

## Research Report – Update

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

### Phunware, Inc.

**Rating: Speculative Buy**

Howard Halpern

May 23, 2022

**PHUN \$1.44 — (NASDAQ)**

	2019 A	2020 A	2021 A	2022 E	2023 E
Revenue (in millions)	\$19.2	\$10.0	\$10.6	\$25.0	\$33.1
Earnings (loss) per share	(\$0.35)	(\$0.50)*	(\$0.71)**	(\$0.30)***	(\$0.14)

52-Week range	\$24.04 – \$0.82	Fiscal year ends:	December
Shares outstanding a/o 05/09/22	97.8 million	Revenue/shares (ttm)	\$0.19
Approximate float	94.0 million	Price/Sales (ttm)	7.6X
Market Capitalization	\$140.8 million	Price/Sales (2023) E	4.2X
Tangible Book value/shr	\$0.16	Price/Earnings (ttm)	NMF
Price/Book	9.0X	Price/Earnings (2023) E	NMF

\* Includes (\$0.10) per share legal settlement \*\* Includes (\$0.43) per share in net charges from extinguishment of debt, impairment of digital currencies and warrant liabilities

\*\*\* Includes approximately (\$0.10) per share in impairment of digital currencies (\$0.09) per share and warrant liabilities (\$0.01) per share

Phunware Inc., headquartered in Austin, Texas, designed and developed the Multiscreen-as-a-Service (MaaS) platform, a fully integrated enterprise cloud platform that facilitates one-to-one engagements and interactions between brands and individuals on mobile. This technology resides at the intersection of mobile, cloud, big data and blockchain in order to help any brand in any industry better engage, manage and monetize their global audiences and communities. The company's Lyte by Phunware operations provides customers with high performance computer systems.

#### Key Investment Considerations:

**Maintaining Speculative Buy rating but reducing our 12-month price target to \$3.00 per share from \$5.25 per share due primarily to reductions in sector multiples.**

**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, hospitality, smart cities, and corporate campuses. Analysts project the worldwide mobile apps market could reach \$613 billion in 2025, up from \$178 billion in 2017 for annualized growth of 16.7%.**

**In 1H22, PHUN should complete the integration of its 4Q21 acquisition of Lyte Technology. We anticipate Lyte revenue contributing at least \$14.8 million and \$19 million, respectively to our 2022 and 2023 forecasts.**

**PHUN reported (on 5-12-22) a 1Q22 loss of (\$0.15) per share on 311.8% revenue growth to \$6.8 million that was driven by a \$4.3 million contribution from the newly acquired Lyte operations. In 1Q21, the loss per share was (\$0.19) on revenue of \$1.6 million. We projected a (\$0.04) per share loss on revenue of \$6 million.**

**For 2022, we project a loss of (\$0.30) per share from our prior forecast of (\$0.13) per share on 134.9% revenue growth to \$25 million (unchanged). Our revised loss per share reflects 1Q22 results that includes approximately (\$0.10) per share due primarily to impairment of digital currencies.**

**For 2023, we increased our projected loss per share by (\$0.07) to (\$0.14) per share on 32.5% revenue growth to \$33.1 million (unchanged). The increase in our loss per share forecast is due primarily to a slower than anticipated expansion of gross margin. While we anticipate gross margin improving to 43.9% from an estimated 31.8% in 2022, our prior expectation was 58.2% in 2023. The reduction is due to higher costs of sales for the company's Lyte operations than previously anticipated.**

**Please view our Disclosures pages 14 – 16.**

## ***Appreciation Potential***

**Maintaining Speculative Buy rating but reducing our 12-month price target to \$3.00 per share from \$5.25 per share due primarily to reductions in sector multiples.** Our price target should be supported by the company's October 2021 acquisition of Lyte Technology, Inc., which we anticipate should contribute revenue of \$14.8 million and \$19 million, respectively in 2022 and 2023. We also anticipate a growing customer base of higher margin recurring platform (that includes the company's MaaS technology, application transaction, and blockchain technology offerings) revenue through 2023.

Our rating reflects the company's MaaS technology offerings gaining enterprise customer acceptance. Entering 2Q22, the company's backlog stood at \$7.1 million. 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 2022, the company will continue to launch its blockchain ecosystem (with gross margin that should exceed 90%) that should complement and supplement the company's core offerings in its MaaS, application transaction, and Lyte operations.

**Our 12-month price target of \$3.00 per share implies shares could more than double over the next twelve months.** According to finviz (a/o 5/20/22), the average trailing twelve-month price-to-sales multiple with equivalent market capitalizations for companies in the Software – Application/Infrastructure and Information Technology Services sectors is 11.4X (prior was 23.1X). PHUN's trailing twelve-month price-to-sales multiple is 7.6X (prior was 20X). We anticipate investors are likely to accord PHUN a multiple approaching that of the sector. We applied a price-to-sales multiple of 10X (prior was 19X) to our 2023 sales per share forecast of \$0.34 (unchanged) to obtain a year-ahead price target of approximately \$3.00 per share.

