

FireEye Inc.

FEYE

Analyst: Kyle Ritchie
Sector: Information Technology

BUY

Price Target: \$ 34.50

Key Statistics as of 10/21/15

Market Price:	\$29.17
Industry:	Information Technology
Market Cap:	\$4.58 B
52-Week Range:	\$27.50 - \$55.33
Beta:	1.51

Thesis Points:

- Increasing Threat of Cyber-Security Poses Major Opportunity
- Advanced Tech Continues Boosting Revenue
- Current Market Conditions Offer Favorable Buy

Company Description:

FireEye Inc. provides cyber-security solutions to enterprises across the globe. The company specializes in detecting cyber threats and providing real-time solutions to these attacks. FireEye has designed and implemented a virtual execution engine that utilizes threat intelligence in order to identify and prevent cyber-attacks before they occur. The technology being implemented by FireEye targets the next generation of cyber-attacks. Chairman and CEO David DeWalt has five quality years of previous experience as CEO of the security software giant McAfee from April of 2007 to May of 2012. FireEye competes with some of the major industry leaders in cybersecurity such as Palo Alto Networks, Oracle and IBM.



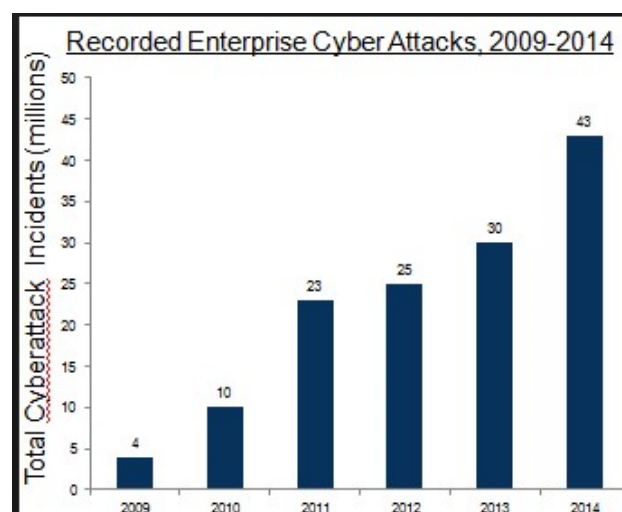
Thesis

Cyber-security software is a competitive sector yet FireEye differentiates itself with advanced, cutting-edge technology. Cyber-attacks are becoming a major concern for our government and the demand in growth for this next-generation technology will certainly increase. HACK, the Cyber Security ETF, is currently down 2.67%. FireEye is down 5.05% and hovering above its 52-week low. Recently this year, President Obama has made the strengthening of cyber-defenses a top priority for the country. The threat of advanced cyber-attacks continues to grow demonstrating the opportunity for FireEye to prove the capability of its technology. The growing attention to this industry demonstrates an opportune time to buy.

Threat of Cyber-Security/Opportunity for FireEye

The cyber security market is drastically growing due to the overall demand needed by companies to protect private information. The growth in demand of security software is directly influenced by the increasing number of cybercrimes. As technology continues to improve, the types of cyberattacks become more sophisticated and difficult to detect. The various forms of cybercrime include: government espionage, corporate espionage, stolen e-mail addresses with login credentials, stolen intellectual property, stolen medical-related data and most importantly, stolen credit card and financial data. Some of the major attacks on stolen credit card and/or financial data include Subway, VISA and MasterCard in 2012, Stardust and Target in 2013, and Home Depot along with Goodwill Industries in 2014. JP Morgan and Chase also announced a data breach in 2014 from a group of alleged Russian hackers. As these attacks become publicized, management boards and executive teams are becoming more aware of cyber threats thereby giving great incentive to increase security budgets. The result of one company increasing its security budget causes its business partners and even competitors to consider similar courses of action. This offers an immense opportunity for FireEye to expand its customer base and implement its technology. CEO David DeWalt stated, "Our customers include the governments of more than 60 countries now, hundreds of financial firms and critical infrastructure companies as well as retailers,

healthcare providers, and now entertainment companies. We are even seeing small companies from hospitals, the law firms, to biotech, high-tech startups turning to FireEye to protect their critical assets and reduce their risk of cyberattacks." FireEye is focusing its efforts on eliminating cybercrime throughout all industries in the economy in order to ensure security and information protection. The graph below illustrates the increase in cyberattack incidents on enterprises along with the millions of dollars stolen and/or lost as a result since 2009.



