SecurityScorecard

SecurityScorecard for Cyber Insurance
January 2019

2   +jbird@securityscorecard.io Please replace core slides with current versions from Phil
Stacy Moran, 17-Jan-19

1   Please use Insert/Comment feature for any suggested inputs by Noon today.
Stacy Moran, 17-Jan-19

Our Journey

2013

SEED
böldstart ventures evolution EQUITY PARTNERS

Founded by Dr. Aleksandr Yampolskiy and Sam Kassoumeh; both are cybersecurity practitioners and leaders

2015

SERIES A
SEQUOIA

Collaboration Tools Launch

2016

SERIES B GV

Instant SecurityScorecard, Automatic Vendor Detection, and ThreatMarket Launch

100K Companies Continuously Monitored

2017

SERIES C
NGP NOKIA GROWTH PARTNERS intel Capital AXA Strategic Ventures Moody's

Malware Grader Launches

Partnership with the London Digital Security Centre

200K Companies Continuously Monitored

2018

MILESTONE
1,000,000 SCORED

Milestone achievement provides unmatched amount of historical data to contextualize cybersecurity risk.

Atlas Launches

Gartner Predicts 2018:
Impact of Security Ratings

Gartner Predicts 2018:
Security and Risk Management Programs

Strategic Planning Assumptions

Strategic Planning Assumption: By 2022, **cybersecurity ratings will become as important as credit ratings** when assessing the risk of business relationships.
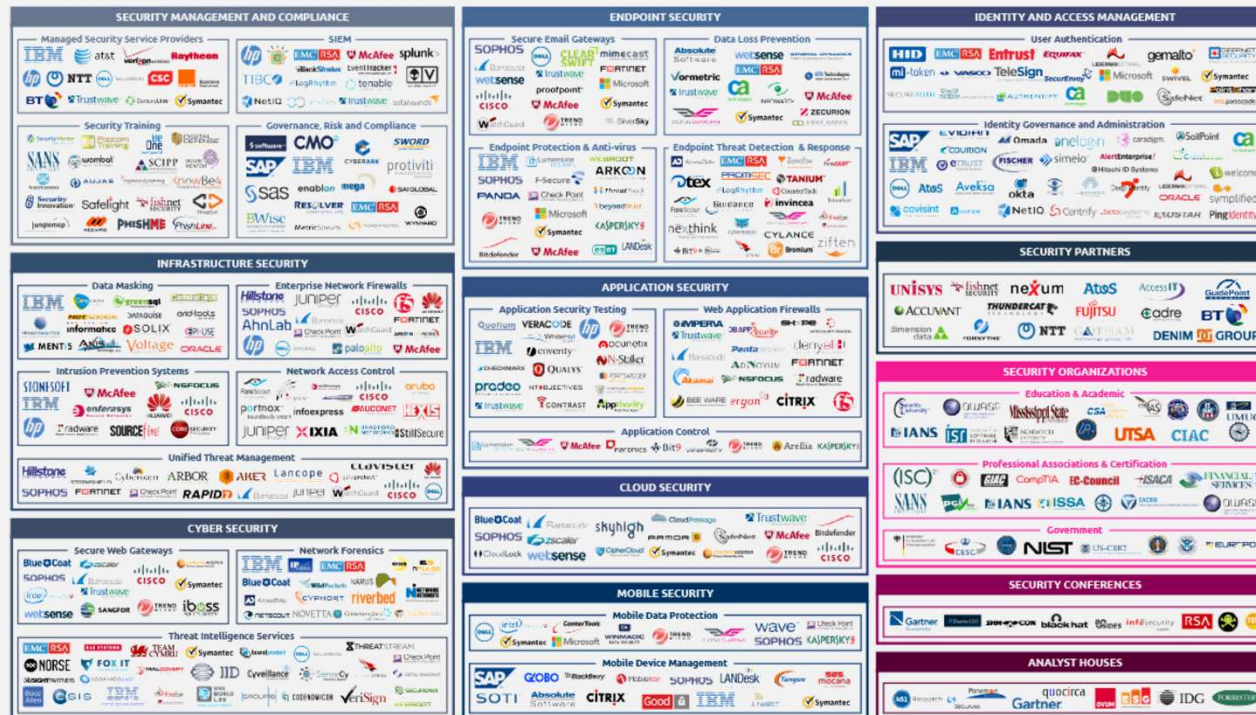
Key Findings:

