commerce context is complex, and previous explanations about why customer purchase products on social commerce platforms may not be applicable in live streaming shopping. Based on the above discussion, we can find the affordance theory has been used to study customers' behavior in social commerce (Dong & Wang, 2018; Lin et al., 2018). Live

streaming shopping as one of the modes of social commerce, we think the affordance theory is also can be used in this context. And because what factors influence customer purchase is unknown, we explain why customers purchase products in live streaming shopping from the affordance perspective.

#### **HYPOTHESIS**

Visibility affordance takes the product become visible to customers (Dong et al., 2016). Customers can use the tools in social commerce to visualize the products displayed by sellers in social commerce. Visibility affordance enables sellers to pass pictures and information of products to customers to reducing perceived risks and product uncertainties (Dong & Wang, 2018). And the seller can display the product information to the customer via social commerce tools such as live chat rooms or other communication tools to reduce the customer's purchase uncertainty and perceived risk, and reduce the customer's purchase resistance (Chung, Song, & Lee, 2017), which will positively impact customer purchase in live streaming shopping. What's more, because of the visibility affordance, other people's comments and ratings which customers can learn from social commerce sites are visual. And the comments and ratings have a positive impact on customer purchase by influencing customer's cognitive appraisals (Chen, Lu, & Wang, 2017). In addition, visual attraction plays a positive role in promoting the perceived enjoyment of customers, which also plays a positive role in customer purchase (Xiang et al., 2016). So, we hypothesize that:

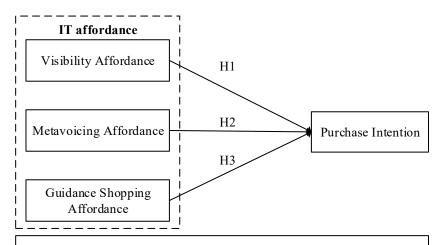
H1: Visibility affordance has a positive effect on customer purchase intention in live streaming shopping.

In social commerce, the metavoicing affordance enables the efficient communication between customers and sellers and customers can provide feedback on products (Dong & Wang, 2018). Metavoicing affordance integrates personal voice and feedback into the communication between sellers and customers and improves the interaction between customers and sellers (Dong & Wang, 2018). In live streaming shopping, based on the acquisition of product information, customers will seek information about products from sellers. Customers who have questions about the product can ask the sellers directly through live chat room (Lv et al., 2018). And they also can ask questions which are about the products they want to buy to other customers. The sellers can directly answer the customer's questions and introduce the product in the form of voice and can send videos or picture so that the customer can accept the information they searched. Thus, it reduces the perception of uncertainty and shopping resistance which have negative impacts on customer purchase. In addition, the metavoicing affordance promotes the use of interactive tools such as comment tool, rating tool and live chat room. So, there is a strong interaction between customers and sellers in live streaming shopping. The interaction plays a positive role in promoting customer purchase (Alalwan, 2018). So, we hypothesize that:

H2: Metavoicing affordance has a positive effect on customer purchase intention in live streaming shopping.

Guidance shopping affordance can help customer make purchasing decisions by providing personalized service (Dong et al., 2016). With product recommendation technology, guidance shopping affordance helps the seller to explicitly or implicitly obtain individual consumers' interests or preferences related to the product and then provide product recommendations that match the interests or preferences expressed by the consumer (Xiao & Benbasat, 2011). The sellers can directly provide customers with information about the products they need. And guidance shopping affordance helps buyers solve problems by providing personalized services (Dong & Wang, 2018). What's more, customers also can directly ask for help from sellers for product purchase and sellers can provide relevant helps based on the basis of real-time interaction and personalized needs of customers (Lv et al., 2018), which can reduce customer resistance. Based on the guidance shopping affordance and real-time interaction, sellers can provide customers with information that matches their needs, which is conducive to creating useful information for customers, and thus helping customer purchase. So, we hypothesize that:

H3: Guidance shopping affordance has a positive effect on the customer purchase intention in live streaming shopping.



# Control variables:

Live streaming purchase frequency,

Online social commerce purchase frequency,

Online social commerce purchase experience

Age, Gender, Income, Educational levels, Live streaming platform types

Figure 1: The Concept Model

#### METHODOLOGY

#### Measurements

By referring to existing literatures, we developed a questionnaire to measure our model. Visibility affordance, metavoicing affordance and guidance shopping affordance were adopted from Dong and Wang (2018), purchase intention was adopted from Chen et al. (2017). And we measure all the items using 7-point scales from 1 (strongly disagree) to 7 (strongly agree). Because the data was collected in China, an English questionnaire was prepared based on the existing literature, and then translated it into Chinese, followed by the guidance of relevant experts, and finally translated it into English to determine whether there was translation deviation.

