

Team 2: Cybersecurity Framework for Healthcare Industry



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Client & Sponsor



- **Lane Sullivan**
- **Senior Vice President, Chief Information Security Officer**
- 25+ years of experience that develops high-performing teams and achieves transformation goals
- Specialties in: IT Governance Risk and Compliance, Data Governance, Data Loss Prevention, Policies, Identity & Access Management, Incident Response, Vulnerability Management, Security Operations Center, Vendor Risk Management, and Threat Intelligence



Outline

Introduction

Identified Threat Landscape

Problem Statement

Regulations for Healthcare Industries

Our Cybersecurity Framework

Cost-Benefits

Summary

A large, dark gray, curved shape that occupies the left side of the slide, resembling a quarter-circle or a large arc.

Introduction

Our Client



Y-GWASH Inc.: Your Global Welfare
and Social Health Inc.



Healthcare Company

provides services for
family clinics and
online consultations



Medium size



Identified Cybersecurity Risks and Threat Landscape

What is Cybersecurity?

Cybersecurity protects computer systems, networks, and digital data from being stolen, corrupted, or accessed by unauthorized individuals.

What Problem Does it Solve?

Cybersecurity acts as the guard against unauthorized access to sensitive data.

Why is cybersecurity important for a healthcare company?



Patient Data Protection



Medical Device Security



