

Why Cybersecurity Matters to the Ready Mix Concrete Industry

NRMCA Annual Convention
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Audience Poll

- Does your business have an Internet connection?
- Do you use email?
- Do you store confidential information electronically?
- Are you part of a small, medium, or large business?
- Do you have a cybersecurity policy?



Today's Presentation

Presenter	Company	Topic
 Oliver Brooks	 Martin Macreth	Why Cybersecurity Matters
 Brandon Williams	 CENTRAL	Recent Case Studies
 Ken Cook	 OZINGA	Implications of a Breach
 Carrie Heisler	 imi	Best Practices and Preventative Measures



Why Cybersecurity Matters

"A future hot target for attacks – how construction companies can improve"

Construction Dive News
8/11/16

"60% of small firms that suffer a cyber attack are out of business within 6 months"

Denver Post
10/23/16

"If you spend more on coffee than on IT security, you will be hacked"

Richard Clarke
Cybersecurity Expert



A Constant Headline

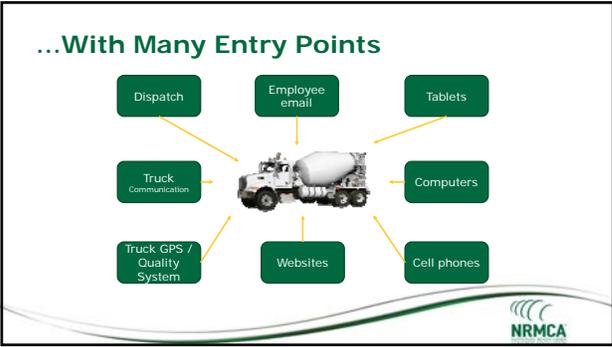


Are We Next?



A Constant Threat...

Malware	• Sends viruses usually through email attachments
Phishing	• Requests your data through disguised links
Password Attacks	• Cracks your password
Denial-of-Service	• Disrupts and cripples your network
Man in the Middle	• Impersonates people and websites you know
Drive by Download	• Downloads malware from a trusted site
Malvertising	• Unleashes malicious codes when you click an ad
Rogue Software	• Poses as legitimate software updates

Case Study: **Turner**

Entry Point	Information Obtained	Implications
<ul style="list-style-type: none"> • Phishing email to HR employee • Spoofed the "From" field to trick the target • Employee replied with sensitive information 	<ul style="list-style-type: none"> • Employee names • Earnings • Social Security #'s • Residence • Tax data 	<ul style="list-style-type: none"> • Company-wide breach • Affected all employees employed in 2015 • Significant cost



Phishing Scams



- \$3.7 million annual average cost
- rgabini@nrmca.com vs. rgabini@nmca.com
- @amazons.com vs. @amazon.com
- 156 million phishing emails are sent each day



Targeted Information

Employee <ul style="list-style-type: none"> • Name and address • Earnings • Beneficiaries • Taxes 		Customer <ul style="list-style-type: none"> • Credit cards • Demographics • Logins
Trade Secrets <ul style="list-style-type: none"> • Customer lists • Pricing and plans • Intellectual property 		Financial <ul style="list-style-type: none"> • Account numbers • Financial records



Implications of Data Breach

- Likely public relations nightmare
- Loss of trust
- Employees, customers and vendors
- Loss of business




Implications of A Breach

Financial Impact

- Average Cost:
 - \$4 million globally
 - \$7 million U.S.
- ~\$221 per each sensitive record compromised
- What makes up these costs?
 - Employee terminations
 - Outside consultants
 - Loss of business (\$3.97/record)

Source: Ponemon Institute



Implications of A Breach

Transportation Sector

- ~\$129 per each record (transportation industry)
- Average of 29,611 records compromised during 2016

Potential Business Impact

Less than **1,500** hacked records can cost as much as **1** ready mix truck

An "average size" attack could replace your next acquisition!




Protecting Your Assets

Technical	Training & Prevention	Policy & Culture
Firewalls	Employee training	Written policy
Security software	External resources	Password protection
Server back ups	Incident response	Being alert
Data encryption		Knowing vulnerabilities

IT Led ← Management Led →



Where Can Senior Managers Focus?

Recommendation	Rationale
Reinforce a culture of tight cybersecurity	<ul style="list-style-type: none"> Most boards of directors think cyber security is a threat Management support is key
Support mandatory training	<ul style="list-style-type: none"> Creates awareness Threats evolve over time
Ban thumb drives	<ul style="list-style-type: none"> Many carry viruses and malware
Limit access to sensitive data	<ul style="list-style-type: none"> Reduces risk exposure Edward Snowden example
Support a strong password policy	<ul style="list-style-type: none"> Most common passwords are easy to hack

Source: Paul McGillicuddy



Most Common Passwords

(Based on 2015 data)

- 123456
- password
- 12345
- 12345678
- qwerty
- 1234356789
- 1234



... There are only two different types of companies in the world: those that have been breached and know it, and those that have been breached and don't know it.

Ted Schlein, Venture Capitalist

Source: Paul McGillicuddy



Ensuring Strong Passwords

- Create password 10 characters or longer
- Include uppercase & lowercase letters, numbers, and symbols



Source: csid



Key Takeaways



Thank You

