Navigational and Representational Applications

Navigational and representational applications allow citizens to take a virtual tour of these business districts. From a design/planning perspective, this application facilitates virtual walk-throughs, akin to a conventional site visit. Using a conventional point and click user interface, users walking along the virtual street, can pause at specific vantage points to get a sense of what lies ahead and look back to where they have just come from. They can get a 360-degree panoramic view of the area as well. This navigation tool will facilitate discussion among stakeholders about existing conditions and can be further adapted to incorporate proposed changes and modifications.

Annotated maps

Functionality and Use during the Project

For this project, we used an aerial view of each business district as a base map. We then created a walk-through the street by embedding visual cues (images and 360-degree panoramas) and text notes. This application was designed to be available on a stand-alone computer (such as in a library or a community kiosk) where different comments are saved and are visible to the next user. During the project, this application was available for use by citizens in the studio. We also demonstrated how the “annotated” map could be integrated into a conventional power point presentation.

Potential Future Uses

This application can be easily integrated into the day-to-day planning work of the Village. It can be used for presentations to the Board, at meetings with developers, and for citizens to document and share information about planning issues.

Planning Portal

Functionality and Use during the Project

Students in the technology studio designed a web-based planning portal to enhance the workings of small businesses and small business associations. Using the example of the Harrison Street Business Alliance (HSBA), the group explored how Internet technology could be used to improve communication among the members of a local business alliance, as well as their outward communication to the community of local residents and customers. The class created a simple, functioning template that included information specific to the HSBA and its surrounding area, but could easily be altered to fit the needs of other such groups. The site was intended to be straightforward and easy to maintain, so that organizations without significant resources or expertise would be able to benefit. The site included an open public area (with business information, a calendar of events, directions and a virtual tour), as well as a password-protected area for members only, where businesses could share information about their district and their association (through discussion boards and file sharing functions). This planning portal was not used during the project but was designed as a functioning prototype.

Planning On-line

On-line planning tools allow users to communicate information to decision makers and to other citizens over the Internet without the use of any specialized software. These applications, when used in the context of a planning project allow decision makers to gather data about specific neighborhood level planning issues as and when feedback is needed. Used carefully, these on-line planning tools can complement and enrich participatory processes.

Sketch Planning Tools

Functionality and Use during the project

The two sketch tools designed for this project allow users to draw on maps and accompanying their drawings to the planning team. This application provides users with a means of singling out specific intersections, blocks, or areas that require further scrutiny in the planning project and communicating the details of their concerns to the planning team. The Sketch Tool is available to users over the Web. In each instance, users are presented with a base map of the study area. They can select an area of the map by choosing to draw with a line, a
point, or a rectangle shape. Once they have selected an area on the map, they are then asked to type comments which correspond to the area that they have selected. They submit this information which is saved in a database. They can also see “other views” which shows them areas that other users have selected and the comments that were submitted. These applications were developed during the course of the planning project and were presented to the public in April 2003.

Potential Future Uses:
By changing the base map, the Sketch tool can be easily used in other geographical locations. The application could also have creative applications for other projects, where the Village solicits citizens to submit ideas with a place-specific aspect.

Oak Park Community Mapping
Functionality and Use during the project
The Oak Park Community Mapping Tool was designed to improve community decision-making by giving local stakeholders access to various kinds of data and information through an interactive community mapping website. Through these applications users can view maps ranging from census data, consumer expenditure data, land use, businesses, and public amenities. The information provided through the community mapping tool is generally available to the public, but this tool would give people access to unique “local” information in a simple, accessible, and convenient format. This application was conceptualized as a studio project but it was not fully developed or used in the UIC Oak Park project.

Benefits and Constraints Associated with the Use of Digital Technologies

Benefits
Innovations in communication and visualization offer great promise to enhance citizen participation. However, they cannot and should not be seen as a substitute for face to face meetings or other forms of direct citizen involvement. When used creatively, these technologies improve the quality and the efficiency of public discussions and debates and help build community consensus around specific planning issues.

In a pragmatic sense, the use of these interactive applications can increase participation among those citizens who are unable to attend face to face meetings. However, the tools collectively offer additional advantages. These applications protect the privacy of respondents and therefore allow citizens to share “unpopular” or “minority” opinions without the fear of personal attacks or criticism. For instance, the survey of existing conditions contained an image of a popular neighborhood amenity which was also perceived as an unwanted land use by residents who lived in the area. The web-based survey suggested that a majority of respondents actually appreciated the neighborhood amenity. The outcomes of the survey do not imply that there are no problems associated with this particular amenity. However, it provides additional information to planners and decision-makers who are considering approvals of similar land uses in the same area.

Interactive applications make it possible for users to become proactive rather than just reactive in thinking about the future of their community. The applications developed for these two business districts can be readily adapted for use in other business districts.

Constraints
The interactive tools are likely to place an additional burden on limited staff resources since the presence of interactive technologies are likely to raise expectations among citizens who anticipate personalized and immediate responses to questions and complaints. Citizens and users need to be educated about the value and benefits associated with these technologies. Although the Oak Park community has a high level of access to technology, some people are likely to feel overwhelmed and intimidated. The adoption and use of digital technologies must be accompanied with educational support and training programs for citizens to use the new tools.

Through this project, UIC worked with a core group of staff in developing their skills to use and work with the applications developed for this project. However, additional support for training staff will be necessary to realize the complete benefits of technology adoption.