

Encouraging residents to take social ownership of an online community network through Participation, Animation, Design

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Abstract

Online community networks are designed to supplement residential communities in an effort to revitalise and grow neighbourhoods, but they are challenged in times of networked individualism. Recent research has shown that (a) connectivity alone does not ensure community, and (b) new and weak communities do not benefit from community networks as much as existing and strong communities do. This paper proposes a model combining Participation, Animation and Design (PAD) to encourage residents to take social ownership of the community network. The aim is to support personalised networking and to create intrinsic motivation for residents to realise that their engagement in the community network is not additional work, but a way to improve their quality of life by establishing a community culture and community identity. The proposed model integrates systems design with community development and is currently being implemented and tested in an apartment complex comprising approximately 160 tenants in Brisbane, Australia.

Connectivity does not ensure community

Online community networks are being developed and deployed to supplement residential communities in an effort to revitalise and grow neighbourhoods and to answer Putnam's call for a revival of civic engagement and local community identity in society (Putnam, 2000). Yet, the ubiquity of the internet enables and encourages users to pursue 'personalized networking' (Wellman, 2001) which leads to the emergence of private 'portfolios of sociability' (Castells, 2001). The 'community question' whether we still need actual neighbourhoods in times of networked individualism remains to be answered. Community networks compete with potentially more attractive globally dispersed online communities that can provide a more specialised, on-demand, current, dynamic and comprehensive interest-based pool of information and interactivity.

The unique selling proposition that gives residential community networks their rationale for existence is proximity (cf. Walmsley, 2000). Community networks allow residents to interact online and to take and continue online interaction offline, in real life and face to face. This offline and place-based dimension introduces challenges to the design, development and rollout of online community networks. Reaching a critical mass of users is considered to be the key criterion of success (Arnold, Gibbs, & Wright, 2003; Patterson & Kavanaugh, 2001) and has been reported as one of the most common stumbling blocks: "If you build it, they will not necessarily come" (Maloney-Krichmar, Abras, & Preece, 2002: 19).

However, other studies (Carroll & Rosson, 2003; Foth, 2003) have shown that a critical mass of interconnected users alone is not sufficient for a community network to live up to higher expectations such as increasing social capital in the community, fostering sociability and establishing community identity: "Those geographic communities already rich in social capital may become richer thanks to community networks, and those communities poor in social capital may remain poor" (Jankowski, Van Selm, & Hollander, 2001: 113), or simply put, "connectivity does not ensure community" (Blanchard & Horan, 1998: 302). Something else has to be done.

Uslaner (2000: 60) claims that "the Internet neither destroys nor creates social capital", people do, and Putnam (2000: 180) argues "that the Internet will not *automatically* offset the decline in more conventional forms of social capital, but that it has that potential". So how can this potential be realised with community networks in the face of networked individualism?

This study starts out to explore those issues guided by two key research questions:

How can members of a residential community participate, influence and be integrated into the design process of online community networks in order to take social ownership of those networks?

In what ways can community members be animated and motivated to accept and use online community networks for their individual benefit and the benefit of their local neighbourhood community?

The PAD methodology: Participation, Animation, Design

An online community network is only successful and can only live up to its higher expectations if a critical mass of active users is reached and maintained. A critical mass of users can only be reached if residents realise the community network's potential to improve their quality of life. They must not regard their involvement and participation in the community network as additional work that is forced upon them by external stakeholders. Instead, the aim is to create intrinsic motivation for residents themselves to realise from the bottom up that the community network

can be a social, engaging and fun way to communicate and interact with other residents of their choice.

For residents to realise this potential, the community network has to be developed and deployed in a way that allows them to take social ownership of the project and the resulting community network, that is, to participate in and influence the design process, to actively engage with other residents in decision making during and after the project, to share responsibilities, and to represent their explicit and tacit experience, attitudes, interests and support needs online and offline. Thus, the project has to be owned and driven by the residents themselves.

