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Value Capturing and Role Playing in Social Networking Sites

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Digitally Engaged Communities (DECs) are growing exponentially within Social Networking Sites (SNS), such as Facebook, Twitter, Bebo, LinkedIn, and MySpace, thanks to the wide adoption of such sites. Digitally engaged communities are referred to by terms such as online communities, virtual communities, Web communities, and social networks. One of the most widely cited definitions of DECs is that of Preece [31]. She argues that a DEC consists of people, purpose, policies, and the computer systems. She explains that any community is created by a group of people networking together, interacting publicly, sharing similar needs, and governing themselves through an implicit set of protocols guiding their interactions. Preece [31] also indicates that this kind of digital relationship needs to be mediated by the support of technological facilitators. Hence, one can argue that DECs are Web-based networks of interpersonal ties connecting people socially, and allowing them to 1) create a sense of belonging and construct an online profile within a bounded system, and 2) articulate a list of other online contacts with whom they establish relationships and connections.

Today, DECs are the lifeblood of the Internet – the medium that created an online environment for people to get together in a more accessible way. The initial operation of such communities depends on the ongoing participation and engagement of its own members as the intended purpose behind them cannot be achieved without the presence of dedicated interactants ensuring an effective functioning of the community [3]. This is because, otherwise, it would simply be a cyberspace of outdated content rather than an ongoing source of value creation and exchange.

The advent of 3G+, and beyond, Internet-based broadband and other Web-based technologies have transformed the nature of social interactions. Indeed, the rapid growth of network access and the convergence of a faster medium of computer-mediated networking opened opportunities for exchanging value between different parties. This proliferation of low cost access enticed people to manage their social lives online. Moreover, and since the Internet has shifted the boundaries of human interaction, communities have extended to a broader geographical context and more users are now joining. Retrospectively, we believe that there is an emerging need to understand interactions at a deeper level [4], [5], [28], including the need for a further investigation of value elements exchanged within DECs, as well as an in-depth illustration of the interrelationships between the roles adopted by users and the value elements gratified within each role. This is indeed vital so as to improve our understanding of human-human and human-information relationships that can lead to a more effective use of the space.

Digitally Engaged Communities

The convergence of a cheaper and faster Web-based medium has opened opportunities for global networking where exchanging value is the main stream for a healthy community. The massive availability of DECs has deepened the velocity of transactions and fostered interactional density. Due to that, social ties are shifting from linking people in particular places to linking people at any place. However, the initiation of DECs has not been for the sake of their own, as they mostly support the connection of shared interests and views. For example some communities have emerged with an

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intention of building relationships (e.g., MySpace), enhancing friendships (e.g., Facebook), and pertaining emotional/health support (e.g., Bebo Bewell), while others have been launched for learning reasons (e.g., Pearson), and music sharing purposes (e.g., Bebo). On a general level, according to Peck [30], DECs can be categorized into five main classes as follows.

- **Person Oriented:** This type of communities focus on individuals and their social interactions (e.g., Facebook).
- **Professional:** Professional communities or communities of practice (CoP) are communities of knowledge creation and exchange within the boundaries of a specialsed network (e.g., LinkedIn).
- **Media-Oriented:** Communities that focus on the creation, distribution, and consumption of user-generated multi-media content, such as videos, music, and photos (e.g.,YouTube and Instagram).
- **Virtual World:** 3D Communities with multimedia tools and applications to enhance user-generated content that is owned by its own members and users (e.g., Second Life).
- **Mobile:** Communities that allow easy access, and make it possible to have direct and indirect contact with the community on the move. Where news and updates are checked simply through any handheld device installed with Web-based applications (e.g., Twitter).

In spite of the purpose behind each community, most share common participative features, i.e., interactants who form impressions

through customized personal profiles [6], [14]. Such profiles reflect self-presentational behaviors as members share personal information and upload it for contacting purposes, whether via their online profiles on a one-to-one basis (much like an email), or in a more public and multi-lateral manner.

