

A large, stylized graphic of the letter "K" is positioned on the left side of the slide. The "K" is white and is set against a background of blurred, multi-colored text that resembles computer code or data. The "K" is composed of a vertical stem and two diagonal arms that meet at a point in the middle.

American Home Furnishings Alliance Cyber Threat Insights November 12, 2021

Agenda

- Introductions
- Top Cyber Trends
- Ransomware Briefing
- Wire Transfer Fraud Briefing
- Cyber Strategy



Dustin Owens

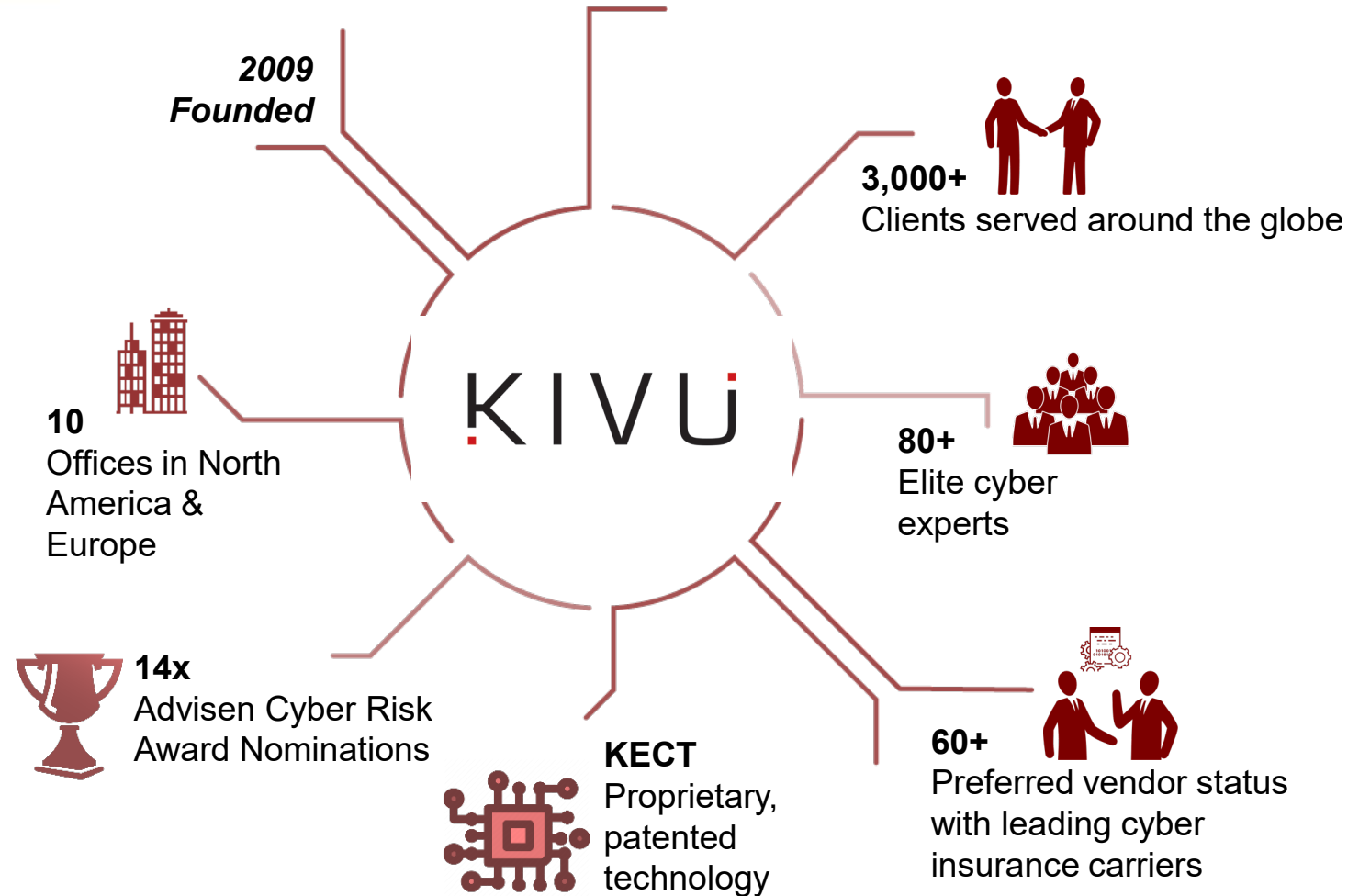


Dustin Owens is the VP of Cyber Risk & Resilience capabilities, which focus on proactive/pre-breach services at Kivu. Dustin has over 25 years of cyber experience with his core expertise being enterprise risk management and compliance. Dustin's industry expertise comes in the form of financial services, energy, healthcare, manufacturing, retail, travel and transportation, hospitality and consumer packaged goods.

Prior to joining Kivu, Dustin held various service leadership positions at Lucent Technologies, International Network Services, British Telecom, HP/DXC and Optiv Security.

