

# PROTECTING OUR BUSINESS: SECURITY ASSESSMENT FINDINGS AND RECOMMENDATIONS



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This presentation summarizes the key security challenges we face and provides actionable steps to protect Grey Matter's operations, finances, and reputation in light of the BrainMeld acquisition.



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# Introduction

The acquisition of BrainMeld brings opportunities but also risks.

Our cybersecurity assessment identified areas requiring immediate and long-term attention to protect our business.

Today's presentation will focus on:

- Critical vulnerabilities identified.
- Recommended solutions and their importance.
- Steps to ensure future resilience.

## Importance

- Cybersecurity is fundamental to successfully integrating BrainMeld's systems and protecting Grey Matter's growth. Without addressing these issues, we risk operational disruptions and financial loss.

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# Key Findings



Vulnerabilities discovered include:

- Unpatched systems (e.g., SMB server issues).
- Weak password practices.
- Outdated encryption protocols.

These weaknesses, if left unaddressed, create entry points for hackers.

- A single vulnerability can result in costly breaches, operational downtime, or loss of trust with customers. Strengthening these areas protects us from external threats.

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# Unpatched SMB Server Vulnerabilities

## Unpatched Server

- SMB (Server Message Block) allows data sharing over networks but has known vulnerabilities.
- Example: The WannaCry ransomware attack exploited unpatched SMB servers, causing millions in damages globally.
- Recommendation:
  - Apply critical patches.
  - Disable outdated SMBv1 protocol.

## Importance

- Unpatched systems are an open door for attackers, risking stolen data and ransomware incidents that could cripple operations.
- Protecting these systems ensures business continuity.



# WEAK PASSWORD PRACTICES

## Password-related risks identified:

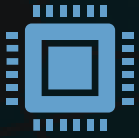
- Default credentials like "admin:guest."
  - Weak or reused passwords.
- Example: Cyberattacks often start by exploiting default passwords, leading to unauthorized access.
- Recommendations:
  - Enforce stronger password policies.
  - Implement account lockout for repeated failed attempts.

## importance

- Weak passwords are like leaving the front door unlocked. Strengthening them ensures that only authorized individuals access our systems.



# OUTDATED ENCRYPTION METHODS



## Issues:

Use of HTTP instead of HTTPS.  
Weak SSL/TLS certificates vulnerable to interception.



## Example:

Outdated encryption allows hackers to intercept sensitive information, like login credentials or customer data.



## Recommendations:

Transition all systems to HTTPS.  
Update encryption to meet modern standards (e.g., SHA-256).



## Importance:

Encryption protects our communication and sensitive data.  
Modernizing encryption ensures customer trust and compliance with industry standards.

# POTENTIAL IMPACTS

## Risks if vulnerabilities remain unresolved:

- Data breaches expose sensitive customer or employee information.
- Financial losses due to fraud, fines, or recovery costs.
- Loss of reputation, impacting customer trust and market position.
- "Without action, these vulnerabilities could disrupt business operations and undermine our credibility."

## Importance

- Addressing vulnerabilities today prevents crises tomorrow, protecting our business and customers.



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## RECOMMENDED IMMEDIATE ACTIONS

### Quick steps to reduce risks:

- Apply software patches immediately.
- Disable outdated SMBv1.
- Strengthen password policies and encryption.
- "These actions provide an immediate shield against the most critical vulnerabilities."

### Importance:

- These straightforward actions are cost-effective and reduce the risk of major breaches.



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# LONG-TERM STRATEGIES

## Strategies for ongoing security:

- Regular system audits.
- Employee cybersecurity training.
- Continuous policy updates to adapt to evolving threats.
- Example: Regular audits in similar companies reduced incidents by 50% (Business Tech Weekly, 2022).

## Importance

- Security is not a one-time fix; it requires continuous effort to adapt to new threats.

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# VISUAL AID

Vulnerability	Potential Impact	Recommended Action	Timeline
Unpatched SMB Server	Unauthorized access and ransomware attacks	Apply security patches, disable SMBv1	Immediate (1 week)
Weak Password Practices	Brute-force attacks and data breaches	Enforce strong passwords, set lockouts	Immediate (1 week)
Outdated Encryption (HTTP)	Data interception and loss of sensitive information	Transition to HTTPS, update SSL/TLS	Short-term (1 month)
Lack of Regular System Audits	Undetected vulnerabilities	Implement regular security audits	Ongoing



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# BENEFITS OF IMPLEMENTATION

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By taking these steps, Grey Matter will:

- Enhance system security.
- Protect customer trust.
- Avoid costly disruptions and fines.
- "Strong security is an investment in our company's future."

## Importance:

- Proactive measures ensure Grey Matter remains competitive and trusted in the market.

A network diagram with numerous dark grey circular nodes connected by thin black lines, forming a complex web. The nodes are of varying sizes, with some being larger than others. The background is a dark teal color with a subtle pattern of light blue circuit lines and nodes.

# CONCLUSION

## Summary:

- Our findings highlight critical vulnerabilities.
- Immediate and long-term actions protect our business.
- Moving forward, ongoing efforts are essential.

## Call to Action:

- "Together, we can secure Grey Matter's future by addressing these risks today."