

2017

StillyArts LLC

NETWORKED DIGITAL SIGNAGE FOR THE CITY OF STILLWATER

A PROPOSAL TO: Design, Build and Run Networked
Signage for City of Stillwater

CLIENT: City of Stillwater, Downtown

Date: 03/20/2017

Executive Summary

Summary Phase I

20 Downtown Business

Fixed One Time Cost (per business) **\$700**

Variable Cost (per month) **\$400**

Fixed Cost 20 Business **\$14,000**

Two Spare set hardware **\$1400**

Total Annual Variable Cost **\$4800**
(\$20/month/business)

Total Cost for first year **\$20,200**

Total Cost for second year **\$6000**

Digital Signage is a method of broadcasting information to the masses. Similar in concept to billboards on roadways, digital signage has the added advantage of displaying several different pieces of information at once as well as rotating between different information sets. Whereas billboards suffer from extremely limited interaction times with vehicles traveling at highway speeds (a few seconds), as well as extremely low retention times, digital signage in fixed business installations have longer interaction times (minutes or longer) and can run various kinds of media including high definition videos and animations.

The proposed networked digital signage system will equip 20 Stillwater Downtown business with a display with rotating Ads in the form of text, images, videos and animation. Barring the initial setup cost of roughly \$600/business the monthly cost of said networked digital signage system can be as low as \$20 per business.

There are three basic components:

- Display System including a small form factor computer connected to the internet
- Server with requisite software which will drive the display system
- Groups of users (businesses) to create, moderate and publish Ads

The server will dynamically create a webpage where users can log in and create content (Ads in specific layout using text, images or videos). A set of moderators can approve the content which then gets published to the internet connected display systems. Updates can be made daily or weekly by users.

Additional features such as information about a state of emergency, weather advisories or general purpose public announcements can also be incorporated.

A network of such digital signage system creates a decentralized information network for the City of Stillwater which can be used for economical, public service or emergency purposes. Such system can be easily expanded to the 100s of business or government buildings and other installations.

Statement of Work

Hardware

The hardware consists of the following:

1080p TV 42"	\$350
Small Form Factor Computer (SFF)	\$150
Wall Mount	\$50
Installation	\$100
Cables/Adapters	\$50
Total	\$700 per business

The small form factor compute will be mounted on the back of the TV and will be connected to the internet owned by the business. Power to the system will also be provided by the business. The display system with the computer will be wall mounted in a prominent location within the business with the most foot traffic.

Spares

2 spares will be ordered and inventoried each year to cater for any failure in the hardware.

Software

The computers will have a client installed which will talk to the server and update the images/videos on the display as per the update that day.

The server will run a standard suite of webserver, relational database management system, scripting languages and other associated modules and software. The server will also run an instance of a content management system (CMS) that will dynamically produce a webpage for users to log in and create/upload content.

Web Services

The software on the server, bandwidth, server hardware, web-assets and maintenance of the server will be provided on the model of software as a service (SaS) with an estimated price of \$400 per month for 20 users.

Content

Producing content (Ads) will be the responsibility of the individual business.

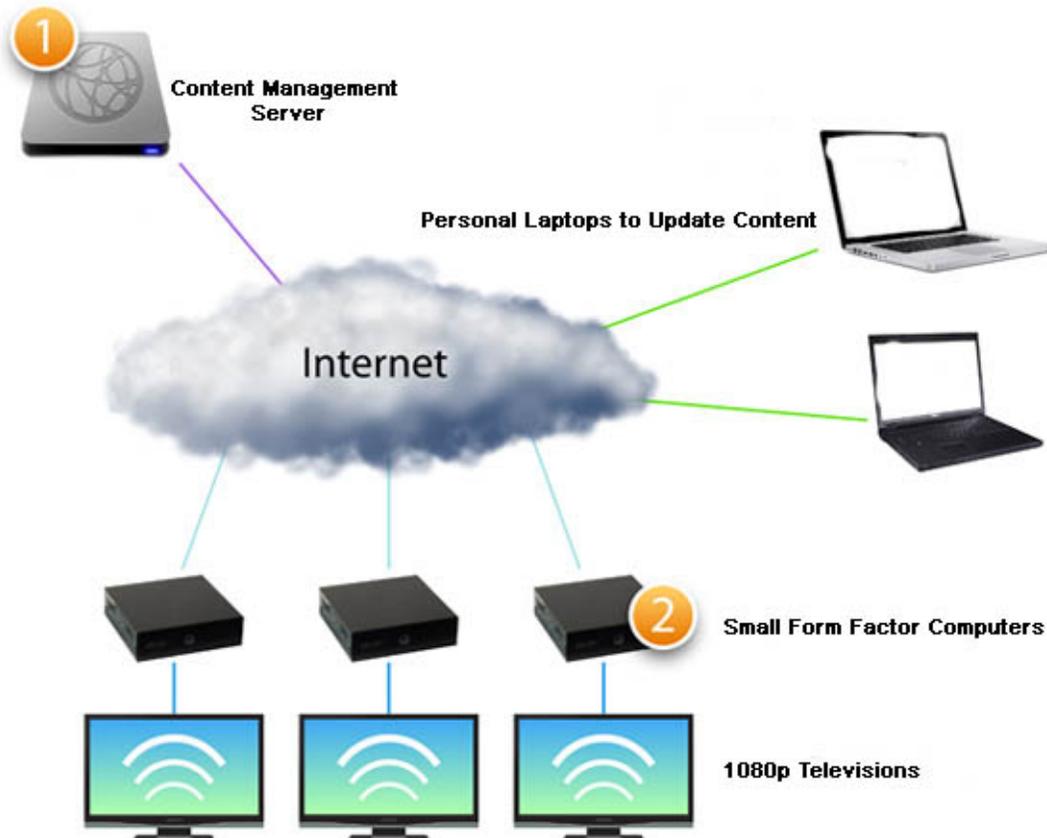
Training

Training to use the CMS to upload content will be provided in the form of webinars and pre-recorded videos.

Training for creating simple layout of the Ads can also be provided upon request.

How it Works

Refer to the diagram below:



Users (Individual Businesses) will create content (Ad in the form of a jpg image or a MP4 video) using offline tools such as Photoshop or GIMP. They will do so using their own personal laptops/computers. They will then log on to the CMS via a URL (eg. StillwaterDigitalSignage.com) using a standard internet browser (eg. Chrome). Once logged in, they will upload the content to the CMS server.

The CMS server will push this content to the SFF computers to display on the televisions. The television will rotate through 20 different Ads of the 20

business. Superusers such as the city manager could override the system to display emergency warnings or weather advisories as required.