Kivu Background

KIVU





Cyber Security

Evolution & Current State of
Cyber in Manufacturing

Top Cyber Threats

Manufacturing

- Top Threat Events
 - Ransomware
 - Wire transfer fraud
- Top Manufacturing Attack Tactics (How)
 - System Intrusion
 - Social Engineering (phishing)
 - Basic Web Application Attacks
- Top Threat Actors (Where):
 - External (82%), Internal (19%), Multiple (1%)

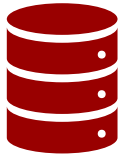
**Source: 2021 Verizon Data Breach Investigation Report*



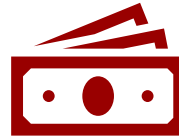
Ransomware

Industry Threat Briefing

Ransomware Primer



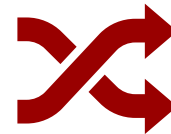
**Critical / Sensitive
Data Encrypted**



**Pay / No Pay
Decisions**



**Issuance of
Ransom Note**



**Double Extortion
Schemes**



**Imposed Time
Limitations**



Research by Attackers

Ransom Impacts



Average Duration of Negotiations – 9 Days



Average Initial Ransom Demand in US Dollars* – \$892k



Average Initial Ransom Demand for Companies > \$500M in Revenue - \$3M



Average Cost of a Ransomware Breach - \$4.62M (not including ransom payment)**



51% of Manufacturing Sector Experienced Significant Revenue Loss Post Breach***

Engaging with Ransomware Agents

- Exercising caution with self engagement
- Profiling a threat actor
- Office of Foreign Assets Control (OFAC) Check
- Negotiation Objectives
 - Delaying payment timeline
 - Ransom reduction
 - Digital payment process



