

## **Social Media Interactions and Online Games - Building up New Human Relationships in Danube Region**

**Predrag K Nikolić<sup>1</sup>**

**Abstract:** In this paper we are trying to explore possibilities of using online environment, multiplayer gaming culture and social media networks to engage people in the Danube Region around social, multi-cultural and environment initiatives. The Danube Region online community could become a new cultural phenomena, technology mediated, built on human interactions, common interests and cultural heritage which open space for future human-centered social and infrastructural design initiatives. We believe that such social media environment could also be a research playground where people from Danube Region may express their needs and desires as well as to leave the trace of their behavior, significant for further Danube Region development.

**Keywords:** social interactions; online games; virtual environments; interactivity; co-creation; human-centered design; social sustainability

### **1. Introduction**

The way we exchange information has been altered in many aspects from the moment social media spread around online world. Bowen states "Social media has transformed the way in which reporters gather and report information, the way public relations practitioners provide news, the way audiences collect information, and the nature of the interaction between publics and...organizations." (Bowen, 2013). Users of digital space have an opportunity to connect no matter of their locations across the globe. This facilitates the` access to a greater diversity of perspectives than was previously available. Social media platforms also make it possible to connect and share information in many different forms and quicker than ever before (Bowen, 2013).

Social Media development has also provided users with significant changes in a way they participate in the communication. Now, their messages can be transmitted, shared, re-contextualized and modified with incredible ease. Mobile

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<sup>1</sup> Associate Professor, PhD, Faculty of Digital Production, EDUCONS University, Serbia, Address: Vojvode Putnika 87, 21208 Sremska Kamenica, Serbia, Corresponding author: predragknikolic@gmail.com

devices are playing important role in interpersonal communicative encounters on the Internet and elsewhere, so it is not surprising that we can find nowadays plentiful researches on diverse aspects of computer-mediated communication (CMC; cf. Herring et al. 2013), which should, these days, be rather substituted by the notion of TMC, i.e. technology-mediated communication. Social media users subscribe to CMC/TMC and participate into various forums, discussion boards, and blogs, as well as most popular social networks: Facebook, YouTube, Twitter and others. Interactions in social media are characterized by physical separation and remote connection between speakers' and hearers' and infinite numbers of potential participants at the reception end, usually unfamiliar with one another. As such social media interaction can thus be regarded as "mediated quasi-interaction" (Chovanec 2010, 2011; cf. Thompson 1995; Talbot 2007). Computer-mediated interactions in social media exhibit the characteristics of both face-to-face and mass media communication, whilst their new forms never cease to challenge extant theory (Poole and Jackson 1993).

Social media delivers contemporary audiences with new participatory possibilities. Audience members are not merely end-recipients of texts but they assume an active, crowd generate, production role as well (Morris and Ogan 1996; Alexander 2011). Within social media environment traditionally passive recipient role is transformed into an active one combining the reciprocity and the production ends, facilitated by the so called "Web 2.0" phenomena in the area of computer-mediated communication (O'Reilly 2005). Web 2.0 environment is characterised by a shift from static online content to dynamic co-creation.

With social media rise, it appears that communication in all aspects has been democratized. Now, the power moved from marketing and PR sources into hands of the individuals and communities that create, share, and consume social media content. Communication about social and political issues happens as well as initiatives with or without permission of the state or local governments. It is now up to them to decide if they want to get serious about social media and participate in this communication, or continue to ignore it. We consider that social media has a tremendous impact on social climate with potential to become strong cohesive factor in multi-national initiatives and the Danube Region further development.

## **2. Social Interactions and Engagement**

*"Imagine a day that begins by greeting your regular barista at the local coffee shop. You get to work and run into a colleague who you have not seen for a while, and chat about your weekend. After work, you head to yoga class where you exchange pleasantries with the girl whose hair is always a different color. Walking home afterward, you stop to chat with the guy you always see walking the pug named Wilbur. None of these people play an important role in your life, and yet a*

*day without these kinds of interactions seems a little emptier.”* (Sandstrom & Dunn, 2014).

