Max Li
Anthony Vo
Samanvitha Basole
Mario Fugueroa
Stephen Fung

Case study capture document

<Max Li>

Interviewer Date	3/17/16
Title of case study	Enterprise Solution on Managing Social Media
Contextual information	The goal is to research how social media plays a part in spreading awareness and providing a solution to utilize the research in order to make CyberGirlz more well-known.
Institution name	STEM Center
Department	Science
Faculty/Staff Name, Title	Jose Mendoza
Telephone/Email	Jose.Mendoza@sjsu.edu
People interviewed:	Jose Mendoza
Description of practice:	CyberGirlz is an organization that inspires and teaches young women about cyber security.
Rationale	What were the drivers behind the initiative, external and internal? CyberGirlz has been successful organization despite it being very young. Currently, there are very few women who enter the software industry compared to men, and we want to help CyberGirlz reach out to more women.
Stage of development	When did the project start? Which sprint are you in? Project started in early march, currently on sprint 5
Curriculum context	In which areas of the curriculum, research, or administrative activity is this technology useful? Give qualification, course and/or module titles. This technology is useful in spreading awareness through social media. The enterprise solution allows the user to manage multiple social media accounts through one enterprise account. Users must be somewhat familiar with today's social media. Courses include creating different social media accounts, how to utilize these tools, how to manage them, enterprise solution on managing these tools.
Learner profile	What type of learners are involved? Students and faculty

	What degrees do the learners hold? If students, what year/ level of study? College as well as industy experience
Pre-requisite skills if any	Do learners have to have certain skills or prior experience? Yes, learners must have somewhat familiarity with the use of social media.
Learning objectives or intended outcomes	What are the learning objectives or intended outcomes? The objective is to have the client learn how to manage different social media through an enterprise solution.

Environment for learning:	<Anthony Vo> <Mario Figueroa>
Learning setting Physical setting, if relevant	The team is teaching the stakeholders through training sessions done through WebEx. The clients' are located in their offices during the sessions as well as for outside learning. Girls in Cybergirlz are taught in classrooms at their middle schools. The ratio of faculty to students is roughly 1 to 10 for their 100+ students and they are taught by SJSU students as well as industry professionals.
Mode of access	The client is being taught through WebEx. Both the team and the client are situated at SJSU. For the students, the learning will be done at their schools and there are cybersecurity competitions that will be held at SJSU where the girls will compete.
Social setting	The client works individually on certain days and in groups when other members are available. The students work individually on certain assignments and together on others. The client does collaborate on tasks and so do the students.
Tools	Students and the client both use laptops, software that provides an assisted coding evironment, web browsers, and Google. The client also utilizes WebEx, which is a live screensharing program meant to make communication between individuals easier. The client also uses Buffer, an app that allows users to update mutliple social media accounts more easily. The students are given laptops but the team is unsure if they are allowed to take them home. The software, web browsers, and Google are freely available to everyone so it is safe to assume they can be used 24/7. Buffer is also a web app which can be accessed on any device with internet access.
Reasons for using this technology	The technology was chosen for its ease of access. The team chose Buffer for its clean UI as well as simplicity. The difficulty was rated to be a 2/5 from our client. The client has completed 4/5 of their training in using buffer and the only training left is to use the technology in practice.

	The team has trained their initial client in using Buffer by descirbing the interface to them and the tools available to them. The team also suggested conducting a survey to see if parents would be interesting in using a dedicated CyberGirlz app.
Relationship to learning outcomes	The use of laptops is required for the studetns to properly receive hands on training and the use of the software helps them more easily grasp the concepts taught. Programs such as Scratch exposes them to the concept of coding language instructions. For the students, learning outcomes include learn about encoding and decoding different computer codes and messages, learn about how to view web traffic, how to safely access wireless networks, and setting up firewalls on their computers, troubleshooting computers and networks can be learned on the Internet, learn about how hackers leave behind a trail when they penetrate a system, learn how to utilize developer tools to look at how a web page is made and if it is safe, and learn about the basic language.
Support considerations	The client was given training that they would then teach their colleagues however, the extent at which accessibility for the diversity of learners is unknown. The teaching style is adaptive for the students. Students are taught at a pace that they are comfortable with.
Technical support requirements	For the students, general computer knowledge is needed that is on par with the average user. For the client, basic social media knowledge is required for the use of Buffer to be effective. For the students, mentors are available and have knowledge how a computer works. They know how to use an IDE to teach the fundamentals and programming for the students which is primarily done through Scratch. The level of support would be an 7/10. Access to responsive assistance outside of class would be beneficial. The team has met with their client to teach them how to use Buffer twice but will be unable to continue training after that. This should not be problematic as the app is fairly intuitive. The level of support would be a 6/10 as we are unable to aid the client regularly. This could be improved by allowing future teams to provide assistance.
Resources	The students have access to a computer, the internet, social media accounts, and the Scratch IDE. The client has access to a computer, the internet, WebEx, social media accounts, and Buffer. The team does not have that information.
Access issues	The Buffer app requires the creation of an account and our client used their own personal email address to create the account which may prove to be problematic for multiple people to access it.
Time Commitment Costs	For the client's training, the time commitment will be roughly 1 hour a week and the regular usage will be roughly 2 hours a week.

