

# Wikiplanning™: the virtual design charrette

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## Abstract

If sustainable development is to be supported by policy makers, than they need to be able to hear from a more diverse audience than the small number of people who typically attend public meetings or design charrettes and whose self-interest and NIMBYism (Not In My Back Yard) sometime outweigh their ability to have a broader perspective. Wikiplanning addresses that challenge. It is an online method created to increase the quantity, quality and diversity of civic engagement in the community planning process. Its intent is to recreate the typical design charrette or public meeting in a virtual environment using the interactive platform of Web 2.0. To test the methodology, architecture and geography students at the University of North Carolina at Charlotte (UNC Charlotte) utilized virtual social networks, blogs and online surveys to solicit feedback from the campus community about the university's master plan update. This paper reports on the findings relative to the evaluation of the methods, the bridging of the digital divide in civic engagement, and the discovery of a very limited number of online applications that offer alternatives to the traditional design charrette.

*Keywords: charrette, web-based technologies, online collaboration, urban design, civic engagement.*

## 1 Introduction

Local, state and national governments can adopt policies that support the development of more sustainable cities. However, when that occurs, it is often due to the efforts of a handful of enlightened leaders rather than being the result



of a grassroots or neighborhood effort. Sustainable development often requires an allowance for increased densities and a mix of land uses, investment in mass transit, and a designation of urban growth boundaries, all of which are controversial measures to landowners and taxpayers. Consequently, sustainable practices are often opposed by the general public, or at least, by the people motivated enough to attend public meetings or design charrettes.

Supporters of sustainable practices, content with the decisions made by their more forward thinking elected leaders, are often silent in their agreement, and seldom in attendance at public meetings. Few of them have patience for the naysayers, or an interest in hearing their uninformed comments. But the public absence of sustainability policy supporters, can lead to a misreading of public sentiment, and ultimately, a lack of accountable, government action.

If sustainable development is to be supported by policy makers, than they need to hear from a more diverse audience than the small number who attend public meetings. They need to hear from more than just the immediate property owners, whose self-interest sometimes outweighs their ability to have a broader perspective. That is an especially difficult challenge given the primacy of gathering public comment through public meetings and design charrettes.

Urban planning activities in the United States are undertaken through a model in which public-private collaborative partnerships are prioritized and the voice of citizen participation is strongly heard [2]. The design charrette is a type of interactive community meeting where attendees are immersed in a participatory format. Such charrettes typically involve intense, multi-day meetings, and include municipal officials, real estate developers, and residents, in addition to the urban designers themselves. A successful charrette includes an educational component, promotes collaboration and joint ownership of solutions, builds consensus and attempts to defuse typical confrontational attitudes between residents and developers and/or municipal planners.

However, the traditional charrette process has several characteristics that are counterproductive to the ultimate goal of inclusive community planning and urban sustainability. The very nature of the process requires the assemblage of many professionals from all sides of the project, and frequently for multiple sessions. Not only does this result in high professional fees, but also the added expense and use of energy for transportation, and the printing and eventual waste of large amounts of paper.

The other problem with design charrettes is the lack of diversity within the residents who are present at community meetings. Frequently, only a small group of residents attend, and in the case of a multiple meeting project, it is largely this same group of *civically obsessed* citizens who continue to be engaged. Involvement of only a small group may not offer a good representation of the community as a whole, for which the process strives. Pippa Norris in *The Digital Divide* cites numerous examples of how those on the periphery of civic engagement (via racial inequality, gender, age, disability, and socio-economic status) are often still excluded from citizen participation [6]. While there are well documented disconnects between these groups and their ability to utilize



electronic resources, an intuitive user platform could bridge the gap between government and those who remain on the outside of public discourse.

The concept of Wikipanning is an integrated approach utilizing existing online technologies to complement/ replace the traditional community design charrette. By employing a user-friendly interface that takes cues from the successes of various social networking sites, Wikipanning utilizes multi-media learning sessions, online chat events, blogs, and online surveys. These functions offer the desired objectives of a typical design charrette: to teach, discuss, gather input and build consensus. Wikipanning takes all of the best from the traditional process, and makes it more accessible, in a shorter period of time, and at a substantially lower cost in terms of both money and energy, assuming of course, that the Internet is widely available.

