

# **Steel City Sports World**

## **Executive Summary**

Student Consultant, Raphael Mun  
Community Partner, Luther J. Dupree, Jr.

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### **I. Background Information**

Steel City Sports World (SCSW) is a live, call-in television program on the local Pittsburgh PCTV-21 channel. It also runs two other programs, Positive Images Program and the free sports leagues, both geared towards kids and enabling them to build confidence and a brighter future.

The organization is directed by Luther J. Dupree, Jr. but also has several co-hosts and a four-member board of directors.

In the words of the author,

*The mission of SCSW is to improve the lives of young people from underserved communities in Pittsburgh and the surrounding areas through sports and the media.*

### **II. Consulting Tasks**

#### **Task 1. Organization Overview Analysis**

SCSW has three distinct programs: SCSW, Positive Images Program, and the free sports leagues. This task allowed the organization and the website to be evaluated through those programs and categorize different parts of SCSW accordingly.

#### **Task 2. Hosting Service Transfer**

Investigation of the organization from the first task gave rise to the problem that SCSW could save money by switching its website hosting service as well as receive better benefits. This task also was an opportunity for Luther to backup the website files on his own computer and learn to transfer web pages through FTP (File Transfer Protocol) programs.

#### **Task 3. YouTube Videos**

The purpose of this task was for SCSW to gain YouTube presence by having recordings of the SCSW show online. In addition, those recordings which were previously just on physical DVD discs can now be digitally backed up on other computers.

#### **Task 4. Web Development**

Luther needed a way to put YouTube videos on the pages and have more flexibility than the limiting internet application to create websites on the previous website hosting service. This task gave way to editing the website without needing to log into the website hosting service by using program such as Nvu and then upload those files to the server computers.

### III. Outcomes Analysis and Recommendations

#### Task 1. Organization Overview Analysis

- **Outcomes:** Each program is a separate sub-site under a single SCSW website domain with a portal page directing the user to one of the three destinations, compared to a single page with over 20 distributed navigational links.

#### Task 2. Hosting Service Transfer

- **Outcomes:** [www.scsportsworld.com](http://www.scsportsworld.com) is served from the Doteasy.com web hosting service, transferred from Web.com hosting, saving about \$300 a year with four times the web storage.
- **Risks:** While 5-10 other hosting services were investigated, there could be potentially an even better deal for a website host that has not been discovered.

#### Task 3. YouTube Videos

- **Outcomes:** SCSW is now on YouTube and can stream videos through the scsportsworld.com website.
- **Risks:** The DVDs could be at risk as a backup method and the video files copied to the computer in the process of uploading videos to YouTube could be backed up and duplicated.

#### Task 4. Web Development

- **Outcomes:** SCSW website pages are now edited off-line on the computer using visual editors like Nvu. This also allows SCSW to edit the HTML code directly instead of being confined to visual edits.
- **Risks:** Without Luther, SCSW site could not be maintained or updated.

#### Recommendations

- A class on web development for members of SCSW
- Create thumbnails for the images on the website
- SCSW Introduction video on YouTube
- SCSW Archives Section
- Episode Re-cap summary
- Adding Web Visitor Counter & other features

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#### Community Partner

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Steel City Sports World  
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#### About the Consultant

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Raphael is a senior in Computer Science. He will begin working as a software design engineer for Microsoft this summer.

# **Steel City Sports World Final Consulting Report**

Student Consultant, Raphael Mun  
Community Partner, Luther J. Dupree, Jr.

## **I. About the Organization**

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### **Organization**

*Steel City Sports World (SCSW)* was founded on May 15, 2000 to let local residents speak with rising stars and provide youth with opportunities to participate in free sports leagues, *SCSW* is a call-in TV program at 6 p.m. on Wednesdays with two other non-profit programs, *Positive Images Program* and free sports leagues.

In the words of the author,

*The mission of SCSW is to improve the lives of young people from underserved communities in Pittsburgh and the surrounding areas through sports and the media.*

### **Facilities**

The main TV Show and the *Positive Images Program* are run at the non-profit studio, PCTV-21. The free sports leagues are run out of McKeesport Recreation Center.

