



BITSIGHT

CYBER RATINGS FOR THE AUTO INDUSTRY: SUMMARY OF KEY ISSUES

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Key Questions at RSA 2016

- 1) **Can cyber vulnerabilities in automobiles be exploited to cause harm to drivers?**
- 1) **How can auto manufacturers secure the vast vendor supply chain (e.g. telematics, software applications, etc.)**
- 1) **How are auto manufacturers working to address these problems?**
- 1) **Are consumers aware of risks? How important is security to consumers? How do auto manufacturers provide information/assurance to consumers?**

Impressions of Consumers in 2015

- **72% aware of Jeep hacking incident**
- **41% say they will consider hacking when buying/leasing next car**
- **78% say hacking will be frequent problem next 3 years**
- **81% think auto manufacturer is most responsible to secure from hacking**
- **64% want to go to dealership to get security patch installed**

*From Kelley Blue Book Car Hacking Survey, 2016

Impressions of Consumers in 2016

- **Only 26% could recall an instance of vehicle hacking**
- **73% believe hacking will be a moderate/serious problem in the future**
- **Millenials least likely generation to think vehicle hacking will be a problem over next 3 years (50% v. 70% of overall)**
- **Top safety concerns “right now” – vehicle hacking #9 (out of 10)**
- **Majority of millenials (60%) support more connected vehicles (v. 42% of total)**
- **56% of consumers think vehicle manufacturers should be responsible for anti-hacking software**

*From Kelley Blue Book Car Hacking Survey, 2016

Consumers Willing to Pay for Security

- **48% would pay for software to prevent vehicle hacking (\$8.98/month)**
- **56% would pay for additional insurance to cover hacking (\$9.31/month)**
- **Millenials will pay more for software (\$10.67) and insurance (\$15.20)**

Industry and Government Initiatives

- **Bug bounties and crowdsourced vulnerability disclosure**
- **Auto ISAC – created to be central intelligence hub**
- **Hackathons**
- **NHTSA Automotive Cybersecurity Research Program**

Sen. Markey SPY Act

- **“Security and Privacy in Your Car” Act introduced in July 2015**
- **Response to Sen. Markey’s Tracking and Hacking: Security & Privacy Gaps Put American Drivers at Risk**
- **Requires “reasonable measures” to prevent car hacking**
- **Designs to isolate critical systems**
- **Transparent cyber “dashboard” that displays an evaluation to inform consumers about measures**
- **Involves NHTSA (vehicle safety) and FTC (privacy information)**

Panelist Opinions: Generally

- **Safety of the auto is paramount – (durability and safety are 2 most important decisions when purchasing car)**
- **Many similarities between vehicles and medical devices, where there are also natural regulators to play a role**
- **Crash test ratings developed as a result of NHTSA and insurance industry interest in enhanced design security**
- **Current crash test ratings do not factor cyber**
- **Unique cyber rating may be less preferred to incorporation of cyber into overall crash test assessment (though difficult to do)**
- **Insurance likely driver for enhanced cybersecurity in cars and supply chain**

Panelist Opinions: The Dashboard

- **Overall cyber maturity model – a systematic methodology to evaluate the hardware, software, supply chain security initiatives used by the manufacturer to build the car**
- **Vulnerability assessment (judged by independent third party?)**
- **Software development process – how code was written, acquired, tested, and deployed in the system**
- **Information about the security of the vendor supply chain, including 3rd party telematics vendors, software providers, etc.**
- **Patching system – performed remotely or on site?**

About BitSight Technologies

Led by security and networking industry veterans from:

- Q1 Labs (IBM) - Raptor (Symantec) - Okena (Cisco)
- MIT - Sun Microsystems - McAfee
- Brix - VeriSign - Credit Suisse

Prestigious investors



Trusted by customers, partners and independent standards bodies



BITSIGHT SECURITY RATINGS

A BURGEONING STANDARD FOR ENTERPRISE RISK MANAGEMENT

Regulatory Impact

- **Briefings with top regulators** including federal and state regulators in finance, energy, consumer
- **Active communication** with important regulatory organizations including the Fed, OCC, FDIC and SEC
- **Working with financial services industry leaders** to integrate BitSight Ratings with SOC 2 evaluations
- **Participant in standard setting groups** including Shared Assessments and FS-ISAC

Enterprise Adoption

- **300+ Enterprise Customers** worldwide and across all major industries
- **8 top cyber insurers** use BitSight to make underwriting decisions
- **3 of the top 5 investment banks** use BitSight Security Ratings for VRM
- **4 of the top 5 private equity firms** endorse BitSight
- **2 of the Big 4 Accounting firms use BitSight** - One firm has attested to the ratings methodology

Industry Recognition

- Recognized by leading technology research firm as a **Cool Vendor 2015 in Vendor Management**

Gartner: BitSight is “well on its way to being as widely recognized as a Moody’s or S&P ratings for the information security space.”

