

## AVG Technology

AVG: NasdaqGS

**Analyst:** Peter Ostrowski  
**Sector:** Information  
Technology

**BUY**

Price Target: \$25.70

### Key Statistics as of 11/5/2015

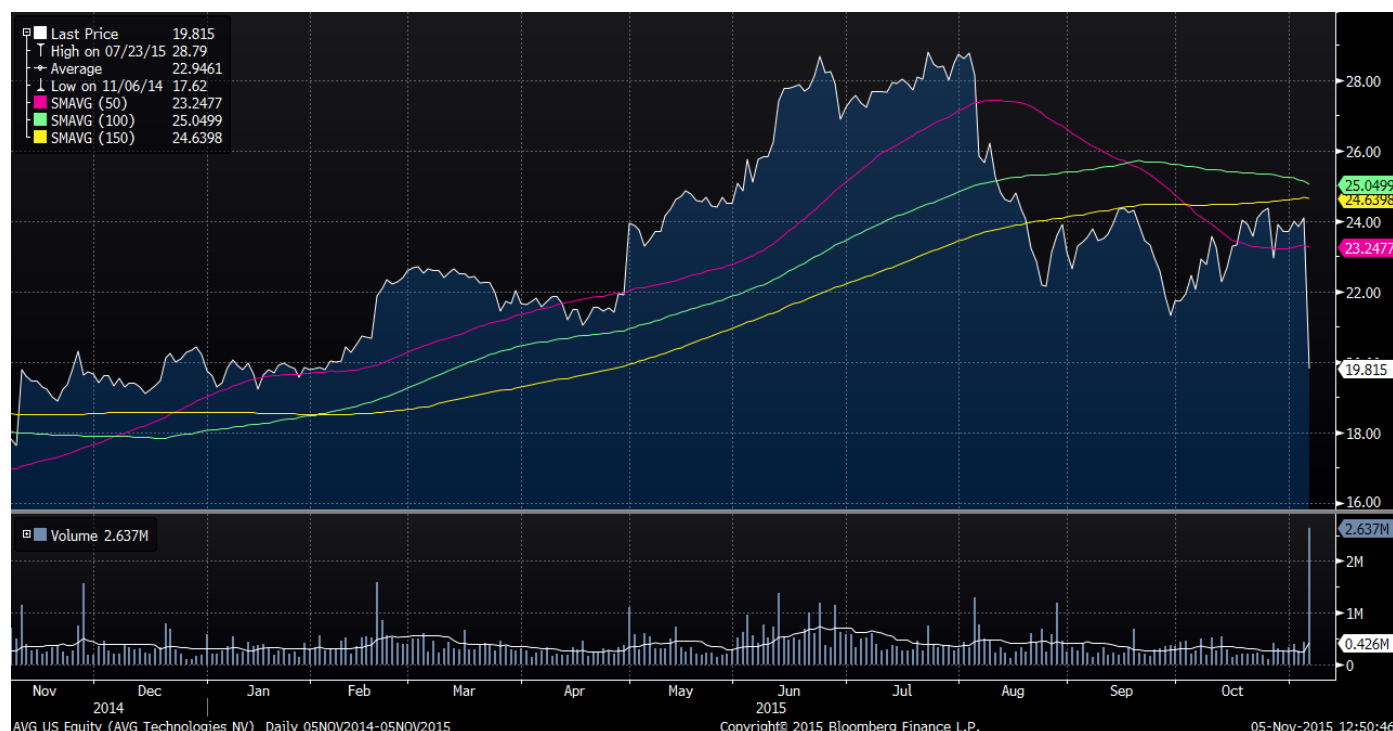
Market Price:	\$19.82
Industry:	Software
Market Cap:	\$1.06B
52-Week Range:	\$16.88-29.15
Beta:	.88

### Thesis Points:

- Malware will continue to increase the number of attacks and adapt as number of internet users grows
- Continued investment in current projects will create future value for AVG
- Acquisition of Privax will lead to a strategic position in evolution of security and privacy

### Company Description:

AVG Technologies NV provides antivirus and internet security products. The Company produces and develops software for threat detection, prevention, and risk analyzes. AVG Technologies operates worldwide.

