

Research Note

Investors should consider this report as only a single factor in making their investment decision.

Perion Network Ltd.

Speculative Buy

John Nobile

March 11, 2021

PERI \$18.79 — (NASDAQ)

	<u>2019A</u>	<u>2020A</u>	<u>2021E</u>	<u>2022E</u>
Revenues (millions)	\$261.5	\$328.1	\$375.0	\$412.0
Earnings (loss) per share	\$0.49	\$0.36	\$0.31	\$0.44

52-Week range	\$28.32 – \$3.43	Fiscal year ends:	December
Common shares out as of 1/22/21	32.6 million	Revenue per share (TTM)	\$11.39
Approximate float	20.0 million	Price/Sales (TTM)	1.6X
Market capitalization	\$613 million	Price/Sales (2022)E	1.7X
Tangible book value/share	\$0.28	Price/Earnings (TTM)	52.2X
Price/tangible book value	67.1X	Price/Earnings (2022)E	42.7X

Perion Network Ltd., headquartered in Holon, Israel, is a global technology company that provides agencies, brands and publishers with digital advertising solutions. The company provides its data-driven Synchronized Digital Branding platform and high-impact ad formats in the display domain, a social media platform, and a branded search network.

Key investment considerations:

Reiterating Speculative Buy rating on Perion and raising our twelve-month price target to \$33.50 per share from \$31.00 based primarily on our increased 2022 projections.

In March 2021, Perion announced it expects to report revenue of at least \$86 million and adjusted EBITDA of at least \$7.2 million in 1Q21. Revenue for FY21 is expected to be \$370 million to \$380 million and adjusted EBITDA is expected to be at least \$37 million. The company's prior revenue guidance was \$350 million to \$370 million with adjusted EBITDA of at least \$35 million.

In March 2021, Perion announced the launch of Paragone's (formerly MakeMeReach) Actionable Performance Monitoring (APM) system. Paragone's APM is a SaaS platform that provides brands and their advertising partner teams a holistic view of their social advertising spend across all networks, agencies, and platforms - from one easy-to-use interface. The platform leverages advanced AI algorithms to predict and optimize campaign results and performance.

Paragone's APM adds significant benefits to its multi-channel social advertising management platform, which is deployed with high-profile clients, including The Walt Disney Company and Havas Media.

For 2021, we project a 14.3% increase in revenue to \$375 million and net income of \$11.5 million or \$0.31 per share. We previously projected revenue of \$360 million and net income of \$10.3 million or \$0.28 per share. Our revised estimates reflect recent guidance.

For 2022, we project a 9.9% increase in revenue to \$412 million and net income of \$16.2 million or \$0.44 per share. We previously projected revenue of \$396 million and net income of \$15.6 million or \$0.42 per share. Our revised estimates reflect continued organic revenue growth.

****Please view our disclosures on pages 9 - 11.***

Recommendation and Valuation

Reiterating Speculative Buy rating on Perion and raising our twelve-month price target to \$33.50 per share from \$31.00 based primarily on our increased 2022 projections.

PERI's trailing 12-month price-to-sales multiple is 1.6X. We believe investors are likely to accord PERI a multiple in line with the industry (which is currently 3X) given the company's growth potential and our projected increases in cash flow and shareholder's equity. Applying a multiple of 3X to our 2022 sales projection of \$11.14 per share implies a year-ahead value of approximately \$33.50 per share.

Perion Increases 1Q21 and FY21 Revenue and Adjusted EBITDA Guidance

On March 2, 2021, Perion announced it expects to report revenue of at least \$86 million with adjusted EBITDA of at least \$7.2 million in 1Q21. We projected 1Q21 revenue of \$77 million and adjusted EBITDA of \$6 million.

Revenue for FY21 is expected to be \$370 million to \$380 million and adjusted EBITDA is expected to be at least \$37 million. The company's prior guidance called for revenue of \$350 million to \$370 million and adjusted EBITDA of at least \$35 million. We projected FY21 revenue of \$360 million and adjusted EBITDA of \$36 million.