Within an academic framework, action research lends itself to the task of conducting a rigorous study while encouraging residents to participate in the project. As the name suggests, action research is a combination of action and research. The imperative of an action research project is not only to understand the problem, but also to provoke change. Action researchers argue that the quality of an action research project is thus not only established and assured by conceptual and theoretical advances, but also by practical results and achievements in the field that actually solve the problem at hand (Checkland & Holwell, 1998; Dick, 2002; Reason & Bradbury, 2001; Wells & Horan, 2001). Action researchers must go by definition beyond mere observation and description and towards immersion with the subjects under investigation in order to connect with them and encourage them to directly participate in the project as co-investigators. This is seen as a democratic and even ethical imperative (Reason, 1998).

Action research is operationalised by constant cycles of planning, acting, observing and reflecting. The data and knowledge which advance the study are aligned with the phase of planned action which benefits the community by giving them the opportunity to act upon the existing findings and by taking social ownership of the project through participation and engagement. This approach which regards subjects and researchers as equally valuable, is especially suitable within the context of designing community networks, because processes and outcomes are usually not predictable in a deterministic way and often involve fuzzy and emotional human parameters. The field of ICT and digital media is highly technical, thus action research principles are needed to embrace social factors and community values (Hearn & Foth, forthcoming).

Figure 1 illustrates the project stages involved in the PAD methodology. After the initial phase of immersion in Stage I, the model integrates systems design (indicated on the left) with community development (on the right) in Stages II and III. Participatory design methods are utilised to *create* the network, to provide *access* to information and to ensure *usability* within the context of human-computer interaction, whereas sociocultural animation is employed to *populate* the network, make *use* of information and to improve *sociability* within the context of social ties and human networks. Stage IV adapts principles of viral marketing to maintain and build upon a critical mass of active users and to establish a neighbourhood culture that strengthens the online community network, so “it becomes an institutional actor with

relationships to other community institutions, as well as to individuals and their groups” (Carroll & Rosson, 2003: 384). The model closes with a project evaluation in Stage V.

The following part of the paper explains each stage in more detail.