A higher valuation of Phunware is likely to be supported by revenue 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. In 2023, we forecast PHUN's operating losses narrowing to \$12.8 million from an estimated loss of \$19.3 million in 2022. The operating loss was \$16.8 million in 2021. PHUN's cash burn of an estimated \$15.3 million in 2022 should narrow to an estimated loss of \$8.2 million in 2023. Cash burn was \$13.5 million in 2021.

## ***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 deploy technology at the intersection of mobile, cloud, big data, and blockchain in order to help any brand in any industry improve the engagement, management and monetization of their global audiences and communities. PHUN's long-term vision is to create a Phunware ID for every person that has a device touching a computer network through their favorite brands, venues, and applications that interface or intersect with PHUN's MaaS software solutions or application transaction infrastructure.

In October 2021, PHUN completed the acquisition of Lyte Technology, Inc. which provides customers with high performance computer systems. The company should complete the integration of this new Lyte by Phunware segment.

## ***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 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.

#### 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.

#### Lyte by Phunware

In October 2021, the company acquired privately-held Lyte Technology, Inc., which provides its customers with high performance computer systems. 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. Its customer base are 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.

#### 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. Sales are recorded with the company's platform revenue generating segment.

### ***Growth Strategy***

The company's growth strategy is built upon its core vision to transform the digital human experience worldwide by leveraging personal, corporate, and government data to better inform, facilitate and improve interactions and engagements between brands and individuals in the real and virtual worlds.

### 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 and partnerships, 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. 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.

### Lyte

In 1Q22, the company had two strategic supplier relationships that should mitigate supply chain constraints for Lyte compared to many of its competitors. These relationships should support the increased demand the company is experiencing at the start of 2022 in the US and globally for Lyte's offering. The increased demand is being driven by newly initiated spending on social media marketing initiatives. The ability to meet the increased demand and to manage future costs was enabled by obtaining a new commercial lease on a warehouse in Texas (in 1Q22) that will double the size of Lyte's old warehouse in Illinois. The new warehouse should begin to positively impact Lyte's operations by 4Q22.

The Lyte operations 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.

### Healthcare

We anticipate the mobile and virtual healthcare market is likely to be a key growth vertical for the company. 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.

### Technology

The company's technology portfolio and associated applications supports its growth initiatives. Phunware has a portfolio of intellectual property that includes 18 US issued patents and 4 non-provisional patent applications. In March 2022, the USPTO issued a Notice of Allowance for the Company's patent application entitled Monitoring Outdoor and Indoor Regions with Mobile Devices. 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***

### *Basis of Forecast*

We anticipate PHUN's 2022 and 2023 revenue growth should be driven primarily by the October 2021 acquisition of Lyte and higher margin recurring platform revenue from new MaaS technology customer and sales of the company's PhunToken for its blockchain technology offering, as well as contribution from application transaction customers in 2H22.

In 2022 and 2023, we anticipate Lyte should contribution revenue of at \$14.8 million and \$19 million, respectively, 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.

### *Operations – 2022*

We project revenue increasing 134.9% to \$25 million (unchanged) due primarily to the October 2021 acquisition of Lyte, the company's recurring revenue customers for its MaaS technology platform, and service offerings expanding within the healthcare, hospitality, smart cities, and corporate campus sectors, renewed growth within the application transaction operations.

Gross profit should more than double to \$7.9 million from \$3.6 million in 2021 due to revenue growth, partly offset by gross margin contraction to 31.8% compared to 33.9% in 2021. Gross margin contraction reflects a full year of lower margin Lyte operations that should provide gross margin of 11.6%. We do anticipate Lyte's gross margin will improve sequentially over the final three quarters from 8.1% reported in 1Q22.

We project an operating loss of \$19.3 million compared to a loss of \$16.8 million in 2021. The increase is due primarily to gross margin contraction, partly offset by revenue growth and operating margin expense decreasing to 109.2% from 192.2% in 2021.

We anticipate operating expenses increasing 33.4% to \$27.3 million from \$20.5 million last year. We project a 30.2% increase in G&A expense to \$17.3 million to support customer growth of the company's MaaS technology, application transaction, blockchain offering, and Lyte operations. Sales and marketing expense should nearly double to \$6 million to support marketing initiatives to increase the company's customer base. We anticipate R&D expenses decreasing to \$4 million from \$4.2 million in 2021.

We project interest expense of \$801,000 as the company will not pay off its short-term debt (note to acquire Lyte) until October 2022. We anticipate a \$9.4 million impairment of digital currencies and a \$213,000 expense from change in fair value of warrant liabilities, both were reported by the company in 1Q22. In 2021, interest expense was \$4.5 million, along with a \$5.1 million loss on extinguishment of debt (includes gain from CARES Act loan forgiveness), an \$18.1 million charge from fair value adjustment for warrant liabilities, and a \$9.4 million impairment charge of digital currencies.