#### **Data Collection**

Our questionnaire was distributed on an online survey website (https://www.wjx.cn/) and 510 valid questionnaires was collected. About the respondent demographics in this study, there were 313 women, which accounted for 61.37%. There were 197 men, which accounted for 38.63%. There were 198 respondents aged 30-39, which accounted for 38.82%. 357 respondents were bachelor, which accounted for 70%. About respondent experience, most respondents purchase 1-3 times a month through live streaming shopping (n=348, 68.23%). And most respondents buy 4-6 times a month in social commerce platforms (n=175, 34.31%).

### DATA ANALYSIS AND RESULTS

We use the SmartPLS and SPSS to test our measurement model and structural model. The PLS and SPSS has been adopted by many researchers (Chen et al., 2017; Ou, Pavlou, & Davison, 2014), and are effective in data analysis.

#### **Measurement Model**

Before measuring the model, we first test common method bias (CMB) and multicollinearity. About the CMB, we use the Harman's single factor method to test, the result shows that 36.46% in our research, which indicates that the influence of CMB is slight. About the multicollinearity, we take the VIF as the indicator to test. Table 1 shows the VIF in our model is below 3.3, which indicates that there is not multicollinearity problems in our research (Ou et al., 2014).

Table 1: VIF, loadings and cross-loadings

Constructs	Items	VIF	GS	ME	PUI	VI	
GS	GS1	1.39	0.74	0.40	0.36	0.37	
	GS2	1.42	0.74	0.34	0.35	0.36	
	GS3	1.50	0.79	0.38	0.42	0.39	
	GS4	1.44	0.76	0.40	0.37	0.41	
ME	ME1	1.57	0.36	0.70	0.24	0.43	
	ME2	1.55	0.34	0.73	0.30	0.46	
	ME4	1.54	0.38	0.75	0.28	0.39	

	ME5	1.41	0.34	0.72	0.32	0.30	
	ME6	1.49	0.43	0.77	0.35	0.40	
PUI	PUI1	1.54	0.39	0.29	0.81	0.39	
	PUI2	1.94	0.45	0.38	0.88	0.47	
	PUI3	1.71	0.41	0.36	0.83	0.42	
VI	VI1	1.83	0.42	0.49	0.44	0.84	
	VI2	1.56	0.38	0.40	0.42	0.79	
	VI3	1.57	0.38	0.42	0.38	0.77	
	VI4	1.50	0.41	0.38	0.35	0.74	

Note: VI: Visibility, ME: Metavoicing, GS: Guidance Shopping, PUI: Purchase Intention.

We adopt Cronbach's alpha and composite reliability (CR) to test the realibility. Table 2 shows the Cronbach's alphas are from 0.75 to 0.79 and composite reliability is from 0.84 to 0.88. All the realibility values exceed the recommended values 0.7 (Fornell & Larcker, 1981), which shows that the realibility of our model is satisfied.

We adopt AVE to test the convergent validity, and adopt square root of AVEs and comparing the loadings and cross loadings to test the discriminant validity. Firstly, table 2 shows the values of AVE is from 0.54 to 0.71, which indicates that the convergent validity is satisfied (MacKenzie, Podsakoff, & Podsakoff, 2011). Secondly, table 2 shows that all the values of square root of AVEs exceed the corresponding construct corelations. And table 1 shows that each variables' loadings exceed cross loadings on other variables. Both the two methods show that the discriminant validity is satisfied in our research.

Table2: Cronbach's Alpha, Composite Reliability, AVE, and correlations

Constructs	Cronbach's Alpha	Composite	AVE	GS	ME	PUI	VI
		Reliability					
GS	0.75	0.84	0.57	0.76			
ME	0.79	0.85	0.54	0.50	0.73		
PUI	0.79	0.88	0.71	0.49	0.41	0.84	
VI	0.79	0.87	0.62	0.51	0.54	0.51	0.79

Note: VI: Visibility, ME: Metavoicing, GS: Guidance Shopping, PUI: Purchase Intention.