Perion Launches Paragone – First Social Actionable Performance System

On March 8, 2021, Perion announced the launch of Paragone's Actionable Performance Monitoring (APM) system. Paragone's APM adds significant benefits to its multi-channel social advertising management platform, which is deployed with high-profile clients, including The Walt Disney Company and Havas Media.

Paragone, formerly MakeMeReach, is an actionable performance monitoring platform for social advertisers. Paragone's APM is a SaaS platform that provides brands and their advertising partner teams a holistic view of their social advertising spend across all networks, agencies, and platforms - from one easy-to-use interface. The platform leverages advanced AI algorithms to predict and optimize campaign results and performance.

Projections

2021 Forecast – We project a 14.3% increase in revenue to \$375 million and net income of \$11.5 million or \$0.31 per share. We previously projected revenue of \$360 million and net income of \$10.3 million or \$0.28 per share. Our revised estimates reflect recent guidance.

We project gross margins of 93.8%. Customer acquisition costs and media buy expenses are projected to increase 15.6% to \$228.5 million as payments to publishers and developers increase. R&D expense should increase by 10.1% to \$34 million as the company continues to invest in new product development. Selling and marketing expenses should increase 17.4% to \$45.9 million from \$39.1 million. We project a 6.2% increase in general and administrative expenses to \$16.8 million as the company continues to control costs.

We project operating income of \$15.8 million, up from \$12.3 million in 2020. We anticipate the company paying \$2.9 million in taxes for a 20% tax rate.

In 2021, we project cash earnings of \$24.7 million and a \$6.9 million increase in working capital resulting in \$17.7 million cash from operations. Cash from operations and proceeds from the January 2021 equity offering should cover payments related to acquisitions, the payoff of debt, and capital expenditures, increasing cash by \$65 million to \$113.9 million at the end of 2021.

2022 Forecast – We project a 9.9% increase in revenue to \$412 million and net income of \$16.2 million or \$0.44 per share. We previously projected revenue of \$396 million and net income of \$15.6 million or \$0.42 per share. Our revised estimates reflect continued organic revenue growth.

We project gross margins of 94.2%. Customer acquisition costs and media buy expenses are projected to increase 10.9% to \$253.5 million as payments to publishers and developers increase. R&D expense should increase by 5.9% to \$36 million as the company continues to invest in new product development. Selling and marketing expenses should increase 5.9% to \$48.6 million from our projected \$45.9 million in 2020. We project a 7.1% increase in general and administrative expenses to \$18 million.

We project operating income of \$21.4 million, up from \$15.8 million projected for 2021. We anticipate the company paying \$4.1 million in taxes for a 20% tax rate.

In 2022, we project cash earnings of \$27.9 million and a \$4.9 million increase in working capital resulting in \$23 million cash from operations. Cash from operations should be more than offset by payments related to acquisitions and capital expenditures, decreasing cash by \$4.5 million to \$109.4 million at the end of 2022.

Risks

In our view, these are the principal risks underlying the stock.

Pandemic concerns – The outbreak of the coronavirus presents concerns that may dramatically affect the company’s ability to conduct business effectively. The trajectory of the coronavirus remains uncertain and it is becoming increasingly plausible that Perion’s business may be directly affected. In the event that the economic effect of the outbreak deepens and has a long term effect on the global economy, the company’s business and operations may be adversely effected.

Lack of long-term contracts – Perion generally does not enter into long-term contracts with its advertising customers, and such customers do business on a non-exclusive basis with no minimum spending guarantees. Perion’s advertising customers may reduce or terminate their business relationship with the company at any time which could have a material adverse effect on Perion’s business, results of operations, and financial condition.

Technological obsolescence – Google, as an advertising publisher, accounts for most US online search-generated revenues while Microsoft and Yahoo account for substantially all of the rest. A small number of social network companies, such as Facebook, account for a large portion of digital advertising budgets.

