

Proposal

Education in cybersecurity is a huge problem that provides opportunities for entrepreneurs. In particular, companies lose tons of money due to not establishing a proper cybersecurity implementation to mitigate cyber attacks and other vulnerable systems. Some of the companies that have strong cybersecurity are also compromised by attacks that are triggered unknowingly by their employees. Also, the elderly are also at risk for falling to easy hacking and leakage of sensitive data. For example, a lot of older people are more likely to give their credit card information online because they think that online security is safer than the real world. In reality, the online world is just as dangerous as the real world. Since I have identified a problem with cybersecurity education in these two big groups, there is an actual need to distribute resources and course teachings to instruct them on how to navigate the digital world and protect themselves while doing so.

I know that it is a problem because cybersecurity is a relatively modern field compared to other contemporary fields like history and art. History and art has been existing since modern times. If one was to go back and search archives, there is always some form of artifact to help learn more about the topic. However, the Internet is developed in the 1900s which means that a lot of the jargon and technology was not accessible to everyone. Even older people who lived at the start of the Internet age had to get used to going from landlines to smartphones. Also, for more traditional companies, they had to utilize the Internet to remain competitive and boost their sales. As the Internet evolved, hackers began to exploit the Internet to harm companies' reputations and collect data for more advanced schemes. One example is the use of APTs to keep a sustained attack on a victim, as long as it isn't detected. Another common form of a cyberattack is the use of a ransomware attack. Hackers love to use ransomware attacks because they can request for a payout due to their access to the decryption algorithm. It also prevents the company from using its data, until the system has been decrypted. On the other hand, older people are susceptible to the smallest level of attacks. Phishing scams and viruses are the most effective attacks for hackers on the older generation. Older people are less likely to verify email addresses and click on advertisements frequently, leading to more traffic to malicious sites.

To help address the problem for both groups, I am going to create a cybersecurity company that create video courses for them. For older people, their problem is more on operating the devices and being familiar with different services. They have trouble doing tasks like purchasing online items and operating social media. They don't need to be educated on sophisticated techniques because data and money are their only priority. Some courses that I will create will be making strong passwords and evaluating the legitimacy of websites. These will help them to become aware of fraud and scams on the Internet. On the other hand, companies will need more technical knowledge on setting up their internal networks and dealing with a large amount of traffic in a single day. They do have to be conscious about money and data, but they have to worry about their reputation on top of it. Companies that are hacked before face more scrutiny by the customers and from other partners who rely on the services of the companies. Some important courses for them will be setting up firewalls and how to disclose a proper breach to inform customers without hurting their reputation.

Some barriers that I will encounter will be opposing arguments that argue against the need of cybersecurity education, how to make a profit without driving customers away from the signup process, growing the user base and acquiring a steady usage rate among the long term,

and building a nice reputation for the company. For the first barrier, the elderly might not know that they have been compromised before by an online scam. When they see the company's products, they might scoff at the need of the service and make up reasons to avoid trying our service. Also, the elderly are quite stubborn because they don't want to rely on others to make their lives easier. However, their frustration proves that there is no progress made and their lack of technical education puts them at a significant disadvantage. It's not about how frequently they are using the Internet. They have to do it in a way that protects them and achieve their expectations. Meanwhile, companies will argue that they already have sufficient cybersecurity education in their routine. However, education is not a one time process. It is a life-long engagement that adds to prior knowledge. The most successful companies are always adapting to new threats and switch up their training programs. Making a profit is a hard consideration for any company. Increasing the prices will always push customers away for paying and lowering prices will not be a good return on time and investment on the courses. The balance point will be the price that is affordable to customers and delivers a meaningful return on revenue. After setting up payment options, getting loyal customers is a slow process. This is where marketing will be crucial for getting new customers and captivating existing users. Most companies hit a breaking point where their growth has averaged out, so my goal is to make sure that we are not losing too much customers during that period. Finally, the brand's reputation is really important for being trusted by anyone who wants to use the service. My goal is to get some press releases on the company which will help convince people and describe my service in a simple, but powerful tone.

For measuring success, most companies look at their growth metrics and their margin values on their products. Since our service is a software-based company, I will also use those metrics to give a rough estimation on the company's success. For example, if our company has grown to about 1000% in a course of three months, it means that our user base has went from almost nothing to a solid community of people who are interested in our products. Another way to evaluate success is to look at the engagement of the videos. If videos are being viewed at least 75%, this means that the videos are actually helping the people, and they are learning something from watching them. However, if they only look at 30-40% of the video, this means that the videos are either not interesting or lack enough content to make them finish the rest of the video. I will also look at feedback or comments on the videos to see if customers have benefited or not from the videos. For example, if the person writes a comment that praises the detail and simple explanation, it means that the video is more digestible for my audience, so I have to follow the same format to replicate the success. If a video receives a bad comment, I will have to make sure to not make the same mistake and tweak the format to fit to the audience's taste. Lastly, the use of the margin values will help me get an understanding on the financial health of my company. For example, let's say the cost of a video course was \$50 in a one-time purchase for the elderly. The cost of making the video only took me \$20 to make it. When I subtract the losses from the profits, the remaining money is my profit margin. So, my profit margin was \$30 dollars. That's only for a single person. Now, if 300 people signed up to buy the course, I will have to multiply the number of people to the profit margin to get my total profit margin. When I do the math, $300 \times \$30$ is a total of \$9000 for a one time purchase. On the companies' side, I can boost my revenue by selling a subscription instead of a one-time purchase because companies have more budget. If I used the previous numbers without changing the values, the \$9,000 from 300 companies will be multiplied by 12 months to get my yearly estimated profit margin which come up to \$108,000/yearly. Once I combined the money from both audiences, I can get a general

overview of the companies' financial health and pay my employees using the revenue model. Once I have some data, I can project it to see how much I can make in the next year. Granted, the pricing model will require constant experimentation to see how customers feel about paying for the service, and our company will make adjustments according to the budgets of the two groups of our target audience.