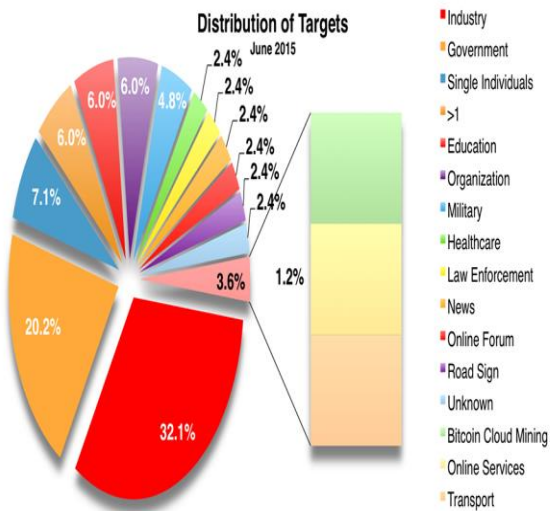


## Thesis

AVG is a leader in antivirus software. This industry is rapidly growing as cyberattacks increase and the amount malicious malware and viruses on the web grow. As these attacks are largely directed at businesses it is important for antivirus software to adapt and stop these issues before they occur. There is a high cost when a business is attacked by cybercriminals; so businesses are willing to pay for a higher quality product. AVG constantly demonstrates that their products are superior through awards and reviews. They are continuing to invest their current projects to ensure a higher quality and increasing customer satisfaction. AVG also recently acquired Privax which will lead to a strategic position in the evolution of security and privacy.

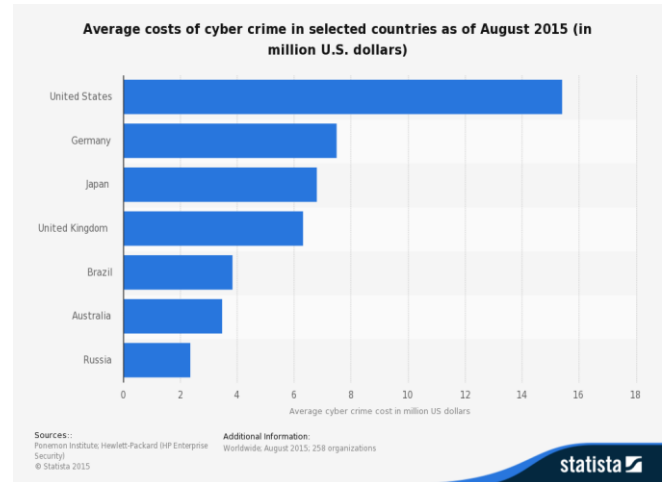
## Macroeconomic factors

Cybercrime is one of the biggest threats to modern business and has no plans of slowing down. As technology increases and more information is made available through the internet, cloud or public wifi; cybercriminals are adapting and hacking this information at growing rates. Cyber thieves are constantly working faster than companies are able to defend themselves. This year 5 out of 6 large companies were targeted were targeted by cyber criminals. That is a 40% increase since 2014.



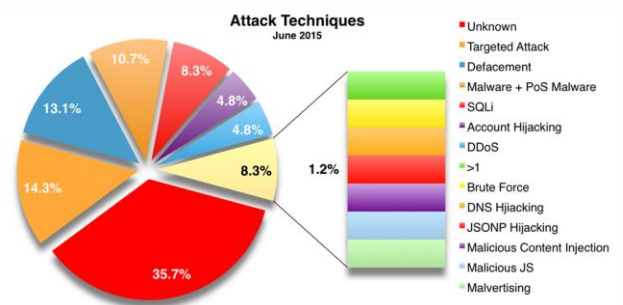
As shown in the graph above 32.1% of cyber-attacks were directed towards industries in June. . These attacks prove to be extremely costly as well. The graph

below demonstrates the monetary impact a cyber-attack against a company has on average.