Advanced Tech Boosts Revenue

What makes FEYE a unique pick compared to its competitors is the technology they are implementing into the market. The FireEye Multi-Vector Virtual Execution (MVX)-IPS takes a new approach to security protection. Unlike historical cyber-security softwares that learn from attacks and implement detection technology based on malware patterns, FireEye is implementing a whole new generation of security technology. The FireEye MVX-IPS is taking a new approach to IPS by extending the MVX technology to a new layer in the security stack, eliminating problems created by traditional IPS solutions. The unique architecture of the FireEye MVX-IPS validates attacks for which there is a signature using the MVX technology, thereby reducing alerts and allowing security teams to focus on serious threats. According to CEO David DeWalt, the FireEye MVX-IPS; reduces operation expenses, decreases overhead costs of managing multiple devices, consolidates threat defense for known and unknown threats, provides actionable threat intelligence to accelerate incident

response time and increases the overall level of efficiency of threat protection. The security software that FireEye offers certainly differentiates itself from its competitors as you can see from the graph below illustrating revenue growth. The graph illustrates the increase in quarterly revenues since the beginning of 2014 as a result of this new technology.



Current Market Conditions Offer Favorable Buy

The current market conditions of the cyber-security sector offer an opportune time to buy. As mentioned, the demand for cyber-security software will only continue to increase in the upcoming months as well as many years to come. Analysts' coverage for the cyber-security sector have consistently reported that FireEye (FEYE), Palo Alto Networks (PANW), and Check Point Security (CHKP) are all top buys for 2016. The current analyst ratings for FEYE are split 50/50 between buying and selling which is a primary result of the time frame in which the stock was analyzed.

The Information Technology sector is a very volatile sector as stocks are drastically influenced by company filings and news reports. This is the key indicator of this sector and makes FEYE a promising buy as of the past few weeks. FEYE recently approached its 52-week low but the cyber-security market as a whole has seen a noticeable decline. But it is the substantial and sustainable growth in revenue that will fuel FEYE for the future. CHKP has consistently reported positive financial data and its stock price certainly demonstrates fairly constant growth. PAWN is another major and well-established corporation with credible financials but

is an extremely expensive stock. CHKP and PAWN are priced at \$82 and \$166 respectively while FEYE is currently priced at \$29.17. The graph below illustrates the fluctuation of FEYE stock price over the past two years.



Within the past month the stock price has been hovering above its all-time low since its IPO. Although the market sentiment on the stock is bearish, this offers a perfect opportunity for contrarian investors.

FireEye reported solid second-quarter results on July 30, 2015. The company reported a net loss of \$0.78 which was lower than Zack's Consensus estimate of a loss of \$0.84. Three out of the four past quarters resulted in positive earnings surprises. Investors should strongly consider the current low price and closing opportunity before FireEye announces its third quarter earnings on November 4, 2015.

Conclusion

I am recommending a buy on FireEye Inc. because of its substantial growth in revenue, the growth in demand for this sector and most importantly the quality of its product. The financial margins of FireEye are not yet profitable due primarily to the company investing heavily in R&D along with SG&A. It is clear though that this company is still operating in its explicit period and has promising long-term growth potential. The market is currently undervaluing this company due to not capitalizing SG&A and only its R&D expenses. The company has partnered and continues to join forces with major corporations within the past years such as VISA to work alongside against the ever-looming threat of cyber-attacks of today's world.