We project a net loss of \$29.7 million or (\$0.30) per share on average shares outstanding of 97.6 million. We previously projected a net loss of \$12.3 million or (\$0.13) per share on average shares outstanding of 97 million.

#### Finances – 2022

We project cash burn of \$15.3 million and a decrease in working capital of \$416,000. Cash used in operations of \$14.9 million and final payments on debt to acquire Lyte should result in cash decreasing by \$20.6 million to \$2.6 million at December 31, 2022.

#### Operations – 2023

We project revenue increasing 32.5% to \$33.1 million (unchanged) due primarily a growing customer base for the company's computer hardware products from its Lyte operations and recurring revenue platform segment offerings. Gross profit should increase 83% to \$14.5 million from an estimated \$7.9 million due to revenue growth, gross margin improving to 43.9% compared to an estimated 31.8% in 2022. Gross margin improvement should be due to sustained recurring revenue growth, as well as the company's Lyte operations achieving gross margin of 21.2% from an estimated 11.6% in 2022. The gross margin improvement in Lyte's operations should stem a full year of consolidated production at its new warehouse in Texas.

We project the operating loss narrowing to \$12.8 million compared to an estimated loss of \$19.3 million in 2022 due primarily to revenue growth, gross margin expansion and operating margin expense decreasing to 82.4% from an estimated 109.2% in 2022. We anticipate operating expenses flat at \$27.3 million, as the increases in sales and marketing and G&A expenses to support revenue growth is offset by an \$820,000 decrease in R&D expense to \$3.2 million.

We project interest expense flat at \$800,000 as we anticipate the company is likely to issue debt at the beginning of 2023, after the company repaid its promissory note to acquire Lyte in October 2022. We are not recording any change in warrant liabilities or impairment of digital currencies compared to \$9.4 million impairment of digital currencies and a \$213,000 expense from change in fair value of warrant liabilities in 2022.

We project a net loss of \$13.6 million or (\$0.14) per share. We previously projected a net loss of nearly \$6.4 million or (\$0.07) per share.

### Finances – 2023

We project cash burn of \$8.2 million and a decrease in working capital of \$1.6 million. We anticipate the company's issuance of \$5 million of debt that will not cover cash used in operations of \$6.5 million and capital expenditures of \$100,000. Cash should decrease by \$1.6 million to \$956,000 at December 31, 2023.

### **1Q22 Results**

#### 1Q22 Results

Revenue increased 311.8% to \$6.8 million from \$1.6 million in 1Q21 due primarily to the October 2021 acquisition of Lyte Technologies that contributed nearly \$4.3 million in revenue, as well as 51.4% growth in platform revenue to nearly \$2.5 million from \$1.6 million in the year-ago period. Platform revenue growth reflects primarily PhunToken sales of \$1 million, partly offset by a decrease in development, licensing and support services provided to one customer in 1Q21 that did not recur in 1Q22.

The increase in gross profit to \$1.8 million from \$954,000 in 1Q21 was due primarily to revenue growth, partly offset by gross margin contraction to 26.1% from 58% in 1Q21. The gross margin decrease reflects the company's lower margin Lyte segment (8.1% in 1Q22) accounting for 63.2% of total revenue.

Operating expenses increased 55.6% to \$6.8 million compared to \$4.4 million in the year-ago period. The increase in operating expenses was due to the inclusion of Lyte's operations. Sales and marketing and G&A expenses increased to \$1.5 million and nearly \$4.3 million, respectively, from \$556,000 and \$2.8 million in the year-ago period. R&D expense decreased \$49,000 to \$1 million.

Non-operating expense was \$9.9 million compared to an expense of \$9 million in 1Q21. In the current period, the company reported interest expense of \$381,000, a \$213,000 charge related to the fair value adjustment for warrant liabilities, and \$9.4 million impairment of digital currency. In 1Q21, the company reported interest expense of \$2.2 million, \$5.8 million loss on extinguishment of debt, and an \$885,000 charge from fair value adjustment for warrant liabilities.

The net loss was \$14.9 million or (\$0.15) per share on 96.8 million outstanding average shares. Excluding net charges of (\$0.10) per share stemming from impairment of digital currency and warrant liabilities, the loss per share was (\$0.05). We forecast a net loss of \$2.2 million or (\$0.04) per share on revenue of \$6 million.

### Finances

In 1Q22, cash burn of \$4.7 million and a \$5.4 million increase in working capital resulted in cash used in operations of \$10.2 million. Cash used in operations, repayment of debt, and the purchase of digital currency, reduced cash by \$12.3 million to \$10.8 million at March 31, 2022.

### Capital Structure

At March 31, 2022, the company had total outstanding debt (all short-term) of \$3.5 million, which should be paid off prior to the end of 2022. The company also has \$1.2 million PhunCoin rights listed as short-term deposits on its balance sheet. At March 31, 2022, the company had a digital currency asset balance of \$24.2 million (prior was \$32.6 million at December 31, 2021) based on owning approximately 644 Bitcoin and 1,287 Ethereum.