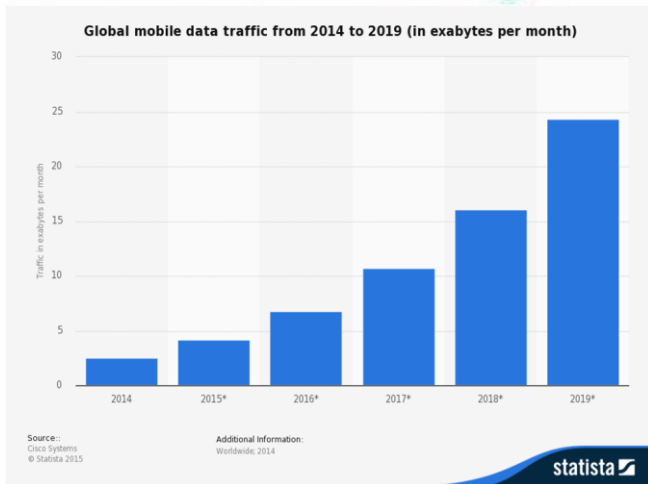
It is shown on this graph that the United States companies are effected the most with an average cost of \$15.42 million per attack.

Last year nearly one million new threats were released each day. The diversity of these attacks is shown in the chart below.



The issue with this chart is that almost 36% of attack techniques are unknown. This means that these viruses and threats are adapting and changing faster than businesses. The ultimate reason why this is important is because the cyber security and antivirus sectors are going to have to grow and adapt to fight these new cyber-attacks.

The amount of internet users has been exponentially increasing since the inception. It is estimated that by 2017 the amount of mobile users on the internet will double. The amount of data that is being added to the internet is increasing at an even faster rate as shown in the graph below.



This increase in data traffic is exponential. This means that cybercriminals data traffic will also increase exponentially. More malware, viruses and cyber-attacks means that cyber-security must update and adapt to this cyber war.

## Investment in Current Projects

AVG has been increasing investments in 3 key growth areas. These areas include Location Labs, SMB and AVG Zen. Location Lab is a mobile app that supplies AntiVirus and Cloud backup to protect data on phones. This product is family oriented. Its location lookup feature allows parents to see where their children are through the gps tracker. Each year this product accounts for one billion “look ups”. The drive safe component is able to detect when a phone is moving and can be locked by either the guardian or the child. This product is currently being marketed through a free to paid technique within AVG.

AVG Zen is built right into your laptop, tablet and phone. It is a very easy way to monitor the protection, performance and privacy among one’s family devices.



AVG Zen is currently up 50% in users from previous quarter. Increasing from 11 million to 17 million users. This increase was driven from a move to comprehensive systematic deployment through broader availability and distribution.

AVG’s small medium business segment is based primarily on the AVG Business Managed Workplace 9.2 product. This product won a gold medal by channel pro network. AVG recently scored 100% with AV. This was due to their 100% detection rate of widespread malware. The new features of this product includes premium remote control, integrated backup and disaster recovery, AVG device manager for Mac OS X and integrated AntiVirus enhancements.



SMB has recently recorded 13% topline growth. Their revenue increased from \$14.7m last year to \$16.6m for the third quarter.

## Acquisition of Privax

In May of this year, AVG acquired Privax for \$40 million and will pay up to an additional \$20 million in cash consideration based on the performance of Privax. Privax is a leading provider of digital privacy services to consumers. Their product HMA! Is able to bypass online restrictions to access foreign websites like a local. One can also enjoy complete security, even on public wifi connections. This allows its users to evade hackers. It also allows one to surf the web privately by changing the IP address. This will protect one’s data from snooping. Privax will be incorporated into AVG Zen to provide further privacy.

AVG currently has 200 million existing monthly users. By adding Privax’s HMA! Product to their portfolio;

AVG can now market Privax at close to zero marginal cost to all of its customers. Privax has more than 250,000 paying subscribers worldwide using its virtual private network encryption service, while its popular free web-based browser proxy service attracts a global audience of over eight million visitors per month.

Privax's competitive advantages are largely related to the security and stability it offers. Privax currently has servers in over 190 countries. Other VPN services can slow down internet connection, Privax's VPN keeps connection fast. It can be used on multiple devices simultaneously and offers 24/7 customer support. This year it is estimated that Privax will generate \$10 million in revenue.

The third quarter showed a 50% growth in users signing up for recurring billing plans.

## Porter's Five Forces

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The bargaining power of suppliers for antivirus software is low. This is mainly because volume is critical to suppliers and the distribution channel is diverse. The bargaining power of customers is neutral because there are a large number of antivirus companies; however buyers often require special customization and there are a large number of buyers. The intensity of existing rivalry is high. This is because there are a large number of competitors. The threat of substitutes is neutral. There are a high number of alternate methods to antivirus software; however, these methods are not necessarily higher quality and there is a high cost for businesses to switch to an alternative. The threat of new competitors is low. Strong brand names are highly important and there is a high learning curve to establish a business in the industry.

