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Research Report – Update

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

Phunware, Inc.

Rating: Speculative Buy

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November 16, 2021

PHUN $4.01 — (NASDAQ)

	2018 A*	2019 A	2020 A**	*2021 E*	*2022 E*
Revenue (in millions)	$22.5	$19.2	$10.1	***$10.3***	***$26.0***
Earnings (loss) per share	($0.38)	($0.35)	($0.40)	***($0.31)***	***($0.08)***

52-Week range	$24.04 – $0.60	Fiscal year ends:	December
Shares outstanding a/o 11/09/21	96.3 million	Revenue/shares (ttm)	$0.11
Approximate float	71.6 million	Price/Sales (ttm)	36.5X
Market Capitalization	$386.2 million	Price/Sales (2022) E	15.4X
Tangible Book value/shr	($0.17)	Price/Earnings (ttm)	NMF
Price/Book	NMF	Price/Earnings (2022) E	NMF

**Excludes $8.4 million in revenue from becoming publicly traded ** Excludes a ($0.10) legal settlement charge*

Phunware Inc., headquartered in Austin, Texas, designed and developed the Multiscreen-as-a-Service (MaaS) platform, a fully integrated enterprise cloud platform for mobile to its customers. MaaS platform provides customers with the products, solutions, data and services needed to build, manage, and monetize their mobile application portfolios at scale. PHUN's MaaS technology platform includes its patented location based services technology and service offerings.

Key Investment Considerations:

Maintaining Speculative Buy rating and increasing our 12-month price target to $5.25 per share from $1.65 due to our 2022 revenue per share forecast nearly doubling, a significant increase in sector valuation, and a reduced risk profile.

Phunware has substantial growth potential for its Multiscreen-as-a-Service (MaaS) technology platform that includes its patented location based service technology and service offerings within markets such as healthcare, smart cities, and corporate campuses. Analysts project the mobile apps market could reach $935 billion in 2023, up from $365 billion in 2018 for annualized growth of approximately 20.7%.

In October 2021, PHUN completed the acquisition of Lyte Technology, Inc., which provides customers with high performance computer systems. We anticipate Lyte revenue contributing at least $3 million and $16 million, respectively to our 4Q21 and 2022 forecasts.

In 2Q21, PHUN launched its blockchain ecosystem, which should complement and supplement its core MaaS offerings by offering enterprise customers additional capabilities to identify and engage their target audiences.

PHUN reported (on 11-11-21) 3Q21 EPS of $0.01 on revenue of nearly $2.2 million. In 3Q20, the loss per share was ($0.19) on revenue of $3.1 million. We projected a ($0.01) per share loss on revenue of $1.6 million.

For 2021, we project a loss of ($0.31) per share (prior was ($0.27) per share) on a 2.9% revenue increase to $10.3 million (prior was $6.6 million). Our forecast reflects the October 2021 acquisition of Lyte.

For 2022, we project a loss of ($0.08) per share from our prior forecast of ($0.15) per share on 152.7% revenue growth to $26 million (prior was $10.5 million). Our forecast reflects a full year of operations from the Lyte acquisition and customer acceptance of PHUN's portfolio of MaaS offerings.

Please view our Disclosures pages 15 – 17.

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Appreciation Potential

Maintaining Speculative Buy rating and increasing our 12-month price target to $5.25 per share from $1.65 due to our 2022 revenue per share forecast nearly doubling and a significant increase in sector valuation. Our price target should be supported by the company's October 2021 acquisition of Lyte Technology, Inc., which we anticipate should contribute revenue of at least $3 million and $16 million, respectively in 4Q21 and 2022. We also anticipate a growing customer base of higher margin recurring revenue in 2022. We anticipate recurring quarterly revenues should reach $2.5 million in 4Q22 compared to $1.8 million in 3Q21. The company's reduced risk profile reflects the November 2021 capital raise of over $62 million that should fund operations and growth opportunities beyond our forecast period.

Our rating reflects the company's MaaS technology offerings gaining enterprise customer acceptance. Starting in 4Q21, we anticipate sales and backlog growth should accelerate due to the engagement of new indirect sales and channel partners that include its anchor distribution partner (Carrier Global Corporation), along with other distribution partners announced in 3Q21 (HID Global and Cox Communications' business division). In 2Q21, the company launched its blockchain ecosystem (with gross margin that should exceed 90%) that should complement and supplement the company's core MaaS offerings by offering enterprise customers additional capabilities to identify and engage their target audiences.

Our 12-month price target of $5.25 per share implies shares could appreciate nearly 30% over the next twelve months. According to finviz (a/o 11/15/21), the average trailing twelve-month price-to-sales multiple with equivalent market capitalizations for companies in the Software – Application/Infrastructure and Information Technology Services (newly added) sectors is 23.7X (prior was 12.8X excluding IT Services). PHUN's trailing twelve-month price-to-sales multiple is 37.2X (prior was 8X). We anticipate investors are likely to accord PHUN a multiple approaching that of the sector. We applied a price-to-sales multiple of 20X (prior was 12.3X) to our 2022 sales per share forecast of $0.26 (prior was $0.14) to obtain a year-ahead price target of approximately $5.25 per share.

A higher valuation of Phunware is likely to be supported by quarterly sequential sales growth that began in 3Q21, a narrowing of operating losses, reduced cash burn, an increase in its recurring revenue customer-base, as well as growth of the operations of Lyte (acquired in October 2021). In 2022, we forecast PHUN's operating losses narrowing to $7.8 million (prior was $11.2 million) from an estimated loss of $14.9 million in 2021. PHUN's cash burn should narrow to $2.3 million in 2022 from an estimated $9.2 million in 2021 and $14.3 million in 2020.

Overview

Phunware Inc., headquartered in Austin, Texas, is a provider of the Multiscreen-as-a-Service (MaaS) platform, which is a fully integrated enterprise cloud platform for mobile infrastructures in order to provide companies the products, solutions, data, and services needed to build, manage, and monetize their mobile application portfolios at scale. PHUN's technology includes its patented location based service technology that provides real-time unique features that include indoor and offshore tracking (as well as outdoor and onshore tracking) on the ground, in large buildings, and in the air. The offering meets the needs of the hearing and visually impaired and people that are in wheelchairs.

The company's mission is to assist customers in defining their brands, as well as to create, launch, promote, monetize and scale their mobile identities as a means to anchor consumers brand interactions. PHUN's MaaS technology platform of service offerings provides the entire mobile lifecycle of applications, media and data in one login through one procurement relationship at scale. Phunware is striving to become an integral part of the cloud-based big data mobile apps infrastructure. Over time, the company aims to dominate the intersection of mobile, cloud, and big data, enabling consumers to take control over how their data is used, shared and monetized.

