

Storytelling for citizen engagement: Citizen-generated videos as responses to civic questions

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Abstract

The present paper introduces contextual, in-place storytelling via public displays as a method to encourage civic engagement in smart cities. An exploratory, field study was conducted to study the contribution of user-generated videos to be shown as parts of stories distributed via public displays. A qualitative method was applied with the aim to explore the factors that impact three different aspects of storytelling, those of content contribution and consumption by citizens, and that of content moderation by professional producers. The results obtained provide insights into the challenges and potential of in-place storytelling as a mechanism towards meaningful citizen engagement in interface-rich urban environments.

Keywords: storytelling, public displays, citizen engagement, smart city, media, urban

Introduction

Whereas sensor data are expected to trigger citizen reaction to urban challenges, stories that are produced by citizens, are connected and embedded in the local context have a greater potential to augment citizen engagement by ‘humanising’ the smart city^a. Storytelling, as a form of communication, sharing knowledge and cultural values, is an effective mechanism of citizen engagement. Especially storytelling in the context of local communities helps to actively construct community identity and guide community action.¹

A medium for embedding stories in the community place are public displays. Stories embedded in the urban space can increase citizens’ incidental consumption of community news. With the ‘news-find-me’ perception becoming more prevalent due to the ambient nature of news, the active seeking of news gradually gives its place to incidental encounters.^{2,3,4} By serving as local communication infrastructure¹ and enabling contextual, in-place storytelling, public displays offer a way of increasing citizens’ encounter with news about local community challenges. As a result, storytelling via public displays can enrich citizens’ awareness of novel and different perspectives on critical civic questions, and stimulate interaction, public participation and connection to the city.

Research on citizens’ contribution to storytelling via public displays has, so far, shown the contribution of content, such as images shared from existing websites, text messages uploaded from mobile phones, simple video links, or situated snapshots created through on-display cameras.^{5,6} Other citizen content includes feedback, which is shared on displays either via voting systems or via tangible interaction with displays.^{7,8} To the best of our knowledge, a limited number of studies⁹ exist in which citizens produce video stories as responses to societal questions on public displays. Nonetheless, people have been sharing personal video content for some time through channels like Instagram, Facebook, or Youtube, while news media have increasingly been producing news in the format of Instagram stories.

In this research, we introduce user-generated videos (CGVs) as another type of content shared by citizens for public display. More specifically, this paper explores whether citizens respond to calls for sharing personal video content for producing stories around civic questions as well as how other community members react when encountering displayed stories produced from such content.

Study

A study was conducted with the purpose of addressing the above questions, the results of which are presented below. The study took place in a city with a smart city living lab serving as a test-bed for socio-technical innovations.

Method

Participants were recruited via the local Living Lab network. Twenty-one participants expressed willingness to participate in exchange of a financial reward, allocated on the basis of at least three content contributions. Out of them, seven participants participated actively throughout the study duration. For a period of five successive weeks, participants received a ‘call-to-action’ (CtA) by a team of media producers¹ (represented by the Flemish

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public broadcaster VRT) and were called to generate personal video stories as a response to each CtA. The CtA themes targeted locally relevant issues, such as neighbourhood activities.

Participants were asked to share their content with the producers within one week from the CtA release. CGVs were subsequently edited by the media producers in order to create stories. The outcome stories were then displayed via three screens, placed in semi-public spaces that attracted different citizen profiles (e.g. elderly, students).

Results and discussion

Results are discussed from the perspective of both professional storytellers and citizens. More specifically, we gained insights from the CGV editing process and the citizens' engagement with CGVs that are displayed on public displays. Compared to professional content, CGVs required more editing effort by media producers due to not already being described in production sheets and scripts, forming a logical sequence and labeled accordingly. Producers could not predict the number, quality or content presentation (i.e. the content shown and the camera angle) of CGVs. As a result, producers needed to manually create a sequential, visually appealing order, while puzzling the content together to form a story. Another significant task that appeared for producers, at least within the current study set-up, was maintaining follow-up contact with the citizens to ensure continuous content contribution. Therefore, compared with other news stories produced by media professionals, stories whose content depends on UGVs required significantly more effort. The insights about the editing challenges in particular informed the building of a platform that deploys video object recognition technology to label and categorize video content, with the aim to facilitate the process of UGV-based storytelling.

Next, citizens' engagement with CGVs is discussed with a focus on willingness to share videos for the purpose of stories shown via public displays. Interviews with the participants revealed that the main motives for responding to the CtA by sharing video were curiosity about the project, personal interest in video-making, and video-making as a group activity. Given the growth of story use on social media, interest in video-making can be further exploited towards increasing the popularity of CGVs for community storytelling. Video making in groups confirms previous findings about individuals' preference to interact with public displays in group settings.¹⁰ Inviting group stories can, therefore, contribute to increasing the number of CGVs sent for story editing. Participants' engagement with making videos was affected by the CtA topics, with some CtA being perceived as easier and yielding more videos (e.g. CtA on mobility), compared to others (see *Figures 1, 2*). An exploration and rating of most appealing themes is suggested as an additional means to increase CGV traffic. Moreover, engagement with video-making was higher in moments of no activity (e.g. while waiting). Such information can be used to inform the context of sending questions for CGVs. Last, participants' reported disappointment over their videos not being selected for the edited story implies that transparency in the editing process is a critical factor of engagement with video sharing.

The experience of encountering and consuming in-place stories, created on the basis of UGVs, and their potential to trigger video sharing by community members who encounter the stories was also explored through interviews with viewers. Asked about their opinion on the anticipated impact of storytelling on citizen engagement, some viewers saw a positive impact given format changes, whereas others mentioned several obstacles to that, such as lack of interest for local community matters, information overload in the urban space and consumption of similar information on social media. The above suggest making the origin (i.e. why and how stories were collected) as well as the purpose (i.e. increase awareness, trigger action) of storytelling in local community contexts much more explicit (see *Figure 3* for a story example perceived as lacking clear purpose). Citizen suggestions on how to strengthen the effectiveness of storytelling as a tool for citizen engagement included use of advertising techniques (e.g. to make story content more appealing; to advertise the role of public displays), improvement of layout, involvement of more human characters in stories, as well as use of interactive display features, such as content uploading options and virtual reality applications. Viewers' willingness to share videos for storytelling was rather low. The reasons ranged from low familiarity with smartphone use (especially for the elderly) to fears of others' reaction and public exposure of private life. The most prominent factor explaining viewers' low willingness to share videos was, however, the unclarity of the storytelling purpose.

Conclusion

To conclude, this study addressed the potential of UGV for community storytelling. Qualitative analysis provided insights into ways of enhancing willingness to share videos, increasing the appeal of stories for viewers of public displays, and facilitating the use of UGV by media producers interested in community storytelling. The obtained insights translate to a set of recommendations that serve to effectively engage citizens in both contributing personal video content for community storytelling and attending to UGV-based storytelling encountered in their urban space, and to facilitate the work of media producers interested in creating community stories out of citizens' personal video content.



Figure 2. CtA for peace week (the least appealing CtA) in the city, UGV & story publicly displayed (screenshots)



Figure 3. Story on favorite location in the city: purpose of story publicly displayed perceived as ambiguous by viewers