Research Report – Update

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

Pareteum Corporation

Speculative Buy

John Nobile
November 19, 2018

TEUM $2.03 — (NASDAQ)

	2016A	2017A	2018E	2019E
Revenues (millions)	$12.9	$13.5	$31.3	$82.0
Earnings (loss) per share	$(4.56)	$(0.84)	$(0.10)	$0.18

52-Week range	$3.59 – $0.54	Fiscal year ends:	December
Common shares out as of 11/13/18	97.3 million	Revenue per share (TTM)	$0.44
Approximate float	90.3 million	Price/Sales (TTM)	4.6X
Market capitalization	$196 million	Price/Sales (FY2019)E	2.5X
Tangible book value/share	$0.46	Price/Earnings (TTM)	NMF
Price/tangible book value	4.4X	Price/Earnings (FY2019)E	11.3X

Pareteum Corporation, headquartered in New York, NY, is a cloud communications platform company. Cloud communications involves the integration of multiple communication methods and services that can be accessed over the Internet and are handled and hosted by a third-party (such as Pareteum) through the cloud.

Key investment considerations:

Reiterating Speculative Buy rating and raising our twelve-month price target to $5.00 per share from $4.00 based on our increased 2019 revenue projection and the synergies created by the acquisition of Artilium.

The company's 36-month backlog more than tripled to over $500 million as of October 24, 2018 from $147 million as of December 31, 2017. The company has also increased the number of connected devices using its technology to 2.9 million as of September 30, 2018, up 127% since September 30, 2017.

Pareteum's 36-month contractual backlog and growing number of connected devices using its technology should support our revenue growth forecasts. We project strong revenue growth should result in EBITDA of $23.3 million in 2019, up from a projected loss of $2.2 million in 2018.

On October 1, 2018, Pareteum completed its acquisition of Artilium, a provider of services to both telecom infrastructure customers, as well as enterprise customers. On November 12, 2018, Pareteum announced it entered into a definitive agreement to acquire iPass in an all-stock transaction.

For 2018, we project revenue more than doubling to $31.3 million and a loss of $(0.10) per share. Our prior forecast was for revenue of $25.1 million and breakeven per share. The changes to our forecast reflect 3Q18 results and the inclusion of Artilium in 4Q18.

For 2019, we project revenue more than doubling to $82 million and EPS of $0.18. We previously forecasted revenue of $55 million and EPS of $0.21. Our forecast reflects a full year of Artilium.

Pareteum reported (10-Q released 11-14-18) 3Q18 revenue more than doubled to $8 million from $3.5 million. The net loss (includes currency translation changes) was $(0.12) per share versus a loss of $(0.16) per share in 3Q17. We estimated revenue of $7 million and breakeven per share.

****Please view our disclosures on pages 14 - 16.***

Recommendation and Valuation

We are reiterating our Speculative Buy rating on Pareteum Corporation and raising our twelve-month price target to $5.00 per share from $4.00 based on our increased 2019 revenue projection and the synergies (through cross selling, market expansion, and cost savings) created by the acquisition of Artilium.

Our rating should be supported by worldwide spending on public cloud services and infrastructure, which is forecasted to achieve a five-year compound annual growth rate (CAGR) of 21.9% with public cloud services spending totaling $277 billion by 2021. One of the industries projected to grow the fastest is the telecommunications industry with a 23.3% CAGR to 2021. Software as a Service (such that Pareteum offers) is projected to be the largest cloud computing category, capturing nearly two thirds of all public cloud spending in 2018.

The company's 36-month backlog more than tripled to over $500 million as of October 24, 2018 from $147 million as of December 31, 2017. The company has also increased the number of connected devices using its technology to 2.9 million as of September 30, 2018, up 127% since September 30, 2017. Pareteum's 36-month contractual backlog and growing number of connected devices using its technology should support our revenue growth forecasts. We project strong revenue growth should result in EBITDA of $23.3 million in 2019, up from a projected loss of $2.2 million in 2018.

TEUM trades at a TTM multiple of 4.6X sales while industry (telecommunications software and services) peers trade at a trailing multiple of 1.6X sales. We believe Pareteum's premium compared to the industry is due to its substantial growth prospects. We project sales growth of over 160% for TEUM in 2019 compared to 4.1% for the industry. As the company's sales growth accelerates, we believe investors are likely to accord TEUM a higher multiple. We applied a multiple of 7X (up from 6X previously reflecting Artilium synergies) to our FY19 sales per share projection of $0.79, discounted for execution risk, to derive a year-ahead value of approximately $5.00 per share.

Significant Developments

<u>*Pareteum Completes Acquisition of Artilium*</u> – On October 1, 2018, Pareteum completed its acquisition of Artilium, a provider of services to both telecom infrastructure customers, as well as enterprise customers.

Since October 2017, Pareteum and Artilium have benefitted from a strategic alliance entered into with the intention of jointly pursuing new and developed markets, accelerating growth and increasing market penetration for both Artilium and Pareteum.

Under the terms of the acquisition, Pareteum paid approximately $10 million cash and issued approximately 37.8 million shares to Artilium's shareholders for a total consideration of approximately $131.5 million. On a Proforma basis, 2018 revenue would have approximated $49 million if the acquisition was completed on January 1, 2018.