In recent years, access to the Internet has become more widely available. According to the Pew Internet and American Life Project in 2007, 70 percent of women and 71 percent of men in America used the Internet. Also, 73 percent of urban and 70 percent of rural residents not only had access to, but also took advantage of its features and benefited from its resources [3]. The use of the Internet by the masses has placed people in contact with one another more than ever before through email and online social media. No longer does the traditional one-to-one paradigm limit interaction between people or groups [4].

As more people become connected, the flow of information has increased. Any person who has access to the Internet can post information on a webpage. This has led to the creation of wikis, sites that allow Internet users to post and edit content on a given topic, as they do with the online encyclopaedia *Wikipedia*. The user-moderation of these sites has resulted in their ability to be strikingly accurate and to be utilized as a means for interaction among participants.

In addition to wikis, the formation of online social networks has also fostered the spirit of collaboration and the flow of information at a smaller, though often more effective, scale. The sites *mySpace* and *facebook* are extremely popular with 43 million and 8 million users in 2006, respectively. These sites offer users the ability to post a profile showcasing their interests through lists of favorite books, movies, activities, etc. The sites also have a blog feature which enables the user to post thoughts, ideas, and stories. Users are able to form online friendships and can further communicate by visiting each other's personal profiles. *mySpace* and *facebook* users can also form event and special interest groups that allow members to further communicate through a common profile and mailing list.

Communication that began on social networks often continues via on-line, real time blogs. Sites such as *Blogger* and *Live Journal* allow individuals to post ideas, photos, stories, or even rants which any Internet user is able to view. These sites are open ended, allowing for a limitless variety of topics. The sites' formats offer the ability for others to post feedback to any particular post in the form of a comments dialog box. Many creators, however, experience one-sided output with very little input from others. Even with very little input, users continue to post information, seeing the site as a means of expressing their ideas.



Other sites, such as *Meetup*, allow the formation of special interest groups, whose members may choose to meet in person or online through mailing lists and message boards. These sites reach a wide number of people and are able to gather support for local interests. A fee is required to start a group, which can be a limiting factor, but helps to serve as a gatekeeper, insuring that only individuals fully invested in leading a group will start one. A *Meetup* group could, however, be a successful tool in directing users to a common interest website.

Websites formed around a common interest, for example *urbanplanet.org*, which focuses on a variety of topics related to cities around the world have proven to be very successful in their ability to promote collaboration and communication. Such sites are created for a specific purpose and draw together a group of individuals with a common goal. They offer not only forums for discussion, but general information helpful to the group.

## 2 Civic engagement in the digital world

In their 2000 book, *Community Networks: Lessons from Blacksburg, Virginia*, Cohill and Kavenaugh acknowledge the perception of some that there has been a loss of human contact with the Digital Age. However, they see the two as merely coincidental. Instead, they suggest that there is more conversation and collaboration between people than ever, as evidenced by the rise of virtual (online) social networks [7]. Upon the advent of Internet chat rooms and blogs, online collaboration has become a reality. As Fine illustrates in *Momentum*, "Once people could talk together online, it was only a matter of time before they wanted to work together." Through email and online social media, the ability for people to talk to each other has become the norm. No longer does the one-to-one paradigm limit interaction between groups or within the democratic civic realm, that ultimately relies upon participation and engagement [4].

There is, however, a limited amount of literature exploring the Internet as a tool for civic engagement as the basis for community design and planning. Perhaps that is due to a belief in the need for traditional face-to face interaction. This interaction takes on greater significance when combined with the communication revolution: many-to-many communication. The advent of new communication technologies has bridged spoken and written language; compression of time and space allows a rapid exchange of ideas while at the same time, maintaining a record of public communication [5].