Ethnographic Analysis

The employed methodological strategy in this interpretive research is ethnography given its fit to provide descriptions and a depth of understanding of a human society, community, or culture. Hammersley and Atkinson [17] define ethnography as "a descriptive account of a community or culture." Ethnography can also be described as observational investigation that refers to fieldwork conducted by investigators who live with and live like those who are studied. Given that this research is examining communities within SNS from a social and cultral standpoint, ethnography seems to be fitting [11], [18]. Indeed, using ethnography to examine online communities is common within the IS research (e.g., [13], [29], [34]).

The community examined in this research is Bebo (i.e., "Blog Early, Blog Often") social networking platform. Although Bebo was established just in 2005, the number of its users exceeds 40 million members world-wide. This however makes it one of the largest and fastest growing social networks. It is a digitally engaged community consisting of over (80) groups, sub-groups, and sub sub-groups. Each group serves certain social and other needs including but not limited to mental and other health support, crime prevention, social care, and music and talents share.

Given that this study takes place in a digital community, ethnography here is referred to as "online ethnography" (e.g., [11]), or "virtual ethnography" (e.g., [18]). Following online ethnography, the authors were taking more of participative

roles rather than observing, where more engagement took place in the virtual space. Authors otherwise referred to as ethnographers, lived among Bebo users for over 18 months, and participated in daily activities while maintaining objectivity. In this ethnographic study, the primary source of data is through participant observations, as this is regarded a core ethnographic technique where researchers participate in observing the behavior under examination without influencing its patterns [27]. That is direct, first-hand observation of members' daily behaviors including informal conversations and long-term engagement where (1114) messages out of (12) sub-groups were analyzed following content analysis techniques (see [1]).

Value Creation and Capturing

Digitally engaged communities cannot survive without user involvement and participation in terms of generating content and social interacting. Indeed, DECs need members if they are to be successful. What are most important are the value elements the community offers. These value elements are created and exchanged by the community's own users. For the past couple of years, millions of people have turned daily to DECs for diverse information-seeking and other communication activities. A great number of users, however, appeared to be passive information consumers [15], [37] without any active involvment. Over time, many of those would assume an additional role and become active content contributors, and thus add value to the community they are engaging in [16].

Behind any level of digital participation, there are numerous classes of value elements exchanged among users. As DECs offer a wide range of publicly transferred benefits, people join them to fulfil personal needs, whether individually-oriented or

community-oriented. Therefore, participation seems to be purposive, but the level of involvement varies depending on the purpose behind joining them. Therfore, we postulate that the successful operation of any DEC depends to a large extent on its growing value elements communicated to and by its own users. Our ethnographic analysis reveals that value in DECs can be classified as: *Social*, *Hedonic*, *Epistemic*, *Gift*, and *Utilitarian* value elements.

Social Value

Social value is one of the most important values captured in DECs [6]. It concerns the utility derived from user's association with certain social groups, and eventually could be broken down into *Emotional*, *Networking*, *Self-Esteem*, and *Self-Discovery* needs. These needs however are maintained through the interpersonal relationships among interactants.

Many individuals join online networks desperately seeking for **Emotional** support in different aspects of life. Calls could be for help and advice in health issues (e.g., Bebo/Bewell), mental conflicts (e.g., the Samaritans), and decisional support matters (e.g., Bebo/Beenriched). Such users might lack the opportunity of getting this support in real life, and somehow been dragged into isolation [26]. Therefore, they are encouraged into finding an accessible substitute. The anonymity in these communities also increases the calls for community assistance, as social value seekers are offered opportunities to receive emotional support in a climate of trust and empathy [21].

The value of **Networking** is another goal for many social networking sites. Interactants tend to bond and maintain relationships by engaging in such digital communities. It can be described as the process by which members act toward or respond to one another,

i.e., social interacting. Networks of socializing can take an online form that might extend to further boundaries of offline relationships, or to enhancing offline relationships via online networks. DECs are all about social interaction where communication is the foundation of such relationships [33].

The value of **Self-Esteem** offered by platforms of DECs enables users to open up and get a feeling of togetherness through interaction with other community members. Participating in groups and events gives members the feeling of existence and being connected. The creation of groups and the contribution to discussions can help establish a certain reputation, which according to Maslow's theory of human motivation represents the outer self-esteem need and thereby enables them to feel internally important (e.g., inner self-esteem). Generally speaking, the esteem needs, both on the outer and inner levels, that users can get from DECs are 1) the need of respect from others, and the need for status, recognition, attention, appreciation, even dominance, and 2) the need for self-respect, including feelings such as confidence, achievement, independence, and freedom [20].