When having a social interactions with people who does not play an important role in our life (i.e. friends and family) we are referring to weak ties relationships. Crucial for this research is how those relationships, and if they contribute meaningfully to our happiness, or are they inconsequential. Evidence suggests that weak ties such as these—relationships involving less frequent contact, low emotional intensity, and limited intimacy—confer some important benefits (Sandstrom & Dunn, 2014).

In his seminal article, Granovetter (1973) showed that weak ties are important for diffusion of information (such as news, innovations, job openings) across a social network; information remains within isolated clusters of strong ties (i.e., close friends and family) without weak ties to bridge between them. By providing access to a breadth of perspectives and non-redundant information, weak ties have also been linked to greater creativity (Perry-Smith, 2006). Although little work has examined the association between weak tie interactions and well-being, numerous studies have documented the association between positive affect and socializing, more generally (Sandstrom and Dunn, 2014). Through social media interactions people expressed more positive affect when they are engaged in social rather than non-social activities (Pavot, Diener, & Fujita, 1990). People also expressed more positive affect on days when they recall participating in social events (Clark & Watson, 1988; Vittengl & Holt, 1998b; Watson, Clark, McIntyre, & Hamaker, 1992), and on days when they remember feeling more connected to others (Reis, Sheldon, Gable, Roscoe, & Ryan, 2000). Besides that, people remembered having experienced greater enjoyment during socializing than during most other activities (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004; Krueger, Kahneman, Schkade, Schwarz, & Stone, 2009).

Baumeister and Leary (1995) proposed that humans have a need to belong, and suffer negative consequences to their health and well-being when they lack frequent interactions with close others. On a daily interactions base, people report more positive affect following interactions with more familiar partners (Vittengl & Holt, 1998a), and people report being less lonely when they have more intimate interactions (Wheeler, Reis, & Nezlek, 1983). Furthermore, people who have more meaningful conversations report greater happiness (Mehl, Vazire, Holleran, & Clark, 2010; Reis, Sheldon, et al., 2000) and a greater sense of relatedness (Reis, Sheldon, et al., 2000). Nevertheless, more recent research suggests that a wider range of relationships may contribute to fulfilling the need to belong. According to Sandstrom & Dunn, people feel a greater sense of belonging, as well as increased positive affect, after simply having a social interaction with the barista at a coffee shop (Sandstrom & Dunn, 2013a). Also, people feel more socially connected when

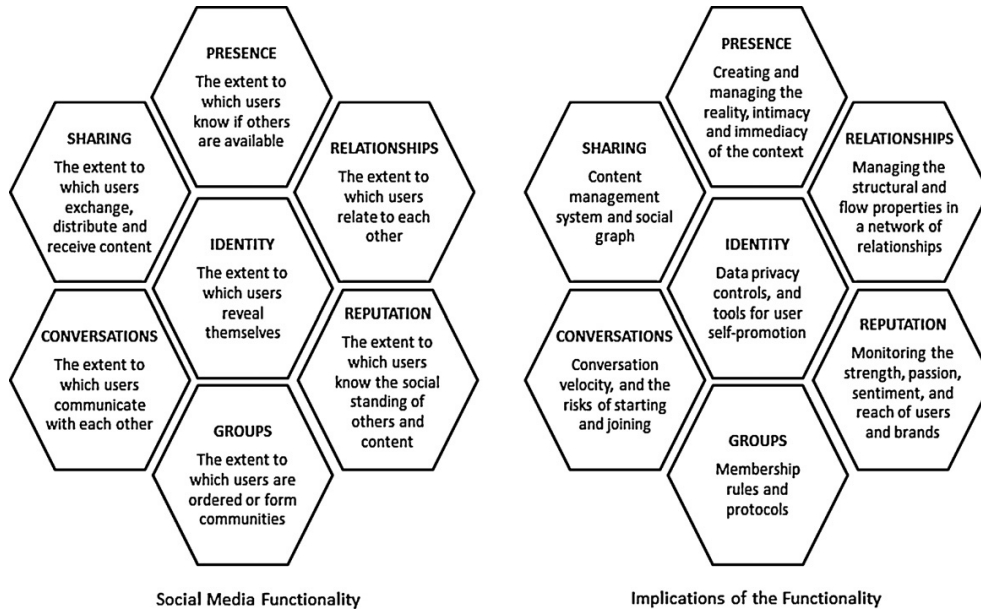
a passerby makes eye contact instead of looking past them (Wesselmann, Cardoso, Slater, & Williams, 2012).