## Conclusion

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I recommend a buy for AVG. This is mainly due to the macroeconomic factors associated with the industry. The internet is growing rapidly and cyber threats are also increasing. Cyber security is going to need to grow and adapt to combat these issues. AVG has a competitive advantage in the diversification of its products and their knowledge to invest in emerging products.

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AVG Technologies N.V.		Analyst Peter Ostrowski	Current Price \$20.26	Intrinsic Value \$25.31	Target Value \$25.70	Dividend Yield 0%	1-yr Return: 26.84%	<b>NEUTRAL</b>			
General Info		Peers	Market Cap.	Management							
Sector	Information Technology	FireEye, Inc.	\$4,642.25	Professional	Title	Comp. FY2012	Comp. FY2013	Comp. FY2014			
Industry	Software			Kovacs, Gary	Chief Executive Officer and Managing Director	\$0	\$2,605,569	\$7,436,330			
Last Guidance	November 4, 2015			Little, John	Chief Financial Officer and Managing Director	\$731,238	\$1,095,529	\$1,633,435			
Next earnings date	February 18, 2016	Cheetah Mobile Inc.	\$2,840.68	Levi, Shaul	Chief Scientist	\$0	\$0	\$0			
		NQ Mobile Inc.	\$362.06	Anderson, Harvey	Chief Legal Officer	\$0	\$0	\$0			
Enterprise value	\$1,179.19	Imperva Inc.	\$2,262.66	Brown, Jeff	Vice President of Corporate Development	\$0	\$0	\$0			
Market Capitalization	\$1,058.24	SolarWinds, Inc.	\$4,182.15	Scheers, Steven	Chief People Officer	\$0	\$0	\$0			
Daily volume	4.37			<b>Past Earning Surprises</b>							
Shares outstanding	52.23	Barracuda Networks, Inc.	\$1,094.76		Revenue	EBITDA	Norm. EPS	Standard Error of "Surprise"			
Diluted shares outstanding	52.59	Blueora, Inc.	\$403.36	Last Quarter	-1.66%	1.49%	-12.50%	4.24%			
% shares held by institutions	76.71%	<b>Current Capital Structure</b>		Last Quarter-1	0.08%	-7.00%	2.17%	2.78%			
% shares held by insiders	1.92%	Total debt / Common Equity (LTM)	0.25	Last Quarter-2	2.62%	45.33%	24.32%	12.33%			
Short interest	3.90%	Cost of Borrowing (LTM)	0.00%	Last Quarter-3	4.80%	15.21%	6.90%	3.18%			
Days to cover short interest	0.00	Estimated Cost of new Borrowing	4.84%	Last Quarter-4	1.97%	23.00%	27.27%	7.82%			
52 week high	\$29.15	Altman's Z	2.58	Standard error	1.1%	9.1%	7.3%	3.93%			
52-week low	\$16.88	Estimated Debt Rating	BAA	Standard Error of Revenues prediction	1.1%	<b>Industry Outlook (Porter's Five Forces)</b>					
5yr Beta	0.83	Current levered Beta	0.94	Imputed Standard Error of Op. Cost prediction	9.0%	Bargaining Power of Suppliers (100th Percentile), Bargaining Power of Customers (71th Percentile), Intensity of Existing Rivalry (33th Percentile), Threat of Substitutes (67th Percentile), Threat of New Competition (75th Percentile), and Overall (86th Percentile).					
6-month volatility	30.47%	LTM WACC	6.86%	Imputed Standard Error of Non Op. Cost prediction	NM						
<b>Convergence Assumptions</b>											
<b>General Assumptions</b>			<b>Items' Forecast Assumptions</b>			<b>Other Assumptions</b>					