These companies, along with other large and established Internet and technology companies, may also leverage their power to make changes to their Web browsers, operating systems, platforms, networks or other products or services in a way that impacts the entire digital advertising marketplace. If Perion is unable to adjust to those changes, the company’s revenues and performance could be adversely impacted.

Demand for digital advertising – A substantial portion of the company’s revenues is derived from the sale of digital advertising solutions. If the demand for digital advertising does not continue to grow or customers do not chose Perion’s solutions, it could restrain the company’s operations.

Competition - The advertising industry is highly competitive. There are a large number of digital media companies and advertising technology companies that offer services similar to Perion’s that compete for finite advertising budgets and for limited inventory from publishers. Some of the company’s competitors are better established have significantly more financial, technical, sales and marketing resources than Perion. Given that the barriers to entering the digital advertising market are relatively low, the number of competitors may increase. If Perion cannot compete effectively in this market, its revenues are likely to decline.

Desktop computer search services - The market related to desktop computers has accounted for a substantial part of Perion's search revenues. Recently, the number of individuals who access the Internet through devices other than desktop computers, such as mobile phones, tablets, etc., has increased dramatically. If this trend towards using the Internet on non-desktop devices accelerates, some of Perion's services will become less relevant and may fail to attract advertisers and Web traffic.

Exchange rates - A significant portion of Perion's costs are incurred in new Israeli shekels (NIS). Exchange rate fluctuations may have an adverse effect on the company's earnings and asset base if it not able to effectively hedge against currency exchange risks.

Regulatory changes - Perion's business is conducted through the Internet and is subject to the laws and regulations that apply to e-commerce and online businesses around the world. These laws and regulations are becoming more prevalent in the US, Europe, Israel, Canada, and elsewhere and may impede the growth of the Internet and consequently the company's services.

Reliance on North American market - Perion's revenues have been concentrated within the North American market, accounting for approximately 75% of revenues. A significant reduction in the revenues generated in North America could have a material adverse effect on the company's results of operations.

Political, economic and military risks - A potential disruption of US economic conditions lies in the global spread of COVID-19 that is likely to cause supply chain and demand issues which could adversely impact corporate operating results. Perion's principal executive offices are located in Israel. Accordingly, political, economic and military conditions in the Middle East may directly affect the company's business.

Liquidity risk - Shares of Perion have risks common to those of the microcap segment of the market. Often these risks cause microcap stocks to trade at discounts to their peers. The most common of these risks is liquidity risk, which is typically caused by small trading floats and very low trading volume and can lead to large spreads and high volatility in stock price. There are 20 million shares in the float and the average daily volume is approximately 1.7 million shares.

Miscellaneous risk - The company's financial results and equity values are subject to other risks and uncertainties including competition, operations, financial markets, regulatory risk, and/or other events. These risks may cause actual results to differ from expected results.

Perion Network Ltd.

Consolidated Balance Sheets
(in thousands \$)