Interactions with people on the periphery of our social networks, we have weak ties, may contribute to our social and emotional well-being and lead to greater feelings of belonging and greater happiness (Sandstrom & Dunn, 2014). We found this important for this research and reflection on building new relationships between people in the Danube Region within social media environment. emotional well-being and lead to greater feelings of belonging and greater happiness (Sandstrom & Dunn, 2014). We found this important for this research and reflection on building new relationships between people in Danube Region within social media environment.

### **3. Social Media Seven Functional Blocks**

In the paper "Social media? Get serious! Understanding the functional building blocks of social media" (Kietzmann et al. 2011) present a (honeycomb) framework that defines social media by using seven functional building blocks. The intention was to provide a better understanding of the audience of a particular social media platform and their engagement needs:

- **Identity** represents the extent to which users reveal their identities in a social media setting.
- **Conversations** represents the extent to which users communicate with other users in a social media setting.
- **Sharing** represents the extent to which users' exchange, distribute, and receive content.
- **Presence** represents the extent to which users can know if other users are accessible.
- **Relationships** represents the extent to which users can be related to other users.
- **Reputation** represents the extent to which users can identify the standing of others, including themselves, in a social media setting.
- **Groups** represents the extent to which users can form communities and sub-communities.



**Figure 1. The honeycomb of social media**

#### **4. Social Experience and Online Gaming**

It is usually considered that online gaming as human activity has capability to isolate players from their social environment. However we could follow the increase of social gaming and multi-player platforms which are providing plethora of online and offline interactions within socially based playing eco-system (Bryce & Rutter, 2003; Yee, 2006, 2007). In particular, for this research it is interesting widely spread social networking games phenomena where players are encouraged to engage socially both in and through games, supporting findings which refer to players' habit of playing games with others rather than alone (Cupitt & Stockbridge, 1996; Durkin & Aisbett, 1999; Kubey & Larson, 1990; Vorderer & Ritterfield, 2003). What is even more interesting is the importance of social interactions for multi-player environments as one of the key motivation factors and improvements for gaming experience (Colwell, 2007; Griffiths, Davies & Chappell, 2003; Kim & Ross, 2006; Lo, Wang & Fang, 2005a; 2005b, Sherry & Lucas, 2003; Sherry, Lucas, Greenberg & Lachlan, 2003; Wood, Gupta, Derevensky, & Griffiths, 2004).

According to Bartle (1996, 2004) and Yee (2006, 2007) motivation in social gaming comes out from and it is built on the particular type of gamers which are called "social-oriented players". Considered as such, they emphasize social factors as key elements of gaming behavior. Self-Determination Theory provides a

theoretical explanation framework to better understand the relationship between social factors in gaming and enjoyment (Ryan, Rigby & Przybylski, 2006; Tamborini, Bowman, Eden, Gizzard & Organ, 2010, Kaye & Bryce 2012), as the satisfaction of needs of relatedness (i.e., feeling of connection with others involved in playing experience development), autonomy and competence have been found to predict game enjoyment (Kaye & Bryce 2012). In addition to that, it is also important to consider the time spent playing while playing and its correlation with the social motivations (Williams, Yee & Caplan, 2008), and predictors of online game enjoyment as well as the level of participants' amusement achieved (Cole & Griffiths, 2007).

The phenomena of Massively Multiplayer Online Role -Playing Games (MMORPGs). and its social interactions consequences has been investigated by Cole and Griffiths (2007). Researches such as one done by Filijack and Wiemer-Hastings (Filiciak, 2003; Ng & Wiemer-Hastings, 2005). show the importance of making relationships between players within multi-player gaming environment. Involvement in social community, reflected on participant enjoyment of playing these types of game, especially when making friends and hearing personal information online. (Kaye & Bryce 2012). These factors can also enhance feelings of social belonging (Griffiths, 1997). Smyth (2007) suggests that playing MMORPGs creates feeling which distinct from other gaming experiences, and has different psychological and social outcomes. In the same research he also compared MMORPGs with individual playing experience and showed higher enjoyment in playing and greater acquisition of new friendships in the MMORPGs group compared to the "traditional" gamer group.