As the shift to digital business continues, Gartner sees an increased focus on the risks associated with the complex ecosystems that are an integral part of digital businesses. **Digital supply chain risk is becoming a larger and more impactful component of the overall landscape of risk. Concurrently, third-party risk is growing; some Gartner clients are considering fourth- and fifth-party risk and beyond.**

Over the next six years, these services will become a **mandatory precondition** for a growing number of business relationships and part of the standard of due care for providers and procurers of services. These cybersecurity scores will impact the degree to which other companies engage in high-value business with the organization. These **scores will have an impact on cost/availability of cyberinsurance.**

Cybersecurity rating services theoretically meet an almost **universal need for the initial and continuous monitoring** of external party security posture, yet the practice remains a relatively new form of service that has not yet proven the utility of its scoring systems. Like credit ratings services, it may be the case that providers will need the cooperation of their targets of evaluation, providing a deeper level of inside information than is currently incorporated into scoring models.

Security Landscape is Fragmented, Crowded, with Clear Winners Uncertain

Over 170 press mentions (2017-2018) in leading media outlets

https://securityscorecard.com/press-mentions

Market Opportunity is into the Billions

Opportunity #1:
TPRM (VRM) in regulated
industry verticals

Challenge: Understanding and
managing security risk posed by
3rd party vendors, suppliers, or
business partners
Opportunity size: $7.5B IRM
market by 2020

SOURCE: Gartner

Opportunity #2:
Enterprise Risk Management

Challenge: Measuring and
mitigating enterprise security &
risk holistically, on a massively
distributed scale
Opportunity size: $17.1B
market by 2021

SOURCE: : Research & Markets

Opportunity #3:
Cyber Risk Underwriting

Challenge: Measuring and
modeling security risk for cyber
insurance underwriting
Opportunity size: $14B market
by 2022

SOURCE: P&S Market Research

Instantly Rate – Continuously Monitor

SecurityScorecard is a security ratings platform that enables enterprises to *instantly* rate, understand, and *continuously monitor* the security risk of any company worldwide, non-intrusively and from an outside-in perspective.

Understood by all of your peers. We use an A-F rating scale. Companies with a C, D, or F rating are up to 5 times more likely to be breached or face compliance penalties than companies with an A or B rating.

Let us be Your Source for Cyber Ratings Information

- Heavily trafficked website with ~26k website visitors per month

- 51 Blogs in 2018 (average 1.43 blogs per week)

https://securityscorecard.com/blog

Industry Leading Cybersecurity Reports

We leverage our data and capabilities to help the industry understand the state of cybersecurity:

- Healthcare Report
- Government Report
- Top 20 CISOs
- Retail Report
- Education Report
- Big 500 Report
- IoT Report

Downloaded by thousands of leading cybersecurity professionals across the globe: (https://securityscorecard.com/resources?type=reports)

Continually Improving your Experience – High-Level Capabilities

- Sophisticated reconnaissance and behavioral analytics

- Groundbreaking machine learning-based questionnaire tool

- Trusted source for CVE details

- Broadest digital footprint discovery available

- Predictive scoring algorithm

- Extensive malware detection

Forrester New Wave:
#1 Product Offering

THE FORRESTER NEW WAVE™
Cybersecurity Risk Rating Solutions
Q4 2018

SecurityScorecard is positioned strongest (#1) for current product offering

SecurityScorecard earned a the highest rating possible in the following critical criteria:

- Thought Leadership & Strategic Partnerships
- Dashboards & Alerts
- Rating Efficacy & Transparency
- Risk Analysis & Attribution
- Dark Web & Technical Intelligence
- Surface & Deep Web Intelligence

The SecurityScorecard Process

Our proprietary software gathers as much threat intelligence data as possible using non-intrusive methods.

The threat intelligence data is normalized and scored using patented machinelearning algorithms.