<u>*Agreement to Acquire iPass*</u> - On November 12, 2018, Pareteum announced it entered into a definitive agreement to acquire iPass in an all-stock transaction. iPass is a provider of global mobile connectivity, and location and performance data.

Under the terms of the agreement, Pareteum will commence an exchange offer to acquire all of the outstanding shares of iPass common stock, offering 1.17 shares of Pareteum common stock in exchange for each share of iPass common stock tendered. The exchange offer is subject to customary conditions, including the tender of at least a majority of the outstanding shares of iPass common stock and certain regulatory approvals, and is expected to close in the first quarter of calendar year 2019. No approval of the stockholders of Pareteum is required in connection with the proposed transaction.

Pareteum anticipates achieving more than $15 million in annual cost synergies with greater than $12 million of those expected to be realized in the first full quarter of combined operations. Pareteum estimates approximately $2 million of GAAP earnings accretion and $5.5 million of non-GAAP earnings accretion in the first full year after closing the transaction. In addition, the acquisition will add new offices and talent in Silicon Valley, California and Bangalore, India, expanding Pareteum's presence globally.

Expansion of Executive Positions – In November 2018, Pareteum announced that CEO Vic Bozzo has been appointed as the new CEO of Pareteum Asia, replacing Manjot Mann.

In October 2018, Pareteum announced that Denis McCarthy has been promoted as the company's first president, and Amy Love has joined the company as chief marketing officer.

Formerly senior vice president of corporate development at Pareteum, McCarthy will lead Pareteum's growth strategies, and guide the company through the integration of newly-acquired Artilium. He will oversee finance, corporate development, human resources, marketing communications, and operations support. As chief marketing officer, Love will refine and elevate Pareteum's brand to showcase how the company is delivering for customers and the investment community.

Love joins Pareteum from the Georgia Institute of Technology Advanced Technology Development Center (ATDC) where she led statewide programs, helping technology startups launch and scale. Prior to ATDC, Love was head of marketing and communications for the South Carolina Department of Commerce and launched the state's lifestyle and business brand "SC is Just Right;" she later became the state's inaugural director of the Office of Innovation. Love worked in Europe for German telecommunications company Deutsche Telekom and its mobile line of business T-Mobile, and built corporate communications tools needed as the company expanded globally. BA in English from Furman University and a Master of Mass Communication, public relations emphasis, from the University of South Carolina. Love is a Liberty Fellow, part of the Aspen Global Leadership Network.

In October 2018, Pareteum announced the appointment of David Hess as vice president of sales for North America and David John as managing director of Latin America.

Hess has held prominent positions as the former chief executive officer of Telia North America and chief operating officer of KDDI Global, with 20 years of leading operations and sales in the telecommunication, cloud infrastructure, and managed service provider markets. John has led delivery and operations globally as a strategic partner of AT&T, Vodafone, Telefonica, Telecom Italia, Oi, and Sprint. He has experience with telecom carriers and multinational enterprises in public safety, smart city, and internet of things applications.

Organizational History

Pareteum Corporation, a Delaware corporation, was originally formed in 2001 as Elephant Talk Communications Corp. as a result of a merger between Staruni Corporation and Elephant Talk Limited. In December 2011, the company moved its listing from the OTCBB to the NYSE American and began trading under the ticker symbol ETAK.

Following approval at the company’s 2016 annual shareholder meeting, the company was rebranded and formally renamed Pareteum Corporation. In November 2016, the company started trading on the NYSE American Exchange under the ticker symbol TEUM.

Pareteum currently has offices in New York, Madrid, Barcelona, Bahrain and the Netherlands.

Business

Pareteum Corporation, headquartered in New York, NY, is a cloud communications platform company. Cloud communications involves the integration of multiple communication methods and services that can be accessed over the Internet and are handled and hosted by a third-party (such as Pareteum) through the cloud.

Source: Pareteum

Pareteum has developed patent pending software which is connected to mobile networks in various countries using multiple communications channels including mobile telephony, data, SMS (Short Message Service or text messaging), VOIP (Voice over Internet Protocol is a methodology for the delivery of voice communications and multimedia sessions over the Internet), and OTT services (Over-The-Top is where a telecommunications service provider delivers one or more services across an Internet network). Pareteum integrates these distinct communications methods and services for customers and application developers. Some of the company's partners include: HP, Cisco, Sonus, Vodafone, and T-Mobile among others (see chart above).

Pareteum targets large and growing sectors such as IoT (Internet of Things) and MVNOs (a Mobile Virtual Network Operator is a wireless communications services provider that does not own the wireless network infrastructure over which it provides services) that need Communications-as-a-Service (CaaS) that Pareteum offers. CaaS is an outsourced enterprise communications solution that can be leased from a single vendor responsible for all hardware and software management. CaaS allows businesses to selectively deploy communications devices on a pay-as-you-go, as-needed basis, eliminating the large capital investment and ongoing overhead for a system whose capacity may often exceed or fall short of current demand.

Services

Managed Services Platform - Fully-managed services designed for Mobile Virtual Network Enablers (an MVNE provides network infrastructure and related services to an MVNO), large Mobile Network Operators (MNO) and Mobile Virtual Network Operators (MVNO). This platform provides integrated operational and billing management services enabling real-time account (SIM) management, policy (service and rules) management and charging (pricing, rating, and billing).