### **Programs**

There are three programs run through *SCSW*. The main program is the TV-Show *Steel City Sports World*, but *SCSW* also runs two other programs through the organization focusing on at-risk youth: *Positive Images Program* and free sports leagues.

#### ***Steel City Sports World***

The *Steel City Sports World* TV-program hosted by Luther Dupree and co-hosted by four other members that allows local residents to voice out about sports and to chat with rising stars. The show runs on Wednesdays and on the first Wednesday of every month, the show is live on TV at 6 p.m. for the audience to call in and chat on PCTV-21. Other recorded shows are shown on Saturdays at 11 a.m.

#### ***Positive Images Program***

The *Positive Images Program (P.I.P)* is a program for African American youth of ages 12-17 in which the kids learn to work with the media technology and learn new skills through running their own TV show of themselves. Its goal is to help kids create positive images of themselves. The kids selected to participate in the workshops work in the PCTV studio to learn pre-production, field production, and editing to produce segments on live television. They also work with mentors twice a month to keep their grades and behavior on track.

## ***Free Sports Leagues***

The free sports leagues give at-risk youth in underserved communities an opportunity to get together and participate in sports. Primarily basketball games sponsored at the McKeesport Recreation Center, the leagues hold games once a week while assigned coaches have individual practices for their teams. These leagues help to build discipline, pride, and self-esteem in the children to try to guide them towards a constructive direction.

## **Staff**

*Steel City Sports World* has several people on its staff as co-hosts, expert draft analyst, and others. Luther and “Smokin” Jim Frazier are the primary hosts of the show along with Mike Migliore and Phil Williams.

A board was founded last year after gaining non-profit status, consisting of four people, one of whom is Luther.

Luther is looking to recruit more members but as a volunteer organization, SCSW is still quite under-staffed.

## **Technical Environment**

### ***Media Environment***

The media-based organization is run out of a non-profit Pittsburgh TV studio, PCTV-21 located at 1300 Western Avenue, Pittsburgh, PA 15233. PCTV provides time-slots in which Pittsburgh residents and non-profit organizations can use the equipment to produce non-commercial television programming, mainly funded by Comcast to run on its Channel 21.

Each producer must be trained to use the equipment and studio and editing training is provided by PCTV staff.

The Studio provides the following equipment for full television production:

- Studio DVR Cameras
- Lighting Equipment
- Mackie Audio Board
- Synergy 100 Digital Video Switcher
- Rental Production Tapes
- iMac Computer Lab with iMovie for Non-Linear Editing

Each recorded show from the DV-Cam are stored on DVD format and are with Luther.

### ***Other Technical Environments***

The SCSW website and other aspects of the organization are managed from a computer running Windows XP at Luther’s house.

The computer currently is equipped with a DVD-Drive as well as a CD-ROM Drive, but the DVD-Drive has problems recognizing the DVDs created from the SCSW production. The computer runs a bit sluggish at times but is still a fairly recent computer and can be used to update the website and

run other parts of the organization, but uploading clips from the show was a problem due to DVD-Drive problems.

Luther purchased a new computer to update his current machine: a Mac which allows him to work with iMovie, the same environment as the editor provided at the studio. The new machine also enabled him to move videos from DVDs to the internet on YouTube.com.

Prior to the consulting period, the *SCSW* website, [www.scsportsworld.com](http://www.scsportsworld.com) was hosted on a remote server by Web.com on their eCommerce plan, paying about \$35 a month. The eCommerce hosting price was also going to increase to the website listing the price at \$54.95 per month. The domain name [scsportsworld.com](http://scsportsworld.com) remains registered through register.com.