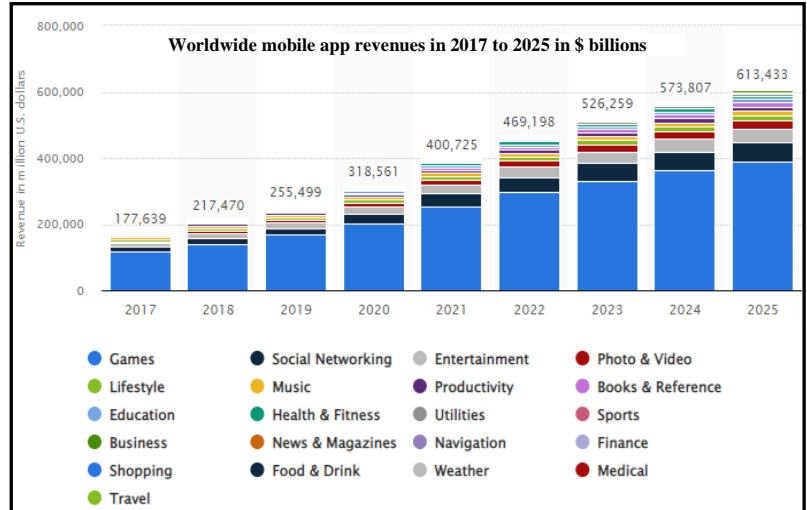
On January 31, 2022, Phunware entered into an At Market Issuance Sales Agreement with H.C. Wainwright & Co., pursuant to which PHUN may offer and sell, from time to time, shares of its common stock for aggregate gross proceeds of up to \$100 million through or to Wainwright, as agent or principal. At March 31, 2022 no shares were sold.

## Mobile Markets

### Mobile Applications Market

In June 2021, eMarkter issued a report that indicated that in 2020 time spent on mobile reached 4 hours and 16 minutes, up 31 minutes per person in the US from 2019. All of the major app categories (audio, social, video, messaging, and gaming) increased with social leading the way with travel apps decreasing due to the COVID-19 pandemic. Forecasts indicate that overall mobile time spent and smartphone time spent to continue to add minutes at a steady rate (approximately 2.3%) reaching 4 hours and 31 minutes by 2023. Growth should be supported by the arrival of 5G and the introduction of advanced mobile capabilities.

The chart on the right (source: Statista September 2021) shows that the Worldwide mobile apps market could reach \$613 billion in 2025, up from \$178 billion in 2017 for annualized growth of approximately 16.7%. Growth is driven by increased paid downloads and in-app advertising with the strongest growth segments likely to be mobile games and social networking.



### 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 that 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 March 31, 2022, the company's accumulated deficit was approximately \$214.2 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.

### Digital Assets

As of March 31, 2022, there was no clearing house for the company's digital assets, including its bitcoin holdings, nor is there a central or major depository for the custody of those digital assets. There is a risk that some or all of the company's digital asset holdings could be lost or stolen since there can be no assurance that the custodians will maintain adequate insurance or that such coverage will cover losses. Stolen or incorrectly transferred digital assets may be irretrievable. As a result, any incorrectly executed transactions could adversely affect the company's financial condition. The aggregate cost basis of the company's digital asset holdings was nearly \$43 million at March 31, 2022 compared to \$24.2 million recorded on its balance sheet for a paper loss of \$18.8 million.

### 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 18 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 4.2% of the outstanding voting stock (December 31, 2021). All of these owners could 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 2020 was 3.4 million shares, which increased to 14.3 million in 2021. During the three months to May 20, 2022, volume decreased to 4.2 million. The company has a float of 94 million shares and shares outstanding of 97.8 million.

Phunware, Inc.  
Consolidated Balance Sheets  
FY2019 – FY2023E  
(in thousands)