Operational Continuity

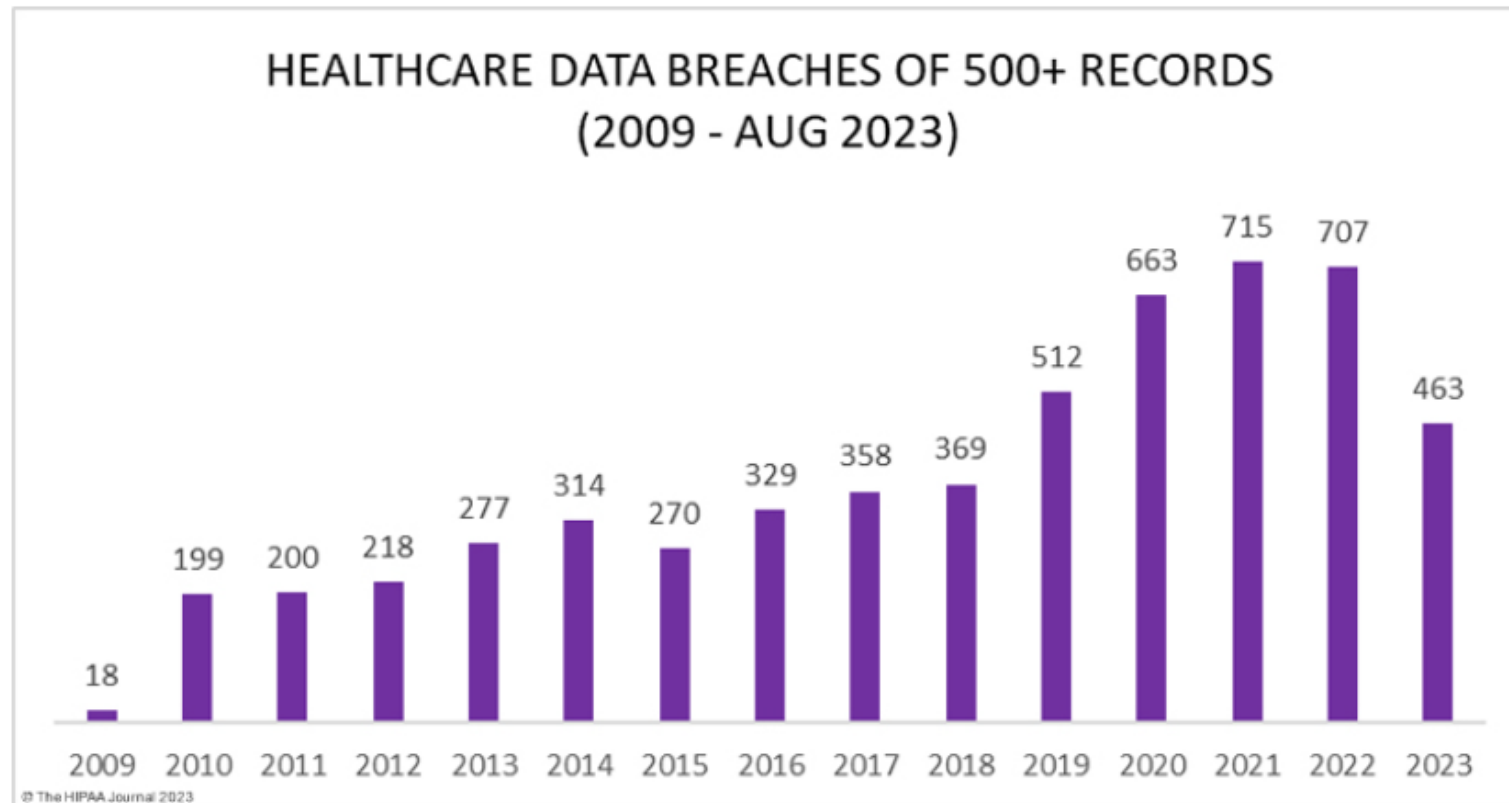


Financial Implications

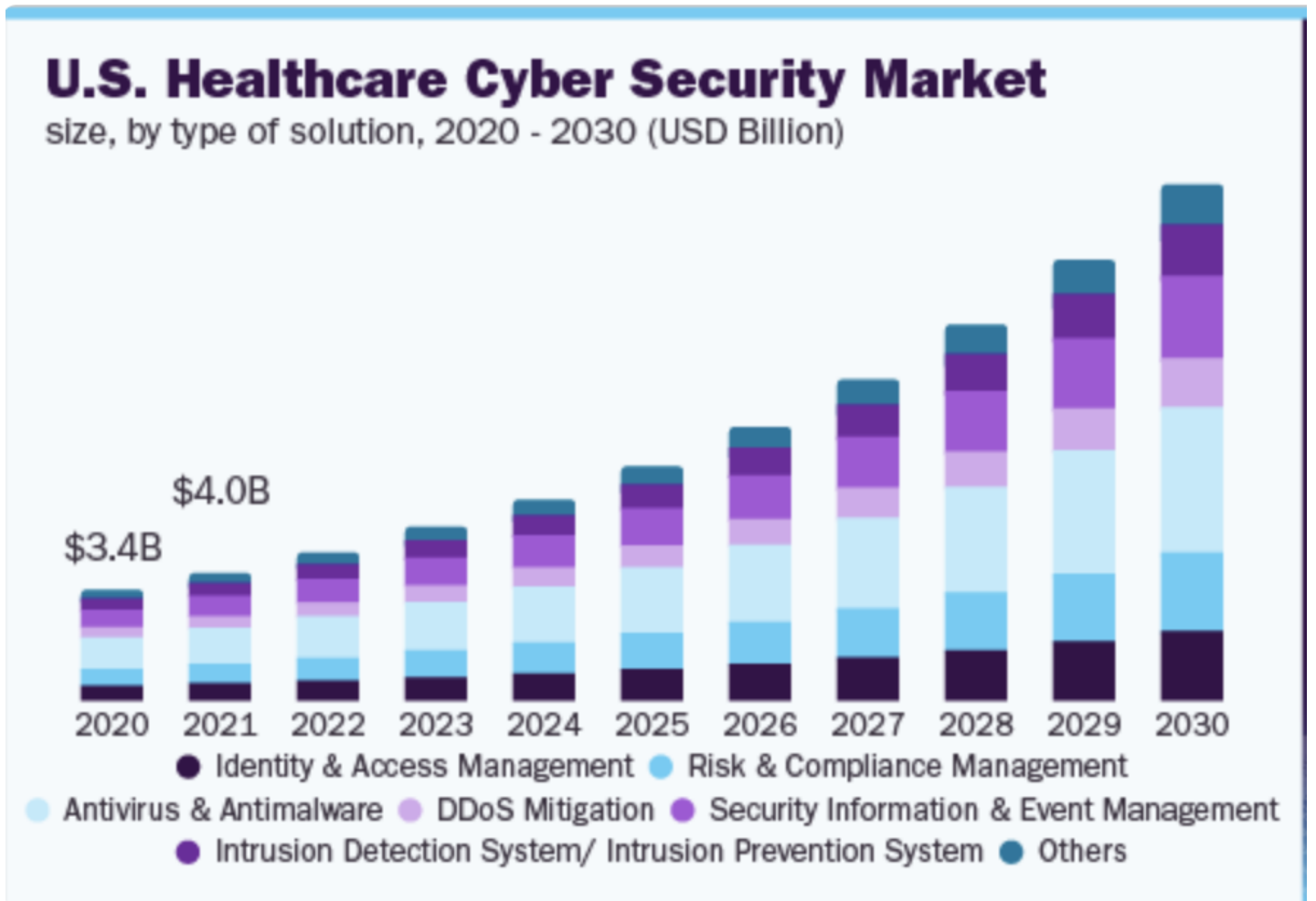


Regulatory Compliance

How many cybersecurity incidents have happened in the healthcare industry?

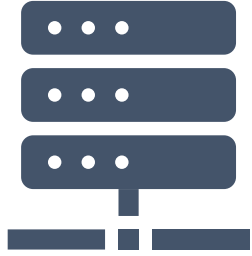


How much investment in cybersecurity is there currently in the healthcare industry?



Problem Statement

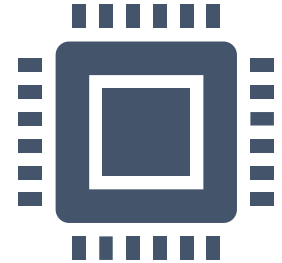
Problem Statement



Y-GWASH Inc already has **basic** IT Infrastructure in place (e.g. network, database, IT system)



But **don't have established cybersecurity procedure**



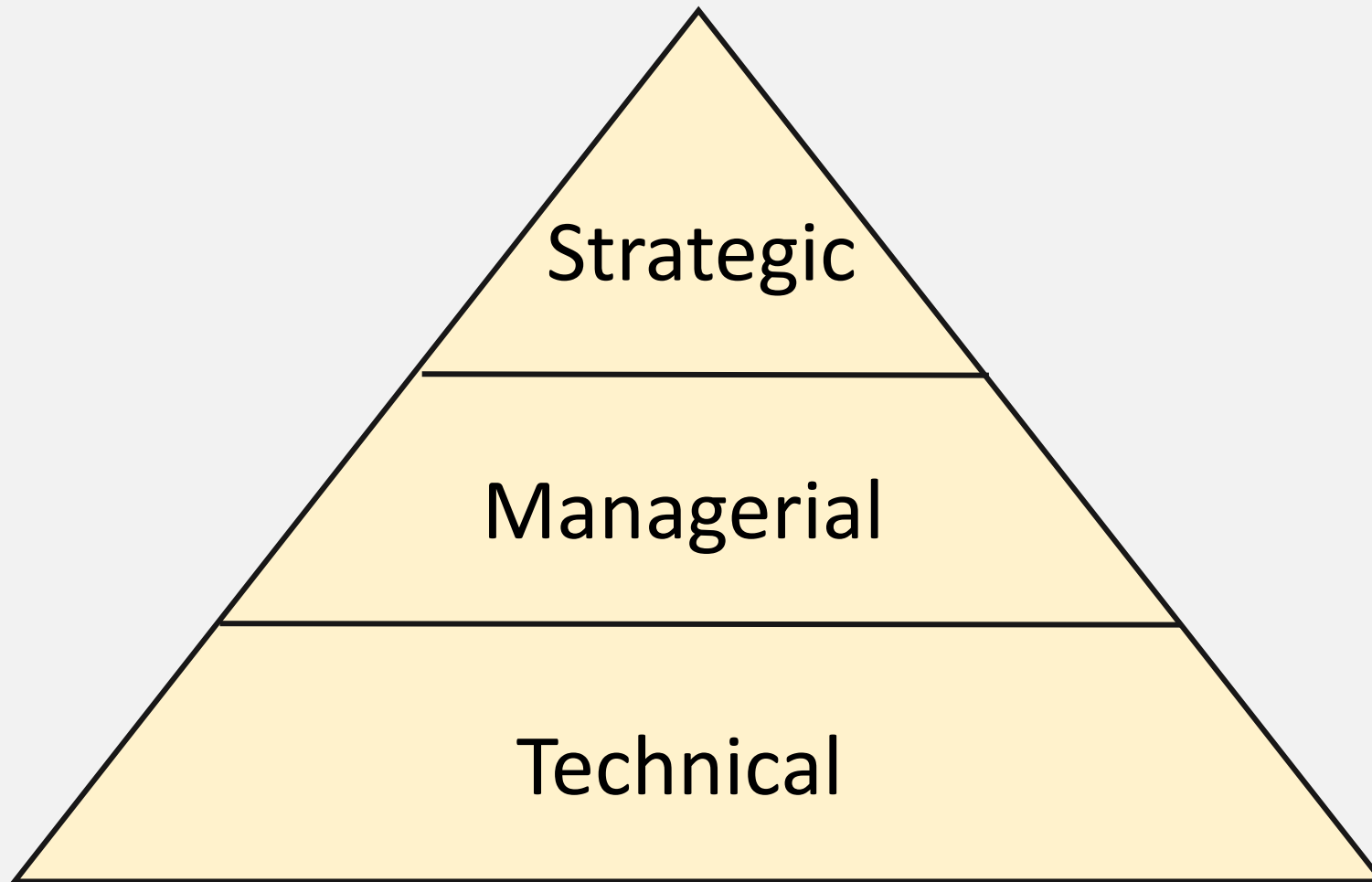
We are here to suggest **how best to implement a robust cybersecurity framework** for Y-GWASH Inc.