The Okinawa Charter was one of the first international acknowledgements of the potential of new technologies in civic engagement. The purpose of the document, adopted by the governing bodies of the G-8 at their 2000 Summit in Okinawa, Japan is to establish a means by which the digital divide can be eliminated. It states that the goal of an information society is to foster social cohesion while striving to strengthen democracy and increase transparency in accountability in governance [5]. The accessibility of the core institutions of government within the digital world provides the framework in which individual citizens are provided opportunities to participate online [6].



A 2004 study prepared by the Pew Internet and American Life Project stated that “civic involvement will increase substantially in the next 10 years, thanks to the ever-growing use of the Internet.” [3]. That being the case, it seems reasonable to expect that urban planners would seek to find methods to exploit the Internet in their shared and recognized goal of civic engagement. “Increasingly, urban planning activities in the United States are undertaken through a model in which public-private collaborative partnerships are prioritized and the rhetoric of citizen participation is strongly echoed” [2].

Increasing numbers of people are engaging in virtual social networks for community participation. This is true in geographies of all sizes and socio-economic status. Cohill and Kavanaugh were early pioneers in exploring this phenomenon and the Internet as a means for civic engagement. They focused their investigation on Blacksburg, Virginia, a small city of 40,000 in the Blue Ridge Mountains of the American South. Their work initially centered on the creation of the Blacksburg Electronic Village, and eventually resulted in a dramatic rise of online networks as a virtual tool to link government and its citizens [7].

The Blacksburg Electronic Village network was formed at the level of the local government and serves to connect citizens through the use of email (one-to-one contact), electronic mailing lists (one-to-many contact), and message boards (many-to-many contact). Users may also download notes and video recordings from various town meetings. Cohill and Kavanaugh report that the most successful outcome of the Blacksburg Electronic Village has been its ability to connect citizens on a variety of levels. Through email, citizens are able to maintain close contact with friends and town leaders. Through special interest sites and their subsequent mailing lists, people are able to remain informed of local concerns and events. Through message boards, local eateries, car repair shops, and a variety of other topics are discussed, drawing on the knowledge of many to compile information. As a result of this virtual connectedness, citizens are made aware of community events and subsequently, group enrollment and physical attendance at public meetings has increased [7]. Since the publication of Cohill and Kavanaugh’s book entitled *Community Networks: Lessons from Blacksburg, Virginia*, the city of Blacksburg has a new website, [www.blacksburg.gov](http://www.blacksburg.gov) which has all of the features of the Blacksburg Electronic Village in a cleaner, more user friendly format. The technologies used, however, are very basic early-Internet methods and the city does not benefit from the full extent of interactive technologies now available.

Another method of web-based civic interaction being utilized by government is public participation geographic information systems (PPGIS). Geographic information systems (GIS) are computer-driven mapping tools that allow large amounts of spatial data to be viewed separately or in combined layers. Spatial data routinely used in GIS ranges from current and future land use to crime hot spots and the demographic makeup of a particular area. PPGIS “explores the issue of equitable access and use of GIS and spatial data among traditionally marginalized citizens, in order to facilitate effective citizen participation in inner-city revitalization activities” [2]. Knowledge is power and PPGIS allows citizens



equal access to decision makers and the data they use to shape their thinking. In Milwaukee, Wisconsin, a city of 600,000 approximately 90 miles north of Chicago, PPGIS has been utilized to assist residents living in the city's economically-challenged and blighted neighborhoods in more quickly identifying problem properties and absentee landlords. Being able to both gather and map that information has given residents of these areas a stronger argument in and louder voice before decision makers when seeking support for change and their share of local resources.

Providing individuals input into shared issues is not limited to public agencies. *Neighborhood America* is a private on-line company that seeks to leverage web and mobile technologies to create a sense of collaboration and community. They provide the infrastructure to manage such projects, enabling the sorting and archiving of documents, data, and community input. Though born out of a corporate rather than municipal structure, their website includes several articles and videos that outline key issues in using web-based technologies for civic engagement [8]. They also cite examples in their bridging the public-private divide and their growing and creative successes at civic engagement. For instance, following the September 11, 2001 terrorist attacks on the United States, *Neighborhood America* helped create the web-based Flight 93 memorial design competition. On the website, design entries were posted and users were able to provide feedback in a discussion-based format, which was then taken into consideration by judges of the competition.