	FY19A	FY20A	FY21A	1Q22A	FY22E	FY22E
<b>ASSETS</b>						
Current assets:						
Cash	\$ 276	\$ 3,940	\$ 23,137	\$ 10,815	\$ 2,569	\$ 956
Accounts receivable, net	1,671	664	967	1,219	1,250	1,380
Inventory	-	-	2,636	4,699	5,000	6,000
Digital currencies	-	-	32,581	24,244	24,244	22,678
Prepaid expenses and other current assets	368	304	686	1,294	1,000	1,159
<b>Total current assets</b>	<u>2,315</u>	<u>4,908</u>	<u>60,007</u>	<u>42,271</u>	<u>34,064</u>	<u>32,173</u>
Property and equipment, net	24	13	-	77	80	85
Goodwill	25,857	25,900	33,260	33,227	33,227	33,227
Intangible assets, net	253	111	3,213	3,030	2,481	2,298
Deferred tax asset - long term	241	537	1,278	1,278	1,278	1,278
Restricted cash	86	91	-	-	-	-
Right-of-use asset	-	-	1,260	1,186	1,186	1,186
Other assets	276	276	276	354	354	354
<b>Total assets</b>	<u>\$ 29,052</u>	<u>\$ 31,836</u>	<u>\$ 99,294</u>	<u>\$ 81,423</u>	<u>\$ 72,670</u>	<u>\$ 70,601</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>						
Current liabilities:						
Accounts payable	10,159	8,462	6,589	6,809	8,292	9,032
Accrued expenses	4,035	5,353	9,621	7,114	9,501	9,936
Accrued legal settlement	-	3,000	-	-	-	-
Lease liability	-	-	399	424	424	424
Deferred revenue	3,360	2,397	3,973	3,263	4,240	5,000
PhunCoin deposits	1,202	1,202	1,202	1,203	1,203	1,203
Factored receivables payable	1,077	-	-	-	-	-
Current portion of long-term debt, net	-	4,435	4,904	3,493	-	-
Warrant liability	-	1,614	3,605	3,818	4,562	3,718
<b>Total current liabilities</b>	<u>19,833</u>	<u>26,463</u>	<u>30,293</u>	<u>26,124</u>	<u>28,222</u>	<u>29,313</u>
Debt	910	3,762	-	-	-	5,000
Debt - related party	195	195	-	-	-	-
Deferred tax liabilities	241	537	1,278	1,278	1,278	1,278
Deferred revenue	3,764	2,678	1,299	1,008	3,000	4,000
Deferred rent	83	180	-	-	-	-
Lease liability	-	-	1,147	1,023	1,023	1,023
Redeemable convertible preferred stock, \$0.0001	-	-	-	-	-	-
<b>Stockholders' equity:</b>						
Common stock, \$0.0001 par value; authorized 1,00,000,000 shares;	4	6	10	10	10	10
Additional paid-in capital	128,008	144,156	264,944	266,606	268,508	272,908
Accumulated other comprehensive income	(382)	(338)	(352)	(384)	(384)	(384)
Retained earnings (accumulated deficit)	<u>(123,604)</u>	<u>(145,803)</u>	<u>(199,325)</u>	<u>(214,242)</u>	<u>(228,987)</u>	<u>(242,547)</u>
<b>Total stockholders' equity</b>	<u>4,026</u>	<u>(1,979)</u>	<u>65,277</u>	<u>51,990</u>	<u>39,147</u>	<u>29,987</u>