Based on the threat data, businesses are graded based on company size and digital footprint.
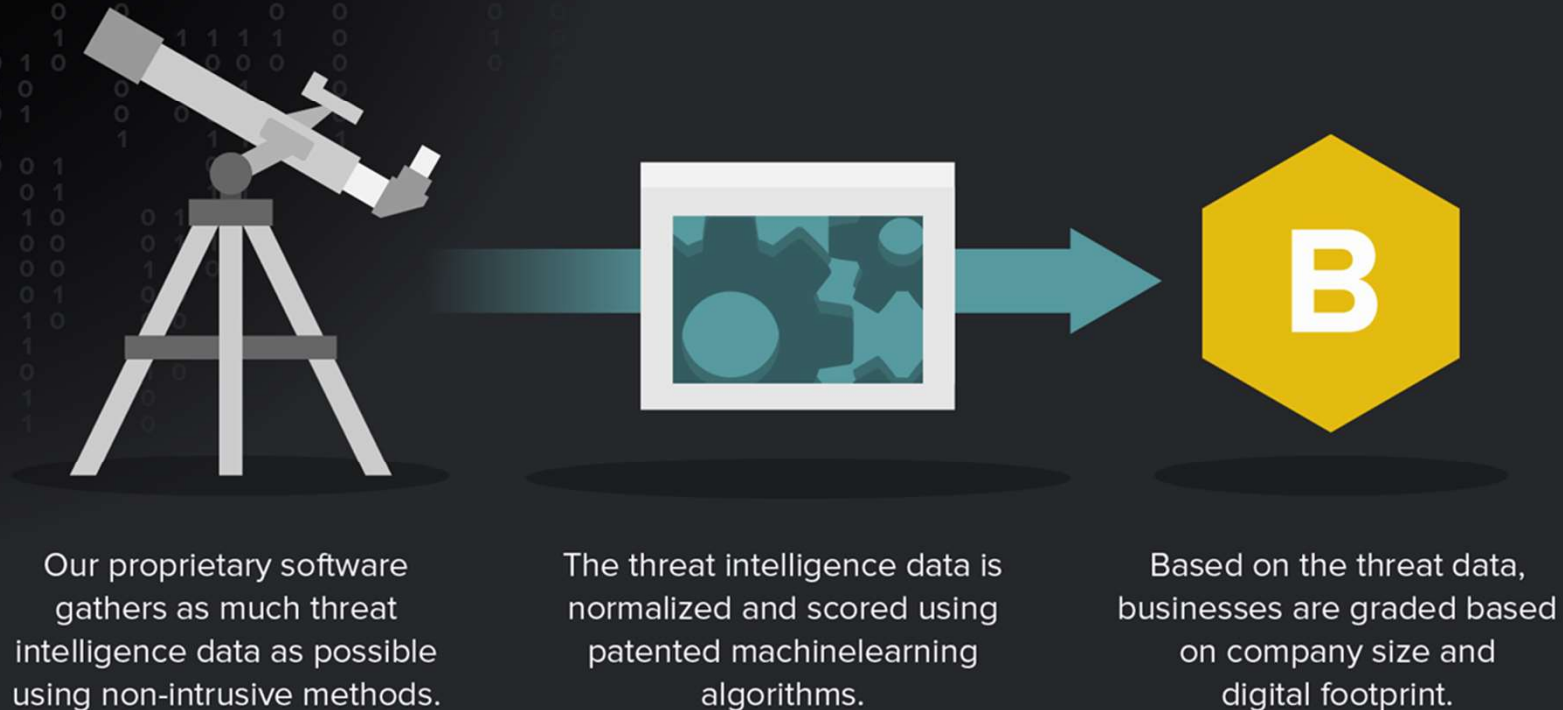
Overall Grade

SecurityScorecard Security Rating   A   B   C   D   F

Grade Per Risk Factor

Application Security | Network Security | Endpoint Security | Social Engineering | Hacker Chatter | DNS Security | Leaked Information | Cubit™ Score | Patching Cadence | IP Reputation

Vulnerability Search Engine

ThreatMarket™
(IP Attribution, Normalization of Data, Elimination of Noise)

Data Collection

Sensors Crawling the Entire Internet   Vulnerability Fingerprinting   Emerging Threat Collection