Web.com eCommerce plan provided the following features:

- 5 GB Web Storage\*\*
- 500 GB Bandwidth\*\*
- 3.5 GB E-mail Storage\*\*
- Python, PERL 5, PHP 4\*
- Two 50 MB MySQL Databases\*
- PayPal Payflow Pro\*
- MIVA Merchant\*
- thawte SSL Certificate\*
- Dedicated IP Address

\* Features that were not used by [www.scsportsworld.com](http://www.scsportsworld.com)

\*\* Features that were not used extensively by [www.scsportsworld.com](http://www.scsportsworld.com)

- The total web storage required by *SCSW* was currently about 32 MB, which was significantly less than the 5GB provided (appx. 5000 MB).
- The monthly bandwidth according to statistics was approximately 1.5 GB compared to the provided 500 GB.
- E-mail storage data was not fully investigated but the provided email service was difficult to navigate through and only accessible through webmail, so Luther primarily used his Yahoo! Email account. As a comparison reference, Hotmail provides 5GB of storage and Yahoo! Email provides unlimited storage.

Web.com provided a basic Site Builder Web Publishing tool accessed online from Luther's computer to choose a theme and write in content. Direct file transfer (FTP) access to the webpage files stored on the web server was unavailable as the documentation provided was out-of-date.

Luther's computer is running Norton Anti-Virus as a security measure and previously, there were no means for backup because *SCSW*'s web files were created and maintained by Web.com and could not be stored locally.

## **Technical Management**

Luther has been a producer with *SCSW* for 8 years and manages all other technical aspects of *SCSW* in running the show and the website. His co-hosts meet only for the television production and the directing and producing is all done by Luther.

All technical training for the staff and for youth in the *P.I.P.* program comes from PCTV. All *SCSW* work is volunteer-work and an assistant for Luther would provide *SCSW* with a backup plan, but at this time Luther is the only director for the organization.

## **Technology Planning**

Luther and the Board are in charge of decisions for the future of *SCSW* in regards to its funding for the programs, website, and the next steps. Their goal for the website is to become an extension of the TV Show. There is no existing technology plan for the organization other than a wish list for the website.

As a media-based organization, the primary focus of the website is to provide highlights from the TV show to be available on the internet.

## **Internal and External Communication**

Internally, there are biweekly board meetings after which Luther sends out a summary email to everyone. There are weekly meetings with the co-hosts every Wednesday. And twice a week, the *Positive Images Program* meets on Tuesdays and Wednesdays.

Externally, communication is available through email, phone, and the website. The TV-Show happens at the first Wednesday of every month live at 6 p.m., and taped Steel City News is shown on Saturdays at 11 a.m. They are unable to easily share the previous DV-Cam recordings from the show because they are stored on DVD format and need to be imported as a movie file for editing and uploading to internet video services such as YouTube.com for wider access.

## **Information Management**

Sports statistics from the league programs are gathered manually and all information is handled manually through paperwork.

## **Business Systems**

There is a small grant for the Positive Images Program and they are looking for more grants, but everything is currently handled by Luther and staff.

## **II. Scope of Work**

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### **Task 1. Organization Overview Analysis**

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### **Task 2. Hosting Service Transfer**

Investigation of the organization from the first task gave rise to the problem that SCSW could save money by switching its website hosting service as well as receive better benefits. This task also was an opportunity for Luther to backup the website files on his own computer and learn to transfer web pages through FTP (File Transfer Protocol) programs.

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### III. Outcomes and Recommendations

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#### Task 1. Organization Overview Analysis

- Outcomes

The three main programs: SCSW, Positive Images Program, and the Sports Leagues became separate sub-sites under a single SCSW website domain. The main page leads to a portal page directing the user to one of the three destinations, compared to a single page with over 20 distributed navigational links.

The navigational links for the pages were reduced to a more manageable 5-6 in each section so that the viewer can move from one section to another easily and without needing to scroll the page to view all of the links.

- Increased capacity to meet the organization's mission
  - Because all of the links on each page can be viewed on the web pages without needing to scroll, it is suspected that visitors of the website are able to navigate through the various pages and view pages more specific to their interests.
  - SCSW now has a hierarchical vision of the organization with categorized sub-parts rather than all of its various programs and goals in one.
- Sustainability

As long as this hierarchical vision is maintained among all of the staff members, it will be easy to categorize various actions of the organization accordingly to their respective programs. If any new program were to be introduced, it will simply become a new sub-site accessible from the portal page.