	2018A	2019A	2020A	2021E	2022E
Cash and cash equivalents	39,109	38,389	47,656	112,668	108,173
Restricted cash	1,694	1,216	1,222	1,222	1,222
Short-term bank deposits	4,000	23,234	12,700	12,700	12,700
Receivables	55,557	49,098	81,221	92,708	101,856
Prepaid expenses and other	3,533	3,170	4,560	4,560	4,560
Total current assets	103,893	115,107	147,359	223,858	228,511
Property and equipment	15,649	10,918	6,770	5,429	4,029
Operating lease right-of-use assets	-	22,429	20,266	20,266	20,266
Goodwill and intangibles	131,547	128,444	176,679	176,679	176,679
Deferred taxes	4,414	6,171	7,111	7,111	7,111
Other	943	708	496	496	496
Total assets	256,446	283,777	358,681	433,839	437,092
Accounts payable	38,208	47,681	72,498	80,556	87,229
Accrued expenses and other	17,240	18,414	21,188	24,000	26,368
Short-term operating lease liability	-	3,667	4,514	4,514	4,514
Short-term debt	16,059	8,333	8,333	-	-
Deferred revenues	3,794	4,188	5,711	5,711	5,711
Payment obligation related to acquisitions	1,813	1,025	7,869	30,000	-
Total current liabilities	77,114	83,308	120,113	144,781	123,822
Long-term debt	24,393	8,333	-	-	-
Payment obligation related to acquisition	-	-	30,035	-	-
Long-term operating lease liability	-	20,363	17,698	17,698	17,698
Other	6,158	6,591	6,713	6,713	6,713
Total liabilities	107,665	118,595	174,559	169,192	148,233
Total stockholders' equity	148,781	165,182	184,122	264,648	288,858
Total liabilities & stockholders' equity	256,446	283,777	358,681	433,839	437,092

Source: Company filings and Taglich Brothers' estimates

Perion Network Ltd.

Income Statements for the Fiscal Years Ended
(in thousands \$)

	<u>2018A</u>	<u>2019A</u>	<u>2020A</u>	<u>2021E</u>	<u>2022E</u>
Search advertising and other	126,868	173,587	179,365	200,000	212,000
Display and social advertising	<u>125,977</u>	<u>87,863</u>	<u>148,698</u>	<u>175,000</u>	<u>200,000</u>
Total revenue	252,845	261,450	328,063	375,000	412,000
Cost of revenue	<u>23,757</u>	<u>25,520</u>	<u>22,477</u>	<u>23,200</u>	<u>23,700</u>
Gross profit	229,088	235,930	305,586	351,800	388,300
Customer acquisition costs and media buy	128,351	135,891	197,626	228,541	253,542
Research and development	18,884	22,585	30,880	34,000	36,000
Selling and marketing	38,918	34,736	39,085	45,900	48,600
General and administrative	16,450	14,999	15,819	16,800	18,000
Depreciation and amortization	<u>9,719</u>	<u>9,711</u>	<u>9,923</u>	<u>10,800</u>	<u>10,800</u>
Operating income (loss)	14,691	18,008	12,253	15,759	21,358
Financial expenses	<u>3,794</u>	<u>3,470</u>	<u>2,638</u>	<u>1,352</u>	<u>1,096</u>
Income (loss) before taxes	10,897	14,538	9,615	14,407	20,262
Income tax (benefit)	<u>2,776</u>	<u>1,645</u>	<u>(610)</u>	<u>2,881</u>	<u>4,052</u>
Net income (loss)	<u>8,121</u>	<u>12,893</u>	<u>10,225</u>	<u>11,526</u>	<u>16,210</u>
EPS	<u>0.31</u>	<u>0.49</u>	<u>0.36</u>	<u>0.31</u>	<u>0.44</u>
Shares Outstanding	26,855	26,358	28,798	37,000	37,000
EBITDA	24,410	27,719	22,176	26,559	32,158
Adjusted EBITDA*	29,554	32,393	32,785	37,559	43,158
<u>Margin Analysis</u>					
Gross margin	90.6%	90.2%	93.1%	93.8%	94.2%
Customer acquisition costs and media buy	50.8%	52.0%	60.2%	60.9%	61.5%
Research and development	7.5%	8.6%	9.4%	9.1%	8.7%
Selling and marketing	15.4%	13.3%	11.9%	12.2%	11.8%
General and administrative	6.5%	5.7%	4.8%	4.5%	4.4%
Operating margin	5.8%	6.9%	3.7%	4.2%	5.2%
Tax rate	25.5%	11.3%	(6.3)%	20.0%	20.0%
<u>Year / Year Growth</u>					
Total Revenues	(7.7)%	3.4%	25.5%	14.3%	9.9%

Perion Network Ltd.