Delivering Accurate Scores:
Data Collection and Attribution As a Differentiator
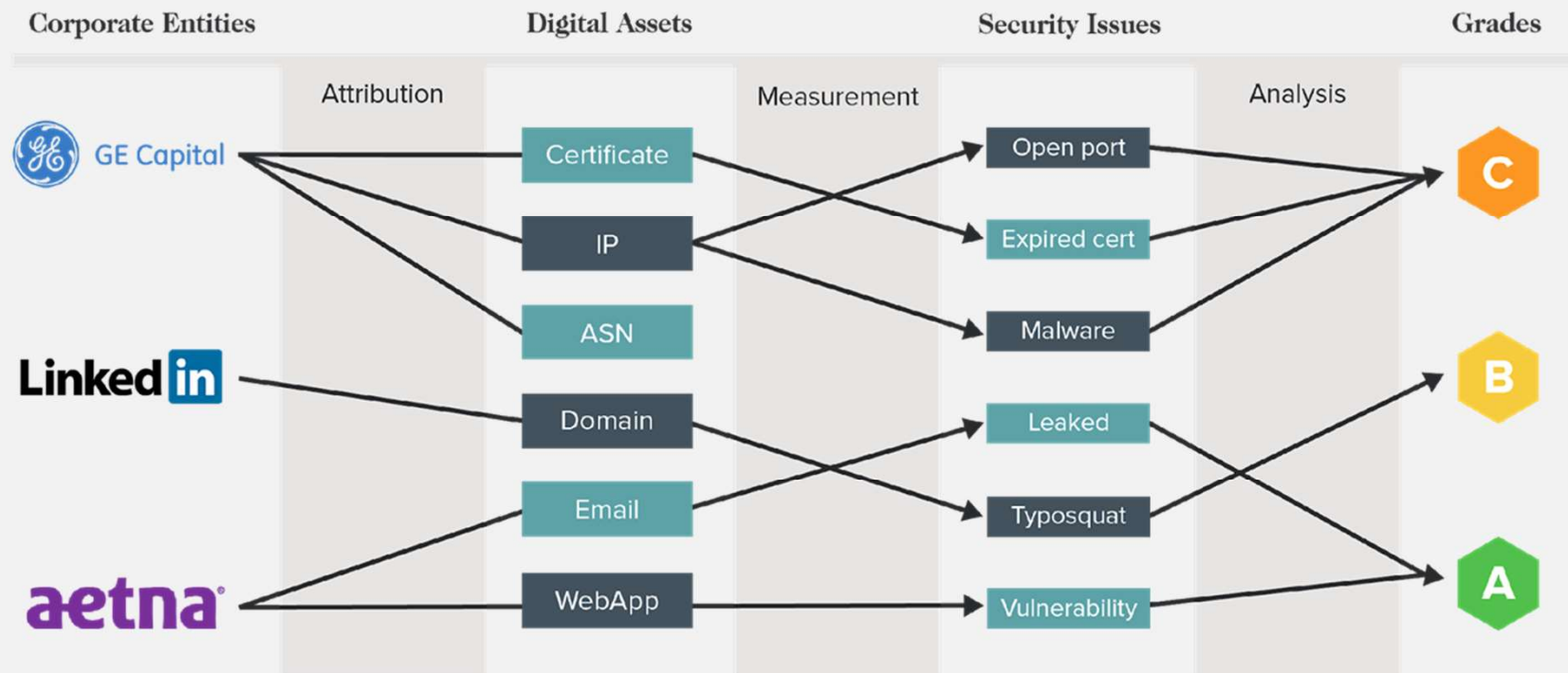
1   thanks Alex. can you suggest an issue to sub?
Phil Marshall, 16-Jan-19

1   Typosquat is not a scored issue type, may be better with something like an app sec issue type, given its showing the only issue leading to a B is an informational one
Alex Bucher, 16-Jan-19

2   HTTP or SPF Missing could work, short enough to fit
Alex Bucher, 16-Jan-19

C, D, or F Scored Companies:
Up to 5x More Likely To Be Breached.
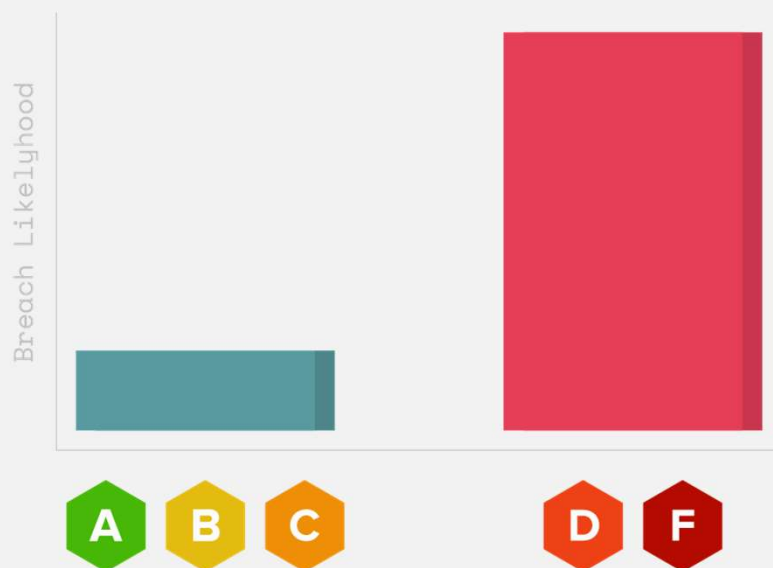
Date of Analysis: Dec 2018

Conclusion: Companies with a poor score are *up to 5x more likely to be breached* compared to companies with a good score.