Money market rate (as of today)			0.40%	<b>Base year (LTM)</b>		<b>Convergence period (Sub-industry)</b>		<b>Adjustment per year</b>		Tobin's Q	80%
Risk-Free rate (long term estimate)			3.00%	Operating Cash/Rev.	34.50%	34.50%	0.0%	Excess cash reinvestment			Money market rate
Annual increase (decrease) in interest rates			0.1%	NWV/Rev.	-9.79%	-9.79%	0.0%	Other claims on the firm's assets			\$0.00
Marginal Tax Rate			25.0%	NPPE/Rev.	4.77%	5.00%	0.0%	<b>Capitalization</b>			
Country Risk Premium			6.0%	Dpe/NPPE	111.98%	100.00%	-1.2%	100% of all rent expenses are capitalized and amortized 'straightline' over 10 years			
				NOPAT MARGIN	25.81%	21.62%	-0.4%	100% of all R&D expenses are capitalized and amortized 'straightline' over 10 years			
<b>Forecast Year</b>			<b>Revenue Growth Forecast</b>		<b>Revenue (\$)</b> Forecast				<b>Valuation Focus</b>		
LTM				Op. Exp./Rev.	69.49%	69.11%	0.0%	DCF Valuation			100%
FY2015	1.9%	\$418.96	SBC/Rev.	2.95%	2.63%	1.30%	0.0%	Relative valuation			0%
FY2016	10.4%	\$426.92	Rent Exp./Rev.	1.78%	1.30%	0.0%	0.0%	Distress Valuation			0%
FY2017	10.4%	\$471.32	R&D/Rev.	20.07%	15.21%	-0.5%	<b>Monte Carlo Simulation Assumptions</b>				
FY2018	7.9%	\$508.54	E&D/Rev.	0.00%	0.00%	-0.14%	Revenue Growth deviation			Normal (0%, 1%)	
FY2019	5.4%	\$536.24	SG&A/Rev.	46.12%	36.36%	-1.0%	Operating expense deviation			Normal (0%, 1%)	
FY2020	4.2%	\$558.89	ROIC	39%	27.90%	-1.08%	Continuing Period growth			Triangular (5.82%, 6%, 6.18%)	
FY2021	3.6%	\$579.08	EV/Rev.	3.07x	2.53x	-0.05x	Country risk premium			Triangular (2.91%, 3%, 3.09%)	
FY2022	3.3%	\$598.22	EV/EBITDA	10.22x	8.78x	-0.44x	Intinsic value σ(e)			\$0.06	
FY2023	3.2%	\$617.09	Debt/Equity	25%	67%	0.4%	1-year target price σ(e)			\$0.07	
FY2024	3.1%	\$636.07	Unlevered beta	0.80	1.11						
Continuing Period	3.0%	\$655.40	Dividends/REV	0%	4%	0.4%					
	3.0%	\$673.06									
<b>Valuation</b>											
<b>Forecast Year</b>		<b>ROIC</b>	<b>WACC</b>	<b>Invested Capital</b>	<b>Implied Enterprise Value</b>	<b>Net Claims on Assets and Dilution Costs</b>	<b>Shares Outstanding</b>	<b>Price per Share</b>	<b>Monte Carlo Simulation Results</b>		
LTM	38.7%	6.9%		\$417.72	\$1,862.29	\$389.56	52.23	\$25.28			
FY2015	35.7%	7.1%		\$414.41	\$1,842.61	\$376.65	52.23	\$25.52			
FY2016	31.5%	7.6%		\$448.60	\$1,886.23	\$316.98	52.23	\$27.25			
FY2017	31.2%	8.2%		\$473.27	\$1,925.51	\$248.10	52.23	\$29.10			
FY2018	31.0%	8.6%		\$486.66	\$1,957.85	\$173.36	52.23	\$31.01			
FY2019	31.2%	8.9%		\$493.76	\$1,988.14	\$92.53	52.23	\$33.02			
FY2020	31.8%	9.3%		\$497.38	\$2,019.44	\$11.73	52.23	\$35.11			
FY2021	32.4%	9.6%		\$498.97	\$2,053.56	-\$71.34	52.23	\$37.32			
FY2022	33.2%	9.9%		\$499.29	\$2,091.71	-\$156.73	52.23	\$39.69			
FY2023	34.0%	10.2%		\$498.70	\$2,134.75	-\$246.90	52.23	\$42.24			
FY2024	35.0%	10.5%		\$497.36	\$2,183.50	-\$527.78	52.23	\$44.80			
Continuing Period	34.0%	10.6%		\$523.13							
<b>Sensitivity Analysis</b>											
Revenue growth variations account for 95.9% 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 variance											