# Structural Model

We use the PLS to estimate our structural model. we bootstrap 5000 times to obtain a stable results, and the results are shown in Figure 2. The  $R^2$  of purchase intention is 0.39, which indicats that visibility affordance, metavoicing affordance and guidance shopping affordance can explain why customer purchase products in shooping live streaming is credible. The path of visibility affordance to purchase intention is 0.29, and is significant on the 0.001 level (p<0.001), which indicates that H1 is supported. The path of metavoicing affordance to purchase intention is 0.10, and is significant on the level of 0.05 (p<0.05), which indicates that H2 is supported. The path of guaidance shopping affordance to purchase intention is 0.24, and is also significant on the level of 0.001 (p<0.001), which shows that the H3 is supported. The results shows that IT affordance can explain why customers liking purchase products on live streaming shopping which is a new mode of social commerce.

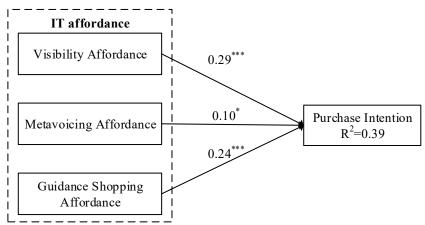


Figure 2: Hypotheses Testing Resultsresults(\*\*\*p < 0.001, \*p < 0.05).

# DISCUSSION

# **Discussion of Findings**

In our research, we find the visibility affordance, metavoicing affordance and guaidance shopping affordance can positively impact on customer purchase. These results are in line with Dong and Wang (2018) who find visibility affordance, metavoicing

affordance and guaidance shopping affordance can promote customer purchase by influencing interactivity and social ties. But different the research of Dong and Wang (2018), we find visibility affordance, metavoicing affordance and guidance shopping affordance can positively impact on customer behavior directly. In live streaming shopping, customer can see the real products based on the visibility affordance, which helps consumers perceived lower risk comparing traditional products presentations. In traditional products presentations such as pictures products presentation and words discribing presentations can't show the real information of the products customers want to buy. It may pass false pictures to customers which lead to lower word-of-mouth for sellers, while the live streaming can solve the uncertainty based on the visibility affordance. Communicating tools are important in online shopping, the metavoicing affordance of live streaming shopping can help customers interact with each other and also can help customers communicate with sellers. One of the online shopping risk for customers is that they can't buy fitted products. But in live streaming shopping, sellers as streamers can guide customer purchase, which help customer buy the products fit their needs. These findings have important implications in theoretical and practical.

# **Theoretical Implications**

Based on afffordance theory, our study proposes a research model to study the factors influencing consumers' purchase intentions. The main theoretical implications include three points. First, our research is from the perspective of affordance to research, which is less used in the study of social commerce but an important in customers' purchase. Previous researches have researched social commerce based on the online social commerce platforms IT affordance (Dong & Wang, 2018; Dong et al., 2016), while our research introcduce affordance theory to live streaming shopping. Future studies can further research other affordances in live streaming shopping and other types live streamings. Second, live streaming shopping promotes e-commerce to become social commerce and promote social meida to become a new system combined with social factors and commerce factors. And as an new mode of social commerce, live streaming shopping has made a huge influence on social commerce. Our research pays attention to what factors impact on customer purchasing products by it, which inspires future studies research this new social commerce mode. And our research also provides some theoretical basis to future research for live streaming shopping.

# **Practical Implications**

Our research also has some practical implications for social commerce operators. First, as a new mode in social commerce, live streaming shopping has become famous among customers. Social commerce operator should pay more attention to it and adopt this new mode in their saling. Second, our research find visibility affordance, metavoicing affordance and guaidance shopping affordance are three important factors influencing customer purcahsing. In social commerce practice, sellers should improve the website's ability of visibility which can reduce customer's peceived risk and uncertatinty. And we find metavoicing affordance can positively impact on customer purcahse. So, sellers also should improve the customers' communication efficiency on social commerce platforms. Meanwhile, Our research finds guaidance shopping affordance can help customer purchase products fitted their needs and thus help them make purchase decisions. The sellers should improve their guidance ability.

# RESEARCH LIMITATIONS

There are some limitations in our research. First, our research considers several platforms, but every platform is different between each other. For example, users of MoGujie mostly are women, but other platforms are not. This difference may lead some errors to our research. Future research can pay attention to one platform or research the differences between different platforms' live streaming shopping. Second, our study only research affordance's directly impact on purchase behavior but doesn't consider customer's psychological state. SOR model holds that stimulus can impact customers response through influencing "Organism". But what is organism in our research is unknown. Future research can research the mechanism of how affordance impacts customer purchase.

# **ACKNOWLEDGEMENTS**

This research was supported by a grant (Grant ID: 16YXYP01) from the Contemporary Business and Trade Research Center, and the Collaborative Innovation Center of Contemporary Business and Trade Circulation System Construction of Zhejiang Gongshang University, and by the National Natural Science Foundation of China under grant (Grant ID: 71772162/71302034).