Global Cloud Services Platform - Cloud based services for Communications Service Providers (a CSP is a telecommunications/Internet/cable/satellite service provider that transports information electronically), IoT providers and enterprises. This platform is increasingly automated with services that include billing, rating, and customer relationship management.

Application Exchange and Developer Platform – Pareteum's customers can easily integrate with the company's solutions through a set of application programming interfaces (an API is a set of clearly defined methods for building application software). This allows for the integration across any channel, for both new systems and legacy infrastructures.

Beyond enabling communications between people and devices, Pareteum's platforms enable smart homes (including smart appliances and smart energy meters), connected cars, and smart cities.

Benefits of Cloud Services

According to the communications industry publisher UC Today, the hosted cloud service model offers several benefits to businesses compared with buying equipment outright and running it on their premises. These benefits include lower capital costs, lower maintenance overhead, faster and easier deployment, as well as flexibility and scalability.

Since there are no upfront purchases, cloud communications subscribers incur only operational expenses (such as the cost of a subscription). Included in the subscription are the costs of system management, maintenance and repair. With no complex hardware to install or software to configure, cloud communications offers customers a fast and easy way of deployment. Since only an Internet connection is required, cloud services allow customers access to cloud tools on any device, anywhere. Cloud communications enables customers the ability to scale their communications needs with their business by adding new users, new branch offices, and new communications tools, with a simple change to the subscription.

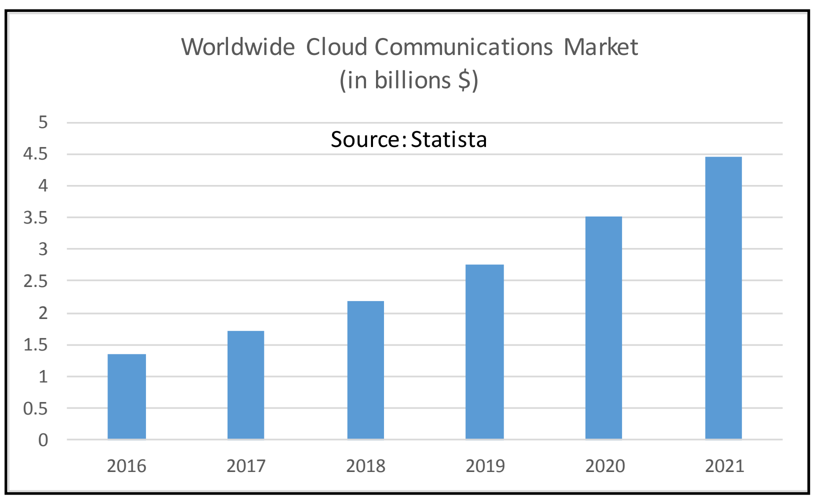
An example of how cloud communications can benefit a business can be seen in how it makes it easier for people in large enterprises to work and collaborate together, even over distance. Cloud communications has coincided with various platforms such as integrated messaging, conferencing, and document sharing, as large businesses look for ways for workers to connect and remain productive on the move. The cloud makes it easier to connect regional and global offices under a single, unified network.

Industry

According to a report by Research and Markets[1], the managed communication services market is witnessing accelerated growth due to the penetration of technologies like mobility, cloud computing and big data across different industry verticals. Though privacy and security concerns remain, these are being addressed by various managed services providers.

Operational efficiency is key to any organization's growth. This can be achieved by streamlining core processes that help in enhancing customer satisfaction and by focusing more on key revenue generating businesses. Research and Markets reports that vendors are planning to shift their services to a cloud-based delivery with the intention to provide customers the choice of having mobile access to unified communication platforms that are hosted by the provider or a third party (such as Pareteum).

The factors responsible for driving the growth of the managed communication services market would be business process efficiency, a growing focus on core businesses, and the need to provide enhanced customer satisfaction. The increasing availability of network connectivity and bandwidth facilitate the new types of cloud and managed services.



Worldwide spending on public cloud services and infrastructure is forecast to reach $160 billion in 2018, an increase of 23.2% over 2017, according to the latest update to the International Data Corporation (IDC) Worldwide Semiannual Public Cloud Services Spending Guide.

1. "Global Managed Communication Services Market 2017: Analysis by End-User Industry, Geography & Vendor Analysis" (Press Release). Research and Markets. November 9, 2017. Retrieved May 17, 2018.

Although annual spending growth is expected to slow somewhat over the forecast period to 2021, the market is forecast to achieve a five-year compound annual growth rate (CAGR) of 21.9% with public cloud services spending totaling $277 billion in 2021. One of the industries that will see the fastest spending growth over the five-year forecast period is the telecommunications industry with a 23.3% forecasted CAGR. Software as a Service (SaaS) will be the largest cloud computing category, capturing nearly two thirds of all public cloud spending in 2018.

Statista projects the worldwide cloud communications platform market to grow at a compound annual growth rate (CAGR) of 26.8% to 2021 (see chart at bottom right on previous page).

Competitive Environment

Pareteum's competitors fall into three broad categories: traditional telecom/infrastructure vendors, large software solution and SaaS vendors - offering a suite of specialized software components, solutions and APIs, and niche solution providers, providing narrowly focused BSS/OSS (business support system/operations support system) and prepaid solutions.

Some of the company's competitors have greater financial, technical and sales and marketing resources, as well as greater brand and market awareness. As Pareteum executes on its growth strategies and enters new markets or disrupts existing markets, expectations are for competition to become more intense.