- Outcomes not-yet-achieved

A physical diagram could help Luther and the board members visually see the organization all at once, but a suggested single comprehensive diagram was not yet created. Instead, at this time the organization of the website, the portal page, and its link categories directly represent the overview.

#### Task 2. Hosting Service Transfer

- Outcomes

- [www.scsportsworld.com](http://www.scsportsworld.com) is served from the Doteasy.com web hosting service, transferred from Web.com hosting. About 5-10 other hosting services were investigated including GoDaddy.com and hostgator.com to find ones that could provide a variety of features at ease to Luther as well as provide statistical analysis, and Doteasy.com was selected on grounds of Raphael's satisfaction with its hosting and the ability to test out the features as a sub-domain under his current hosting service at no cost.



- SCSW used to pay \$35 per month, a cost that was to increase soon, but after spending an initial transfer fee of \$35, now they will save more than \$25 per month.
- The website now has 20 GB of web storage compared to the previous 5 GB. In rough comparison, having 4 times the storage means more than 10,000 full-sized digital photos for SCSW.
- It also now has unlimited monthly bandwidth instead of 500 GB / month, which was plenty in the past while SCSW was serving about 1.5 GB / month for about 2,000 website visits. However, with an unlimited monthly bandwidth and the new design with downloadable photos, Luther will not have to worry about a bandwidth limit at all.
- There is access to unlimited SQL Databases from two 50 MB databases, which does not affect SCSW at the current time because the organization does not use SQL, but there is more flexibility for the future if it decides to use web databases.
- The email storage decreased from 3.5 GB to 100 MB, but since Luther mostly uses his Yahoo! Email for communication, as long as large attachments are not used with the website's email it will not become a big problem. The email storage can also be upgraded at any point in the future at a small cost, if it becomes necessary.
- Luther has direct FTP file transfer access to the web servers, and this will allow him to hold a copy of the website files on his local computers and edit the files from his computer rather than through a web-browser internet application.
- The webmail interface is easier to manage because there is a separate portal just for email (<http://mail.scsportsworld.com>), whereas previously Luther needed to log in to his main account on Web.com and then search for the email link and log in again. It is designed to look and feel like Microsoft Outlook and so it provides tasks, calendar, and other features also in Outlook and Luther has commented that this email interface is much better.
- There are many features available such as a visitor counter, forum, etc. that are available as pre-packaged parts with instructions on using them. These kinds of features were not available previously.
- The new host is more reliable in terms of customer service and its documentation because it is kept up-to-date and Luther can search through the help pages.
- Increased capacity to meet the organization's mission
  - The organization saves costs, totaling more than \$300 each year, which can be used for other purposes
  - More photos and other content from the organization able to be uploaded on the website can expose more of the work done through SCSW and help increase organization prestige.
- Sustainability

Luther now understands more about what to look for in searching for website hosts and is able to evaluate hosts better. If Luther needs to transfer to a different web host for any reason (Doteasy.com shuts down or another feature is needed that is not provided) then he will be able to find a host that also best supports the features that is being used now, as he has a list of current features and is able to roughly define what they are.

- Risk to sustainability

The 100 MB limit to email storage could pose a problem if Luther is not careful about large attachments in emails and also uses the account more often than he does now. If more space is necessary, however, a separate email storage upgrade is available.

### **Task 3. YouTube Videos**

- Outcomes
  - Luther now owns a Mac computer and is now able to create video files on the new computer from his DVDs of the SCSW recordings.
  - Luther has a YouTube account on the website and has uploaded multiple video files of the SCSW recordings to the account between the weekly meetings. He also copied the provided “Embed” code and pasted it into his website pages by himself and through it, demonstrated an understanding of the provided code in relation to the webpage’s HTML code.
- Increased capacity to meet the organization’s mission

SCSW has the possibility to widen the audience from the greater Pittsburgh region to everyone interested in sports and non-profit organizations similar to SCSW since the recordings can now be accessed outside of the Pittsburgh region through the internet.