<b>Total liabilities and stockholders' equity</b>	<u>\$ 29,052</u>	<u>\$ 31,836</u>	<u>\$ 99,294</u>	<u>\$ 81,423</u>	<u>\$ 72,670</u>	<u>\$ 70,601</u>
SHARES OUT	39,818	56,380	96,752	97,251	97,900	97,975

Source: Company reports and Taglich Brothers estimates

Phunware, Inc.  
Annual Income Statement  
FY2019 – FY2023E  
(in thousands)

	<u>FY19 A</u>	<u>FY20 A</u>	<u>FY21 A</u>	<u>FY22 E</u>	<u>FY23 E</u>
Net revenues	\$ 19,150	\$ 10,001	\$ 10,643	\$ 25,003	\$ 33,120
Cost of sales	<u>9,020</u>	<u>3,357</u>	<u>7,030</u>	<u>17,057</u>	<u>18,580</u>
<b>Gross Profit</b>	<u>10,130</u>	<u>6,644</u>	<u>3,613</u>	<u>7,946</u>	<u>14,540</u>
<b>Operating Expenses:</b>					
Sales and marketing	2,706	1,653	3,022	6,025	6,250
General and administrative	15,403	15,361	13,256	17,265	17,850
Research and development	4,333	2,628	4,179	4,003	3,200
Legal settlement	-	4,500	-	-	-
Total Operating Expenses	<u>22,442</u>	<u>24,142</u>	<u>20,457</u>	<u>27,293</u>	<u>27,300</u>
<b>Operating Income (loss)</b>	(12,312)	(17,498)	(16,844)	(19,347)	(12,760)
Interest (expense) income	(581)	(3,413)	(4,481)	(801)	(800)
Gain (loss) on extinguishment of debt (PPP forgiveness)	-	(2,158)	(5,102)	-	-
Fair value adjustment for warrant liabilities	-	872	(18,139)	(213)	-
Impairment of digital currencies	-	-	(9,383)	(9,353)	-
Other income (expense)	<u>27</u>	<u>-</u>	<u>1</u>	<u>52</u>	<u>-</u>
Total Other Income (expense)	<u>(554)</u>	<u>(4,699)</u>	<u>(37,104)</u>	<u>(10,315)</u>	<u>(800)</u>
<b>Pre-Tax Income (loss)</b>	(12,866)	(22,197)	(53,948)	(29,662)	(13,560)
Income Tax Expense (Benefit)	<u>5</u>	<u>2</u>	<u>(426)</u>	<u>-</u>	<u>-</u>
Net income (loss)	<u>(12,871)</u>	<u>(22,199)</u>	<u>(53,522)</u>	<u>(29,662)</u>	<u>(13,560)</u>
<b>Earning (loss) per share</b>	<u>\$ (0.35)</u>	<u>\$ (0.50)</u>	<u>\$ (0.71)</u>	<u>\$ (0.30)</u>	<u>\$ (0.14)</u>
Avg Shares Outstanding	36,879	44,269	75,447	97,599	97,868
Adjusted EBITDA	\$ (10,201)	\$ (8,353)	\$ (11,662)	\$ (15,545)	\$ (8,360)
<b>Margin Analysis</b>					
Gross margin	52.9%	66.4%	33.9%	31.8%	43.9%
Sales and marketing	14.1%	16.5%	28.4%	24.1%	18.9%
General and administrative	80.4%	153.6%	124.6%	69.1%	53.9%
Research and development	22.6%	26.3%	39.3%	16.0%	9.7%
Operating margin	(64.3%)	(175.0%)	(158.3%)	(77.4%)	(38.5%)
Pre-tax margin	(67.2%)	(221.9%)	(506.9%)	(118.6%)	(40.9%)
Tax rate	(0.0%)	(0.0%)	0.8%	0.0%	0.0%
<b>YEAR / YEAR GROWTH</b>					
Total Revenues	(61.3%)	(47.8%)	6.4%	134.9%	32.5%