Quarterly Income Statements 2020A - 2022E
(in thousands \$)

	<u>3/20A</u>	<u>6/20A</u>	<u>9/20A</u>	<u>12/20A</u>	<u>2020A</u>	<u>3/21E</u>	<u>6/21E</u>	<u>9/21E</u>	<u>12/21E</u>	<u>2021E</u>	<u>3/22E</u>	<u>6/22E</u>	<u>9/22E</u>	<u>12/22E</u>	<u>2022E</u>
Search advertising and other	42,320	41,667	45,522	49,856	179,365	49,000	49,000	49,000	53,000	200,000	49,000	53,000	53,000	57,000	212,000
Display and social advertising	<u>23,733</u>	<u>18,674</u>	<u>37,891</u>	<u>68,400</u>	<u>148,698</u>	<u>37,000</u>	<u>38,000</u>	<u>40,000</u>	<u>60,000</u>	<u>175,000</u>	<u>38,000</u>	<u>42,000</u>	<u>48,000</u>	<u>72,000</u>	<u>200,000</u>
Total revenue	66,053	60,341	83,413	118,256	328,063	86,000	87,000	89,000	113,000	375,000	87,000	95,000	101,000	129,000	412,000
Cost of revenue	<u>5,766</u>	<u>4,880</u>	<u>5,292</u>	<u>6,539</u>	<u>22,477</u>	<u>5,550</u>	<u>5,550</u>	<u>5,550</u>	<u>6,550</u>	<u>23,200</u>	<u>5,650</u>	<u>5,650</u>	<u>5,650</u>	<u>6,750</u>	<u>23,700</u>
Gross profit	60,287	55,461	78,121	111,717	305,586	80,450	81,450	83,450	106,450	351,800	81,350	89,350	95,350	122,250	388,300
Customer acquisition costs and media buy	36,138	36,801	49,878	74,809	197,626	52,288	52,896	54,201	69,156	228,541	53,279	58,463	62,155	79,645	253,542
Research and development	7,207	7,122	8,071	8,480	30,880	8,500	8,500	8,500	8,500	34,000	9,000	9,000	9,000	9,000	36,000
Selling and marketing	9,701	8,219	9,448	11,717	39,085	11,000	11,200	11,200	12,500	45,900	11,500	12,200	12,200	12,700	48,600
General and administrative	3,939	3,581	4,239	4,060	15,819	4,200	4,200	4,200	4,200	16,800	4,500	4,500	4,500	4,500	18,000
Depreciation and amortization	<u>2,302</u>	<u>2,251</u>	<u>2,695</u>	<u>2,675</u>	<u>9,923</u>	<u>2,700</u>	<u>2,700</u>	<u>2,700</u>	<u>2,700</u>	<u>10,800</u>	<u>2,700</u>	<u>2,700</u>	<u>2,700</u>	<u>2,700</u>	<u>10,800</u>
Operating income (loss)	1,000	(2,513)	3,790	9,976	12,253	1,762	1,954	2,649	9,394	15,759	371	2,487	4,795	13,705	21,358
Financial expenses	<u>(8)</u>	<u>741</u>	<u>459</u>	<u>1,446</u>	<u>2,638</u>	<u>362</u>	<u>346</u>	<u>330</u>	<u>314</u>	<u>1,352</u>	<u>298</u>	<u>282</u>	<u>266</u>	<u>250</u>	<u>1,096</u>
Income (loss) before taxes	1,008	(3,254)	3,331	8,530	9,615	1,400	1,608	2,319	9,080	14,407	73	2,205	4,529	13,455	20,262
Income tax (benefit)	<u>(326)</u>	<u>(1,015)</u>	<u>1,203</u>	<u>(472)</u>	<u>(610)</u>	<u>280</u>	<u>322</u>	<u>464</u>	<u>1,816</u>	<u>2,881</u>	<u>15</u>	<u>441</u>	<u>906</u>	<u>2,691</u>	<u>4,052</u>
Net income (loss)	<u>1,334</u>	<u>(2,239)</u>	<u>2,128</u>	<u>9,002</u>	<u>10,225</u>	<u>1,120</u>	<u>1,286</u>	<u>1,855</u>	<u>7,264</u>	<u>11,526</u>	<u>59</u>	<u>1,764</u>	<u>3,623</u>	<u>10,764</u>	<u>16,210</u>
EPS	<u>0.05</u>	<u>(0.08)</u>	<u>0.08</u>	<u>0.30</u>	<u>0.36</u>	<u>0.03</u>	<u>0.03</u>	<u>0.05</u>	<u>0.20</u>	<u>0.31</u>	<u>0.00</u>	<u>0.05</u>	<u>0.10</u>	<u>0.29</u>	<u>0.44</u>
Shares Outstanding	28,213	26,630	28,337	29,962	28,798	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000	37,000
EBITDA	3,302	(262)	6,485	12,651	22,176	4,462	4,654	5,349	12,094	26,559	3,071	5,187	7,495	16,405	32,158
Adjusted EBITDA*	6,238	2,464	8,749	15,334	32,785	7,212	7,404	8,099	14,844	37,559	5,821	7,937	10,245	19,155	43,158
<u>Margin Analysis</u>															
Gross margin	91.3%	91.9%	93.7%	94.5%	93.1%	93.5%	93.6%	93.8%	94.2%	93.8%	93.5%	94.1%	94.4%	94.8%	94.2%
Customer acquisition costs and media buy	54.7%	61.0%	59.8%	63.3%	60.2%	60.8%	60.8%	60.9%	61.2%	60.9%	61.2%	61.5%	61.5%	61.7%	61.5%
Research and development	10.9%	11.8%	9.7%	7.2%	9.4%	9.9%	9.8%	9.6%	7.5%	9.1%	10.3%	9.5%	8.9%	7.0%	8.7%
Selling and marketing	14.7%	13.6%	11.3%	9.9%	11.9%	12.8%	12.9%	12.6%	11.1%	12.2%	13.2%	12.8%	12.1%	9.8%	11.8%
General and administrative	6.0%	5.9%	5.1%	3.4%	4.8%	4.9%	4.8%	4.7%	3.7%	4.5%	5.2%	4.7%	4.5%	3.5%	4.4%
Operating margin	1.5%	(4.2)%	4.5%	8.4%	3.7%	2.0%	2.2%	3.0%	8.3%	4.2%	0.4%	2.6%	4.7%	10.6%	5.2%
Tax rate	(32.3)%	31.2%	36.1%	20.0%	(6.3)%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
<u>Year / Year Growth</u>															
Total Revenues	22.7%	(5.1)%	26.8%	51.1%	25.5%	30.2%	44.2%	6.7%	(4.4)%	14.3%	1.2%	9.2%	13.5%	14.2%	9.9%