In October 2021, PHUN completed the acquisition of Lyte Technology, Inc. which provides customers with high performance computer systems.

Recent Developments

October 2021
The company acquired privately-held Lyte Technology, Inc. (on October 19, 2021). Lyte provides its customers with high performance computer systems. PHUN financed the closing of the acquisition ($3.3 million) with cash on-hand and unsecured, non-dilutive debt. Including revenue from the acquisition of Lyte, PHUN issued net revenue guidance of at least $5 million in 4Q21.

Lyte, founded in 2018, is a profitable, system integrator that specializes in marketing and distributing custom, high-end computer systems (off-the-shelf) with advanced graphic processing units for gaming, streaming and cryptocurrency mining. Located in Illinois, Lyte employs over 25 people and ships thousands of computer systems per quarter to a unique customer network that has largely grown through word-of-mouth.

Total consideration to be paid for this acquisition is approximately $11 million that will consist of cash and PHUN common stock with a portion paid as an earn-out payment contingent upon Lyte generating at least $12 million in net revenues for the one-year period post-closing.

This acquisition enables Phunware to enter the high performance personal computer market, which is estimated to grow annually by 20.4% through 2024. In 2020, the market generated revenue of approximately $32 billion.

Lyte's customers represent gamers, developers, content creators and crypto enthusiasts who should support the adoption, scale and infrastructure required for Phunware to deploy its decentralized data economy powered by PhunCoin and PhunToken.

November 2021
As of November 4, 2021, Phunware holds approximately 127 bitcoin, which were acquired at an aggregate purchase price of nearly $7.8 million.

As of November 12, 2021, PHUN sold approximately 18.2 million common shares pursuant to an existing at market issuance sales agreement with B. Riley. Net cash proceeds (after deducting expenses of $1.9 million) were nearly $62.1 million.

Technology Platform

PHUN's technologies have evolved into its Multiscreen-as-a-Service (MaaS) cloud-based technology platform and service offerings, which are designed for the licensing and creation of category-defining mobile experiences for brands and their application users worldwide at scale. Phunware is transitioning its technology and service offering to generate a stream of recurring revenue (a Software-as-a-Service model) through the licensing of its technology platforms and service offerings. The higher margin recurring revenue subscription model is offered to customers typically on one, three, or five year contracts. The company's MaaS offering is designed to enhance the end-user experience.

Software Development Kits (SDKs)
SDKs are a collection of software development tools in one installable package and ease the creation of applications. Phunware offers SDKs for organizations developing their own applications via customized development services and prepackaged solutions. The company's MaaS platform is built on technological components that include SDKs, application programming interfaces, scripts, portals, integrations, interfaces and other software tools, solutions and services in order to address and provide application use and engagement analytics.

Mobile Application Framework and Data
PHUN's mobile application framework and data products offer real-time mobile audience targeting, reach, engagement, and monetization for insights and interactions globally at scale, as well as pre-integration of all the company's software technology modules for use within mobile application portfolios, solutions, and services. A long-term goal of Phunware is to empower and enable consumers or end users of mobile applications to own, control

and be rewarded for the use of their personal data and information. That long-term goal took its first step in 2Q21 with the announcement in May 2021 that the company launched its PhunToken purchase portal that began selling PhunToken to consumers, developers and brands. This step begins the process of creating the company's blockchain-enabled mobile loyalty ecosystem that should drive engagements by unlocking the features and capabilities of Phunware's Multiscreen-as-a-Service platform.

Location-based Services

A critical element for the company's future deployments and customer growth is its location-based services technology and service offerings. This module includes mapping, navigation, wayfinding, workflow, asset management and policy enforcement. A key differentiator of Phunware's location-based services is the ability to track (a mobile device) indoors and offshore within a hospital, buildings, stadiums/arenas, cruise ships, and airplane. The company's real-time blue-dot position uses Bluetooth Low Energy beacons, or Wi-Fi, GPS and/or Li-Fi (wireless communication utilizing light to transmit data and position between devices). Its location-based services comply with the Americans with Disability Act (i.e., for the wheelchair bound and visually impaired).

The company anticipates being able to leverage its location-based service module within its MaaS technology platform to provide smart campuses for corporations and higher educational customers since this technology has the capability to potentially improve internal workflows and increase operational efficiency. It can make such improvements by taking advantage of location awareness to track employees, equipment and assets, as well as trigger customer workflows based on proximity alerts and gather valuable data on traffic patterns and more.

Blockchain Ecosystem

In 2019, the company launched PhunToken that acts as a medium of exchange within its blockchain technology enabled rewards marketplace and data exchange. In May 2021, PHUN began selling PhunToken through its Phun Token International subsidiary. As of September 30, 2021, PHUN sold $100,000 of PhunToken for which we received both cash and digital currency from customers. Sales are recorded as application transaction revenue.

Growth Strategy

Technology and services offerings

The company is taking advantage of their investments in research and development since its founding in 2009 in order to continually extend the technology within and functionality of its service offerings. A key to future growth was the expansion of technological capabilities to include location-based services, which was solidified in April 2019, when a patent award was granted for a component of the technology. Phunware's patented location-based services software and management solution technology should provide it with a competitive market differentiator for customers deploying its MaaS platform. This technology should enable the company to obtain new customers in the healthcare industry, corporations looking to develop smart campuses to manage workers and workflow in the current and post COVID-19 environment, as well as cities and municipalities looking to develop smart city applications.

Customer Base

The company aims to grow its customer base through an expansion of its go-to-market strategy with indirect sales and channel partners, including its anchor distribution partner (Carrier Global Corporation), along with other distribution partners announced in 3Q21 (HID Global and Cox Communications' business division). It is anticipated that PHUN's MaaS technology offerings will be sold by those distribution partners to their already established customer bases.

Partnerships

By expanding its number of partnerships and achievements, the company should be able to have its MaaS technology platform service offering marketed to a broad base of potential new customers. The company's partners should be able to use and leverage the mobile expertise Phunware's support professionals have developed over the last ten years. In addition to 4Q20 announced partnerships with GAIN Innovation for government contract bids in Texas and Vizza Technologies that should enable PHUN to expand its mobile digital front door healthcare offering, PHUN announced in 1Q21 that it partnered with Infinite Leap to continue the process of enhancing its digital front door technology offering on mobile devices.

<u>Healthcare</u>
We anticipate the mobile and virtual healthcare market is likely to be a key growth vertical for the company. In 4Q20, the company was selected by Dignity Health Yavapoia Regional Medical Center for the deployment of its location based services software, as well as the doubling of the square footage covered by this solution from an existing customer (Baptist Health South Florida). Also, Virginia Hospital Center selected PHUN's comprehensive mobile healthcare solution for deployment. In 3Q21, the company announced it delivered the digital front door on mobile for that Virginia Hospital Center that covers more than 850,000 square-feet of indoor medical space. In 4Q21, PHUN announced its mobile digital front door solution for healthcare is available on the Epic App Orchard marketplace. EPIC controls one-third of the electronic health record market.