Coverage in leading publications including the **Wall Street Journal, Bloomberg, Forbes, etc.**

Trusted by 300+ Enterprises



BIT SIGHT MARKETS

BitSight Security Ratings are used by companies in all industries to:

Benchmark Security Performance

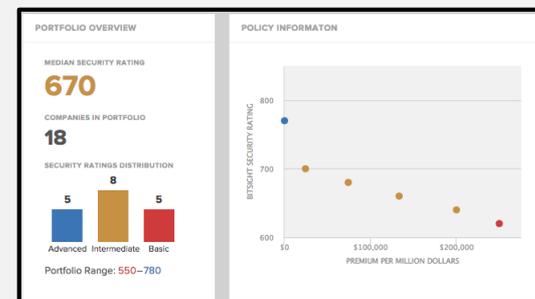
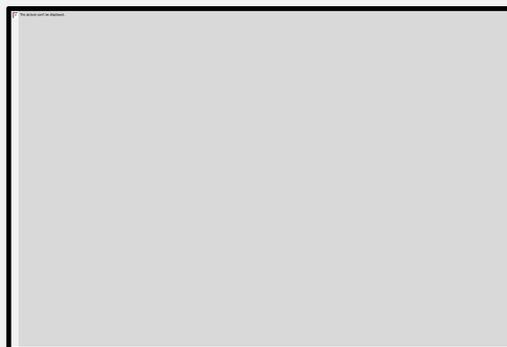
- **Compare security performance** to industry averages and peers
- **Remediate threats** facing your company
- **Communicate metrics** to decision makers

Manage Third Party Risks

- **Continuously monitor** security performance of third party vendors
- **Gain knowledge** on your information supply chain weaknesses
- **Screen new vendors**, business partners, or acquisitions for security performance

Underwrite Cyber Insurance

- **Better understand** security posture of applicants and insureds
- **Monitor portfolio** for possible changes in performance
- Bring **actionable metrics** into the underwriting process



BITSIGHT SECURITY RATINGS

DATA-DRIVEN RATING OF A COMPANY'S SECURITY PERFORMANCE

- Companies are rated on a scale of **250-900**
- High rating indicates a **strong security performance** and **lower security risk**
- Analyzes, rates, and monitors companies' security performance, **all from the outside**
- Daily ratings and alerts provide **continuous visibility**