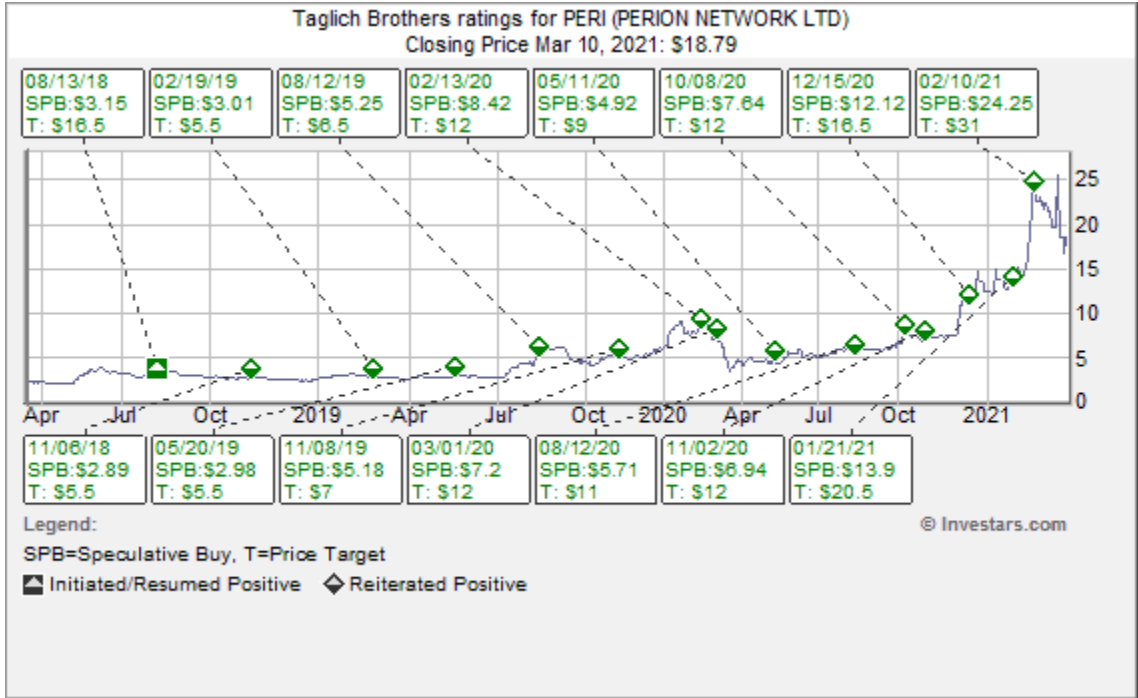
Perion Network Ltd.