<u>Technology</u>
The company's technology portfolio and associated applications supports its growth initiatives. Phunware has a portfolio of intellectual property that includes 17 US issued patents and 4 non-provisional patent applications. In August 2020, the USPTO issued a US Patent Covering – Systems and Methods for Enterprise Branded Application Frameworks for Mobile and Other Environments. The new patent allowance should support, expand, and protect its core patent portfolio underlying its Multiscreen-as-a-Service (MaaS) platform. The company's fully integrated services platform enables brands to engage, manage and monetize users on mobile.

Projections

<u>Basis of Forecast</u>
We anticipate PHUN's 2022 revenue growth should be driven primarily by the October 2021 acquisition of Lyte and new higher margin recurring platform subscriptions and services revenue customers for its MaaS technology platform and service offerings. Lyte should contribution revenue of at least $16 million from customer growth for its high performance computer systems through implementation of a sales and marketing effort. Prior to being acquired by PHUN, Lyte's sales were primarily through word-of-mouth. We anticipate recurring MaaS Technology quarterly revenues approaching $2.5 million in 4Q22, compared to $1.8 million in 3Q21 driven by customer acceptance and accelerated sales growth starting in 2H22 due to the engagement of indirect sales, channel partners, and partnerships.

<u>Operations – 2021</u>
We project revenue increasing 2.9% to $10.3 million (prior was $6.5 million) due primarily to the October 2021 acquisition of Lyte. Gross profit is likely to decrease to $5 million from $6.6 million in 2020 due to gross margin contraction to 48.2%, down from 66.4% in 2020. Gross margin contraction reflects the sales mix and timing issues for expenses recognized on completed projects that have yet to be delivered and accepted by customers.

We project an operating loss of $14.9 million compared to $13 million in 2020 (excludes a $4.5 million legal settlement charge). The increase reflects gross margin contraction. We anticipate operating expenses of $19.8 million compared $19.7 million in 2020 (which excludes the $4.5 million legal settlement charge in 2020). We anticipate G&A expense decreasing to $13.1 million from $15.4 million as the company continues to control costs through lower professional fees, offset in part by the October 2021 acquisition of Lyte. We project a 60.9% increase in sales and marketing expense to nearly $2.7 million to support marketing initiatives to increase the company's customer base and R&D expense of $4.1 million compared to $2.6 million in 2020.

We project non-operating interest expense increasing to $4 million compared to $3.4 million due to the 1H21 impact of accelerating amortization of debt issuance and discount costs stemming from the elimination of debt obligations. We estimate a $5.1 million (net) loss on extinguishment of debt compared to $2.2 million in 2020.

We project a net loss of $23.5 million or ($0.31) per share on average shares outstanding of 76.7 million. We previously projected a net loss of $25.1 million or ($0.35) per share on average shares outstanding of nearly 71.5 million.

Finances – 2021
We project cash burn of $9.2 million and an increase in working capital of nearly $11 million. The increase in working capital is due primarily to an increase in receivables and prepaid expenses and decreases in payables and accruals. Proceeds of $98.2 million from the issuance of common stock and exercise common stock warrants should cover cash used in operations of $20.2 million, repayment of debt, and the acquisition of Lyte. Cash should increase by $50.2 million to $54.2 million at December 31, 2021.

Operations – 2022
We project revenue increasing 152.7% to $26 million (prior was $10.5 million) due primarily to the October 2021 acquisition of Lyte and the company's recurring revenue customers for its MaaS technology platform and service offerings expanding within the healthcare, smart cities, and corporate campus sectors, as well as a return of hospitality and real estate customers. The increase in our revenue forecast reflects sales from Lyte of at least $16 million. Gross profit should nearly triple to $14.7 million from nearly $5 million due to sales growth and gross margin improving to 56.6% compared to an estimated 48.2% in 2021. Gross margin improvement should be due primarily to sustained recurring revenue customer growth.

We project the operating loss narrowing to $7.8 million (prior was $11.2 million) compared to an estimated loss of $14.9 million in 2021. The improvement in our operating loss forecast from our 2021 and prior expectation is directly due to the profitable operations of Lyte (acquired in October 2021). We anticipate operating expenses increasing 13.7% to nearly $22.6 million. We project a 25% increase in G&A expense to $16.4 million to support customer growth of the company's MaaS technology and Lyte operations. Sales and marketing expense should increase 18.4% to nearly $3.2 million to support marketing initiatives to increase the company's customer base. We anticipate R&D expenses decreasing to $3 million from an estimated $4.1 million in 2021.

We project interest income of $80,000 compared to an expense of $4 million due to the elimination of debt. We project a net loss of nearly $8 million or ($0.08) per share on average shares outstanding of 96.3 million. We previously projected a net loss of $11.3 million or ($015) per share on average shares outstanding of 74.9 million.

Finances – 2022
We project cash burn of $2.3 million and an increase in working capital of $3.4 million. The increase in working capital is due primarily to an increase in receivables and decrease in payables. Cash used in operations of $5.7 million and final payments to acquire Lyte should result in cash decreasing by $13.4 million to $40.9 million at December 31, 2022.

3Q21 and 9Mos21 Results

3Q21
Revenue decreased $970,000 or 31% to nearly $2.2 million compared to $3.1 million, reflecting $1.1 million in lower platform subscriptions and services sales stemming from a single customer that accounted for 26% of total revenue in the year-ago period compared to no revenue from this customer in 3Q21. Application transaction revenue increased $119,000 to $389,000 due primarily to an increase in advertising campaigns and initial sales of PhunToken.

Gross profit was $1.1 million compared to $2.2 million reflecting lower sales and gross margin contraction to 52.5% from 71.3% in the year-ago period. The gross margin decrease reflects lower margin projects compared to the year-ago period. Operating expenses were $5.2 million compared to $9.7 million (includes a $4.5 million legal settlement). Excluding the legal settlement in the year-ago period, operating expenses were flat as the $980,000 decrease in G&A expense was nearly offset by increases in sales and marking and R&D expenses of $920,000 (combined). The reduction in G&A expense reflects lower stock-based compensation and legal fees. Sales and marketing expense increased due primarily to an increase in headcount and associated compensation. R&D expense increased due to the activity in developing the PhunToken ecosystem.

Non-operating income was $4.4 million compared to an expense of $1.1 million in 3Q21. The swing to income reflects interest income of $7,000 compared to an expense of $1.5 million in 3Q20, as well as gain on debt forgiveness of $2.9 million compared to a $950,000 loss on extinguishment of debt in the year-ago period. The current period had a gain on warrant liabilities of $1.5 million compared to $1.2 million in 3Q20.