### REFERENCES

- [1] Alalwan, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management*, 42, 65-77.
- [2] Argyris, Y. A., & Monu, K. (2015). Corporate use of social media: technology affordance and external stakeholder relations. *Journal of Organizational Computing and Electronic Commerce*, 25(2), 140-168.
- [3] Cabiddu, F., Carlo, M. D., & Piccoli, G. (2014). Social media affordances: enabling customer engagement. *Annals of Tourism Research*, 48, 175-192.
- [4] Chen, A., Lu, Y., & Wang, B. (2017). Customers' purchase decision-making process in social commerce: a social learning perspective. *International Journal of Information Management*, 37(6), 627-638.
- [5] Chen, C.-C., & Lin, Y.-C. (2018). What drives live-stream usage intention? The perspectives of flow, entertainment, social interaction, and endorsement. *Telematics and Informatics*, 35(1), 293-303.
- [6] Chung, N., Song, H. G., & Lee, H. (2017). Consumers' impulsive buying behavior of restaurant products in social commerce. *International Journal of Contemporary Hospitality Management*, 29(2), 709-731.
- [7] Dong, X., & Wang, T. (2018). Social tie formation in Chinese online social commerce: the role of IT affordances.

- International Journal of Information Management, 42, 49-64.
- [8] Dong, X., Wang, T., & Benbasat, I. (2016). *IT Affordances in Online Social Commerce: Conceptualization Validation and Scale Development (10 pages)*. In Proceedings of the Twenty-Second Americas Conference on Information Systems, AMCIS, San Diego, American, August 11-13.
- [9] Fornell, C., & Larcker, D. F. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal of Marketing Research*, 18(3), 382-388.
- [10] Han, H., Xu, H., & Chen, H. (2018). Social commerce: a systematic review and data synthesis. *Electronic Commerce Research & Applications*, 30, 38-50.
- [11] Hilvert-Bruce, Z., Neill, J. T., Sjöblom, M., & Hamari, J. (2018). Social motivations of live-streaming viewer engagement on Twitch. *Computers in Human Behavior*, 84, 58-67.
- [12] Hu, X., Huang, Q., Zhong, X., Davison, R. M., & Zhao, D. (2016). The influence of peer characteristics and technical features of a social shopping website on a consumer's purchase intention. *International Journal of Information Management*, 36(6), 1218-1230.
- [13] Koroleva, K., & Kane, G. C. (2017). Relational affordances of information processing on Facebook. *Information & Management*, 54(5), 560-572.
- [14] Lin, J., Luo, Z., Cheng, X., & Li, L. (2018). Understanding the interplay of social commerce affordances and swift guanxi: an empirical study. *Information & Management, In press*.
- [15] Lv, Z., Jin, Y., & Huang, J. (2018). How do sellers use live chat to influence consumer purchase decision in china? *Electronic Commerce Research and Applications*, 28, 102-113.
- [16] MacKenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. (2011). Construct Measurement and Validation Procedures in MIS and Behavioral Research: Integrating New and Existing Techniques. *MIS Quarterly*, 35(2), 293-334.
- [17] Ou, C. X., Pavlou, P. A., & Davison, R. (2014). Swift Guanxi in Online Marketplaces: The Role of Computer-Mediated Communication Technologies. *MIS Quarterly*, 38(1), 209-230.
- [18] Sjöblom, M., & Hamari, J. (2017). Why do people watch others play video games? An empirical study on the motivations of Twitch users. *Computers in Human Behavior*, 75, 985-996.
- [19] Treem, J. W., & Leonardi, P. M. (2012). Social media use in organizations: exploring the affordances of visibility, editability, persistence, and association. *Annals of the International Communication Association*, 36(1), 143-189.
- [20] Volkoff, O., Strong, D. M., Worcester Polytechnic, I., & Simon Fraser, U. (2013). Critical realism and affordances: theorizing IT-associated organizational change processes. *MIS Quarterly*, 37(3), 819-834.
- [21] Wongkitrungrueng, A., & Assarut, N. (2018). The role of live streaming in building consumer trust and engagement with social commerce sellers. *Journal of Business Research*, In press.
- [22] Xiang, L., Zheng, X., Lee, M. K. O., & Zhao, D. (2016). Exploring consumers' impulse buying behavior on social commerce platform: the role of parasocial interaction. *International Journal of Information Management*, 36(3), 333-347.
- [23] Xiao, B., & Benbasat, I. (2011). Product-related deception in e-commerce: a theoretical perspective. *MIS Quarterly*, 35(1), 169-195.
- [24] Yu, E., Jung, C., Kim, H., & Jung, J. (2018). Impact of viewer engagement on gift-giving in live video streaming. *Telematics and Informatics*, 35(5), 1450-1460.
- [25] Zhang, K. Z. K., & Benyoucef, M. (2016). Consumer behavior in social commerce: a literature review. *Decision Support Systems*, 86, 95-108.
- [26] Zhao, Q., Chen, C.-D., Cheng, H.-W., & Wang, J.-L. (2018). Determinants of Live Streamers' Continuance Broadcasting Intentions on Twitch: A Self-Determination Theory Perspective. *Telematics and Informatics*, 35(2), 406-420.

