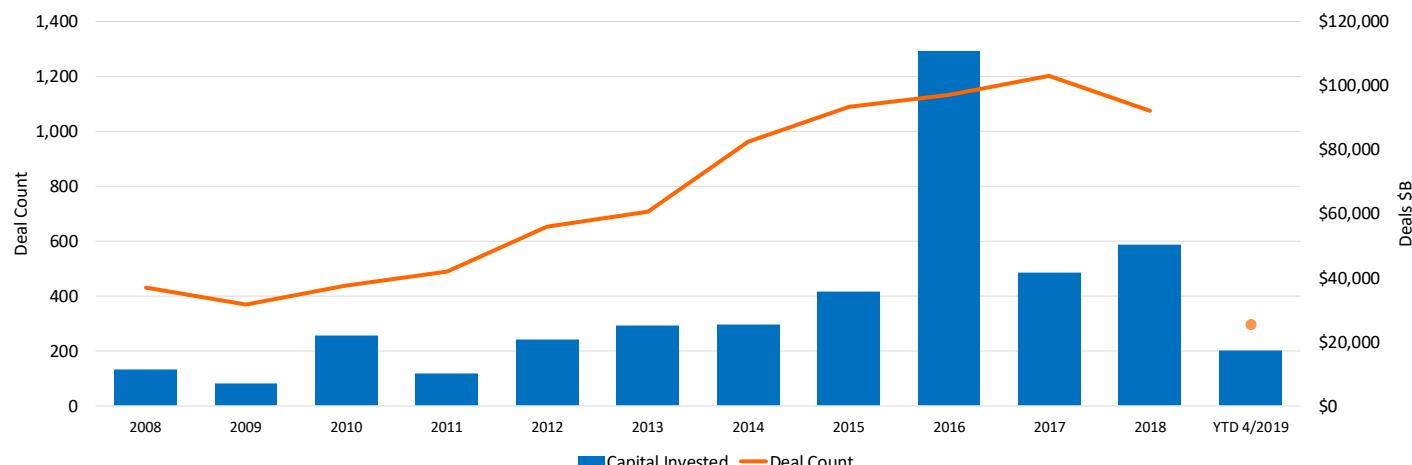


CYBERSECURITY M&A REVIEW

2018 REVIEW & 2019 PERSPECTIVES

As the cybersecurity industry keeps growing, consolidation in the sector continues at a steady pace, as demonstrated by 2018 acquisition activity. The number of deals dipped slightly from 2017, but the size increased substantially with the mean capital invested per transaction up nearly 25% to \$77 million. Total capital invested grew to nearly \$50 billion, and industry activity has experienced steady growth since 2012. Note that the massive \$67 billion acquisition of EMC by Dell skews the 2016 data. Capital invested in Cybersecurity deals has grown 13x since 2005, and active interest is expected to continue as the complexity of cyber attacks increases and the market remains underserved. Despite a growing awareness of the risks posed by having lax cyber security, 68% of American businesses, and small businesses in particular, have no coverage in case of a breach.¹

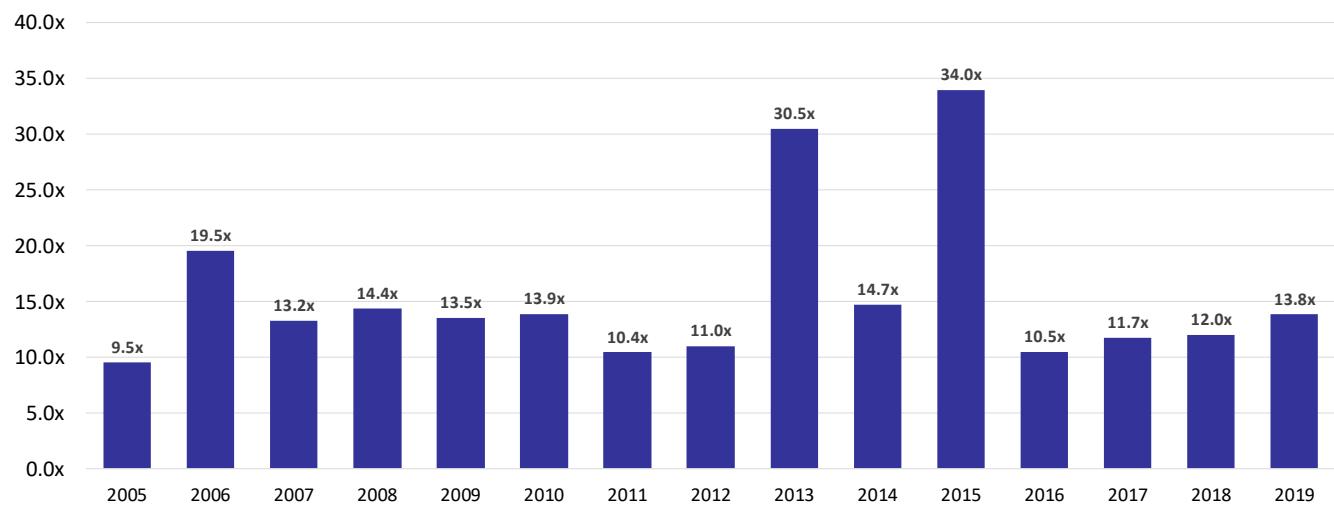
CYBERSECURITY M&A ACTIVITY



Source: Pitchbook

EV/EBITDA multiples steadily increased since 2016, with a median EBITDA multiple of 12x in 2018.