The company believes that the key competitive differentiators in the near-term will be the scale and international reach of connectivity, the comprehensiveness of platform offerings, the ease of deployment and implementation, and the scalability and reliability of service, of which Pareteum considers itself well placed.

Strategy

Pareteum's strategy is to grow both organically and through mergers and acquisitions. The company is focused on selling and implementing new communications services and IoT opportunities as the world of connected devices and people continues to grow.

Pareteum's strategy includes attracting new subscribers through direct sales, existing channel partnerships and new initiatives such as referral programs. The company aims to continue to on-board new communication services providers through business development and direct sales in each defined sales region (North America, Latin America, Europe, Middle East, Africa, and Asia-Pac). Pareteum also looks to drive adoption through on-boarding more connections which are already active on its Managed Services and Global Cloud Platforms, and to draw in new customers and end-users to the Application Exchange and Developer Platform.

Economic Outlook

In October 2018, the IMF lowered its global economic growth estimate to 3.7% for both 2018 and 2019, down 0.2% for both periods from its July 2018 estimate. The downward revision was due to rising trade barriers and a reversal of capital flows to emerging economies.

The IMF kept its economic growth estimate for the US at 2.9% for 2018 but lowered its 2019 estimate to 2.5%, down 0.2% from its July 2018 estimate. While the IMF believes that economic momentum is still strong as fiscal stimulus continues to rise, the downward revision for 2019 reflects $200 billion in tariffs on US imports from China.

The advance estimate of US GDP growth (released on October 26, 2018) showed the US economy grew at an annual rate of 3.5% in 3Q18, down from 4.2% in 2Q18. The 3Q18 US GDP growth estimate primarily reflects increases in consumer spending, inventory investment, government spending, and business investment.

Because Pareteum's business is conducted globally, the increased economic growth projections both domestically and abroad, should support continued growth.

Projections

The acquisition of Artilium resulted in a significant increase to our revenue forecasts as it will impact 4Q18 and 2019. The company's 36-month backlog more than tripled to over $500 million as of October 24, 2018 from $147 million as of December 31, 2017. The company has also increased the number of connected devices using its technology to 2.9 million as of September 30, 2018, up 127% since September 30, 2017. Pareteum's 36-month contractual backlog and growing number of connected devices using its technology should support our revenue growth forecasts.

2018 – We project revenue more than doubling to $31.3 million and a net loss of $6.9 million or $(0.10) per share. Our prior forecast was for revenue of $25.1 million and net income of $19,000 or breakeven per share. Our revised forecasts reflect 3Q18 results and the 4Q18 acquisition of Artilium.

Gross profit should more than double to $21.3 million due primarily to sales growth, offset in part by gross margins decreasing to 67.9% from 72.8%. Our gross margin projections account for the lower blended margins with Artilium.

We project SG&A expenses of $20.3 million or 64.9% of sales compared to $11.7 million or 86.2% of sales. The significant increase in SG&A expenses is primarily the result of nonrecurring stock compensation in 3Q18. Product development costs are projected to grow $1.9 million to $3.3 million as the company continues to expand its service offerings. Depreciation and amortization expense is projected to decrease to $3.9 million from $4.5 million due primarily to lower depreciable fixed assets. We project the operating loss narrowing to $8.3 million from $8.8 million as the increase in revenue more than offsets the growth in operating expenses.

Interest expense should decrease to $700,000 from $5.1 million on a significantly lower average debt level. The company should not pay taxes in the foreseeable future given its large amount of net operating loss carryforwards ($109 million as of December 31, 2017).

We project cash earnings of $4.8 million and a $3.5 million decrease in working capital resulting in $8.3 million cash provided by operations. The decrease in working capital primarily reflects increases in accruals. Capital expenditures of $2.7 million, $10 million cash paid for Artilium, and $10.3 million provided by financing activities (primarily from a stock offering and the exercise of warrants and options) should result in a net increase in cash of $6 million to $19.7 million at December 31, 2018.

2019 – We project revenue more than doubling to $82 million and net income of $18.9 million or $0.18 per share. We previously forecasted revenue of $55 million and net income of $15.3 million or $0.21 per share. Our revised forecast reflects the inclusion of Artilium for a full year.

We anticipate gross profit more than doubling to $51.3 million even as gross margins decline to 62.5% from 67.9% in 2018. The decrease in gross margins reflects a full year of lower blended margins with Artilium.

We project SG&A expenses increasing 8.3% to $22 million or 26.8% of sales due primarily to the inclusion of Artilium. Product development costs should grow $2.9 million to $6.2 million due primarily to implementation of strategic growth initiatives to expand business opportunities. Depreciation and amortization expense should decrease to $3.3 million from $3.9 million due primarily to lower depreciable fixed assets. We project a swing to operating income of $19.7 million versus an operating loss of $8.3 million as the increase in revenue more than offsets the growth in operating expenses. We project operating margins of 24.1% compared to (26.6)%.

Interest expense should increase to $1 million from $700,000 due to the debt acquired from Artilium. The company should not pay taxes in 2019 given its large amount of net operating loss carryforwards.

We project cash from operations of $32.2 million from cash earnings of $27.1 million and a $5.1 million decrease in working capital. The decrease in working capital primarily reflects increases in payables and accruals. Cash from operations and capital expenditures of $2.7 million should result in a net increase in cash of $29.5 million to $49.2 million at December 31, 2019.