Similar successes are cited by Dibya Sarkar as she describes how the web has been effective in bringing together government and citizens in her article, "Disasters in the Internet Age." She explains how connections between people aided in the rebuilding of New Orleans, USA following Hurricane Katrina. In this and other disasters, the web enabled people to post comments, memories, and photographs, and was able to facilitate the sharing and reception of information. Following Hurricane Katrina, many of these similar sites popped up, including a Katrina-Help wiki that users could add to, update and correct. Sarkar states that users of the site report that in many ways, it was stronger and more reliable than any government source, because the content was far more dynamic. Because sites such as this enabled communities to connect immediately following the hurricane, the process of rebuilding was also enriched. As it stands, the infrastructure remains in place in the form of a web-based community to launch discussions regarding growth and plans for rebuilding the physical community [9].

Other possibilities for web-based input include posting content related to a point on an aerial map, such as stories about a house or place. Over time, a history of that place is built and recorded for all to see [9]. Sites such as these point to a greater willingness of the public to participate in online community activities.

In addition to the services listed above, several other sites exist that offer a similar concept to Wikipanning with a bundle of on-line engagement opportunities. *ZebraLog* and *PlaceMatters* are interactive websites that utilize online learning networks and community blogs to enhance the planning process.



In addition to online technologies, *PlaceMatters* uses an e-meeting format at its public meetings where participants utilize electronic keypads to input data and cast votes on issues. This data is then rapidly processed and posted on a screen for attendees to view and is made available to the public and posted online after the meeting [10]. While this technology is certainly beneficial and makes use of technology, it still requires a physical meeting to be scheduled.

*Planetizen* is a site that, primarily through blogs and podcasts, allows users to discuss issues of planning and development. The site lists the top ten planning, design and development websites of 2008. One of these sites is *RethinkCollegePark*, a project that utilizes a blog to post comments and multimedia content, as well as an interactive development map of the proposed revitalization of College Park, Maryland, USA. This site has been successful in the sense that not only are the postings current, but that visitors to the site have made comments to it as well [11].

### 3 Case study

The concept of Wikipanning is to bundle and integrate existing online technologies to allow for increased civic engagement in the community planning process. The individual components of Wikipanning were tested in the fall of 2007 when students enrolled in an Introduction to Urban Design class at the University of North Carolina at Charlotte were asked to gather input from their peers for the campus master planning update process.

Four existing web-based applications were utilized in the class over a 12 week period. They included web-based social networks (*facebook* and *mySpace*), blogs, and online surveys. All were investigated independently of each other as a means of testing their individual viability. The concept of Wikipanning, using all of the existing applications utilized by the class in one cohesive unit, was not tested.

While over half of students used *facebook* or *mySpace* as a means to connect to the campus community, results were widely varied. One student created a *facebook* event and extended 100 invitations to friends directing them to an interactive blog outside the application's domain. After complaints arose from respondents' difficulty accessing the blog, the student eliminated it completely and requested that people write directly on the *facebook* event wall. By changing the method midway in the project, the student lost many respondents in the process. Of the 49 people who joined the *facebook* group, none posted comments on the site. Conversely, three other students teamed up and created a *facebook* group about the master plan update with impressive results. With 125 group members by the end of the project, their *facebook* group had gathered over 75 responses (sometimes in the form of heated exchanges between members). This more successful team took their roles as moderators seriously by guiding conversation when it strayed from the issues at hand. Topics suggested by the student moderators focused on all aspects of the master plan update: pedestrian access and safety, sustainable building techniques and architecture, design guidelines, parking for automobiles, and public transportation. The group also



posted photographs of collegiate architecture across North America and Germany for use as visual prompts to discover group members' likes and dislikes.