Pedagogic approach and learning tasks:	<Samanvitha Basole>
General pedagogic approach	The approaches taken were research-based and problem-based. We focused on understanding the problem, found out solutions based on market needs, researched 3 organizations similar to CyberGirlz, and focused on what we can provide CyberGirlz so that the organization is as popular as Girls Who Code. These approaches were collaborative as we all spoke about what we should be doing. Such collaborative learning proved to be very effective because of working and learning in a team. We worked 30 hours/week on the research and evaluation of tools.
Learning tasks or activities	Understanding the problem: Our client first enagages in understanding our analysis of what is lacking in reaching out to a larger audience. Our client will be shown how CyberGirlz has 2450 google search results while Girls Who Code has 408,000 reslts due to social media and events Learning the need to use new tools: Our client will realize through our comparative study that they need to update their social media platforms. Trying how to use those tools: Our client and students then learn how to use the tools suggested by us.
Feedback	Our client will receive feedback through regular meetings (2 meetings for every 15 days) and updates. We would like them to receive feedback through regular meetings because it gives learners an idea of what to keep doing or what to stop doing so that progress is ensured.
Locus of control	Scrum Manager directs the tasks, and the sprint manager ensures that those tasks are smoothly done before the deadline. The scrum team performs the tasks with collective planning, usually 30 hrs/week. The scrum manager provides feedback during every scrum meeting on Tuesdays at 5:30pm .
Time allocated	Learners spend 3 hours on these tasks. Time is allocated using 5 iterations or sprints. 8 hours were spent on getting to know the technology (cloud-based communication and collaboration tools).

Outcomes for learners:	<Mario Figueroa> Inspire: close the gender gap in technology, inspire girls to pursue computer science by exposing them to real life and on screen role models Educate: programming fundamentals, web development and design, mobile development, and robotics. giving them the hard and soft skills needed to become the technologists of tomorrow Path to Success: Expose young women into STEM and further advancements
Impact of the activity	In 1984, 37% of all computer science graduates were women, but today that number is just 18%. 20% of AP Computer Science test-takers are female. 0.4% of high school girls express interest in majoring in Computer Science
Learner feedback	It was a fun learning JavaScript animation and its concepts. The class was held every friday after school and participants enjoyed their time with animations
Quotes	"Most good programmers do programming not because they expect to get paid or get adulation by the public, but because it is fun to program." - Linus Torvalds

Reflections:	<Stephen Fung>
Resource considerations	During the course of our project, we've used: Adobe Slate, WebEx, Twitter, Facebook, Buffer.
Sustainability	This project is sustainable, the resources required are minimal and once social media presence is established, maintaining it should be simple enough using Buffer.
Risks	In general, there is not much risk associated with what we are doing, and there is much to gain.
Benefits	CyberGirlz will benefit from our project by having a greater social media presence.
Unexpected outcomes	CyberGirlz overtakes Girls Who Code.
Plans for the future	We have suggested that our client conduct a survey to see if parents of the students would be interested in an app dedicated to CyberGirlz and informations/updates pertaining to CyberGirlz. Should the survey show sufficient interest in an app, the next step would be to begin designing it.
Advice for others	In the beginning stages of any project, it is crucial to thoroughly research your topic.
Related projects	CyberGirlz Capture The Flag