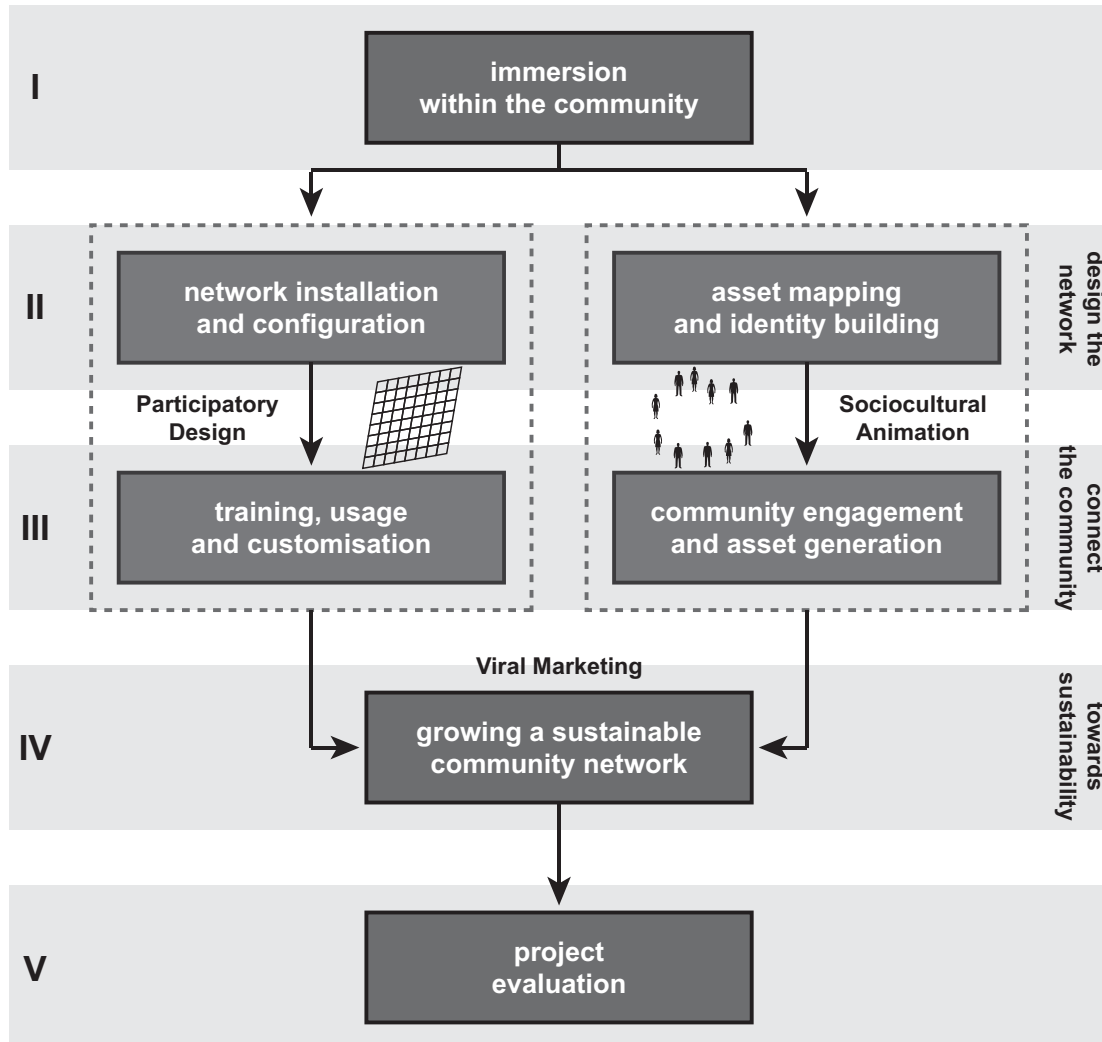


Figure 1: Project stages of the PAD methodology

Stage I: Immersion

To initiate the project, ethnography lends itself effectively to the immersive phases of the project where the goal is to establish an awareness for and knowledge of the existing communicative ecology of residents by identifying stakeholders and leaders, mapping and establishing relationships, contextualising information needs and building trust with community members. Howard (2002: 569) rightly points out that “qualitative methods tend to be best for generating theory and quantitative methods tend to be best for testing theory”. In this sense, the qualitative nature of ethnography proves to be very appropriate for generating a rich understanding of the community’s characteristics during the initial project start-up phase which is necessary to

prepare for and inform the forthcoming systems design and community development phases that happen simultaneously in Stages II and III.

By utilising an ethnographic action research approach (Tacchi, Slater, & Hearn, 2003), the study encourages community participation and will thus benefit from capturing a maximum of both explicit and tacit knowledge sources (Alexander & Stevens, 2002; Polanyi, 1966) which is a strategic advantage in designing a better community network. In return, the initial ethnographic immersion in the community also eases the network introduction at the end of the development phase, for the local support from the community through intrinsic motivation, experience from previous engagement and participation, and the joint definition of the project's objectives support a simplified process of network rollout and acceptance.

After access to the community is secured through administrative procedures (such as ethical clearance and the approval of the on-site manager, body corporate or similar stakeholders), the project and thus the idea of a community network will be introduced to the residents. This has to be achieved in a manner that does not evoke thoughts like 'this looks like work', but instead highlights the opportunities and the potential the project offers to the community and to the individual resident (Andrews, Preece, & Turoff, 2001; Maloney-Krichmar et al., 2002). The first impression is important and should thus be personal but not frightening or overwhelming. A personally addressed information package will be circulated which describes the project in lay terms and in a flexible open-ended manner, so creative space is left for community members to create their own vision for the project. The project's aim is to facilitate the creation and realisation of the vision, not to prescribe it.

Moreover, participation is voluntary and community members are asked to give their consent if they would like to be part of the project. The consent form will be combined with a baseline survey to gather preliminary demographic and statistical data as well as to invite participants to leave any first comments and feedback.