People searching on Google or on YouTube can now come across SCSW and view parts of the show without being a resident of Pittsburgh with access to the Pittsburgh Local Channel, PCTV-21, which could also increase the publicity of SCSW in the world-wide web and could be used to request more funding as the organization’s video media can now reach an audience outside of Pittsburgh.

- Sustainability
  - The ability to get the video recordings off of the discs will also allow him to backup the show digitally on other mediums than just his stack of DVDs. Luther was able to do this during his own time and then upload the video to YouTube.
  - As long as YouTube.com is in business, SCSW will have a presence there and be able to stream parts of the latest TV-shows to any visitor of the website.
  - The DVDs are owned by Luther, but because he figured out by himself how to get the video files off of the DVD to his computer, he will also be able to teach and show other staff members.
- Risk to sustainability

If the DVDs are damaged or lost before all of the video recordings are taken off, the older episodes could be lost forever. Although YouTube should not be used as a backup resource, the video files copied to the computer in the process of uploading videos to YouTube could be backed up.

## Task 4. Web Development

- Outcomes
  - Instead of editing the website files by logging into a web-design internet application provided by the previous Web.com hosting service, SCSW website pages are now edited off-line on the computer using visual editors like Nvu. This also allows SCSW to edit the HTML code directly instead of being confined to visual edits.
  - Luther understands and has practiced adding HTML code on web pages. He has even inserted HTML code to embed YouTube videos onto the website on his own.
  - Luther is able to use FTP to transfer his webpage files directly onto the web servers, and has uploaded pages in my absence to the server computers. Although bookmarks have been added for ease of logging in, he has also connected to the server at least three times without the bookmark and understands more clearly the relationship between the website's pages and files.
  - The website's new design better reflects the expertise of the staff with technology and the passion of using technology to spread their enthusiasm for sports.
- Increased capacity to meet the organization's mission
  - The SCSW website files can now be edited without an internet connection, making the changes much quicker and easier to fit Luther's design and vision.
  - As part of the *P.I.P.* program that teaches kids how to use the media technology to run their own TV program, the new section of the website can now also be part of the program that the kids could also maintain. This will also give the kids another skill and a potential career path, also adding value to SCSW's *P.I.P.* program.
- Sustainability
  - The website files can now be backed up and moved to other servers, in case SCSW wishes to change hosts again in the future.
  - The independence from a specific web host and its tools will allow SCSW to be more flexible and up-to-date with the constantly changing and developing tools in web-development.
  - The new sections delegated to some of the staff members will allow their own content to be published on the internet.
- Risk to sustainability

Luther has demonstrated a good understanding of editing the SCSW website with Nvu by creating the pages for the Positive Images Program by himself and updating the content, as well as uploading necessary files through FTP to the server, but he has not yet practiced teaching those skills to others, which is the biggest risk/problem to SCSW at this point. Other staff members could learn from watching Luther use the tools, but it may take longer than desired.

- New vision of technology supporting the mission

The ability to read and understand basic HTML code has made Luther more eager to look deeper into technology, such as searching for JavaScript that allows multiple photos to be displayed in a mini-slideshow on the website.

## **Recommendation 1. Web Development skills for other staff members**

- Problems
  - Luther is currently the only member of SCSW managing and able to manage the website, scsportsworld.com. This is the largest problem/risk to SCSW and distributing the load of updating the website to multiple staff members will also give Luther free time.
  - Luther knows how to update the website and how the Nvu program works from having learned through this project with Raphael, but professional training could help him and the rest of the staff become more comfortable and open with technology.
- Solutions
  - Having the other staff members attend a class or course on web development at the library or a community college along with Luther will give Luther a chance to get everyone else also interested and excited about what is possible with the SCSW website.
  - Holding a workshop meeting after this class with all of the staff in which Luther demonstrates to everyone how to update the website and have each member try it, will let the rest of the staff involved in this part of SCSW. Luther will also need to create accounts on the web host for the other staff members that wish to update the site so that they will not use Luther's personal account which includes the billing information and other sensitive information.