Net income was $372,000 or $0.01 per share on 74.3 million outstanding average shares, compared to a net loss of $8.6 million or ($0.19) per share on 44.3 million outstanding average shares. Excluding one-time items, we estimate the net loss was $4 million or ($0.05) in 3Q21. We forecast a net loss of $885,000 or ($0.01) per share on revenue of $1.6 million.

9Mos.21

Revenue decreased 34.3% to $5.2 million compared to nearly $8 million, reflecting $2.8 million in lower platform subscriptions and services sales stemming from reduced customer activity due to delays in customer deployments. Application transaction revenue increased $61,000 to $770,000 due primarily to initial PhunToken sales in 2Q/3Q.

Gross profit was $2.4 million compared to $5.2 million reflecting lower revenue and gross margin contraction to 45.8% from 65.5% in the year-ago period. Operating expenses decreased to $14 million from $19.6 million in the year-ago period due primarily to reduced headcount, compensation, and legal fees, as well as recovery of bad debt, partly offset by an increase in stock-based compensation.

Non-operating expense increased to nearly $10.1 million from $1.7 million in 9Mos20. The increase was due to higher interest expense to $4.1 million compared to $1.9 million in the year-ago period reflecting higher debt balances in 1H21, as well as a loss of nearly $8 million on the extinguishment of debt compared to $1 million in 9Mos20. The current period includes a $148,000 loss related to a change in fair value of warrant liability and other expense and nearly $2.9 million gain related to forgiveness of PPP loan, as well as a $776,000 impairment of digital currencies, none of which occurred in the year-ago period.

The net loss was $21.7 million or ($0.31) per share on 70.2 million outstanding average shares, compared to a net loss of $16 million or ($0.38) per share on 42.1 million outstanding average shares. Excluding one-time items, we estimate the net loss was $15.7 million or ($0.22) in 9Mos21.

in $ thousands	9 Mos. 21	9 Mos. 20	% Δ
Total Revenue	$ 5,242	$ 7,983	**(34.3%)**
Total Cost of Sales	2,842	2,757	**3.1%**
Gross Profit	$ 2,400	$ 5,226	**(54.1%)**
Total Operating Expenses	14,043	19,557	**(28.2%)**
Operating Income	(11,643)	(14,331)	**(18.8%)**
Total Other Income (Expense)	(10,068)	(1,710)	**NMF**
Pre-Tax Income	(21,711)	(16,041)	**35.3%**
Income tax expense	-	-	
Net Income (loss)	$(21,711)	$(16,041)	**39.9%**
Earnings (loss) per share	($0.31)	($0.38)	
Avg Shares Outstanding	70,185	42,089	
Margins			
Gross margin - combinded	45.8%	65.5%	
Operating Margin	(222.1%)	(179.5%)	
Pre-Tax Margins	(414.2%)	(200.9%)	
Tax Rate	0.0%	0.0%	

Source: company reports

Finances

In 9Mos21, cash burn of $8.7 million and a $10.4 million increase in working capital resulted in cash used in operations of $19.1 million. The increase in working capital was due primarily to decreases in payables, accruals and deferred revenue. Proceeds of $32.6 million from the issuance of common stock did not cover cash used in operations and repayment of debt, as well as the purchase of digital currency. Total cash and restricted cash combined decreased $3.1 million to $973,000 at September 30, 2021. On the balance sheet, non-current restricted cash was $91,000.

Capital Structure

At September 30, 2021 the company had total outstanding debt of $1.1 million (includes $195,000 related party promissory note) of which $83,000 is short-term. The company also has $1.2 million PhunCoin rights listed as short-term deposits on its balance sheet.

In February 2021, the company completed a common stock offering through the issuance of nearly 11.8 million common shares for net proceeds of approximately $24.7 million. In January 2021, the company issued nearly 2.7 million shares for net proceeds of approximately $5 million from its at-the-market offering and sales agreement with

Ascendiant Capital. On March 18, 2021, PHUN delivered a written notice to Ascendiant Capital that it elected to terminate the previously announced at-the-market issuance sales agreement effective March 28, 2021. The company did not incur any material early termination penalties in connection with the termination of the sales agreement.
On April 7, 2021, PHUN entered into an at the market issuance sales agreement with B. Riley Securities, Inc. for up to $25 million with a commission of 3% to B. Riley based on gross proceed sales. The company has available approximately $50 million of open shelf space on its $100 million registration statement that will allow for financial flexibility to support organic or inorganic growth opportunities.

From October 1, 2021 to November 12, 2021, the company sold 18.2 million shares of its common stock pursuant to the terms of the at-the-market offering with B. Riley. Aggregate net cash proceeds were nearly $62.1 million before estimated expenses of $1.9 million.

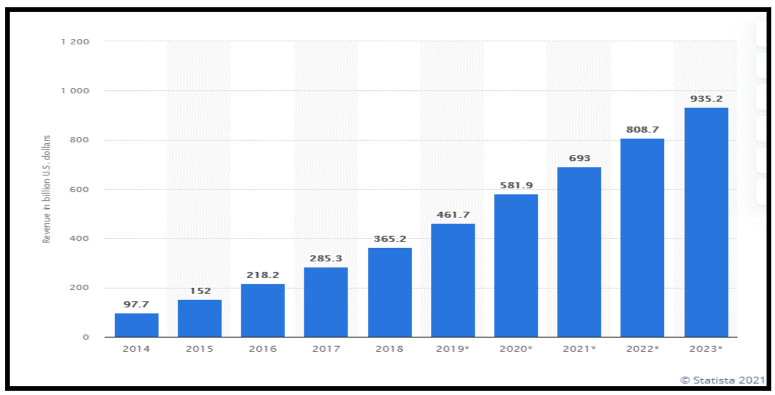
On October 18, 2021, in conjunction with closing the Lyte acquisition, PHUN entered into a note purchase agreement and completed the sale of an unsecured promissory note with an original principal amount of $5.2 million. No interest will accrue on the promissory note unless and until the occurrence of an event of default. Beginning on January 15, 2022, the company will be required to make a monthly amortization payments of $574,000. PHUN can prepay the outstanding balance with a prepayment premium of 110%.

Mobile Markets

Mobile Applications Market

In November 2020, Comscore issued a report that indicated that US consumers spent 79% of their time online on a mobile device and that total time spent viewing videos on a mobile device increased 65% from August 2017 to August 2020. Some of the key verticals Phunware's technology and service offerings seek to penetrate are at 77% mobile for healthcare, 63% for corporations, and 28% and 23% for government and education, respectively.