250 - 900 

BitSight Security Ratings

ADVANCED

900-740

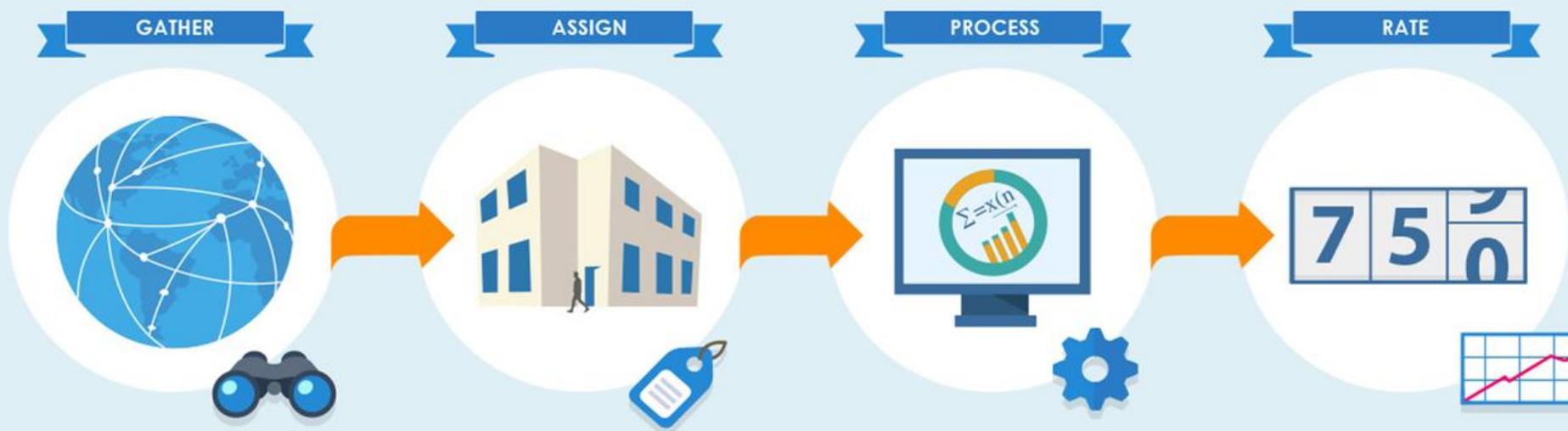
INTERMEDIATE

740-640

BASIC

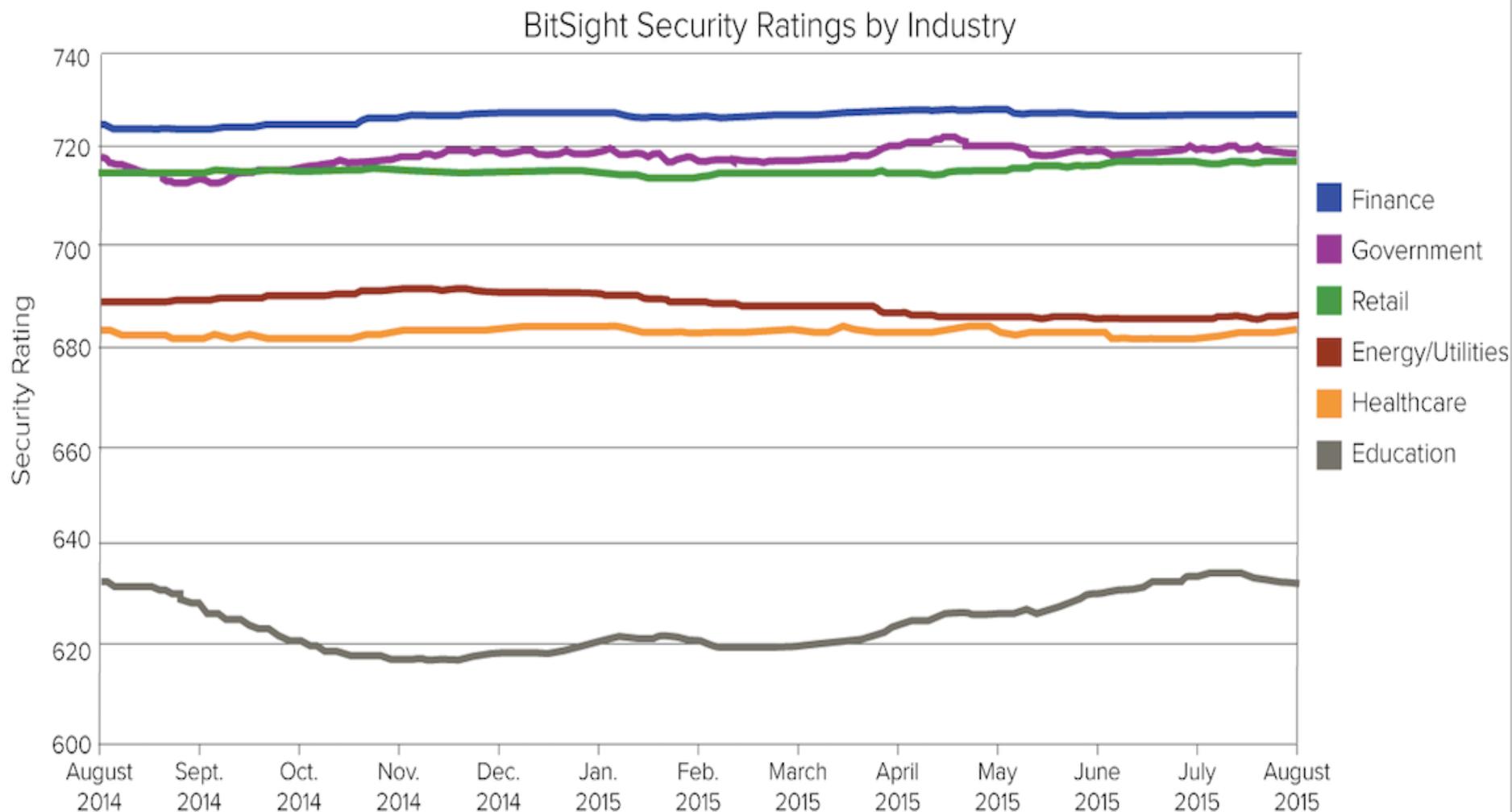
640-250

Generating Security Ratings

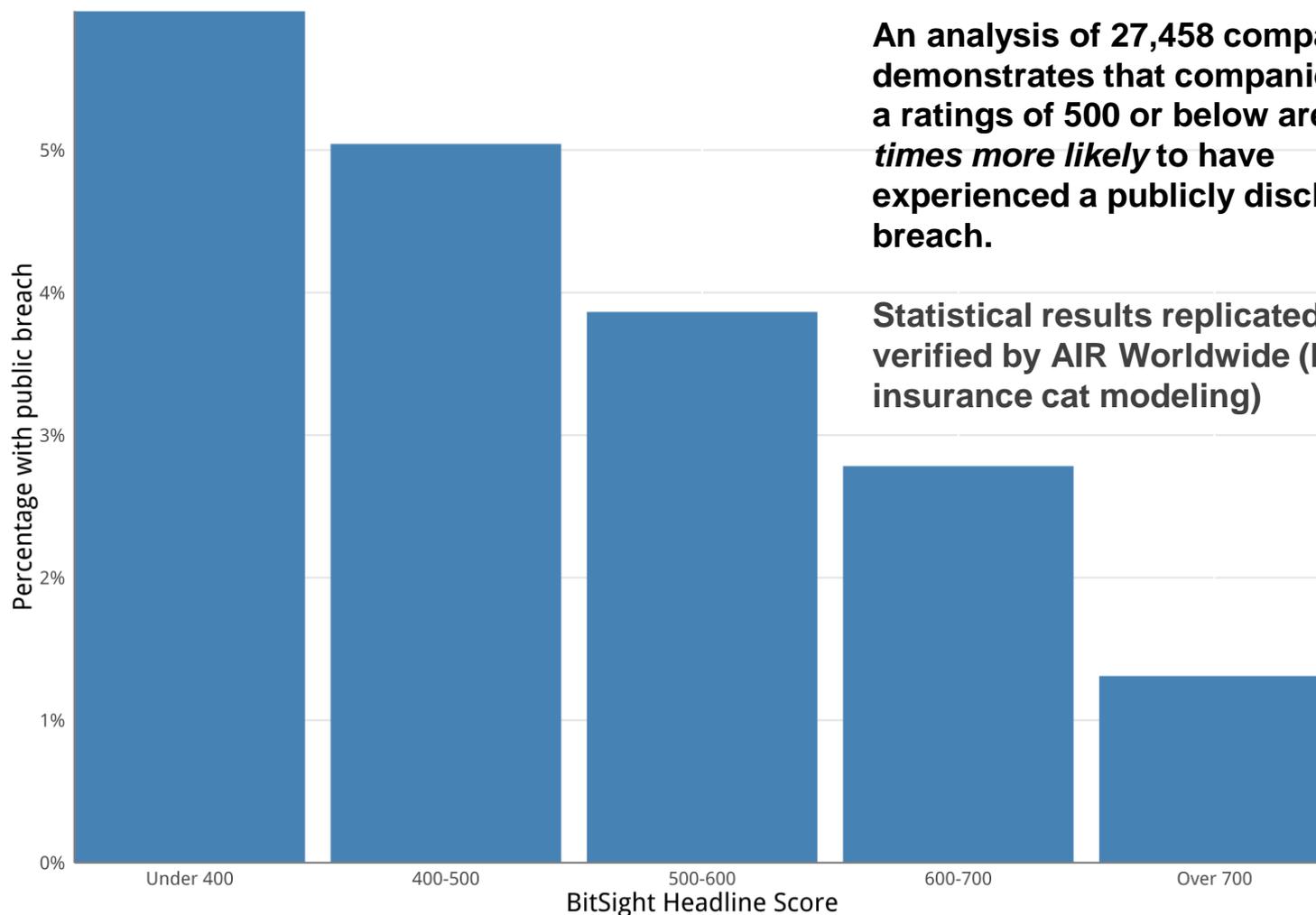


Output: Daily, outside data collection, quantitative ratings of a company's security performance on a scale of 250-900

BitSight Ratings by Industry



BitSight Rating Correlates to Breach



An analysis of 27,458 companies demonstrates that companies with a ratings of 500 or below are *five times more likely* to have experienced a publicly disclosed breach.

Statistical results replicated and verified by AIR Worldwide (leading insurance cat modeling)



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QUESTIONS?

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