Throughout mentioned studies we can conclude that the social aspects in online gaming could dramatically alter the player experience and increase the level of satisfaction as referred in empirical researches focused on the relationship between motivation to play, online communities and organized players groups (Chappell, Eatough, Davies & Griffiths, 2006; Griffiths, Davies & Chappell, 2004; van Looy, Courtois & de Vocht, 2010). Here we can also find that the key motivation factors for playing MMORPGs are feeling connected to others, and recognizing the importance of online friends (van Looy et al., 2010).

According to Lim, Lee (2009) and Lim & Reeves (2010) playing individually provokes different physiological effects then playing with the others or in organized groups. These states could address also to emotional improvements in gaming experience when playing with others rather than alone and could refer to numerous factors listed by the different authors, such as: self-efficacy (Trepte & Reinecke, 2011), identification with the game and/or other players (van Looy et al., 2010), and competitiveness (Klimmt, Schmid & Orthmann, 2009).

Game amusement is affected by player performance and game-related self-efficacy (Trepte & Reinecke, 2011). Furthermore self-efficacy in social gameplay

is considered as one of the key influencers of the emotional outcomes of the engagement. The presence of other players and its competitiveness in gameplay will influence individuals' perceptions of self-efficacy, which could result in enhanced emotional responses to gameplay (Kaye & Bryce 2012). This experience could also be enhanced with the fact that players are more excited when playing in social and highly competitive environment in comparison with the solo contexts due to the individual's ability to monitor other gamers' performance and role in gameplay (de Kort et al., 2007).

## **5. Research Approach**

In the experimental design for this research purposes with regional Facebook social media activations, theoretical framework has been based on Activity and research methodologies from user-centered design process (Ascott, 2003; Stenslie, 2010), where focus is on the thing being designed (e.g., the object, communication, space, interface, service, etc.) to meet the needs of the participants. The time-space aspect of online gaming competition experience embedded into social experiences became considerably important for the social relationships development success. We found that social media networks could offer a research environment where people can interact through creative collaboration and initiatives, and share user-generated content on a symbolic, aesthetic and experiential level in a way that has immediate impact on the interpersonal relationship development. The Activity Theory principle of internalization points on necessary differentiation between internal and external activities. Social Media Activation 45 Years of The Coca-Cola tried to connect internal processes such as perception and emotions and express it through external engagement nested in participants' behavioral changes, in this particular case to contribute to belonging community.

The research formulation of the methodology can be described with goals of scientific research dealing with the area of social interactions, group behavior and participation as well as social gaming experience by:

- describing group behaviour and participation;
- predicting social interactions and participation;
- discovering causes of group participation;
- understanding established relationships through social engagement.

## **6. Proposition and Research Experiment**

Social media interactions and online games have shown all sorts of possibilities to change and engage people in new ways of communication. Such virtual environment has potential to become important meeting point for sharing ideas, initiatives, co-creation and involve people from the Danube region into common

interest projects. By using these platforms it is possible to act on several levels and straighten interpersonal and community relationships between the Danube basin inhabitants, the most multinational river basin in the world. As stated before in this paper, social networks are allowing diffusion of information between people who are not in close relationships and connected only with common interests or exposure to information generated by social media communities. Those informations, shared between users with weak interpersonal ties, are very often triggers for engagement and creativity. Through such regional cooperative co-creation mediated with social media platforms we are in a position to influence and move the region further development, the Danube river community cohesion and social sustainability.