The chart on the right (source: Statista July 2021) shows that the mobile apps market could reach $935 billion in 2023, up from $365 billion in 2018 for annualized growth of approximately 20.7%. Growth is driven by increased paid downloads and in-app advertising.



Location-based Services

In October 2021, Allied Market Research published a report projecting the global location-based services market to reach $318.6 billion in 2030, up from $36.2 billion in 2020 for annualized growth of 24.3%. Primary drivers are expected to be increased smartphone usage as the United Nations reported that approximately 41.5% of the total world population used a smartphone in 2019. As technology advances, industries seem to be willing to adopt new systems, primarily to improve their efficiency. Driving location-based services growth should be increased usage within the healthcare sector.

We anticipate location-based services are likely to expand into mobile and virtual healthcare, aid in government's smart cities technology initiatives, and mobile corporate campus technology infrastructure due primarily to the COVID-19 pandemic.

Healthcare

In 2021, Mordor (a market intelligence and advisory firm) published a report indicating that the mHealth (mobile) Solutions Market could grow annually by 25% from 2021 to 2026, reaching $226 billion. In 2020 the market generated revenues of nearly $52 billion. The mHealth market should be driven by the increases in the adoption of smartphones, penetration of 3G/4G networks, as well as the adoption of 5G technology, utilization of connected devices, and mHealth apps for the management of chronic diseases.

High-End PC Gaming Hardware Segment

In September 2021, consulting firm IDC published a forecast indicating for gaming PCs, which includes both desktop and notebook PCs, unit shipments are expected to reach 52.3 million in 2025 from 41.3 million in 2020. IDC anticipates this segment reaching in excess of $60 billion in 2025, up from $43 billion in 2020 for an annual grow of 7.4%.

In July 2021, Jon Peddie Research published a report projecting the high performance personal computer market reaching $45 billion in 2024, up from $32 billion in 2020 for estimated annual growth of 20.4%.

Competitive Landscape

The mobile applications technology and solutions market is highly competitive and fragmented. The introduction of new technologies and the potential entry of new competitors into the market would result in increased competition. PHUN competes primarily with companies offering cloud-based software solutions for location-based services, mobile marketing automation, content management, analytics and audience monetization, as well as data and advocacy solution offerings for audience building and engagement used for political or other types of rallies. Also, competition includes in-house mobile teams and products developed by software providers that allow customers to build and scale new mobile applications. Primary publicly trading competitors include Adobe and Oracle, along with private companies such as Urban Airship, Chaotic Moon, and Adroll.

Phunware's competitors are likely to have the ability to devote greater resources to the development, promotion and sale of their products and services. To be competitive in the mobile applications technology market a company needs to have established marketing relationships, access to large customer bases, and major distribution agreements with consultants, system integrators and resellers. The major competitive factors in this market include product features and functionality, location accuracy, customer satisfaction, deployment options and hardware flexibility, functionality, implementation services and customer support, as well as total cost of ownership.

Risks

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

Operating Losses

Phunware Inc. has yet to generate an operating profit. At September 30, 2021, the company's accumulated deficit was approximately $167.5 million, up from $102 million in 2017. Losses are likely to continue but diminish through our forecast period. The lack of operating profits could result in the company's inability to execute its growth strategy and diminish its operations. However, common stock offerings in 2021 provided proceeds of approximately $93.5 million that should allow for the company to execute its growth strategy during our forecast period.

Customer Concentration

In 9Mos21, PHUN had two customers accounting for 29% of net sales compared to three customers accounting for 49% of net sales in the year-ago period. In 3Q21, three customers accounted for 58% of receivables compared to three customers accounting for 56% in 3Q20.

COVID-19 Global Pandemic

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.

Legal Proceedings

On December 17, 2019, certain stockholders filed a lawsuit against Phunware. The plaintiffs invested in various early rounds of financing while the company was private and claim Phunware should not have subjected their shares to a 180-day lock up period. On June 23, 2021, PHUN filed a motion to dismiss the petition based on the mandatory forum-selection clause in Phunware's Articles of Incorporation.

On March 30, 2021, PHUN filed an action (a single cause of action for negligence) against its former counsel Wilson Sonsini Goodrich & Rosati, PC. PHUN is seeking compensatory and consequential damages, attorney's fees and costs, interest and other relief the court deems just and proper. Both cases are in the early stages of litigation and the outcomes are uncertain.

In April 2020, Sha-Poppin Gourmet Popcorn, individually and on behalf of a class of similarly situated parties, filed a lawsuit against certain defendants, including PHUN. The Popcorn Company alleges PHUN was unjustly enriched by JPMorgan Chase for a loan made pursuant to the CARES Act. PHUN filed a motion to dismiss the single claim against it and disputes the court's jurisdiction and the basis of the claim. The company intends to defend the matter vigorously, but there can be no guarantees that a favorable resolution will be successful.

Intellectual Property

The company protects its intellectual property through trade secrets law, patents, copyrights, trademarks and contracts, as well as the establishment of business procedures designed to maintain the confidentiality of proprietary information such as the use of its licenses with customers and use of confidentiality agreements and intellectual property assignment agreements with employees, consultants, business partners, etc.

In the US, PHUN has 17 patents issued and 4 non-provisional patent applications that expire between 2027 and 2036.

Third parties may infringe on or misappropriate IP rights, or otherwise independently develop substantially equivalent products and/or services. The loss of intellectual property protection or the inability to secure or enforce intellectual property protection could harm its business and/or ability to compete.

Cyber Security

PHUN operates large and complex technology networks and systems to process, transmit and securely store electronic information and to communicate among locations and customers that contain significant amounts of client data. Unauthorized third parties could attempt to gain entry to its computer systems for the purpose of stealing data or disrupting the systems. The company believes appropriate measures are in place to protect client data from intrusion, and will constantly work to improve and enhance its computer systems. However, if its systems prove not to be secure, the company could suffer significant harm since client contracts typically contain provisions that require their data to remain confidential.

Shareholder Control

Executive officers and directors combined, own 7.2% of the outstanding voting stock (October 2021) with two large investors owning a combined total of 10.4% of the company's outstanding voting stock. All of these owners could greatly influence the outcome of matters requiring stockholder approval, which decisions may or may not be in the best interests of the other shareholders.

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.

Trading Volume

Based on our calculations, the average daily-volume in 2019 was 503,800 shares, which increased to 3.4 million in 2020. During the three months to November 15, 2021, volume increased to 27.7 million. The company has a float of 71.6 million shares and shares outstanding of 96.3 million.