This recruitment process to enlist active participants in the project is followed by further efforts to build trust and to identify themes that help in understanding the current situation of the community. For this phase, convergent interviews (Dick, 1998) are a suitable method to elicit a deeper insight into the inner workings of the community, its problems, challenges and opportunities. Depending on the number of volunteers, potential interviewees can be selected using maximum variation sampling (Patton, 1990) which ensures that a variety of views and opinions are considered.

The initial contact with a selected number of participants is essential not only to identify common issues and themes in the community that will guide and inform the next phase of targeted research, but also to discover those residents who have the long-term motivation and social leadership skills to become the *'keeper of the vision'*. They will also be employed later in the process (Stage IV) to spread the project idea further.

The knowledge generated thus far, a map of the communicative ecology consisting of research themes and community relationships, can be incorporated into a rich picture (Monk & Howard, 1998) which informs the design of the network in Stage II.

Stage II: Designing the network

Figure 2 illustrates that, initially, the identity of a residential community – which may be solely based on a common suburb, street or building – is far from sufficient to form a neighbourhood community in Tönnies' (1887) sense of 'Gemeinschaft' which includes places that "evoke memories, help members reinterpret their memories, and come to signify the values, achievements, and social richness of the community" (Carroll & Rosson, 2003: 384). This is a quite utopian perception of community. Nevertheless, I argue that a community network can still be a significant and useful tool in contemporary society gripped by individualism and privatisation of leisure time (Blanchard & Horan, 1998; Castells, 2001).

Instead of chasing a romanticised and long lost picture of community – which may resemble 'Hobbiton' in 'The Shire' (Jackson, 2001) – it is time to acknowledge a trend towards new forms of community and sociability which Wellman terms 'personalized networking' (Wellman, 2001) or 'networked individualism' (Wellman et al., 2003). Instead of trying to face-lift online community networks by incorporating virtual models of place or by fixating efforts to make everybody love everybody in the world, it is time to cater for and serve the needs of individual residents and their social networks. A community network can be one tool within the toolbox that individuals access to maintain their social networks, alongside and possibly interconnected with email, phone, SMS and face-to-face communication. The objective is to design a community network which includes features that allow residents to conduct personalised networking. The community network complements the physical community space and thus supplements the community, and provides access to *proximate* members – compared with other tools, this is a unique advantage. Reaching a critical mass of users is crucial, for residents expect the community network to present them with choices of who to contact or which group to communicate with.