The last recognizable social value is **Self-Discovery** which can be defined as "a sense of emotional involvement with the group" [8, p. 11]. Blanchard and Markus [9] referred to self-discovery as a "sense of community." Joining a group creates a sense of attachment to that group, as long as one's certain needs are satisfied [12]. In DECs, despite the lack of face-to-face interaction, human feelings including attachment, obligation, relationship, identity, and support are important dimensions captured in the sense of belonging to a community [9]. Thus, we believe that the stronger the sense of community belonging individuals conquer, the more they are likely to take more of an active role.

Hedonic Value

Hedonic values highlight three personal F's – one's fantasies, feelings, and fun [19]. They are perceived as abstract and subjective, and mainly refer to an intrinsic motivation for doing something that is inherently interesting and enjoyable [33], [21]. Many DECs give users interactive entertainment opportunities and offer them an interesting ambiance. Users of Bebo BeInspired, for one example of many, enjoy showing and sharing their personal talents of acting, singing, playing music, etc. Another example is related to entertainment applications on Bebo such as The Simpsons and Pirates Rangers quizzes and games.

Epistemic Value

Epistemic value can be defined as that value that would persuade users looking for novelty experience as well as new knowledge acquisition [2], [35]. This new knowledge might be derived from different factors of motivation. Many individuals may snoop around in a passive manner for the purpose of sneeking on personal profiles, looking at pictures, and having an eye on what is going on (i.e., interpersonal needs), or may passivley pitch in for the purpose of seeking information, support, advice without intending to publicly engage (i.e., informational needs). Epistemic value is considered a key function of value that is highly related to individuals' inner personalities and also can influence behavioral intentions and switch user behaviors [38].

Gift Value

The huge amounts of random information available on the Internet are staggering. In the world of DECs, the gift value is referred to the public informational products available for everyone at no price with no favor asked in return [23]. In other words, DECs represent a world of information rather than a world of physical objects. DECs are a great source of valuable information with large numbers of users pitching in for the greater good where there is no limit to possibilities. Hence, personal interactions amongst DECs users are best represented as a "gift economy" [32]. Gift economies are driven by social relations where sharing and exchanging information cost nothing. Nevertheless, the key to a sustainable gift economy lies within the genuine givers who pass on free advice and information to unknown beneficiaries whom they might not even come across again.

Utilitarian Value

Satisfying a utilitarian value is the effective achievement of a functional goal which is often suitable for solution seekers and problem solvers [19]. It is characterized as instrumental and extrinsic, that is beneficial for functional and practical queries [7]. Such values can be classified as Instrumental or Functional which can be best described as an acquisition of new knowledge, and an increase in idea creation and enhanced problem solving [6]. For example, when users ask for a handy advice in solving a dilemma related to health, careers, travel, or other issues as in Bebo Young Scot InfoLine, they are seeking for practical, utilitarian value elements. It is worth mentioning here that such a classification of value elements in DECs is novel as well as the way of categorizing these elements into *interpersonal values* (social, hedonic, and epistemic) and *informational* (epistemic, gift, and utilitarian).

Role Playing

In time, when enough members join a community, an identity for the community begins to develop. Users might evolve in terms of their participative roles in DECs where each role is distinct with its own characteristics of needs of value. Members start using a common language and as the community grows, they behave according to their intended needs. Thereafter,

roles of users become more identifiable. Some members lead discussions and volunteer information, while others follow and lurk for support and information. These characteristics, which are common to both online and physical communities, initiate the growth stage of a healthy community [3], [33]. Our ethngraphic analysis in this research explores that roles of users in DECs can be broadly classified into:

1) **Passive users** who are subjected to an action without responding or initiating in return as they flow for self-sake rather than benefiting others. In this research, *Newbie* and *Lurker* are two identifiable roles belong to this class of users in DECs.

