# The Exploration Into My Cybersecurity Ideas

Lavontay Johnson

Prof. Batchelder

**CYSE 494** 

#### Venture Idea 1

#### 1. Overview and Need:

- Provide a concise description of the business idea.
- Clearly state the problem or need that this idea addresses. What gap in the market does it fill?

CyberCoach is a mobile and web application that provides gamified, personalized cybersecurity education to non technical users. It is specifically tailored to small business owners, educators, and telecommuters. The app evaluates a user's online behavior and tailors micro lessons to mitigate risk in subjects ranging from phishing to passwords, cloud storage security, and social engineering. It aims to enable individuals to establish effective, daily cyber hygiene in a fun, non threatening manner.

This solution solves this enormous cybersecurity market requirement: user behavior. As pointed out by Verizon's 2024 Data Breach Investigations Report, "more than 80 percent of incidents are caused by human error" (Verizon 2024). I believe the majority of training solutions are corporate focused, boring, or too technical for the general user. I think CyberCoach solves the requirement for user focused, continuous awareness training that sticks.

#### 2. Evaluation of Potential:

- Assess the potential of the idea in terms of market demand, scalability, and profitability.
- Consider potential challenges and risks with the idea.

I truly believe it has good market potential, in my opinion. As remote and hybrid work schedules become the norm, cybersecurity awareness is needed by increasingly more individuals and small organizations without access to IT personnel. The application is scalable and might be commercialized through individual subscriptions, enterprise licenses for small teams, and alliances with insurance firms or managed services providers. Threats are user engagement burnout and rivalry from other security training platforms. But few rivals have mobile first, game based offerings, and the niche is open to filling.

# 3. Discovery Process:

• Explain how you discovered this opportunity. Was it through market research, brainstorming, personal experiences, industry trends?

This concept was triggered by a personal observation when learning cybersecurity and working part time for small businesses. I kind of noticed how embarrassed most were at admitting they didn't know basic security best practices or had clicked on malicious links. I wanted to create something friendly that would make people want to learn and improve rather than scold them. I

also looked into design thinking approaches to behavior change and discovered interactive, tailored learning is more potent than passive modules.

#### **Venture Idea 2**

#### 1. Overview and Need:

- Provide a concise description of the business idea.
- Clearly state the problem or need that this idea addresses. What gap in the market does it fill?

PhishNet is an open source, crowdsourced phishing alert system that allows end users and small organizations to report suspected phishing attacks in real time via email, SMS, or social media. AI is used within the system for assessment of submissions and to alert others in the same geographic region, industry, or organization of phishing campaigns. The utilization of a browser extension and mobile application provides real time submission and alerts, providing a "neighborhood watch" of threats.

This addresses the cybersecurity sector's dire problem of lag in phishing attack detection. More often than not, phishing attacks are already underway prior to the time that security vendors have managed to catch up. PhishNet acts as a rapid, community based detection system that allows users to keep each other safe. It is particularly effective in under resourced environments such as schools, non profits, and small organizations.

#### 2. Evaluation of Potential:

- Assess the potential of the idea in terms of market demand, scalability, and profitability.
- Consider potential challenges and risks with the idea.

Phishing is the top attack vector in the world, and most of the response platforms are focused on large enterprises. I truly believe there is tremendous potential for PhishNet in the small business and nonprofit sector. I believe montenziation can be premium dashboards, threat intelligence licensing, and enterprise reporting tools. It also stands to have tremendous potential in public private partnerships like local government or school districts.

I think concerns involve data privacy, the potential for spurious submissions, and the requirement for intense moderation or AI filtering. Nevertheless, the community based system, if properly designed, can establish an excellent early warning network that surpasses conventional systems.

## 3. Discovery Process:

• Explain how you discovered this opportunity. Was it through market research, brainstorming, personal experiences, industry trends?

I thought of it while researching trends in phishing emails for a class project last semester. I noticed how numerous individuals receive the same phishing attempts but lack a site to report or alert others. I later researched applications such as Citizen and Waze, which utilize community alerts. That led me to consider the prospects of such a platform for phishing. I also examined threat intelligence reports and saw that phishing campaigns pattern by region or sector. That reinforced the need for a real time alert community.

#### **Comparative Analysis**

### 1. Analysis:

- Provide a summary analysis comparing the two ideas.
- Consider factors such as market size, competition, your skills and resources, and potential return on investment.

CyberCoach and PhishNet target various facets of cybersecurity. I believe CyberCoach is grounded in long term behavior change and learning, whereas PhishNet has been designed for live threat detection and collective reaction. I think both concepts are user centered and design thinking based. CyberCoach deals with individual development and learning, whereas PhishNet facilitates collective perception and quick response

I feel CyberCoach has a larger market and more straightforward monetization pathways via partnerships and subscriptions. I truly believe it is easier to scale and less demanding on technical requirements. In my opinion, PhishNet is harder to build and maintain but can build a solid user base through network effects. It is socially valuable and novel but would be slower to deploy and stabilize.

I also feel that both would gain from my background in cybersecurity and my wish for users to be safer online. Yet, CyberCoach is more immediately relevant and helpful to develop as a minimum viable product.

#### 2. Idea with the Most Potential:

• Clearly state which idea you believe has the most potential and why. This could be based on market research, personal interest, or other relevant factors.

Remember to support your evaluations and decisions with relevant data, research, and logical reasoning. This will strengthen your overall analysis and make your assessment more compelling.

I believe CyberCoach has the most potential. It addresses a widespread issue and has a clear impact pathway. There is a compelling need for more engaging, adaptive, and personalized cybersecurity training. As much as I appreciate the creativity of PhishNet, I believe CyberCoach would be simpler to initiate, simpler to promote, and more viable as a company.

## References

Verizon. (2024). 2024 Data Breach Investigations Report. Retrieved from https://www.verizon.com/business/resources/reports/dbir/

Statista. (2025). Cybersecurity awareness training market size worldwide 2020–2030. Retrieved from https://www.statista.com