Source: Company reports and Taglich Brothers estimates

Phunware, Inc.  
Income Statement Model  
Quarters FY2021A – 2023E  
(in thousands)

	Q1 21 A	Q2 21 A	Q3 21 A	Q4 21 A	FY21 A	Q1 22 A	Q2 22 E	Q3 22 E	Q4 22 E	FY22 E	Q1 23 E	Q2 23 E	Q3 23 E	Q4 23 E	FY23 E
Net revenues	\$ 1,646	\$ 1,436	\$ 2,160	\$ 5,401	\$ 10,643	\$ 6,778	\$ 5,375	\$ 5,850	\$ 7,000	\$ 25,003	\$ 8,445	\$ 7,800	\$ 8,025	\$ 8,850	\$ 33,120
Cost of sales	692	1,124	1,026	4,188	7,030	5,007	3,750	3,850	4,450	17,057	5,260	4,330	4,380	4,610	18,580
<b>Gross Profit</b>	<b>954</b>	<b>312</b>	<b>1,134</b>	<b>1,213</b>	<b>3,613</b>	<b>1,771</b>	<b>1,625</b>	<b>2,000</b>	<b>2,550</b>	<b>7,946</b>	<b>3,185</b>	<b>3,470</b>	<b>3,645</b>	<b>4,240</b>	<b>14,540</b>
<b>Operating Expenses:</b>															
Sales and marketing	556	639	715	1,112	3,022	1,485	1,500	1,515	1,525	6,025	1,535	1,550	1,565	1,600	6,250
General and administrative	2,758	3,021	3,296	4,181	13,256	4,305	4,225	4,235	4,500	17,265	4,550	4,300	4,400	4,600	17,850
Research and development	1,052	846	1,160	1,121	4,179	1,003	1,000	1,000	1,000	4,003	800	800	800	800	3,200
Legal settlement	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Expenses	4,366	4,506	5,171	6,414	20,457	6,793	6,725	6,750	7,025	27,293	6,885	6,650	6,765	7,000	27,300
<b>Operating Income (loss)</b>	<b>(3,412)</b>	<b>(4,194)</b>	<b>(4,037)</b>	<b>(5,201)</b>	<b>(16,844)</b>	<b>(5,022)</b>	<b>(5,100)</b>	<b>(4,750)</b>	<b>(4,475)</b>	<b>(19,347)</b>	<b>(3,700)</b>	<b>(3,180)</b>	<b>(3,120)</b>	<b>(2,760)</b>	<b>(12,760)</b>
Interest (expense) income	(2,219)	(1,845)	7	(424)	(4,481)	(381)	(150)	(150)	(120)	(801)	(200)	(200)	(200)	(200)	(800)
Gain (loss) on extinguishment of debt (PPP forgiveness)	(5,768)	(2,184)	2,850	-	(5,102)	-	-	-	-	-	-	-	-	-	-
Fair value adjustment for warrant liabilities	(885)	663	1,501	(19,418)	(18,139)	(213)	-	-	-	(213)	-	-	-	-	-
Impairment of digital currencies	-	(776)	-	(8,607)	(9,383)	(9,353)	-	-	-	(9,353)	-	-	-	-	-
Other income (expense)	(79)	43	51	(14)	1	52	-	-	-	52	-	-	-	-	-
Total Other Income (expense)	(8,951)	(4,099)	4,409	(28,463)	(37,104)	(9,895)	(150)	(150)	(120)	(10,315)	(200)	(200)	(200)	(200)	(800)
<b>Pre-Tax Income (loss)</b>	<b>(12,363)</b>	<b>(8,293)</b>	<b>372</b>	<b>(33,664)</b>	<b>(53,948)</b>	<b>(14,917)</b>	<b>(5,250)</b>	<b>(4,900)</b>	<b>(4,595)</b>	<b>(29,662)</b>	<b>(3,900)</b>	<b>(3,380)</b>	<b>(3,320)</b>	<b>(2,960)</b>	<b>(13,560)</b>
Income Tax Expense (Benefit)	-	-	-	-	(426)	-	-	-	-	-	-	-	-	-	-
Net income (loss)	(12,363)	(8,293)	372	(33,664)	(53,522)	(14,917)	(5,250)	(4,900)	(4,595)	(29,662)	(3,900)	(3,380)	(3,320)	(2,960)	(13,560)
<b>Earning (loss) per share</b>	<b>\$ (0.19)</b>	<b>\$ (0.12)</b>	<b>\$ 0.01</b>	<b>\$ (0.37)</b>	<b>\$ (0.71)</b>	<b>\$ (0.15)</b>	<b>\$ (0.05)</b>	<b>\$ (0.05)</b>	<b>\$ (0.05)</b>	<b>\$ (0.30)</b>	<b>\$ (0.04)</b>	<b>\$ (0.03)</b>	<b>\$ (0.03)</b>	<b>\$ (0.03)</b>	<b>\$ (0.14)</b>
Avg Shares Outstanding	64,587	71,620	74,347	91,235	75,447	96,844	97,845	97,850	97,855	97,599	97,860	97,865	97,870	97,875	97,868
Adjusted EBITDA	\$ (2,403)	\$ (2,743)	\$ (2,474)	\$ (4,042)	\$ (11,662)	\$ (4,220)	\$ (4,100)	\$ (3,750)	\$ (3,475)	\$ (15,545)	\$ (2,600)	\$ (2,080)	\$ (2,020)	\$ (1,660)	\$ (8,360)
<b>Margin Analysis</b>															
Gross margin	58.0%	21.7%	52.5%	22.5%	33.9%	26.1%	30.2%	34.2%	36.4%	31.8%	37.7%	44.5%	45.4%	47.9%	43.9%
Sales and marketing	33.8%	44.5%	33.1%	20.6%	28.4%	21.9%	27.9%	25.9%	21.8%	24.1%	18.2%	19.9%	19.5%	18.1%	18.9%
General and administrative	167.6%	210.4%	152.6%	77.4%	124.6%	63.5%	78.6%	72.4%	64.3%	69.1%	53.9%	55.1%	54.8%	52.0%	53.9%
Research and development	63.9%	58.9%	53.7%	20.8%	39.3%	14.8%	18.6%	17.1%	14.3%	16.0%	9.5%	10.3%	10.0%	9.0%	9.7%
Operating margin	(207.3%)	(292.1%)	(186.9%)	(96.3%)	(158.3%)	(74.1%)	(94.9%)	(81.2%)	(63.9%)	(77.4%)	(43.8%)	(40.8%)	(38.9%)	(31.2%)	(38.5%)
Pre-tax margin	(751.1%)	(577.5%)	17.2%	(623.3%)	(506.9%)	(220.1%)	(97.7%)	(83.8%)	(65.6%)	(118.6%)	(46.2%)	(43.3%)	(41.4%)	(33.4%)	(40.9%)
Tax rate	0.0%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>YEAR / YEAR GROWTH</b>															
Total Revenues	(37.7%)	(35.1%)	(31.0%)	167.6%	6.4%	311.8%	274.3%	170.8%	29.6%	134.9%	24.6%	45.1%	37.2%	26.4%	32.5%