3Q and Nine Month 2018 Financial Results

3Q18 – Revenue more than doubled to $8 million from $3.5 million. The net loss (includes currency translation changes) was $7 million or $(0.12) per share versus a loss of $2.3 million or $(0.16) per share in 3Q17. We estimated revenue of $7 million and a net loss of $101,000 or break even per share.

Revenue growth was primarily due to increased deployments with existing and new customers. Gross profit increased to $5.9 million from $2.7 million even as gross margins decreased to 73.4% from 77.4%.

Product development costs increased to $766,000 from $497,000 as the company expands its service offerings. SG&A expenses increased to $9 million from $2 million due primarily to increased travel, legal, accounting and marketing costs, and the hiring of new employees.

Interest income increased to $50,000 from $42,000. Interest expense decreased to $227,000 from $627,000 due mainly to the company paying off all senior secured debt in 2017.

Nine Months 2018 – Revenue increased 90.1% to $18.1 million. The net loss (includes currency translation changes) was $7.5 million or $(0.14) per share versus a loss of $5 million or $(0.41) per share in the year-ago period. The company realized a gain of $1.3 million gain or $0.02 per share in 2018 versus a gain of $1.9 million or $0.16 per share related to the change in derivative liabilities.

Gross profit increased to $13 million from $7 million with gross margins decreasing to 71.8% from 72.9%.

Product development costs increased to $2.2 million from $1.1 million and SG&A expenses increased to $14.8 million from $6.5 million.

Interest income remained flat at $136,000. Interest expense decreased to $450,000 from $2.9 million due mainly to the company paying off all senior secured debt in 2017.

Income (in thousands $)	9M18A	9M17A
Revenue	18,123	9,533
Cost of revenue (excluding D&A)	5,103	2,579
Gross profit	13,020	6,954
Product development	2,246	1,055
Sales, general and administrative	14,823	6,539
Depreciation and amortization	2,958	3,149
Impairment, sale of assets, restructuring	2,074	841
Operating income (loss)	(9,081)	(4,630)
Interest income	136	136
Interest expense	(450)	(2,893)
Other income (expense)	1,935	2,523
Income (loss) before taxes	(7,460)	(4,864)
Income tax (benefit)	38	81
Net income (loss)	(7,498)	(4,945)
EPS	(0.14)	(0.41)
Shares Outstanding	54,276	12,201
EBITDA	(4,052)	1,178
Margin Analysis		
Gross margin	71.8%	72.9%
Product development	12.4%	11.1%
SG&A	81.8%	68.6%
Operating margin	(50.1)%	(48.6)%
Year / Year Growth		
Total Revenues	90.1%	

Source: Company filings

Liquidity – As of September 30, 2018, Pareteum had $18.9 million cash (of which $430,000 is restricted), a current ratio of 3.9X, $90,000 of total debt, and a nominal debt equity ratio. Total debt is related to a private offering of unsecured convertible notes in 4Q15-1Q16 that have an annual interest rate of 9%.

At September 30, 2018, the company had cash earnings of $2 million and a $5.9 million increase in working capital that resulted in $3.8 million cash used in operations. The increase in working capital was primarily due to a decrease in accruals and an increase in receivables. Gross proceeds from a public offering of common stock and the exercise of warrants and options were partially offset by capital expenditures, increasing cash by $5.1 million to $18.9 million at September 30, 2018.

Risks

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

Economic – The economic climate, especially in Europe, may have an adverse effect in the markets in which Pareteum operates. Many of the company's customers' business is consumer driven, and to the extent there is a decline in consumer spending, Pareteum's customers could experience a reduction in the demand for their services.

International markets – Pareteum has significant international operations in Europe, and to a lesser extent in the US, Middle East and elsewhere. There can be no assurance that the company will be able to obtain the permits and operating licenses required for it to operate

Technological obsolescence - The telecommunications industry is subject to rapid and significant changes in technology, frequent new service introductions and evolving industry standards. If Pareteum fails to adapt successfully to technological advances, it could lose customers.

Integration of acquisitions - Strategic acquisitions are a part of the company's growth strategy. Acquisitions of businesses and customer lists involve operational risks, including the possibility that an acquisition may not ultimately provide the benefits originally anticipated by management.

Foreign currency exchange rates - Because most of Pareteum's business is conducted outside the US, fluctuations in foreign currency exchange rates versus the US dollar could adversely affect its financial results.

Competition – Pareteum is substantially smaller than its major competitors, whose marketing and pricing decisions, and relative size advantage, could adversely affect the company's ability to attract and retain customers and are likely to continue to cause significant pricing pressures that could adversely affect Pareteum's financial results.

Customer dependency - For the year ended December 31, 2017, Pareteum had one significant customer which accounted for 88% of its revenue. The loss or reduction in services to this significant could have an adverse impact on the company's business and financial condition.

Regulations – Pareteum operates in a heavily regulated industry. As a provider of communications technology, the company is subject to varying degrees of regulation in each of the jurisdictions in which it provides services. There can be no assurance that future regulatory changes will not have a material adverse effect on the company or that regulators will not raise issues with regard to Pareteum's compliance with applicable regulations.

Liquidity risk - Shares of Pareteum Corporation 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 90.3 million shares in the float and the average daily volume is approximately 1.2 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.