2) **Active users** who are energetically active in terms of contribution and information sharing. In our context, users in DECs might move from one role to another, or stick to the same role for own self-beneficiary. *Novice*, *Insider*, and *Leader* are three identified roles in DECs that belong to this class of users.

However, identified roles within these two broad classes, based on the applied enthnographic analysis, are further discussed below.

Newbie

A newbie refers to a new comer in any Internet-based activity, most widely used to express newly joining, first-time users of DECs. Newbies start as being observers or over-hearers in order to grab a sense of the community. As they get more familiar with the space, they bring new ideas for discussion and their roles eventually change [10], [29]. They start indirectly by participating through watching or reading information without contributing to the community [34]. But further on, as they have the

desire to contribute, they normally become much of contributors.

Lurker

Lurkers are depicted as non-contributors, and resource-takers. This is because their main role is observing the community and viewing contents with unstructured levels of participation, and mainly no desire or intention for contributing. They actually do not add any content or engage into any discussion [29]. And if they do, they tend to engage anonymously. Lurkers are attracted to DECs because of their desire for credible information. They snoop into the community seeking opportunities to broaden their viewpoints and consume information for their own benefit. Approximately and generally speaking, they represent 80–90% of any DEC population [36]. Despite the argument of some researchers (e.g., Li et al. [25]) that lurkers are not necessarily passive participants, we agree with Nonnecke and Preece [29] that lurkers are passive actors, as noncontributors.

Novice

A novice is a relatively new member of a DEC, who is still inexperienced with patterns of participation. They are beginners who have just started to engage within the community. In other words, it is the stage that often follows being a newbie. Once they get fully engaged, they are most likely to contribute on a higher level. Based on that, they are heading toward full participation [24]. Novice users provide content and tentatively interact in few discussions, post videos, and may comment on others. Novice users as neither lurkers nor leaders and they have been once newbies or lurkers [22].

Insider

Insiders are regular participants who are fully engaged and committed to the community. They consistently add content and get engaged in group discussions. They can be

classified as experienced users as well. Their level of interaction is high and frequent. Insiders make concerted efforts to comment and rate others. They not only browse and ask questions, but respond to others' queries, engage in social interaction, and make intelligent contributions [36]. Insiders were once novices [22], but now are established in the community and comfortably participating in the community's ongoing life.

Leader

Leaders can be referred to as key or advanced users. Leaders are defined as contributors to the success and health of the community since they are in a position to spread knowledge, and thus ensure cohesiveness and consistency among others. They are the main information providers [25] as users turn to them for help and thus such users can also be viewed as community moderators. They sustain membership through continuous participation; therefore, they are recognized within the community. This type of participation is referred to as a "veteran" of a DEC [36], highlighting the fact that they are firmly responsible for making the majority of contributions in the community. The contributions of leaders signifies the main motive for lurkers to sneak around and decide to get involved [31].

Based on the aforementioned discussion, it is now more clear that users play various roles in DECs, and that behind each role lies a purposive personal desire. However, deciding which role to play might vary depending on the value elements that users are willing to recieve.