Phunware, Inc.
Consolidated Balance Sheets
FY2018 – FY2022E
(in thousands)

	FY18A	FY19A	FY20A	3Q21A	**FY21E**	**FY22E**
ASSETS						
Current assets:						
Cash	$ 844	$ 276	$ 3,940	$ 882	**$ 54,246**	**$ 40,871**
Accounts receivable, net	3,606	1,671	664	1,223	**2,572**	**5,417**
Digital currencies	-	-	-	789	**1,600**	**1,600**
Prepaid expenses and other current assets	272	368	304	745	**1,543**	**1,950**
Total current assets	4,722	2,315	4,908	3,639	**59,961**	**49,838**
Property and equipment, net	66	24	13	-	-	-
Goodwill	25,821	25,857	25,900	25,883	**30,788**	**35,883**
Intangible assets, net	521	253	111	38	**4,900**	**4,042**
Deferred tax asset - long term	64	241	537	537	**537**	**537**
Restricted cash	5,500	86	91	91	**91**	**91**
Right-of-use asset	-	-	-	1,486	**1,486**	**2,486**
Other assets	187	276	276	276	**276**	**1,276**
Total assets	$ 36,881	$ 29,052	$ 31,836	$ 31,950	**$ 98,039**	**$ 94,153**
LIABILITIES AND STOCKHOLDERS' EQUITY						
Current liabilities:						
Accounts payable	9,890	10,159	8,462	7,085	**5,919**	**4,698**
Accrued expenses	3,028	4,035	5,353	2,417	**2,572**	**2,600**
Accrued legal settlement	-	-	3,000	-	-	-
Lease liability	-	-	-	486	**486**	**486**
Deferred revenue	2,629	3,360	2,397	1,815	**3,000**	**3,250**
PhunCoin deposits	-	1,202	1,202	1,202	**7,731**	**7,731**
Factored receivables payable	2,434	1,077	-	-	-	-
Current portion of long-term debt, net	1,993		4,435	83	-	-
Warrant liability	-	-	1,614	1,762	-	-
Total current liabilities	19,974	19,833	26,463	14,850	**19,708**	**18,765**
Debt	-	910	3,762	849	-	-
Debt - related party	-	195	195	195	-	-
Deferred tax liabilities	64	241	537	537	**537**	**537**
Deferred revenue	5,622	3,764	2,678	1,262	**3,250**	**4,000**
Deferred rent	17	83	180	-	-	-
Lease liability	-	-	-	1,232	**1,343**	**900**
Redeemable convertible preferred stock, $0.0001	5,377	-	-	-	-	-
Stockholders' equity:						
Common stock,$.0001 par value; authorized 1,00,000,000 shares;	3	4	6	8	**12**	**12**
Additional paid-in capital	118,062	128,008	144,156	180,887	**242,862**	**247,362**
Accumulated other comprehensive income	(418)	(382)	(338)	(356)	**(356)**	**(356)**
Retained earnings (accumulated deficit)	(111,820)	(123,604)	(145,803)	(167,514)	**(169,317)**	**(177,067)**
Total stockholders' equity	5,827	4,026	(1,979)	13,025	**73,201**	**69,951**
Total liabilities and stockholders' equity	$ 36,881	$ 29,052	$ 31,836	$ 31,950	**$ 98,039**	**$ 94,153**
SHARES OUT	27,253	39,818	56,380	75,556	**96,300**	**96,400**

Source: Company reports and Taglich Brothers estimates

Phunware, Inc.
Annual Income Statement
FY2018 – FY2022E
(in thousands)

	FY18 A*	FY19 A	FY20 A	**FY21 E**	**FY22 E**
Net revenues	$ 30,883	$ 19,150	$ 10,001	**$ 10,287**	**$ 26,000**
Cost of sales	11,802	9,020	3,357	**5,327**	**11,275**
Gross Profit	19,081	10,130	6,644	**4,960**	**14,725**
Operating Expenses:					
Sales and marketing	5,417	2,706	1,653	**2,660**	**3,150**
General and administrative	13,562	15,403	15,361	**13,125**	**16,405**
Research and development	6,965	4,333	2,628	**4,058**	**3,000**
Legal settlement	-	-	4,500	**-**	**-**
Total Operating Expenses	25,944	22,442	24,142	**19,843**	**22,555**
Operating Income (loss)	(6,863)	(12,312)	(17,498)	**(14,883)**	**(7,830)**
Interest (expense) income	(724)	(581)	(3,413)	**(4,047)**	**80**
Gain (loss) on extinguishment of debt (PPP forgiveness)	-	-	(2,158)	**(5,102)**	**-**
Fair value adjustment for warrant liabilities	(54)	-	872	**1,279**	**-**
Impairment of digital currencies	(334)	-	-	**(776)**	**-**
Other income (expense)	(2,202)	27	-	**15**	**-**
Total Other Income (expense)	(3,314)	(554)	(4,699)	**(8,631)**	**80**
Pre-Tax Income (loss)	(10,177)	(12,866)	(22,197)	**(23,514)**	**(7,750)**
Income Tax Expense (Benefit)	(374)	5	2	**-**	**-**
Net income (loss)	(9,803)	(12,871)	(22,199)	**(23,514)**	**(7,750)**
Earning (loss) per share	$ (0.38)	$ (0.35)	$ (0.50)	**$ (0.31)**	**$ (0.08)**
Avg Shares Outstanding	25,556	36,879	44,269	**76,701**	**96,275**
Adjusted EBITDA	$ (5,978)	$ (10,201)	$ (8,353)	**$ (9,385)**	**$ (1,830)**
Margin Analysis					
Gross margin	61.8%	52.9%	66.4%	**48.2%**	**56.6%**
Sales and marketing	17.5%	14.1%	16.5%	**25.9%**	**12.1%**
General and administrative	43.9%	80.4%	153.6%	**127.6%**	**63.1%**
Research and development	22.6%	22.6%	26.3%	**39.4%**	**11.5%**
Operating margin	(22.2%)	(64.3%)	(175.0%)	**(144.7%)**	**(30.1%)**
Pre-tax margin	(33.0%)	(67.2%)	(221.9%)	**(228.6%)**	**(29.8%)**
Tax rate	3.7%	(0.0%)	(0.0%)	**0.0%**	**0.0%**
YEAR / YEAR GROWTH					
Total Revenues	15.6%	(61.3%)	(47.8%)	**2.9%**	**152.7%**

*Includes $8.4 million in one-time revenue stemming from the company becoming publicly traded in 2018.