Wire Transfer Fraud

Industry Threat Briefing

Payment Fraud Statistics

74%

Organizations
Experiencing
Payments Fraud in
2020

\$50,000 or less

Total for Most
Organizations Suffering a
Business Email
Compromise (BEC) attack

30%

Organizations
Experiencing
Increase of
Incidents in 2020

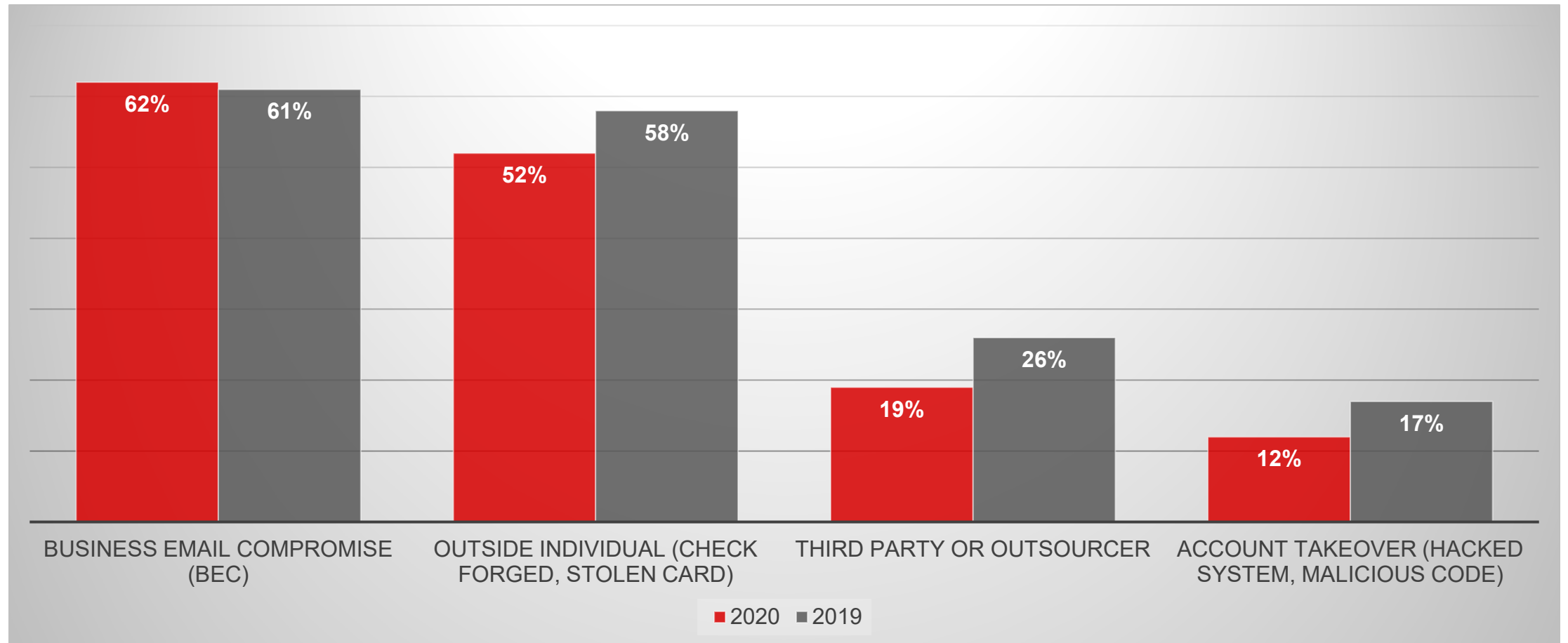
Accounts Payable

Department Most
Targeted for Business
Email Compromise
Attacks

**Source: 2021 Association for Financial Professionals Payments Fraud and Control Survey Report*

Sources of Payments Fraud

% Experiencing Sources of Actual or Attempted Fraud



*Source: 2021 Association for Financial Professionals Payments Fraud and Control Survey Report

Business Email Compromise (BEC)

Common Types of BEC Attacks

- Emails from third parties requesting bank changes, payments instruction, etc
- Emails from fraudsters posing as senior executives requesting transfer of funds
- Emails from fraudsters impersonating as vendors

**Source: 2021 Association for Financial Professionals Payments Fraud and Control Survey Report*



Cyber Strategy

Industry Threat Briefing

Strategic Cyber Recommendations

- Focus first on fixing common attack points
- Incorporate a risk-based approach to cyber
- Conduct regular cyber threat briefings for the board
- Stay apprised of trends with cyber insurance underwriting requirements
- Specific to ransomware, leverage executive tabletops to fully understand preparedness for pay / no pay decision making

Top Cyber Prevention Tactics

Prepare

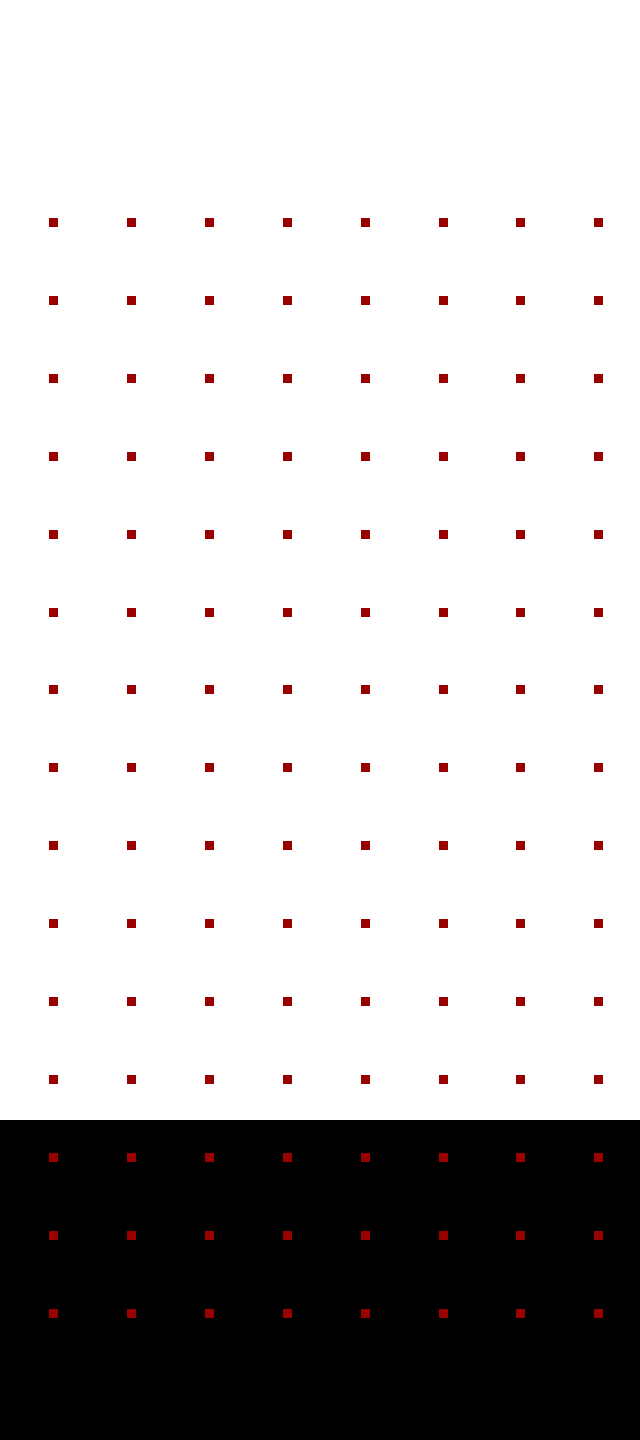
- Security Awareness and Skills Training
- Business Impact Analyses
- Risk Assessments

Protect

- Multi Factor Authentication
- Patch Management
- End Point Detection & Response

Test

- Phishing Simulations
- Tabletop Exercises
- Penetration Testing



Cyber Risk & Resilience

Proactive Cyber Protection

KIVU