

The Bass-Station: A Community Based Information Space

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Abstract

The Bass-Station is a novel mobile device that allows people to easily share their digital belongings with their immediate physical community. Using currently available technology, combined with an already ubiquitous object, we create an information space that affords people of a community the ability to share and exchange information. The Bass-Station facilitates communication and sharing between people in a local community, making use of technology as a medium for developing personal relationships.

1 Introduction

In the early 1980's the ghettoblaster was introduced into the urban culture and instantly became a symbol of mobility, fresh artistic collaboration, and spontaneous community. This new technology, - no longer tethered to a specific environment - was an essential factor in the development of new communities and relationships that spawned revolutionary art forms.

Twenty years later, we find ourselves surrounded by technologies that afford us the ability to be mobile, communicate, and interact with other people like never before. These technologies make the most out of a temporally and geographically displaced community allowing us to communicate and share information with people across the globe. While our technologies bridge displaced communities they create an unnecessary gap between those that are in our immediate vicinity. This gap is most noticeable when we try to share our digital artifacts with those that are physically near us.

In order to promote the development of relationships, potential collaborations, and new artistic endeavors, we see it essential to be able to easily share our digital belongings with people in our immediate community. Additionally, we see mobility and wireless communications as being key to creating spontaneous communities.

The Bass-Station creates a mobile information space that enables the exchange of digital media and contains services for the dissemination of community information. Embodied in a familiar form that represents many aspects of community-based interaction - the boombox - we integrate today's technologies to allow people to share interests, learn about others, exchange digital information, and listen to music. By facilitating such activities, the Bass-Station will allow for the development of relationships, collaborations, and perhaps new art forms.

2 Exposition

The Bass-Station is comprised of an original 1980's boombox that imbeds off the shelf hardware, custom built hardware, and freely available software. The heart of the system is a single board computer with a wireless network interface. A large hard-drive provides storage for the community's media, a custom built mp3 decoder interfaces with the stereo's speakers, and various software services are integrated into the system. The Bass-Station

will be fully mobile, being able to be powered from rechargeable 'D' batteries that fit into the ghettoblaster.

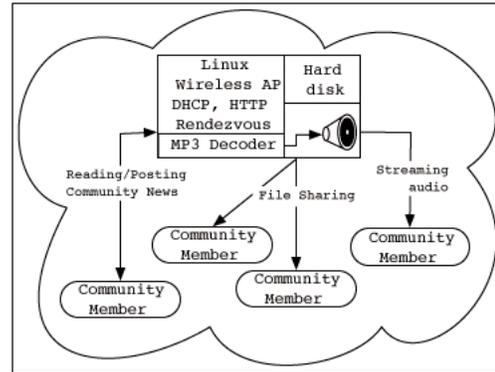


Figure 1. Bass-Station Information Space Overview

The single board computer functions as a wireless access-point which is not itself associated to any other network. It runs all the necessary services allowing wireless clients in range to associate with it. The fact that the Bass-Station uses networking technologies yet does not provide Internet access is a unique feature. In this manner a local community-based information space is created.

The Bass-Station hosts a variety of services such as a streaming audio server, file sharing, personal file storage, discussion forums and bulletin boards. All of these services are accessed via a web browser - the main logical interface to the device. These are the services that allow people in the community to easily share media and personal artifacts.

The physical interface of the Bass-Station contains a collection of knobs, buttons, and LED displays. Some of these knobs and buttons are controls for volume and song playback. The LED displays give visual feedback for activity such as current network load or amount of available disk space.

The Bass-Station will be introduced into our academic community in mid to late April and will begin to function as a physical part of our social and academic environment.

References

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