Source: Company reports and Taglich Brothers estimates

Phunware, Inc.
Income Statement Model
Quarters FY2020A – 2022E
(in thousands)

	Q1 20 A	Q2 20 A	Q3 20 A	Q4 20 A	FY20 A	Q1 21 A	Q2 21 A	Q3 21 A	Q4 21 E	**FY21 E**	Q1 22 E	Q2 22 E	Q3 22 E	Q4 22 E	**FY22 E**
Net revenues	$ 2,640	$ 2,213	$ 3,130	$ 2,018	$ 10,001	$ 1,646	$ 1,436	$ 2,160	$ 5,045	**$ 10,287**	$ 5,700	$ 6,275	$ 6,875	$ 7,150	**$ 26,000**
Cost of sales	1,091	768	898	600	3,357	692	1,124	1,026	2,485	**5,327**	2,770	2,895	2,775	2,835	**11,275**
Gross Profit	1,549	1,445	2,232	1,418	6,644	954	312	1,134	2,560	**4,960**	2,930	3,380	4,100	4,315	**14,725**
Operating Expenses:															
Sales and marketing	605	277	383	388	1,653	556	639	715	750	**2,660**	750	775	800	825	**3,150**
General and administrative	3,945	3,760	4,276	3,380	15,361	2,758	3,021	3,296	4,050	**13,125**	4,075	4,100	4,110	4,120	**16,405**
Research and development	861	378	572	817	2,628	1,052	846	1,160	1,000	**4,058**	750	750	750	750	**3,000**
Legal settlement	-	-	4,500	-	4,500	-	-	-	-	-	-	-	-	-	-
Total Operating Expenses	5,411	4,415	9,731	4,585	24,142	4,366	4,506	5,171	5,800	**19,843**	5,575	5,625	5,660	5,695	**22,555**
Operating Income (loss)	(3,862)	(2,970)	(7,499)	(3,167)	(17,498)	(3,412)	(4,194)	(4,037)	(3,240)	**(14,883)**	(2,645)	(2,245)	(1,560)	(1,380)	**(7,830)**
Interest (expense) income	(101)	(460)	(1,362)	(1,490)	(3,413)	(2,219)	(1,845)	7	10	**(4,047)**	20	20	20	20	**80**
Gain (loss) on extinguishment of debt (PPP forgiveness)	-	(81)	(950)	(1,127)	(2,158)	(5,768)	(2,184)	2,850	-	**(5,102)**	-	-	-	-	-
Fair value adjustment for warrant liabilities	-	-	1,244	(372)	872	(885)	663	1,501	-	**1,279**	-	-	-	-	-
Impairment of digital currencies	-	-	-	-	-	-	(776)	-	-	**(776)**	-	-	-	-	-
Other income (expense)	-	-	-	-	-	(79)	43	51	-	**15**	-	-	-	-	-
Total Other Income (expense)	(101)	(541)	(1,068)	(2,989)	(4,699)	(8,951)	(4,099)	4,409	10	**(8,631)**	20	20	20	20	**80**
Pre-Tax Income (loss)	(3,963)	(3,511)	(8,567)	(6,156)	(22,197)	(12,363)	(8,293)	372	(3,230)	**(23,514)**	(2,625)	(2,225)	(1,540)	(1,360)	**(7,750)**
Income Tax Expense (Benefit)	-	-	-	2	2	-	-	-	-	-	-	-	-	-	-
Net income (loss)	(3,963)	(3,511)	(8,567)	(6,158)	(22,199)	(12,363)	(8,293)	372	(3,230)	**(23,514)**	(2,625)	(2,225)	(1,540)	(1,360)	**(7,750)**
Earning (loss) per share	$ (0.10)	$ (0.08)	$ (0.19)	$ (0.12)	$ (0.50)	$ (0.19)	$ (0.12)	$ 0.01	$ (0.03)	**$ (0.31)**	$ (0.03)	$ (0.02)	$ (0.02)	$ (0.01)	**$ (0.08)**
Avg Shares Outstanding	40,095	41,869	44,304	50,809	44,269	64,587	71,620	74,347	96,250	**76,701**	96,260	96,270	96,280	96,290	**96,275**
Adjusted EBITDA	$ (3,178)	$ (1,817)	$ (1,258)	$ (2,100)	$ (8,353)	$ (2,403)	$ (2,743)	$ (2,474)	$ (1,765)	**$ (9,385)**	$ (1,145)	$ (745)	$ (60)	$ 120	**$ (1,830)**
Margin Analysis															
Gross margin	58.7%	65.3%	71.3%	70.3%	66.4%	58.0%	21.7%	52.5%	50.7%	**48.2%**	51.4%	53.9%	59.6%	60.3%	**56.6%**
Sales and marketing	22.9%	12.5%	12.2%	19.2%	16.5%	33.8%	44.5%	33.1%	14.9%	**25.9%**	13.2%	12.4%	11.6%	11.5%	**12.1%**
General and administrative	149.4%	169.9%	136.6%	167.5%	153.6%	167.6%	210.4%	152.6%	80.3%	**127.6%**	71.5%	65.3%	59.8%	57.6%	**63.1%**
Research and development	32.6%	17.1%	18.3%	40.5%	26.3%	63.9%	58.9%	53.7%	19.8%	**39.4%**	13.2%	12.0%	10.9%	10.5%	**11.5%**
Operating margin	(146.3%)	(134.2%)	(239.6%)	(156.9%)	(175.0%)	(207.3%)	(292.1%)	(186.9%)	(64.2%)	**(144.7%)**	(46.4%)	(35.8%)	(22.7%)	(19.3%)	**(30.1%)**
Pre-tax margin	(150.1%)	(158.7%)	(273.7%)	(305.1%)	(221.9%)	(751.1%)	(577.5%)	17.2%	(64.0%)	**(228.6%)**	(46.1%)	(35.5%)	(22.4%)	(19.0%)	**(29.8%)**
Tax rate	0.0%	0.0%	0.0%	(0.0%)	(0.0%)	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**
YEAR / YEAR GROWTH															
Total Revenues	(50.3%)	(59.8%)	(44.5%)	(24.9%)	(47.8%)	(37.7%)	(35.1%)	(31.0%)	150.0%	**2.9%**	246.3%	337.0%	218.3%	41.7%	**152.7%**