Regulations for Healthcare Industries

Regulations

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- NIST: National Institute of Standards and Technology
 - ISO27001: International Organization for Standardization
 - CSF: Cybersecurity Framework
 - HIPPA: Health Insurance Portability and Accountability
 - CIS: Center for Internet Security

Cybersecurity Framework



Cybersecurity Framework: Strategic



Business Continuity
Management



Data Lifecycle

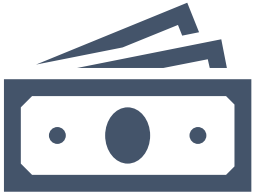


Compliance



Human Training

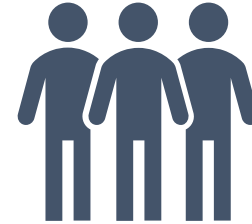
Cybersecurity Framework: Managerial



Asset Management



Risk Management



Third-Party
Relationships

Cybersecurity Framework: Technical



Cryptography/Key
Management



Security Controls



Physical and
Environmental
Security



Access Controls



Monitoring/Audit
Logging

Business Case

Business Case



Y-GWASH: Your Global Welfare and Social Health Inc.



Healthcare
Company

provides services
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Medium size

Costs Benefits Analysis

- **Costs:**
 - One-time Costs
 - Annual Costs
- **Benefits:**
 - Direct Benefits
 - Indirect Benefits
 - Potential Benefits
- **Net Benefits = Total Benefits – Total Costs**



One-time Costs

- **Physical and environmental safety measures**
- **Cybersecurity Infrastructure**
- **Software and Technical Tools**
- **Contract administration and training costs**