Another group of students utilized a web-based survey tool (*Survey Monkey*), but noted problems with the survey engine's interface, suggesting that from a purely functional point-of view, the engine was not an effective tool because it had slow-response and loading time. This, they surmised, resulted in few participants. Although the service from this online application was free, there was little flexibility in the products offered. It also lacked the ability for the facilitator to effectively design a survey that allowed for meaningful results.

Still, much of the students' research revealed similarities relative to the effectiveness of using on-line tools to increase civic engagement. The following seven tenets summarize the lessons they learned in their work.

**3.1** It is critical to understand who the audience is and for the audience to know the convener. Participants need some measure of authenticity if they are to engage seriously in the exercise.

**3.2** Design of the website and how it relates to the chosen audience is important. The audience needs to be able to easily understand what is being asked of them and how to respond within the confines of the application being used.

**3.3** Project goals must be outlined and clearly communicated. Student research showed that when subjects were aware of the end-result goals and why they (specifically) had been chosen to participate, there was a marked increase in response.

**3.4** Catchy titles don't guarantee results. Simply coming up with a clever title for blogs and other forms of web-based collaboration that seek discussion on the subject matter does not guarantee visits to a website or that respondents will create a dialog within it.

**3.5** When utilizing online surveys, clear and concise questions draw a better response. A focused survey group is more effective for both the facilitator/moderator and participants. Fields for open-ended responses offer greater flexibility for participants to stray from the survey topic. These responses, however, can shed light on underlying issues that may be discussed in greater depth utilizing a blog format.

**3.6** When using a blog or social networking sites, provide impetus for and guide the conversations. When participants stray off-topic or become belligerent, attacking an opinion different from their own, the role of moderator is crucial in both steering the dialog back to the topic at hand and diffusing the impact of inflammatory remarks.

**3.7** Continued engagement requires positive reinforcement. While the role of the facilitator/moderator is an important tool to guide conversation and dialog, being too demanding of the audience can backfire. Instead, the positive reinforcement of ideas presented by respondents gives them a feeling of empowerment and thus, they are more apt to return to a conversation and remain engaged in the process.

Kim Patrick Kobza, president and CEO of *Neighborhood America*, has written several articles outlining some key issues in on-line civic engagement





that echo the students' findings. He emphasizes that e-government should not be limited to email communication, but should employ a variety of methods to gather data and to allow for collaboration. He asserts that in order for a web-based project to be successful, it must be seen as a web-based system rather than simply a website. He also discusses the challenges faced with blogging; while the process allows a wide range of topics and input, Kobza agrees that it can become open-ended and it is often very difficult to moderate [12]. But he agrees that there is still enormous value in the creation of that conversation, as long as it is understood not to be prescriptive. The purpose of civic engagement is to inform the public process and ultimately to increase social capital. It is a very subjective process and should not be mistaken for the equally weighted and absolute process of voting.

#### 4 Conclusion

To support the development of more sustainable cities, policy makers must hear the impassioned voices of NIMBYism within a more balanced and diverse chorus of citizens. Wikipanning allows that to occur and serves as an integrated solution for civic engagement. While its format may be new, its components are not. By utilizing an intuitive, user-friendly interface, Web 2.0 technologies can be woven together to provide a rich and engaging experience by which members of a community can come together and have an active and integral role in the planning of a local project.

In urban planning, the charrette has become a widely accepted technique for urban designers to gather community input and build consensus. However, the traditional charrette process has several characteristics that are counterproductive to its ultimate goal of civic engagement. For many communities, charrettes are prohibitively expensive, and public participation is extremely limited. Frequently, only small groups of residents come to these meetings, and those who do attend are often very similar in race, age and gender. They rarely represent the community as a whole, for which the process strives, and their comments are sometimes slanted with their individual biases.

Wikipanning serves as an additional tool that planners can use to address the problems inherent within the traditional charrette process. It may help to negate the issues of time commitments, economic costs, physical documentation, and energy usage that often limit participation. As evidenced by the case study at the University of North Carolina at Charlotte, Wikipanning can be used to complement the traditional community design charrette. But in order to be successful at engaging a community in a common dialogue, the process requires careful planning and understanding of the technologies being utilized.

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