CENTER FOR GLOBAL FINANCIAL STUDIES																																																					
FireEye, Inc.	FEYE	Analyst Piq (1/2 man, 1/2 bear)	Current Price \$29.17	Intrinsic Value \$30.01	Target Value \$34.50	Divident 0%	1-y Return: 18.28%	NEUTRAL																																													
General Info		Peers	Market Cap.	Professional		Management																																															
Sector	Information Technology	Fortinet, Inc.	\$1,172.36	DeWalt, David		Chairman of The Board and Chief Exec		Comp. FY2012	Comp. FY2013	Comp. FY2014																																											
Industry	Software	Splunk, Inc.	\$1,060.39	Aziz, Ashar		Founder, Vice Chairman of The Board,		\$7,463,188	\$311,177	\$13,563,500																																											
Last Guidance	July 30, 2015	Palo Alto Networks, Inc.	\$13,585.27	King, Alexa		Senior Vice President, General Counsel		\$2,387,037	\$452,869	\$2,686,130																																											
Next earnings date	November 4, 2015	Tableau Software, Inc.	\$5,908.24	McGee, John		Senior Vice President of Worldwide Sa		\$654,371	\$658,722	\$3,361,501																																											
Market Data		Check Point Software Technolog	\$14,500.95	Williams, Jeffrey		Senior Vice President of Americas Sale		\$0	\$0	\$6,633,341																																											
Enterprise value	\$4,084.20	Impervis Inc.	\$1,788.81	Mandia, Kevin		President		\$686,202	\$863,173	\$4,903,471																																											
Market Capitalization	\$77.73	Proofpoint, Inc.	\$2,217.45	<table border="1"> <thead> <tr> <th colspan="4">Past Earnings Surprises</th> </tr> <tr> <th>Revenue</th> <th>EBITDA</th> <th>Norm. EPS</th> <th>Standard Error of "Surprise"</th> </tr> </thead> <tbody> <tr> <td>Last Quarter</td> <td>2.64%</td> <td>NM</td> <td>NM</td> </tr> <tr> <td>Last Quarter-1</td> <td>4.01%</td> <td>NM</td> <td>NM</td> </tr> <tr> <td>Last Quarter-2</td> <td>1.03%</td> <td>NM</td> <td>NM</td> </tr> <tr> <td>Last Quarter-3</td> <td>-1.70%</td> <td>NM</td> <td>NM</td> </tr> <tr> <td>Last Quarter-4</td> <td>4.78%</td> <td>NM</td> <td>NM</td> </tr> <tr> <td>Standard error</td> <td>1.2%</td> <td>NM</td> <td>1.16%</td> </tr> <tr> <td>Standard Error of Revenues prediction</td> <td>1.2%</td> <td></td> <td></td> </tr> <tr> <td>Imputed Standard Error of Op. Cost pre</td> <td>NM</td> <td></td> <td></td> </tr> <tr> <td>Imputed Standard Error of Op. Cost pre</td> <td>NM</td> <td></td> <td></td> </tr> </tbody> </table>						Past Earnings Surprises				Revenue	EBITDA	Norm. EPS	Standard Error of "Surprise"	Last Quarter	2.64%	NM	NM	Last Quarter-1	4.01%	NM	NM	Last Quarter-2	1.03%	NM	NM	Last Quarter-3	-1.70%	NM	NM	Last Quarter-4	4.78%	NM	NM	Standard error	1.2%	NM	1.16%	Standard Error of Revenues prediction	1.2%			Imputed Standard Error of Op. Cost pre	NM			Imputed Standard Error of Op. Cost pre	NM		
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Daily volume	0.02	ServiceNow, Inc.	\$11,398.42																																																		
Shares outstanding	159.42	VASCO Data Security International	\$673.38																																																		
Diluted shares outstanding	149.65	Current Capital Structure																																																			
% shares held by institutions	21.62%	Total debt/Common Equity (LTM)	0.37																																																		
% shares held by insiders	10.32%	Cost of Borrowing (LTM)	0.00%																																																		
Short interest	12.61%	Estimated Cost of new Borrowing	0.00%																																																		
Days to cover short interest	3.72	Altman's Z	2.19																																																		
52 week high	\$55.33	Estimated Debt Rating	D																																																		
52-week low	\$27.50	Current levered Beta	1.64																																																		
5y Beta	0.45	LTM WACC	3.14%																																																		
6-month volatility	43.11%																																																				
Proforma Assumptions																																																					
Divergence Assumption		General Assumptions			Items' Forecast Assumptions			Other Assumptions																																													
All base year ratios linearly converge towards the Peers ratios over an explicit period of 10 years		Money market rate (as of today)	0.28%	Operating Cash/Rev.	33.11%	Base year (LTM)	Convergence period (Peers)	adjustment per year	Tobin's Q	80%																																											
