

**A3 No. and Name**  
899 and Group 1

**Team Leader (name & 'phone ext)**  
Srinu Babu Rai

**Team members (name & role)**  
1. **Shiranth Stephen Sahaya Anbu Anitha**  
2. **Bhupender Sejwal**  
3. **Preetpal Singh**  
4.

**Stakeholders (role & department)**  
1. AI & ML Coordinator, Conestoga College  
2. Potential Client name(s)  
3. Other Conestoga College stakeholder(s)  
4.

**Company objective**

**Start date & planned duration**

SafeplayAI

### 1. Clarify the problem

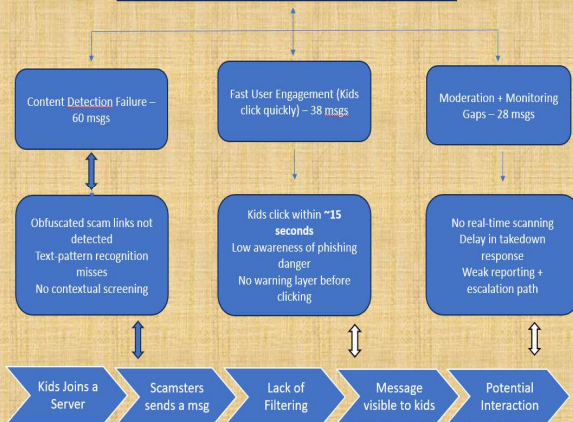
**Current Situation**  
Dataset contains 2000 total messages  
14% are phishing/scam - 280 messages  
Current moderation captures only 50% of phishing content  
→ ~140 blocked / 140 remain exposed to users (children)

**Ideal Situation**  
SafePlay AI will automatically detect and Reduce phishing exposure from 140 → ≤14 messages, achieving 90% protection for child users.  
Final phishing rate should be ≤0.7%

**GAP**  
Currently exposed phishing = 140 messages/month  
Desired exposure = 28 messages/month  
Gap = 140 - 28 = 112 messages/month to reduce.

### 2. Breakdown the problem

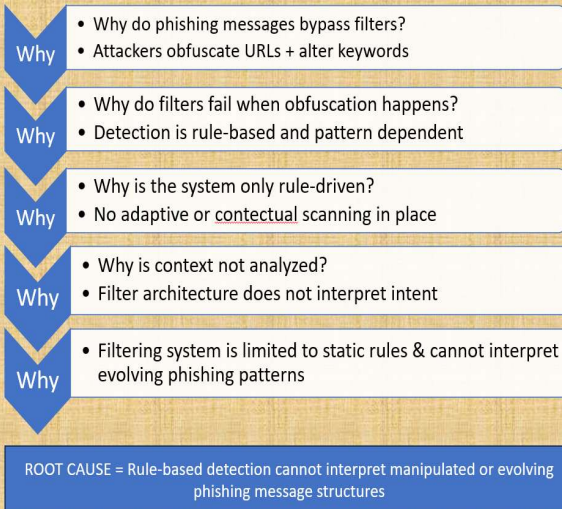
ROOT GAP = 126 phishing messages reaching children



### 3. Set the Target

1. Improve phishing detection accuracy from 50% to 90%.
2. Reduce false positives from 20% to below 5%.
3. Cut scam exposure from 14% to under 5%.
- 4.

### 4. Analyse the Root Cause



### 5. Develop Countermeasures

Th Options Matrix Tool (OMT)

Countermeasure / Action Item	Current Status	Target Status	Priority	Impact	Effort	Risk	Feasibility	Cost	Time	Resources
AI-based Phishing Detection Model	Low	High	High	High	Medium	Low	High	Low	Medium	Medium
Machine Learning Model to Detect Phishing	Low	High	High	High	Medium	Low	High	Low	Medium	Medium
Deep Neural Network for Phishing Detection	Low	High	High	High	Medium	Low	High	Low	Medium	Medium
Deep Reinforcement Learning for Phishing Detection	Low	High	High	High	Medium	Low	High	Low	Medium	Medium
Deep Transfer Learning for Phishing Detection	Low	High	High	High	Medium	Low	High	Low	Medium	Medium
Deep Reinforcement Learning for Phishing Detection	Low	High	High	High	Medium	Low	High	Low	Medium	Medium
Deep Reinforcement Learning for Phishing Detection	Low	High	High	High	Medium	Low	High	Low	Medium	Medium

### 6. Implement Countermeasure

### 7. Monitor Results & Process

### 8. Standardise & Share Success