CYBERSECURITY EV/EBITDA MULTIPLES

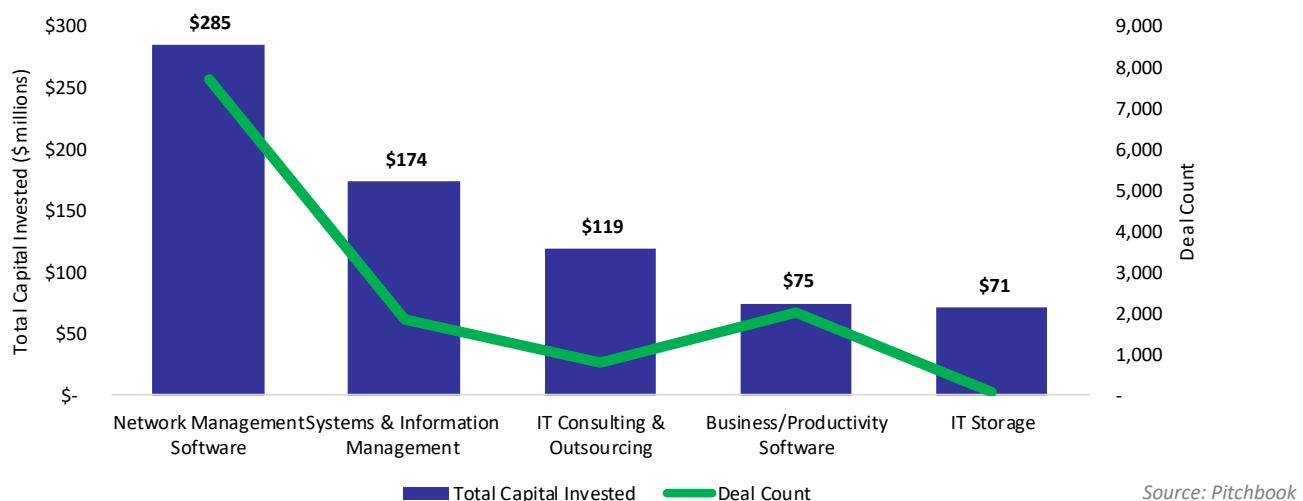


¹Source: Cisco & Cybersecurity Ventures 2019 Cybersecurity Almanac

Source: Pitchbook

Within the cybersecurity industry, the sectors with the most capital invested have been network management software (including companies such as Imperva) and systems and information management (including companies such as EMC or Symantec). These industries represent around 70% of the total capital invested in cybersecurity and continue to be the fastest growing sectors, reflecting the rapid change in the market and increased business awareness of cybersecurity threats.

CYBERSECURITY SECTORS M&A ACTIVITY

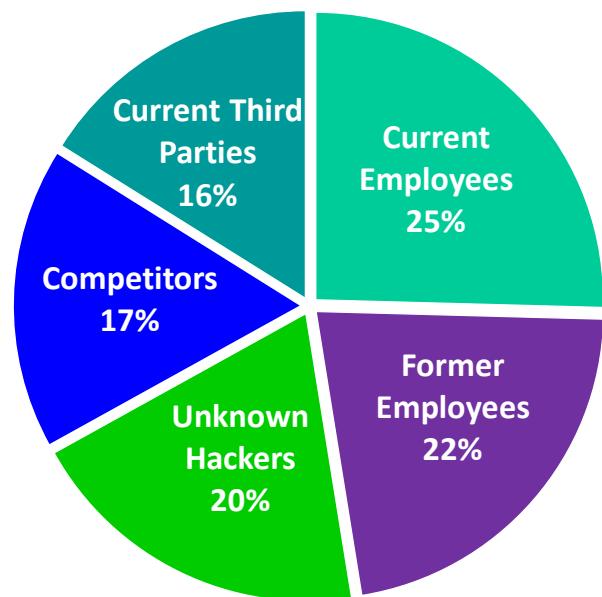


Cybersecurity Issues Within M&A Transactions...

Cybersecurity is proving to be an important issue in merger and acquisition transactions industry-wide. An estimated 40% of acquiring companies reported discovering a cybersecurity issue post-close, and liabilities caused from previous known or unknown data breaches or security weaknesses can have a significant impact on the acquiring company. The majority of these breaches are caused by current and former employees. Failures to adhere to contractual or regulatory requirements may also force a buyer to invest funds to bring a selling company into compliance.