The Value for Cyber Insurance

Insurer Challenges

- **Time to quote**: Need to reduce time and resource requirements associated with information gathering and insured/applicant underwriting process

- **Transparent and accurate assessment**: Need to quickly understand, verify, and quantify prospective policyholder's actual vs. reported risk characteristics to determine appropriate cyber insurance policy pricing

- **Aggregated risk**: Need visibility into all policyholder third-party ecosystem security practices and the risk that these thousands of vendors and business partners pose to the insurer

- **Insurer Liability**: Cyber insurance providers have been burned by underestimating the impact of collateral damage resulting from cyber events.

Challenges of Cyber Insurance Underwriting

- ☑ Lack of historical data and lack of comprehensive centralized source of data

- ☑ Large percentage of cyber incidents go unreported and/or undetected

- ☑ Ever-evolving risk landscape, limits the value of historical data and undermines exposure predictability

- ☑ Visibility into risk-aggregation across portfolios

- ☑ Industry specific risk difficult to assess

Insurers haven't collected a critical mass of loss data on their own

A large percentage of cyber events go unreported

Cyberattacks are constantly evolving, making exposure difficult to anticipate

Insufficient data undermine insurer confidence for underwriting and pricing

Insurers cautiously offer modest limits for restricted coverage

Buyers doubt coverage value, lowering take-up rate/market penetration

Lower sales mean less access to data

Dearth of data leads to vicious circle in cyber insurance

Cyber Insurance Value Prop

SecurityScorecard enables cyber insurers to gain visibility and understand the security posture of applicants and customers, make more informed underwriting decisions, and help policyholders proactively improve cyberhealth.

SSC Features

- **1 million scorecards**: the world's fastest and most scalable, accurate, and dynamic security ratings platform

- **Fast scoring**: ability to create a scorecard for prospective insureds in minutes, enabling faster time to quote

- **Global data collection** that relies on a broad array of signals that track every asset connected to the internet for leading indicators of compromise, touching >2.6B devices every five hours

- **Easy to understand A-F letter grades for any-size company anywhere in the world**.

- Security ratings that provide an up-to-date reflection of a potential insured's security weaknesses in **ten critical risk categories**. Low scores can be used to trigger additional due diligence during the underwriting process.

- **Objective visibility** of cybersecurity performance across entire portfolio of insured companies, including customers' third-party ecosystems.

- **Threshold setting**: Instantly decline or don't renew insureds with ratings below a designated letter grade.

- **Continuous monitoring** of risk associated with cyber underwriting liability

How SecurityScorecard is used today for Cyberinsurance Underwriting

Business Drivers:

- Proactive underwriting

- Scale for SMB market underwriting

- Speed of underwriting

- Gauge Portfolio Risk

- Interactive process to continuously monitor

- Make cyber issues understandable

Pricing Engine

1. Base information of client
2. Questionnaire
3. Coverage conditions
4. Cyber risk score

Portfolio Monitoring and Reporting

1. In force Portfolio
2. Portfolio trending
3. Data explorer
4. Extreme scenario
5. New business

Risk Assessment

1. Breach insights
2. Proactive underwriting
3. Industry specific risk assessment

SecurityScorecard

Platform Capabilities

- **Automate cyber risk assessment** for any cyber liability insurance policy applicant.

- **Quickly and easily invite policyholders/applicants to platform** and empower them with actionable data, using our Score Planner, to rapidly understand exposure, improve their security ratings, and mitigate their most critical vulnerabilities.

- Grant insureds **complementary continuous access** to the SecurityScorecard platform, where you can collaborate with them to drive accountability.

- Leverage our **robust API** to integrate our data into automated underwriting risk assessment models and reduce resource requirements.

- Use SecurityScorecard ratings to **supplement questionnaires**: leverage additional data to fully understand cyber risk across portfolio, direct further investigation, and determine appropriate premiums based on risk.

- **Continuously track changes** in security posture over time (during a policy period, for example).

- Align insured **breach/claim likelihood** with policy premiums and benefits.

- **Reduce costs**: Address security vulnerabilities across policyholder ecosystems before they become claims.

Benefits

- Pay fewer and spend less $ on cyber insurance claims.

- Streamline, accelerate, and scale cyber underwriting.

- Reduce time to value.

- Improve cybersecurity posture across portfolio.

- Reduce risk across insured customer ecosystem.

- Gain competitive advantage based on time to quote.

- Achieve greater efficiency and accuracy in quoting, selling, and renewing cyber insurance policies.

- Gain credibility with prospects and customers as a trusted cybersecurity advisor.

Reference Customers

Demo