## **Recommendation 2. Create thumbnails for the images on the website**

- Problems
  - The original images displayed as part of the web pages are large (~1.5 MB) and a more reasonable size is something less than 100 KB for pictures, or about 640 x 480 as a picture resolution. This is because the entire file must be transferred to the computer viewing the webpage and the file sizes are directly related to the loading time of the webpage. People with slower internet connections could become frustrated by the loading time.
  - Having the original image simply resized on the webpage does not mean a smaller picture file gets sent to the viewer, but instead the whole image must still be sent from the server to the user and then resized from the user's computer.
- Solutions
  - Using a program, even a simple one like MS Paint that comes for free with Windows (Start -> All Programs -> Accessories -> Paint) can resize images and save them. These should be saved as a new file so that the original picture files are not overwritten. A convention could be used such as appending the word "thumbnail" to the end or adding a dash and description such as "-small" will help with organization as well.
  - In re-sizing images, keeping the aspect ratio will be important. For example, in shrinking the size of the image in MS Paint, you can click on Image, then Resize, and

then set the size to 50% Width and 50% Height so that the width and height are relatively proportional.

### **Recommendation 3. SCSW Introduction YouTube Video**

- Problems
  - Visitors may not be aware of the characters and the TV show. The About Us section lists the staff but it is not as personal to visitors that have not seen or are unable to watch the show.
  - The videos you can now upload to YouTube are episodes recorded in the past with the assumption that most of the visitors to the site have seen the TV broadcast. With increasing internet presence, it may be beneficial to have a short video introducing the cast and crew.
- Solutions
  - Having an introduction video recording session before or after the regular SCSW recording sessions could be used to help promote the organization and make the website more unique.

### **Recommendation 4. SCSW Archives Section**

- Problems
  - Having an “old-site” section is good, but it would also be nice for visitors to view older recordings of episodes from the past. There is no way for viewers of the show to watch shows recorded in the past, and this will be a way to re-cap.
  - Dates also need to be listed for entries and news updates so that visitors will quickly know which parts of the website are new.
- Solutions
  - Upload the older videos as well and create a new section on the SCSW site for Archives which would consist of links to past shows, listed and sorted by year, month, and date.

### **Recommendation 5. Episode Re-cap Summary**

- Problems
  - The recordings available on-line will be key to maintaining visitors on the site, but as the number of episodes continue to increase, it will be hard to search for specific recordings.
- Solutions
  - Each video uploaded to the website can have a paragraph summary describing highlights of the episode. Each video on its separate page can include this summary, where these video pages can be edited and uploaded by different staff members so that they become more familiar with the web development tools.
  - On top of this, the summary will allow google to tag the related video episode more accurately because it will be on the specific webpage. It is also an opportunity to look into adding a search bar to the website farther into the future.

- This is also a good opportunity for other staff members to get involved in the web development process.

## **Recommendation 6. Adding Web Visitor Counter & Other features**

- Problems
  - Not a problem in particular, but an opportunity to begin trying out some of the features available through the new web hosting service.
- Solutions
  - Doteasy.com offers a web visitor counter with various designs under the features page. Following the instructions there to copy and paste its HTML code into the web page should make it work. This will help you easily keep track of the number of visitors on the pages on top of the statistical data provided.
  - Other features are also available such as the forum and chat, trying each of these features one at a time to see how the SCSW website visitors react to the new feature and use or do not use them, you can keep the features in place or remove them to keep the website limited to what is only necessary and pertinent to the organization.

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## **About the Consultant**

Raphael Mun is a senior in Computer Science with an additional major in International Relations and minors in History and Japanese at Carnegie Mellon University. He will be starting a career at Microsoft as a software design engineer in the summer.