Pareteum Corporation

Consolidated Balance Sheets
(in thousands $)

	2016A	2017A	9/18A	2018E	2019E
Cash and cash equivalents	931	13,538	18,434	19,696	49,162
Restricted cash	564	200	430	430	430
Receivables	615	2,058	7,200	4,758	12,456
Prepaid expenses	1,085	900	943	943	943
Total current assets	3,195	16,696	27,007	25,827	62,991
Other assets	129	91	39	39	39
Note receivable	1,012	595	588	588	588
Net property and equipment	8,709	4,714	3,945	4,190	3,583
Intangible assets	-	-	-	6,052	6,052
Goodwill	-	-	-	107,444	107,444
Long term investments	-	3,230	3,230	3,230	3,230
Total assets	**13,045**	**25,326**	**34,809**	**147,370**	**183,927**
Accounts payable and customer deposits	2,317	1,979	2,796	4,189	10,250
Obligations under capital leases	11	-	-	-	-
Net billings in excess of revenues	952	243	123	123	123
Accrued expenses and other payables	6,013	5,250	3,891	9,397	16,400
Convertible promissory note	-	66	90	90	90
Loans payable	4,000	-	-	777	777
Total current liabilities	13,293	7,538	6,900	14,576	27,640
Derivative liabilites	4,266	1,598	-	-	-
Deferred tax liabilities	-	-	-	1,065	1,065
Deferred revenue	-	-	-	3,378	3,378
Other long term liabilites	193	151	95	1,233	1,233
Convertible promissory note	821	618	-	-	-
Senior loan	3,716	-	-	-	-
Net billings in excess of revenues	121	-	-	-	-
Total liabilities	**22,410**	**9,905**	**6,995**	**20,252**	**33,316**
Total stockholders' equity*	**(9,365)**	**15,421**	**27,814**	**127,118**	**150,611**
Total liabilities & stockholders' equity	**13,045**	**25,326**	**34,809**	**147,370**	**183,927**

*2019 includes $98 million equity related to the issuance of 37.8 million shares for Artilium
Source: Company filings and Taglich Brothers' estimates

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

	2016A	2017A	2018E	2019E
Revenue	12,856	13,548	31,324	82,000
Cost of revenue (excluding D&A)	3,659	3,684	10,054	30,750
Gross profit	9,197	9,864	21,270	51,250
Product development	3,544	1,480	3,347	6,200
Sales, general and administrative	13,049	11,672	20,323	22,000
Depreciation and amortization	4,247	4,533	3,868	3,307
Impairment, sale of assets, restructuring	7,260	966	2,074	-
Operating income (loss)	(18,903)	(8,787)	(8,342)	19,743
Interest income	112	172	186	200
Interest expense	(7,270)	(5,063)	(700)	(1,000)
Other income (expense)	(4,643)	103	2,040	-
Income (loss) before taxes	(30,704)	(13,575)	(6,816)	18,943
Income tax (benefit)	38	107	38	-
Net income (loss)	(30,742)	(13,682)	(6,854)	18,943
EPS	(4.56)	(0.84)	(0.10)	0.18
Shares Outstanding	6,739	16,338	69,451	103,685
EBITDA	(19,187)	(3,979)	(2,248)	23,250
Margin Analysis				
Gross margin	71.5%	72.8%	67.9%	62.5%
Product development	27.6%	10.9%	10.7%	7.6%
SG&A	101.5%	86.2%	64.9%	26.8%
Operating margin	(147.0)%	(64.9)%	(26.6)%	24.1%
Year / Year Growth				
Total Revenues		5.4%	131.2%	161.8%
Net Income		NMF	NMF	NMF
EPS		NMF	NMF	NMF

Source: Company filings and Taglich Brothers' estimates

Quarterly Income Statements 2017A - 2019E
(in thousands $)