Statement of Cash Flows for the Periods Ended
(in thousands \$)

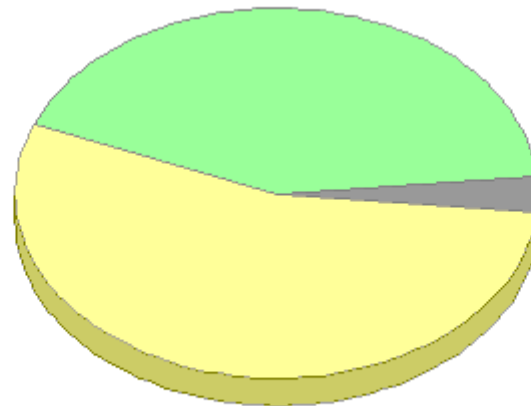
	2018A	2019A	2020A	2021E	2022E
Net income (loss)	8,121	12,893	10,225	11,526	16,210
Depreciation & amortization	9,719	9,711	9,923	8,144	6,677
Impairment	-	-	-	-	-
Restructuring costs	462	-	-	-	-
Stock-based compensation	2,718	2,293	4,447	5,000	5,000
Foreign currency translation	3	(86)	19	-	-
Accretion of payment obligation related to acquisition	-	-	-	-	-
Accrued interest	1,005	(204)	(125)	-	-
Deferred taxes	335	(1,756)	(3,093)	-	-
Accrued severance pay	(783)	96	(23)	-	-
Fair value revaluation - convertible debt	(1,585)	600	-	-	-
Loss from sale of property and equipment	-	-	88	-	-
Cash earnings (loss)	19,995	23,547	21,461	24,670	27,887
<i>Changes in assets and liabilities</i>					
(Increase) decrease in working capital	12,806	21,194	585	(6,921)	(4,882)
Net cash provided by (used in) operations	32,801	44,741	22,046	17,749	23,005
Purchase of property and equipment	(2,038)	(717)	(502)	(500)	(500)
Proceeds from sale of property and equipment	59	-	-	-	-
Capitalization of development costs	(1,756)	-	-	-	-
Cash paid for acquisitions	-	(1,200)	(20,186)	-	-
Obligation in connection with acquisitions	-	-	1,347	-	-
Short-term deposits	1,913	(19,234)	10,534	-	-
Net cash provided by (used in) investing	(1,822)	(21,151)	(8,807)	(500)	(500)
Exercise of options and restricted shares	-	1,227	4,286	3,000	3,000
Payments made in connection with acquisition	(3,333)	(1,813)	-	(7,904)	(30,000)
Proceeds from equity offering (net)	-	-	-	61,000	-
Proceeds from debt	25,000	-	-	-	-
Repayment of debt	(44,676)	(24,182)	(8,333)	(8,333)	-
Net cash provided by (used in) financing	(23,009)	(24,768)	(4,047)	47,763	(27,000)
Effect of currency exchange rates	78	(20)	81	-	-
Net change in cash	8,048	(1,198)	9,273	65,012	(4,495)
Cash - beginning of period	32,755	40,803	39,605	48,878	113,890
Cash - end of period	40,803	39,605	48,878	113,890	109,395