		Risk-Free rate (long term estimate)	2.94%	NWV/Rev.	0.00%				Excess cash reinvestment	Cost of capital																																											
		Annual increase (decrease) in interest rates	0.1%	NPPE/Rev.	14.05%				Other claims on the firm's asset	\$0.00																																											
		Marginal Tax Rate	37.5%	Dpr/NPPE	77.62%				Capitalization																																												
		Country Risk Premium	5.5%	NOPAT MARGIN	28.23%				100% of all R&D expenses are capitalized and amortized 'straightline' over 10 years																																												
Forecast Year	Revenue Growth Forecast	Revenue (\$)	Forecast	Op. Exp./Rev.	138.10%				100% of all R&D expenses are capitalized and amortized 'straightline' over 10 years																																												
LTM		\$529.77		SBC/Rev.	36.75%				E&P expenses are not capitalized																																												
FY2015	20.3%	\$685.80		Rent Exp./Rev.	2.02%				40% of all SG&A expenses are capitalized and amortized 'straightline' over 10 years																																												
FY2016	28.1%	\$362.61		R&D/Rev.	36.45%				Valuation Focus																																												
FY2017	20.8%	\$1,210.73		E&D/Rev.	0.00%				DCF Valuation	100%																																											
FY2018	18.6%	\$1,443.07		SG&A/Rev.	87.08%				Relative valuation	0%																																											
FY2019	16.4%	\$1,686.00		ROC	9%				Distress Valuation	0%																																											
FY2020	14.1%	\$1,924.15		EV/Rev.	13.68x				Monte Carlo Simulation Assumptions																																												
FY2021	11.9%	\$2,153.12		EV/EBITA	NA				Revenue Growth deviation	Normal (0%, 1%)																																											
FY2022	9.7%	\$2,361.44		Debt/Equity	37%				Operating expense deviation	Normal (0%, 1%)																																											
FY2023	7.5%	\$2,551.46		Unlevered beta	1.33				Continuing Period growth	Triangular (5.335%, 5.5%, 5.665%)																																											
FY2024	5.2%	\$2,732.37		Cost of Borrowing	0%				Country risk premium	Triangular (2.91%, 3%, 3.09%)																																											
Continuing Period	3.0%	\$2,915.31		Dividends/REV	0%				Intrinsic value of(z)	\$0.03																																											
									1-year target price of(z)	\$0.03																																											
Valuation																																																					
Forecast Year	ROC	WACC	Total Capital	Implied Enterprise Value	Claims on Assets and Dilution	Shares Outstanding	Price per Share	Monte Carlo Simulation Results																																													
LTM	8.6%	3.1%	\$3,834.71	\$6,733.43	\$1,017.32	159.42	\$28.68																																														
FY2015	11.6%	8.3%	\$4,237.68	\$7,289.44	\$1,053.02	159.42	\$33.23																																														
FY2016	11.2%	9.0%	\$4,637.04	\$7,930.71	\$1,121.06	159.42	\$37.59																																														
FY2017	12.6%	9.1%	\$4,987.81	\$8,349.50	\$1,156.83	159.42	\$41.17																																														
FY2018	14.0%	9.2%	\$5,403.27	\$8,837.17	\$1,169.52	159.42	\$44.97																																														
FY2019	14.3%	9.4%	\$5,881.54	\$9,343.67	\$1,050.38	159.42	\$49.22																																														
FY2020	15.5%	9.4%	\$6,285.42	\$9,771.39	\$1,024.88	159.42	\$52.59																																														
FY2021	16.0%	9.3%	\$6,586.27	\$9,917.87	\$814.09	159.42	\$55.71																																														
FY2022	16.6%	9.3%	\$6,910.07	\$10,074.81	\$470.21	159.42	\$58.87																																														
FY2023	16.3%	9.4%	\$7,332.39	\$10,275.15	\$0.00	159.42	\$61.61																																														
FY2024	16.8%	9.4%	\$7,908.00	\$10,584.81	\$0.00	159.42	\$64.66																																														
Continuing Period	11.1%	9.1%	\$7,841.32																																																		

The 3σ(z)-adjusted intrinsic value is \$30.01; the 3σ(z)-adjusted target price is \$34.5; and the analysts' median target price is \$47.59

Sensitivity Analysis

Revenue growth variations account for 95.3% of total variance
 Risk premium's variations account for 2.5% of total variance
 Operating expenses' variations account for 1.4% of total variance
 Continuing period growth variations account for 0.2% of total