	3/17A	6/17A	9/17A	12/17A	2017A	3/18A	6/18A	9/18A	12/18E	2018E	3/19E	6/19E	9/19E	12/19E	2019E
Revenue	2,795	3,239	3,499	4,015	13,548	4,113	6,003	8,008	13,200	31,324	14,500	18,500	22,500	26,500	82,000
Cost of revenue (excluding D&A)	842	946	791	1,105	3,684	1,195	1,780	2,129	4,950	10,054	5,438	6,938	8,438	9,938	30,750
Gross profit	1,953	2,293	2,708	2,910	9,864	2,918	4,223	5,879	8,250	21,270	9,063	11,563	14,063	16,563	51,250
Product development	285	273	497	425	1,480	727	754	766	1,100	3,347	1,100	1,400	1,700	2,000	6,200
Sales, general and administrative	2,685	1,861	1,992	5,134	11,672	2,986	2,867	8,970	5,500	20,323	5,500	5,500	5,500	5,500	22,000
Depreciation and amortization	844	873	1,433	1,383	4,533	965	994	999	910	3,868	880	847	810	770	3,307
Impairment, sale of assets, restructuring	129	459	253	125	966	74	5	1,995	-	2,074	-	-	-	-	-
Operating income (loss)	(1,990)	(1,173)	(1,467)	(4,157)	(8,787)	(1,834)	(397)	(6,851)	740	(8,342)	1,583	3,816	6,053	8,293	19,743
Interest income	39	55	42	36	172	43	43	50	50	186	50	50	50	50	200
Interest expense	(1,566)	(699)	(627)	(2,171)	(5,063)	(93)	(130)	(227)	(250)	(700)	(250)	(250)	(250)	(250)	(1,000)
Other income (expense)	2,198	423	(107)	(2,411)	103	(146)	2,159	27	-	2,040	-	-	-	-	-
Income (loss) before taxes	(1,319)	(1,394)	(2,159)	(8,703)	(13,575)	(2,030)	1,675	(7,001)	540	(6,816)	1,383	3,616	5,853	8,093	18,943
Income tax (benefit)	1	(68)	148	26	107	-	19	19	-	38	-	-	-	-	-
Net income (loss)	(1,320)	(1,326)	(2,307)	(8,729)	(13,682)	(2,030)	1,656	(7,020)	540	(6,854)	1,383	3,616	5,853	8,093	18,943
EPS	(0.14)	(0.10)	(0.16)	(0.31)	(0.84)	(0.04)	0.03	(0.12)	0.01	(0.10)	0.01	0.03	0.06	0.08	0.18
Shares Outstanding	9,322	12,911	14,304	28,613	16,338	50,062	64,741	59,315	103,685	69,451	103,685	103,685	103,685	103,685	103,685
EBITDA	1,091	178	(99)	(5,149)	(3,979)	(972)	2,799	(5,775)	1,700	(2,248)	2,513	4,713	6,913	9,113	23,250
Margin Analysis															
Gross margin	69.9%	70.8%	77.4%	72.5%	72.8%	70.9%	70.3%	73.4%	62.5%	67.9%	62.5%	62.5%	62.5%	62.5%	62.5%
Product development	10.2%	8.4%	14.2%	10.6%	10.9%	17.7%	12.6%	9.6%	8.3%	10.7%	7.6%	7.6%	7.6%	7.5%	7.6%
SG&A	96.1%	57.5%	56.9%	127.9%	86.2%	72.6%	47.8%	112.0%	41.7%	64.9%	37.9%	29.7%	24.4%	20.8%	26.8%
Operating margin	(71.2)%	(36.2)%	-41.9%	(103.5)%	(64.9)%	(44.6)%	(6.6)%	-85.6%	5.6%	(26.6)%	10.9%	20.6%	26.9%	31.3%	24.1%
Year / Year Growth															
Total Revenues					5.4%	47.2%	85.3%	128.9%	228.8%	131.2%	252.5%	208.2%	181.0%	100.8%	161.8%
Net Income					NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF
EPS					NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF	NMF

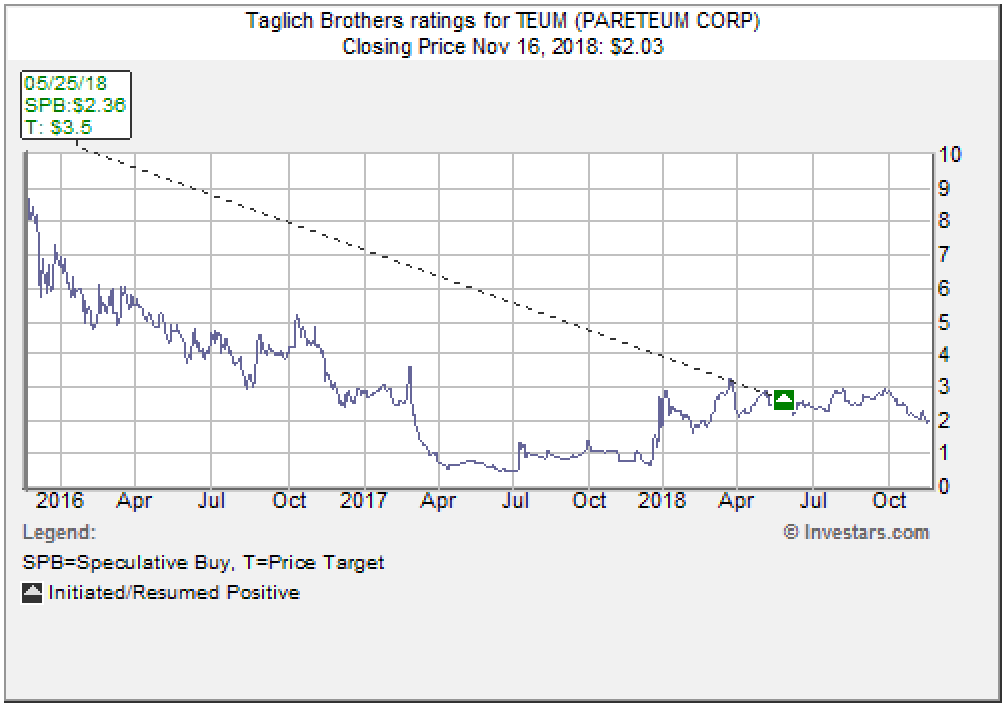
Source: Company filings and Taglich Brothers' estimates