Source: Company filings and Taglich Brothers' estimates

Price Chart



Taglich Brothers' Current Ratings Distribution



■ 42.42 % Buy ■ 54.55 % Hold ■ 3.03 % Not Rated

Investment Banking Services for Companies Covered in the Past 12 Months		
Rating	#	%
Buy	3	14
Hold		
Sell		
Not Rated		

Important Disclosures

As of the date of this report, an employee at Taglich Brothers, Inc. owns or has a controlling interest in 1,000 shares of PERI common stock. Taglich Brothers, Inc. does not currently have an Investment Banking relationship with the company mentioned in this report and was not a manager or co-manager of any offering for the company within the last three years.

All research issued by Taglich Brothers, Inc. is based on public information. The company paid a monetary fee of \$6,000 (USD) in July 2018 for the creation and dissemination of research reports for the first three months. After the first three months from initial publication, the company pays a monthly monetary fee of \$2,000 (USD) to Taglich Brothers, Inc., for a minimum of six months for the creation and dissemination of research reports.

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Analyst Certification

I, John Nobile, the research analyst of this report, hereby certify that the views expressed in this report accurately reflect my personal views about the subject securities and issuers; and that no part of my compensation was, is, or will be, directly, or indirectly, related to the specific recommendations or views contained in this report.

Public companies mentioned in this report:

Meaning of Ratings

Buy – The growth prospects, degree of investment risk, and valuation make the stock attractive relative to the general market or comparable stocks.

Speculative Buy – Long term prospects of the company are promising but investment risk is significantly higher than it is in our BUY-rated stocks. Risk-reward considerations justify purchase mainly by high risk-tolerant accounts. In the short run, the stock may be subject to high volatility and could continue to trade at a discount to its market.

Neutral – Based on our outlook the stock is adequately valued. If investment risks are within acceptable parameters, this equity could remain a holding if already owned.

Sell – Based on our outlook the stock is significantly overvalued. A weak company or sector outlook and a high degree of investment risk make it likely that the stock will underperform relative to the general market.

Discontinued – Research coverage discontinued due to the acquisition of the company, termination of research services (includes non-payment for such services), diminished investor interest, or departure of the analyst.

Some notable Risks within the Microcap Market

Stocks in the Microcap segment of the market have many risks that are not as prevalent in Large-cap, Blue Chips or even Small-cap stocks. Often it is these risks that cause Microcap stocks to trade at discounts to their peers. The most common of these risks is liquidity risk, which is typically caused by small trading floats and very low trading volume which can lead to large spreads and high volatility in stock price. In addition, Microcaps tend to have significant company specific risks that contribute to lower valuations. Investors need to be aware of the higher probability of financial default and higher degree of financial distress inherent in the microcap segment of the market.

From time to time our analysts may choose to withhold or suspend a rating on a company. We continue to publish informational reports on such companies; however, they have no ratings or price targets. In general, we will not rate any company that has too much business or financial uncertainty for our analysts to form an investment conclusion, or that is currently in the process of being acquired.