Interrelationships Between Values and Roles

The analysis conducted in this reseach reveals five value elements exchanged in DECs: a) Social (i.e., emotional, networking, self-esteem, and self-discovery);
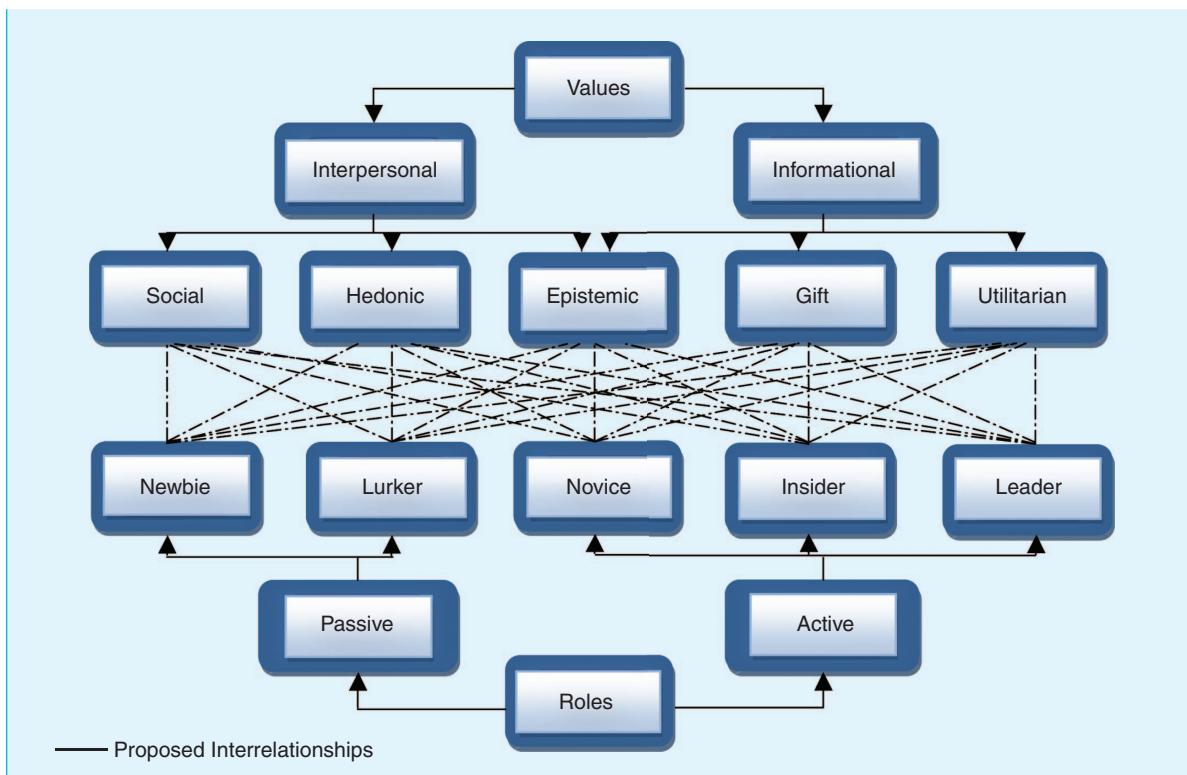
Fig. 1. Interrelationships between value elements and roles in DECs.

b) Hedonic (i.e., self entertainment); c) Utilitarian Value (i.e., instrumental values); d) Gift (i.e., free public information); and e) Epistemic Value (i.e., acquiring new knowledge). Moreover, this research reveals that users in DECs can be usefully classified as a) Newbies (i.e., newcomers), b) Lurkers (i.e., non-contributors), c) Novices (i.e., beginners), d) Insiders (i.e., regulars), and e) Leaders (i.e., experts). Interestingly, these taxonomies seem to be greatly interrelated, as graphically demonstrated in Fig. 1. From our point of view, each role is associated with certain value elements and vice versa. For example, it comes into view that lurkers might be mainly linked to gift and epistemic value elements, while leaders seem to be tightly related to social value in terms of status and self-esteem [3]. The examination of these relationships is however the next step of our research.

This study offers significant implications for both theory and practice. From a theoretical perspective, the originality of the framework proposed adds a new dimension of research in DECs, and opens up opportunities for possible extensions and amendments within this research area. This is because the current study develops a comprehensive framework classifying the potential values driving users into participating in DECs, and what they expect to be achieved as a result. This study develops an inclusive categorization of the various roles adopted by users of DECs. From a practical perspective, this research provides important insights for:

a) *Service Providers* in identifying their audience and knowing whom they are serving. Furthermore, the results of this research is deemed fruitful in building strategic plans for a sustainable healthy community, where participation and engagement is continuous, and accordingly, where policies and regulations might need reengineering for the sake of supporting members;

b) *Content Managers* in better directing the content plans, content creation, and the overall flow of the community;

c) *Users* where they can exactly know which benefit and value element they would satisfy when acting upon a certain role and vice versa, depending on different situational factors accompanied by every person; and

d) *Developers*, as the results of this research inspires them in knowing and meeting the exact needs of members according to their different behavioral roles, taking into consideration the differences in terms of value elements affecting their behaviors. This is important for developers as they are responsible for the technical aspects of the community, which indeed affect its useability and effectiveness.

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