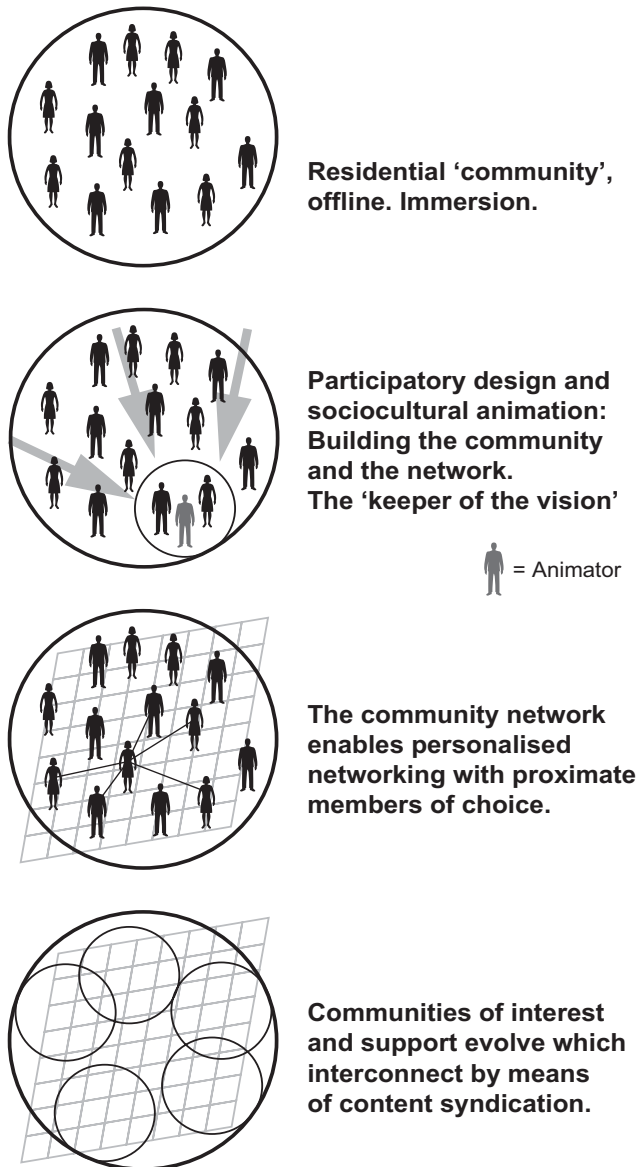


Figure 2: PAD enables personalised networking and communities of interest to evolve

Hence, Stage II will not only initiate the participatory design process to develop the technical and interface aspects of the community network, but also engage in sociocultural animation to attempt to map existing and create new real-life social networks between residents based on their individual interests and support needs. The community network must allow for a flowing, cellular, organic lifecycle of those small sub-communities (or clubs, groups, cliques): they are born, they grow, they connect, they disconnect, they pause, they merge, they split, they die.

The prevailing methods in this stage are in-depth interviews, workshops and group discussions. This phase of the project and its methods are informed in general by participatory design principles (Botero Cabrera, Oilinki, Kommonen, & Salgado, 2002; Büscher et al., 2002) and in particular by the Design Studio Methodology and the Digital Places Design introduced by Horan and his colleagues (Blanchard & Horan, 1998; Horan, 2000; Wells & Horan, 2001).

The online community network itself may take the form of an intranet that includes a variety of tools such as chat, instant messaging, web blogs, discussion boards, file sharing areas, and so forth. Usually, community projects have to be undertaken with certain financial and technical constraints in mind. It is therefore unlikely that a community will have the time, power and resources to develop and program the required communication products themselves from scratch. However, in such a situation it is worthwhile to select from a plethora of open-source solutions which are available free-of-charge on the internet, offer high levels of customisation, and fulfil most communication needs (cf. Bashaw & Gifford, 2004).

The selection of an appropriate set of tools will be guided by the work of Preece (2000; 2003), Powazek (2002) and Wilcox and his colleagues (2002) and the needs of the residents identified in Stage I interviews and Stage II workshops, design studios and design charettes. The task of the researcher is to facilitate the installation and configuration process. Thus, the technical expertise of the researcher can be seen as an interface for the community which enables them to design and set up the network according to their requirements without the need to acquire in-depth IT skills themselves.

The two most important aspects of Stage II are community identity building and community asset mapping (Pinkett, 2002). The design workshops provide opportunities for avid community members to gather as a group, to discuss ideas, share stories, and report their experiences back to their friends and other tenants. They also establish new relations with members they have not met before. They are encouraged to accumulate a library of community assets and resources and flag areas in need of improvement and expansion. Overall, the participatory design of the online network has the significant 'side-effect' of activating and increasing social capital even before the online community network is operational by forming a community of builders.

Stage III: Connecting the community

At this stage, the online community network is set up. The next step is to fill it with content relevant to the community and to populate it with residents. Similar to Stage II, methods based on in-depth interviews, workshops and design studios but also social events will be utilised to connect the community with the network. This process will show community members how to use the network to connect with other members of the community who share similar interests or support needs or simply, who they 'like'.

The main goals in Stage III are to reach a critical mass of users online (Fulk, Flanagin, Kalman, Monge, & Ryan, 1996; Markus, 1990; Patterson & Kavanaugh, 2001) and to start taking the project idea from the initial pool of volunteers to the whole of the community. Already starting at Stage II, the researcher takes on the role of a sociocultural animator (Doneman, 2003; Grosjean

& Ingberg, 1974) who encourages and trains community members in how to use this new online communication tool to conduct 'personalized networking', how to communicate with other members and how to benefit from it personally. According to the ongoing usage and the input from residents, the community network will further evolve and be customised to reflect the needs of the individuals and their social networks.