# ADDITIONAL READINGS

- [1] Blasco-Arcas, L., Hernandez-Ortega, B. I., & Jimenez-Martinez, J. (2016). Engagement platforms: The role of emotions in fostering customer engagement and brand image in interactive media. *Journal of Service Theory and Practice*, 26(5), 559.
- [2] Cha, J. (2014). Usage of video sharing websites: Drivers and barriers. *Telematics and Informatics*, 31(1), 16-26.
- [3] Chan, T. K. H., Cheung, C. M. K., & Lee, Z. W. Y. (2017). The state of online impulse-buying research: A literature analysis. *Information & Management*, 54(2), 204-217.
- [4] Chen, Q., Xu, X., Cao, B., & Zhang, W. (2016). Social media policies as responses for social media affordances: The case of China. *Government Information Quarterly*, 33(2), 313-324.
- [5] Ching, R. K. H., Tong, P., Chen, J. S., & Chen, H. Y. (2013). Narrative online advertising: identification and its effects on attitude toward a product. *Internet Research*, 23(4), 414-438.
- [6] Floh, A., & Madlberger, M. (2013). The role of atmospheric cues in online impulse-buying behavior. *Electronic Commerce Research and Applications*, 12(6), 425-439.
- [7] Gao, W., Liu, Y., Liu, Z., & Li, J. (2018). How does presence influence purchase intention in online shopping markets? An explanation based on self-determination theory. *Behaviour & Information Technology*, 37(8), 786-799.
- [8] Goel, L., Johnson, N. A., Junglas, I., & Ives, B. (2013). How cues of what can be done in a virtual world influence learning: An affordance perspective. *Information & Management*, 50(5), 197-206.
- [9] Hamari, J. (2015). Why do people buy virtual goods? Attitude toward virtual good purchases versus game enjoyment. *International Journal of Information Management*, 35(3), 299-308.
- [10] Karahanna, E., Xu, S. X., Xu, Y., & Zhang, N. (2018). The Needs–Affordances–Features Perspective for the Use of Social Media. *MIS Quarterly*, 42(3), 737-756.

- [11] Lin, H.-F. (2007). Predicting consumer intentions to shop online: An empirical test of competing theories. *Electronic Commerce Research and Applications*, 6(4), 433-442.
- [12] Mundel, J., Huddleston, P., & Vodermeier, M. (2017). An exploratory study of consumers' perceptions: What are affordable luxuries?. *Journal of Retailing and Consumer Services*, 35, 68-75.
- [13] Osatuyi, B., & Qin, H. (2018). How vital is the role of affect on post-adoption behaviors? An examination of social commerce users. *International Journal of Information Management*, 40, 175-185.
- [14] Piccoli, G. (2016). Triggered essential reviewing: the effect of technology affordances on service experience evaluations. *European journal of information systems*, 25(6), 477-492.
- [15] Sheer, V. C., & Rice, R. E. (2017). Mobile instant messaging use and social capital: Direct and indirect associations with employee outcomes. *Information & Management*, 54(1), 90-102.
- [16] Sun, Y., Wei, K. K., Fan, C., Lu, Y., & Gupta, S. (2016). Does social climate matter? On friendship groups in social commerce. *Electronic Commerce Research and Applications*, 18, 37-47.
- [17] Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425-478.
- [18] Wang, Y., & Yu, C. (2017). Social interaction-based consumer decision-making model in social commerce: The role of word of mouth and observational learning. *International Journal of Information Management*, 37(3), 179-189.
- [19] Zhang, H., Lu, Y., Gupta, S., & Zhao, L. (2014). What motivates customers to participate in social commerce? The impact of technological environments and virtual customer experiences. *Information & Management*, 51(8), 1017-1030.