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

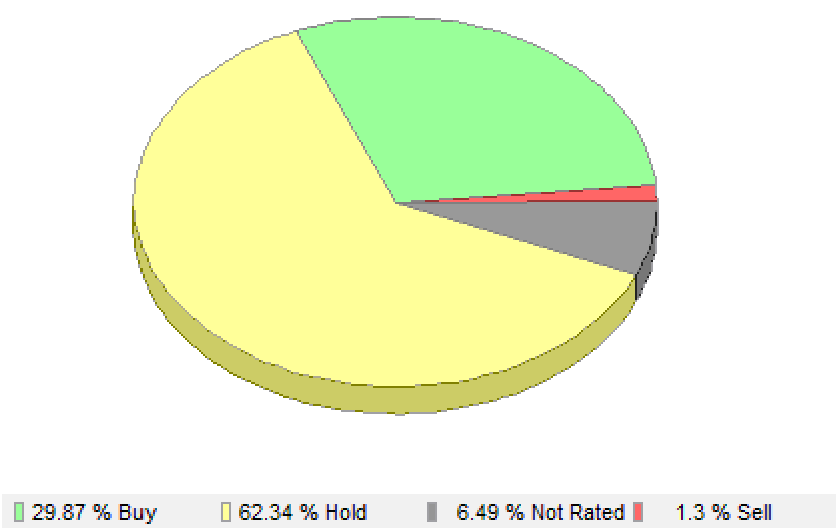
	2016A	2017A	9m18A	2018E	2019E
Net income (loss)	(31,445)	(12,463)	(7,498)	(6,854)	18,943
Depreciation & amortization	4,247	4,533	2,958	3,868	3,307
Provision for doubtful accounts	(89)	3	-	-	-
Stock based compensation	3,897	4,289	7,410	8,550	4,550
Change in fair value of warrant liability	3,316	(795)	(1,284)	(1,284)	-
Amortization of deferred financing costs	1,267	341	21	21	21
Interest expense related to debt discount and conversion	6,042	3,409	175	235	235
Expense settled by issuance of shares	-	784	250	250	-
Other (income) expense	221	-	-	-	-
Amortization of debt discount and deferred financing costs	542	-	-	-	-
Impairment of assets	851	-	-	-	-
Impairment of goodwill	3,229	-	-	-	-
Loss on sale of assets	1,542	-	-	-	-
Cash earnings (loss)	(6,380)	101	2,032	4,786	27,056
Changes in assets and liabilities					
Receivables	622	(1,446)	(5,078)	(2,700)	(7,698)
Prepaid expenses, deposits and other	1,637	640	(28)	(28)	(256)
Payables and customer deposits	81	(349)	799	2,210	6,061
Net billings in excess of revenues	(1,169)	(830)	(128)	(120)	-
Accrued expenses and other	1,551	(732)	(1,421)	4,147	7,003
(Increase) decrease in working capital	2,722	(2,717)	(5,856)	3,509	5,110
Net cash provided by (used in) operations	**(3,658)**	**(2,616)**	**(3,824)**	**8,295**	**32,166**
Purchase of property, equipment, and software development	(1,413)	(722)	(2,189)	(2,700)	(2,700)
Acquisition of Artilium	-	-	-	(10,000)	-
Advance purchase payment on assets held for sale	450	-	-	-	-
Proceeds from sale of assets	2,000	-	-	-	-
Net cash provided by (used in) investing	**1,037**	**(722)**	**(2,189)**	**(12,700)**	**(2,700)**
Financing receivable	355	-	-	-	-
Exercise of warrants and options	-	5,050	5,683	5,683	-
Equity and debt issuance costs	(1,339)	(227)	-	-	-
Principal payment on Eurodollar loan	(967)	-	(61)	(81)	-
Increase in short-term loans	-	-	-	-	-
Proceeds from convertible promissory note	2,273	-	-	-	-
Payment on convertible promissory note	-	-	-	(756)	-
Unsecured promissory note	350	-	-	-	-
Financing related fees	-	-	(633)	(633)	-
Gross proceeds from public offering	-	21,202	6,100	6,100	-
Reclassify accrued interest to principal	-	(84)	-	-	-
Principal repayment to senior lender	-	(10,082)	-	-	-
Gross proceeds from preferred stock	2,490	-	-	-	-
Net cash provided by (used in) financing	**3,162**	**15,859**	**11,089**	**10,313**	**-**
Effect of currency exchange rates	21	(279)	51	51	-
Net change in cash	**562**	**12,242**	**5,127**	**5,959**	**29,466**
Cash - beginning of period	**933**	**1,495**	**13,737**	**13,737**	**19,696**
Cash - end of period	**1,495**	**13,737**	**18,864**	**19,696**	**49,162**

Source: Company filings and Taglich Brothers' estimates

Price Chart



Taglich Brothers' Current Ratings Distribution



Investment Banking Services for Companies Covered in the Past 12 Months

Rating	#	%
Buy	**3**	**11**
Hold		
Sell		
Not Rated	**1**	**50**

Important Disclosures

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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:

Ameri Holdings (OTC: AMRH)
AT&T (NYSE: T)
AudioEye (OTC: AEYE)
Cisco Systems (NASDAQ: CSCO)
Fair Isaac Corporation (NYSE: FICO)
Hewlett Packard Enterprise Company (NYSE: HPE)
ImageWare Systems (OTC: IWSY)
iPass (OTC: IPAS)
T-Mobile (NYSE: TMUS)
Virtusa Corporation (NASDAQ: VRTU)
Vodafone Group Plc. (NASDAQ: VOD)

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.

Dropping Coverage – Research coverage discontinued due to the acquisition of the company, termination of research services, 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.