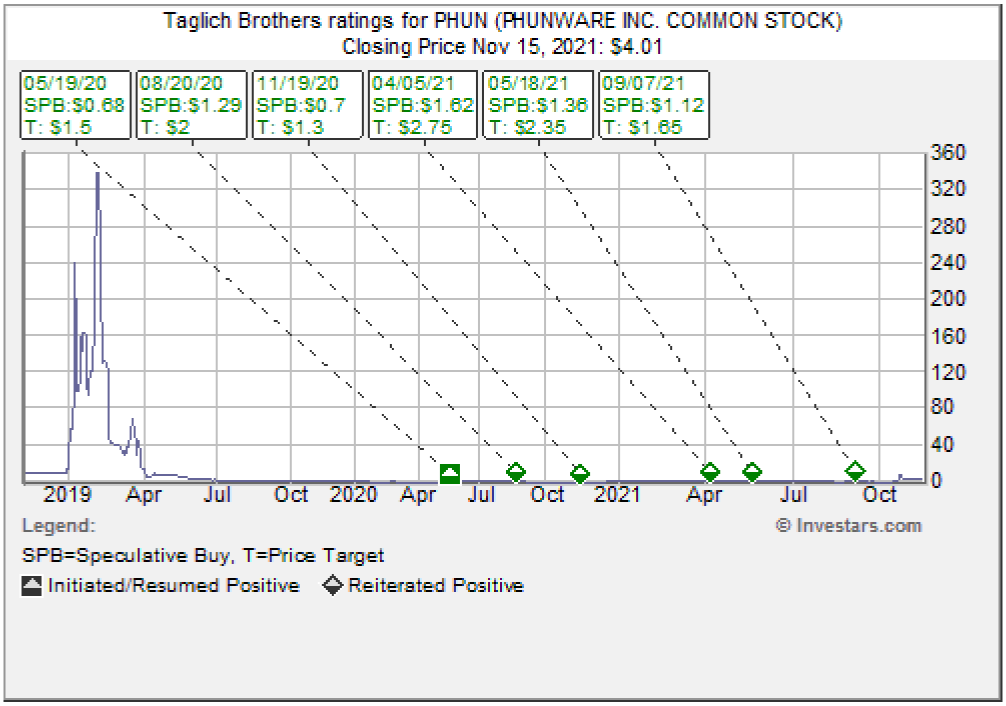
Source: Company reports and Taglich Brothers estimates

Phunware, Inc.
Cash Flow Statement
FY2018 – FY2022E
(in thousands)

	FY2018A	FY2019A	FY2020A	9 Mos21A	**FY2021E**	**FY2022E**
Cash Flows from Operating Activities						
Net Income (loss)	$ (9,803)	$ (12,871)	$ (22,199)	$ (21,711)	**$ (23,514)**	**$ (7,750)**
Depreciation and amortization	62	59	11		**-**	**1,000**
Loss on sale of digital currencies	21	4	-	-	-	-
Bad debt expense (recovery)	167	114	205	-	-	-
Amortization of intangibles and right-of-use asset	372	268	142	-	-	-
Amortization of debt discount and deferred financing costs	-	-	2,185	2,770	**2,770**	-
Loss on extinguishment of debt	-	-	2,158	7,952	**7,952**	-
Gain on forgiveness of PPP Loan	-	-	-	(2,850)	**(2,850)**	
Non-cash interest expense	-	-	55		-	-
Change in fair value of warrants	1,329	-	(872)	148	**148**	-
Impairment of digital currencies and right-of-use asset	334	-	-	776	**776**	-
Settlement of accounts payable	-	-	(453)	-		
Stock-based compensation	450	1,784	4,492	3,933	**5,200**	**4,500**
Defered income taxes and other adjustments	(387)	-	-	297	**297**	-
Cash earnings (burn)	(7,455)	(10,642)	(14,276)	(8,685)	**(9,221)**	**(2,250)**
Changes In:						
Accounts receivable	2,439	1,817	796	(272)	**(1,908)**	**(2,845)**
Prepaid expenses and other assets	15	184	65	(345)	**(1,239)**	**(407)**
Accounts payable	4,156	740	427	(1,236)	**(2,543)**	**(1,221)**
Accrued expenses	(5,789)	1,133	1,064	(2,891)	**(2,781)**	**28**
Accrued legal settlement	-	-	3,000	(3,000)	**(3,000)**	-
Lease liability	-	-	-	(662)	**(662)**	-
Deferred revenue	42	581	(2,049)	(1,998)	**1,175**	**1,000**
(Increase)/decrease in Working Capital	863	4,455	3,303	(10,404)	**(10,958)**	**(3,445)**
Net cash provided (used in) Operations	(6,592)	(6,187)	(10,973)	(19,089)	**(20,179)**	**(5,695)**
Cash Flows from Investing Activities						
Proceeds received from sale of digital currencies	913	88	-	-	-	-
Purchase of digital currencies	-	-	-	(1,497)	**(7,697)**	-
Purchase of Lyte	-	-	-	-	**(3,320)**	**(7,680)**
Payments for note receivable	(536)	-	-	-	-	-
Capital expenditures	-	(18)	-	-	-	-
Cash flow provided (used in) Investing Activities	377	70	-	(1,497)	**(11,017)**	**(7,680)**
Cash Flows from Financing Activities						
Net proceeds (payment) from factoring agreement	618	(1,357)	(1,077)	-	-	-
Proceeds from promissory note to purchase Lyte	-	-	-	-	**5,220**	-
Repayment of promissory note to purchase Lyte	-	-	-	-	**(5,742)**	-
Proceeds (payment) on debt net	-	1,105	14,815	9,980	**9,981**	-
Bridge loans - related parties	-	-	560	-	-	-
Payments on senior convertible note	-	-	(8,418)	(25,116)	**(26,048)**	-
Payments on related party notes	-	-	(560)	-	**(195)**	-
Proceeds from PhunCoin deposits	-	212	-	-	-	-
Proceeds from common stock, net of issuance costs	-	-	-	-	**93,506**	-
Proceeds from common stock subscriptions, net of issuance costs	5,448	-	9,177	32,610	-	-
Proceeds from warant exercise	-	6,092	-	-	-	-
Proceeds from exercise of options to purchase common stock	152	287	99	73	**4,708**	-
Issuances of and redemptions/dividend payments Series A preferred stock	6,000	(6,240)	-	-	-	-
Proceeds from Business combination	98	-	-	-	-	-
Net cash provided (used) by Financing	12,316	99	14,596	17,547	**81,430**	-
Effect of exchange rates	(65)	36	46	(19)	**(19)**	-
Net change in Cash and restricted cash	6,036	(5,982)	3,669	(3,058)	**50,215**	**(13,375)**
Cash and restricted cash Beginning of Period	308	6,344	362	4,031	**4,031**	**54,246**
Cash (and restricted) End of Period	$ 6,344	$ 362	$ 4,031	$ 973	**$ 54,246**	**$ 40,871**

Source: Company reports and Taglich Brothers estimates

Price Chart



Taglich Brothers Current Ratings Distribution

Investment Banking Services for Companies Covered in the Past 12 Months		
Rating	#	%
Buy	4	19
Hold		
Sell		
Not Rated		

Important Disclosures

As of the date of this report, we, our affiliates, any officer, director or stockholder, or any member of their families do not have a position in the stock of the company mentioned in this report. 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 with in the last three years.

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Analyst Certification

I, Howard Halpern, 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:

Adobe, Inc.	(NASDAQ: ADBE)	CISCO Systems, Inc.	(NASDAQ: CSCO)

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.