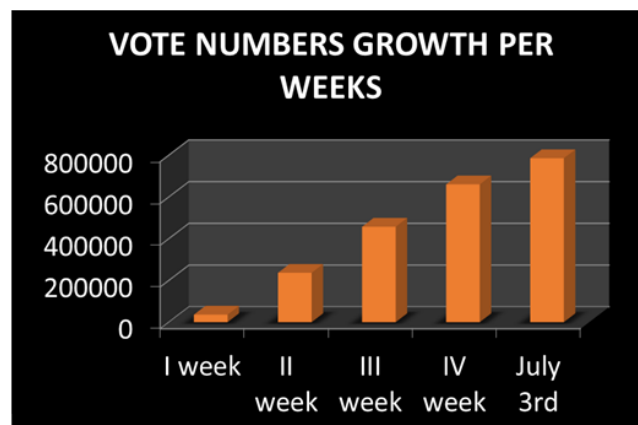
Whole the Danube strategy is about cooperation between countries and communities through joint projects and indicative and what this paper is proposing is use of social media platforms for interactions and playful co-creations which could widely affect ways people in the region are communicating and acting upon the Danube community well-being. As mentioned before people are expressing more positive affect when they are engaged in social rather than non-social activities, participating in social events or feeling more connected to others. The power of social interactions are also inherited into human characteristic that we enjoy much more during socializing than during other activities. Nevertheless, feeling of belonging to the Danube region wider community and contributing to the meaningful conversations through social media interactions reflects on participants happiness and build of wider range of relationships between people united around the Danube river and their understanding of its importance for their future sustainable development.

Besides proposition to use social media virtual environment as potentially powerful platform for the Danube region people stronger relationships and cooperation development, to enrich this experience and potential results, interactions with existing and new friends through online games and social gaming are also considered as important factor in the paper proposition for making new relationships between people in the Danube region. Studies mentioned in this paper clearly identified social gaming as particularly enjoyable for the participants who are making friends, share personal information and generate overall feeling of social belonging to the established online community.

Research experiment to support exposed proposal has been done as part of The Coca-Cola company promotion in Serbia. The idea behind the creative and design concept was to organize corporate social responsible campaign which will involve and unite local communities in Serbia to support development of public fitness zones. The result was absolutely amazing and has shown the power of social interactions and social media, as the campaign was mostly executed on Facebook, when the feeling of belonging is initiated through community well-being



intentions. The social media campaign lasted for two months and eventually ended as one of the regional most successful ever with over 1,7 million votes and 200,000 weak ties participant collected, so called fans, during activation period. The social gaming moment of this activation was seeded in the group competing elements spontaneously developed between participants throughout campaign period. Increase of the collected votes in the first four and a half weeks of the activation was much greater then expected. It started in a first week with 36.153, second week was 236.721 all along to first week of July with 795.725 votes (Fig. 2)



**Figure 2**

To achieve this result, especially in the beginning, we were playing with the activation rules in order to lower interaction complexity and minimize engagement difficulties. We did that by reducing steps in the process of voting, maximizing sharable opportunities and by exposing leadership board within interface throughout complete engagement process. Eventually our design system was based on simplicity and provocation that participants are engaged on something they are doing for their local community well-being.

Qualitative results for the research, in all three cases, were collected from comments left by participants on the brands Facebook pages and other social media channels. Quantitative data were collected from activations database and provide us together with the quantitative with necessary inputs for actionable social media design. Through the analysis of the collected qualitative data, in case of 45 Years of The Coca-Cola in Serbia activation, we found that the crucial factors for the social interactions and engagements were emotional attachments to the belonging community, gaming rules which allowed multiple voting and the strong and respectable organization to trust behind the activation. As result not only that they were playing individually on everyday bases but they started to organize themselves in groups with one common daily routine, to vote for their local

community and win the prize. This way they build new type of relationships, united in the same common cause. As mentioned the activation lasted for two months which was also quite untypical for social media activations, which usually lasts for two or three weeks, but showed the importance of correlation between type of the activation and according to that applied timing. The most important The Coca-Cola company provoked a huge attention of the wide audience on a national level and initiated strong feeling of belonging within local community members and generated new quality to their relationships.

## 7. Conclusions and Future Directions

Social media activation which was done for The Coca-Cola Company, has been used as research experiment which allowed to empirically detect certain correlations between social interactions and gaming and building new relationships within interest groups and communities. The importance of those newly formed participants groups within social media virtual environment is in their capability to initiate and lead changes as well as to develop proactive mindset in a wider community and local organizations establishment. From that perspective social media with interactions and playfulness it can offer, has a potential to become an important strategic tool for the Danube region community or organizations led projects. It can also play important role in self-determination, self-conscious and belonging feelings which are important motivators for social engagement and well-being crowd generated activities which could close up community in general.

Further research will be oriented toward more detailed investigation of the important factors for relationship establishment, the type and the character, within social media environment enriched with online gaming experiences and its potentials to contribute to future cooperation and development of the a wider Danube multinational community.

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