The findings of the asset mapping exercise from Stage II will be fed into the online network to publish information about existing resources and facilities that are available to the community, thus creating value online in the form of helpful content to attract users. This step will also be used to identify desirable assets which have not been substantiated yet, but which can be generated by dedicated community members. The animator will work to engage other community members to use and contribute to this pool of assets in an effort to introduce norms of reciprocity towards continuity and sustainability of the community network and the community.

Stage IV: Towards sustainability

By now, the sociocultural animator holds a range of responsibilities such as training new users, engaging the community to contribute content, encouraging discussion and social activity within sub-nets, and so forth. If a state of ongoing sustainability is to be reached, the animator must aim at retreating from the online network and the community by rendering their role progressively redundant (Flynn Thapalia, 1996).

Hence, the key objectives at this stage are to manifest a community culture or spirit within each sub-net which nurtures a stable and robust community identity and ensures the continuity of the community network. Even if the community experiences a high turnover of its members, procedures are to be in place which allow new members to freely select from a range of sub-nets linked to the community network and to enter the ones of their choice. Elements of viral marketing (Godin, 2001; Goldsmith, 2002; Perry & Whitaker, 2002) will be adopted to encourage existing residents to tell and sign up new residents. These principles are assisted by features of the community network itself, such as 'Email this page to a friend', 'Send this photo as an e-card', 'Recommend us', as well as content syndication and track-back components (Hammersley, 2003).

Furthermore, the previous range of face-to-face project interactions as part of interviews, workshops and design studios, which also promoted trust and identity building, should now evolve into less formal but regular social interactions face-to-face (e.g., group excursions, BBQs, games, coffee chats, sports, birthdays, club meetings). This will hopefully lead to an interconnected web of individual sub-nets which makes up the community network.

During this stage, the animator has to ensure that any areas of responsibility and any continuing tasks that are left from the previous stages of the project are delegated or allocated to suitable members of the community, so the animator can finalise the research aspect of the project in Stage V without interfering with the ongoing activity within the community network.

Stage V: Evaluation

The action research paradigm applied throughout the previous project stages requires an ongoing dedication towards evaluation and testing. Nevertheless, the last stage of the research aspect of the project involves a final and holistic evaluation (cf. Lennie & Hearn, 2003). The applicable methods include the analysis of online network usage statistics over the life time of the project and a qualitative comparison between the data from the pre-assessment in Stage I and the post-assessment of Stage V (Pinkett, 2002).

The network and membership statistics provide quantitative data on aspects of content growth, online traffic, levels of uptake, and frequency of use, and are helpful to determine whether

- the online participation is in relation to the size of the offline community, (and how many users prefer to remain 'lurkers',)
- certain areas online are in higher demand than others,
- a critical mass of users has been reached or exceeded, i.e. overall and in sub-communities of interest and/ or support.

The results of this quantitative analysis will be verified and completed via qualitative data collection that consists of questions which refer to the research themes elicited in Stages I and II, including themes such as:

- social capital (trust, norms of reciprocity, networks),
- community identity and social ownership of the network,
- formation of communities of interest and/ or support,
- awareness of community assets and resources,
- community engagement and involvement,
- ability of the community network to support and advance individual's private social networks.

Summary and conclusion

The paper contributes to the knowledge base and direction of community informatics research (e.g., Day & Schuler, 2004; Gurstein, Menou, & Stafeev, 2003) in general and the use of ICTs for residential communities (e.g., Wilcox et al., 2002) in specific by introducing the PAD methodology to design online community networks that support personalised networking. As well, it follows on from recent studies into community networks that identified issues of resident engagement and reaching a critical mass of active users (e.g., Arnold et al., 2003; Carroll & Rosson, 2003; Foth, 2003).

Based on ethnographic action research (Tacchi et al., 2003), the proposed methodology combines principles of participatory design, sociocultural animation and viral marketing in an effort to integrate systems design with community development. To identify challenges and limitations, the model is currently being implemented in an apartment complex comprising approximately 160 tenants in Brisbane, Australia. A second case study is currently being prepared to test the model in a different environment and to support its transferability. Findings of these two case studies will be published elsewhere.

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