A notable example of a cybersecurity issue affecting an M&A transaction is Verizon's acquisition of Yahoo, where a previously undisclosed data breach was brought to light post-close and ultimately reduced the purchase price by \$350 million.

CAUSES OF CYBERSECURITY BREACHES



Source: Forbes, PwC

2018 Cybersecurity M&A Key Transactions

While motives for acquiring cybersecurity firms are varied, deal rationales follow a trend of technology consolidation as leaders in the industry pursue new innovation. The following case studies explore several of the largest transactions in 2018 and the acquisition strategy associated with each deal.

Cisco Acquires DUO Security...



Duo Security is a computer and network security provider that provides cloud-based two-factor authentication. Duo's services can be paired with websites, VPNs and cloud services, and integrates with smartphones, websites, and more. Founded in 2010, the company has grown to over 700 employees with offices across the United States and in London. Before the acquisition, the company had gone through several rounds of VC funding, raising a total of \$121 million.

Duo Security was acquired by Cisco (NASDAQ: CSCO) through a \$2.35 billion acquisition in October 2018. Founder and CEO Dug Song will remain as the general manager for Duo, joining Cisco's network security business. Cisco completed multiple acquisitions in the cybersecurity space over the past several years, including OpenDNS and Sourcefire. Cisco plans to continue investing in network security.

Source: Pitchbook, Techcrunch

General Dynamics Acquires CSRA...



Think Next. Now.

CSRA (NYSE: CSRA) is an information technology provider that serves United States government clients in national security, civil government and more. The company's services include cybersecurity, data analytics, enterprise business solutions and offers clients full access to a range of intelligence technology. CSRA generated revenue of \$4.9 billion in 2017, and employs 49,000 people. CSRA is headquartered in Falls Church, Virginia.



General Dynamics (NYSE: GD) is a U.S. aerospace and defense corporation, and the fifth largest defense contractor in the world by revenue. General Dynamic's core business segments are marine systems, combat systems, aerospace, and information systems technology, under which the acquisition of CSRA will fall. General Dynamics acquired CSRA for \$6.9 billion. The transaction is valued at \$9.7 billion after factoring assumed liabilities of \$2.8 billion.

Source: Pitchbook

Thoma Bravo Acquires Imperva, Barracuda Networks, and Veracode...



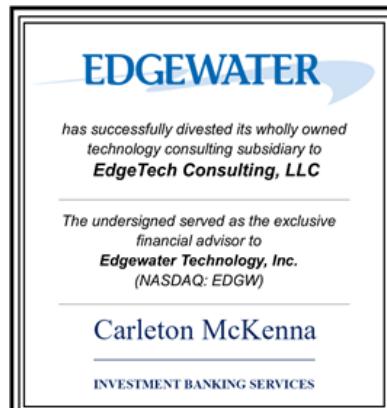
Imperva (NASDAQ: IMPV) is a provider of cybersecurity solutions on premise, for the cloud and for hybrid organizations. Their products specialize in application security and data security. Imperva had \$321 million in revenue in 2017 and 500 employees. Thoma Bravo acquired the company in a \$2.1 billion public-to-private LBO finalized January 10, 2019.

Barracuda Networks (NYSE: CUDA) is a provider of online security products and services that tackles security issues on-site and in the cloud through a centralized control center and end-to-end protection. Barracuda had revenue of \$372 million in 2017, but experienced stagnant growth and low profit margins. Thoma Bravo acquired the company for \$1.6 billion in a public-to private LBO on February 12, 2018, and hopes to provide the capital needed for investment in innovations. This type of intensive capital spending would have been difficult to execute as a public company.

Veracode is a cloud application security company that focuses on assisting security teams and developers at all points along the software development lifecycle. Veracode employs over 500 people. Thoma Bravo acquired the company on January 1, 2019 in a \$950 million LBO.

Source: Pitchbook, Thoma Bravo, theregister.co.uk

Representative Carleton McKenna & Co. Cybersecurity and Technology Transactions...



Paul H. Carleton
Managing Partner
phc@carletonmckenna.com

Christopher J. McKenna
Managing Director
cjm@carletonmckenna.com

Nora T. Mahoney
Vice President & Counsel
ntm@carletonmckenna.com

Brooke A. Hradisky
Vice President
bah@carletonmckenna.com

Alexis M. Becker
Analyst
amb@carletonmckenna.com

Carleton McKenna & Co. is a boutique, independent investment banking firm providing M&A Advisory, Capital Raise Advisory, and Strategic and Financial Planning Advisory services. Our experienced professionals maintain a client-focused and entrepreneurial approach which enables us to maximize outcomes by being creative for our clients. Our professionals have over six decades of experience partnering with public and private companies led by strong, entrepreneurial management teams.