Annual Costs



Foundations



External Sources



Operating Maintenance



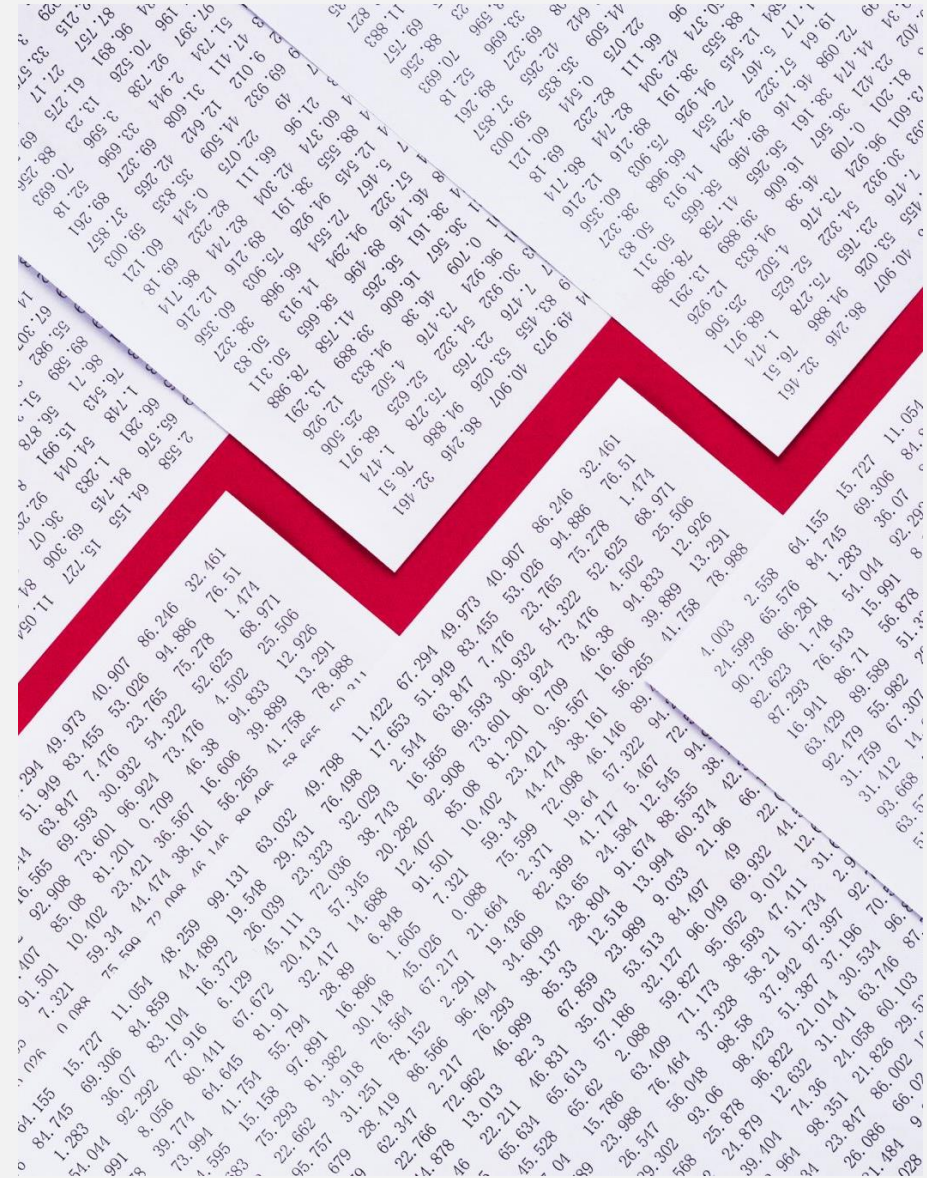
Training



Internal Establishment of Positions

Direct Benefits

- Business Opportunities and Market Share
- Accidental Losses
- Asset Protection
- Efficient Incident Response
- Insurance Cost Reduction
- Lower Insurance Rates
- Overall Risk Reduction



Potential Benefits

PB = Possibility x Penalties

Avoidance of data breach loss

- The global average cost per mid-sized company per data breach was \$4.45 million in 2023

Regulatory Compliance

- CPRA (California Privacy Rights Act)
 - Fines of up to \$2,500/\$7,500 for each violation
- General Data Protection Regulation (GDPR)
 - Fines of up to €20 million or 4% of the company's global annual turnover
- HL7 Fast Healthcare Interoperability Resources (FHIR)

Indirect Benefits (non-quantitative)



IMPROVED ACCOUNTABILITY
AND TRANSPARENCY



CUSTOMER TRUST AND
CONFIDENCE



BRAND PROTECTION

Cost-Benefits (Annual Quantitative part)

**Total Costs = Annual Costs
= \$895,000**

**Total Benefits = (Direct + Potential) Benefits
= \$1,411,000 + Potential Benefits**



Net Benefits = Total Benefits – Costs = \$516,000

A Glance to the Future



Positive outcome



Regulation
compliance



Invest for the
future

Questions?



Thank you for listening

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