Guest Editorial Preface

Special Issue on Live Videos in Social Media

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SPECIAL ISSUE ON LIVE VIDEOS IN SOCIAL MEDIA

Live videos are becoming more and more popular within the social media domain, either in form of standalone live streaming platforms (e.g., Periscope, Twitch or YouNow) or as live-video features embedded in other services (e.g., on Facebook or Instagram). Even though a quick search for "live videos" and "social media" in the scientific database Scopus yields only 39 results (as of August 2019), the volume of the research on this topic is also getting bigger – just under different key words. A search for "live streaming" and "social media" already leads to 74 scientific works since 2011. If we extend the search to the underlying technology (or activity) of "live streaming," we find a total of 1,766 research outputs (however, some of them dealing with the P2P technology). All in all, the topical spectrum of research on live streaming or live videos is very broad and fits perfectly into the scope of this journal, as it concerns internet-based social interaction technology, the human-computer interaction, and information system evaluation.

What makes the live streaming services so special? Unlike on the "traditional" social media platforms, the inter-user communication on live streaming platforms occurs synchronously (the streamers and the viewers communicate in real-time with no time delay) (Scheibe, Fietkiewicz, & Stock, 2016), which in turn leads to a very differentiated social interaction and user engagement. When we compare live streaming to traditional mass media, the viewers motivation has a stronger social and community basis (Hilvert-Bruce, Neill, Sjöblom, & Hamari, 2018). Live streaming also seems to generate a special kind of social interactions as, e.g., in China there is a rising trend of viewers giving tips or virtual gifts to the streamers as rewards (Lee, Yen, Chiu, King, & Fu, 2018). Despite the feature of virtual gifts, many live streaming platforms are characterized by implementation of different gamification elements, which are supposed to motivate the users to continue the usage of the service (Scheibe & Zimmer, 2019).

Why is live streaming a current research topic? The Internet users view more live content than ever before (Cheng, Chang, & Chen, 2019). There are more than 200 different (social) live streaming services, most of them originating in China (Lu, Xia, Heo, & Wigdor, 2018). All in all, we can distinguish between general live streaming services without any topical restrictions (e.g., Periscope) and topic-specific ones (e.g., Twitch for e-sports (Sjöblom & Hamari, 2017; Sjöblom, Törhönen, Hamari, & Maces, 2017), Taobao for e-commerce, or Picarto for art) (Fietkiewicz & Stock, 2019). For the users, streams can become "virtual third places, in which informal communities emerge, socialize, and participate" (Hamilton, Garretson, & Kerne, 2014, p. 1315). Finally, despite the new inter-user interaction possibilities, streaming platforms (especially in the e-sports domain) can provide an additional source of income. "Streamers can profit, up to and including a full-time living 'wage' for those at the highest levels" (Johnson, 2019, p. 506).

This special issue consolidates three scientific works about live streaming in the context of human-computer interaction and information system evaluation. In the first contribution, Jie Cai and Donghee Yvette Wohn address an important aspect of quality and content control on live streaming platforms. Based on their claim that "online spaces need moderation […] because of the negativity that persists regardless of platform," they investigate the existing moderation tools used on one of the most popular live streaming platforms—Twitch. Furthermore, the authors elaborate on possible improvements and moderation tools in the future, which is a highly relevant insight for the platform providers and developers.

The second contribution by Katrin Scheibe and Franziska Zimmer concerns the implementation of gamification elements on social live streaming platforms with particular attention given to gender-dependent differences. Implementation of gamification elements like badges or leaderboard has the goal to engage the users and motivate them to repeatedly use the information system. The authors of this study answer the questions of how users of different genders perceive live streaming services (taking the platform YouNow as an example), whether one of the genders is more prone to spending money on such platforms (e.g., for virtual gifts for the streamers), and finally, which gender is more motivated by gamification elements. The results have not only implications for further human-computer interaction research, but also for practitioners like developers and marketers.

The final contribution by Johanna M. Askeridis and Aylin Ilhan is an information system evaluation of a popular "real-time mobile broadcasting app" V LIVE. This application did not get much attention by the research community yet, which makes this the first empirical information system evaluation of V LIVE. The particularity of this application, compared to YouNow and Twitch investigated in the other two studies, is that it is a global platform connecting K-pop (Korean Pop) fans with their Korean idols. The authors investigated which factors lead the users to accept this information system, focusing on the perceived service quality. Their methodology is based on established evaluation models like TAM or UTAUT, consolidated in a holistic Information Service Evaluation model by Schumann and Stock (2014). The results give new insights into the live streaming domain, since they do not regard e-sports platforms or other general live streaming platforms, which were already exhaustively researched.

REFERENCES

Cheng, S. S., Chang, S.-L., & Chen, C.-Y. (2019). Problematic use of live video streaming services: Impact of personality traits, psychological factors, and motivations. *Proceedings of the 2019 8th International Conference on Software and Computer Applications ICSCA '19* (pp. 487-490). New York, NY: ACM.

Fietkiewicz, K. J., & Stock, W. G. (2019). Introduction to the live streaming services minitrack. *Proceedings of the 52nd Hawaii International Conference on System Sciences* (pp. 2536-2537). IEEE. doi:10.24251/HICSS.2019.305

Hamilton, W. A., Garretson, O., & Kerne, A. (2014). Streaming on twitch: Fostering participatory communities of play within live mixed media. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems CHI '14* (pp. 1315-1324). New York, NY: ACM.

Hilvert-Bruce, Z., Neil, J. T., Sjöblom, M., & Hamari, J. (2018). Social motivations of live-streaming viewer engagement on Twitch. *Computers in Human Behavior*, *84*, 58–67. doi:10.1016/j.chb.2018.02.013

Johnson, M. R. (2019). Inclusion and exclusion in the digital economy: Disability and mental health as a live streamer on Twitch.tv. *Information Communication and Society*, *22*(4), 506–520. doi:10.1080/1369118X.2018.1476575

Lee, Y.-C., Yen, C.-H., Chiu, P.-T., King, J.-T., & Fu, W.-T. (2018). Tip me!: tipping is changing social interactions on live streams in China. *Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems CHI EA '18*. New York, NY: ACM

Lu, Z., Xia, H., Heo, S., & Wigdor, D. (2018). You watch, you give, and you engage: A study of live streaming practices in China. *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems CHI'18*. New York, NY: ACM.

Scheibe, K., Fietkiewicz, K. J., & Stock, W.G. (2016). Information Behavior on Social Live Streaming Services. *Journal of Information Science Theory and Practice, 4*(2), 6-20.

Schumann, L., & Stock, W. G. (2014). The Information Service Evaluation (ISE) Model. *Webology*, *11*(1), e20.

Sjöblom, M., & Hamari, J. (2017a). Why do people watch others play video games? An empirical study on the motivations of Twitch users. *Computers in Human Behavior*, *75*, 985–996. doi:10.1016/j.chb.2016.10.019

Sjöblom, M., Törhönen, M., Hamari, J., & Macey, J. (2017). Content structure is king: An empirical study on gratifications, game genres and content type on Twitch. *Computers in Human Behavior*, *73*, 161–171. doi:10.1016/j.chb.2017.03.036

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