Source: Company reports and Taglich Brothers estimates

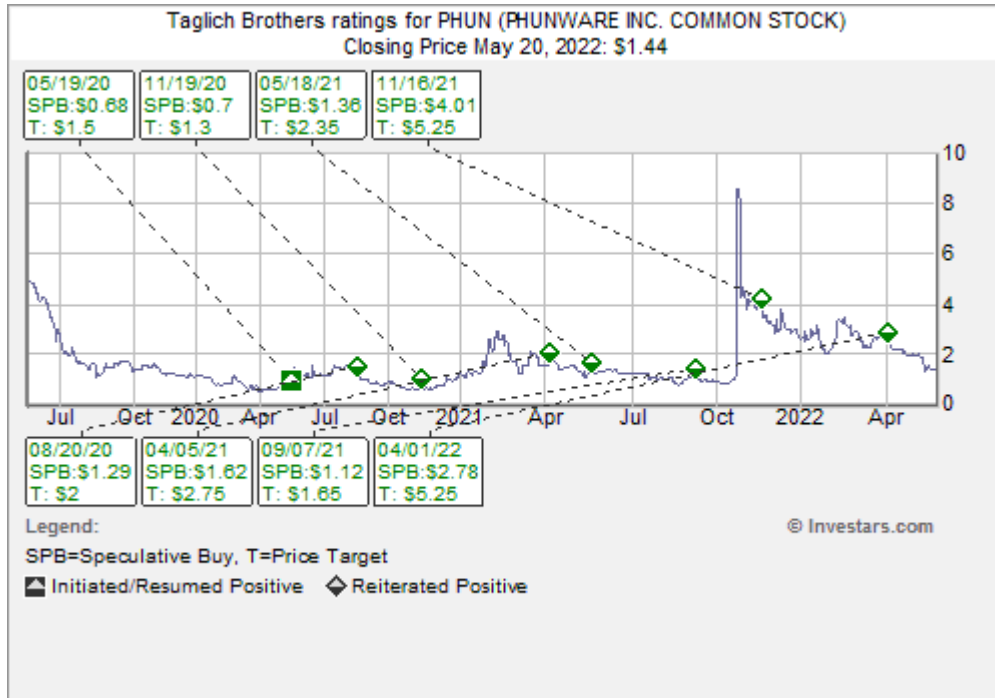
Phunware, Inc.  
Cash Flow Statement  
FY2019 – FY2023E  
(in thousands)

	<u>FY2019A</u>	<u>FY2020A</u>	<u>FY2021A</u>	<u>1Q22A</u>	<u>FY2022E</u>	<u>FY2023E</u>
<i>Cash Flows from Operating Activities</i>						
Net Income (loss)	\$ (12,871)	\$ (22,199)	\$ (53,522)	\$ (14,917)	\$ (29,662)	\$ (13,560)
Depreciation and amortization	59	11	-	-	750	1,000
Loss on sale of digital currencies	4	-	9,383	9,353	9,353	-
Bad debt expense (recovery)	114	205	-	-	-	-
Amortization of intangibles and right-of-use asset	268	142	-	-	-	-
Amortization of debt discount and deferred financing costs	-	2,185	2,942	155	575	-
Loss on extinguishment of debt	-	2,158	7,952	-	-	-
Gain on forgiveness of PPP Loan	-	-	(2,850)	-	-	-
Non-cash interest expense	-	55	-	-	-	-
Change in fair value of warrants	-	(872)	18,139	213	213	-
Settlement of accounts payable	-	(453)	-	-	-	-
Stock-based compensation	1,784	4,492	4,941	564	3,564	4,400
Deferred income taxes and other adjustments	-	-	(478)	(97)	(97)	-
Cash earnings (burn)	<u>(10,642)</u>	<u>(14,276)</u>	<u>(13,493)</u>	<u>(4,729)</u>	<u>(15,304)</u>	<u>(8,160)</u>
<i>Changes In:</i>						
Accounts receivable	1,817	796	(16)	(248)	(283)	(130)
Inventory	-	-	(949)	(2,063)	(2,364)	(1,000)
Prepaid expenses and other assets	184	65	(383)	(687)	(314)	(159)
Accounts payable	740	427	(1,568)	219	1,703	740
Accrued expenses	1,133	1,064	(1,131)	(1,489)	(120)	435
Accrued legal settlement	-	3,000	(3,000)	-	-	-
Lease liability	-	-	(802)	(173)	(173)	-
Deferred revenue	<u>581</u>	<u>(2,049)</u>	<u>(1,172)</u>	<u>(1,001)</u>	<u>1,968</u>	<u>1,760</u>
(Increase)/decrease in Working Capital	<u>4,455</u>	<u>3,303</u>	<u>(9,021)</u>	<u>(5,442)</u>	<u>416</u>	<u>1,646</u>
<b>Net cash provided (used in) Operations</b>	<u>(6,187)</u>	<u>(10,973)</u>	<u>(22,514)</u>	<u>(10,171)</u>	<u>(14,888)</u>	<u>(6,514)</u>
<i>Cash Flows from Investing Activities</i>						
Proceeds received from sale of digital currencies	88	-	-	-	-	-
Purchase of digital currencies	-	-	(41,284)	(489)	(489)	-
Acquisitions, net of cash acquired	-	-	(5,101)	-	-	-
Capital expenditures	<u>(18)</u>	<u>-</u>	<u>-</u>	<u>(80)</u>	<u>(320)</u>	<u>(100)</u>
<b>Cash flow provided (used in) Investing Activities</b>	<u>70</u>	<u>-</u>	<u>(46,385)</u>	<u>(569)</u>	<u>(809)</u>	<u>(100)</u>
<i>Cash Flows from Financing Activities</i>						
Net proceeds (payment) from factoring agreement	(1,357)	(1,077)	-	-	-	-
Proceeds (payment) on debt net	1,105	14,815	14,711	-	-	5,000
Bridge loans - related parties	-	560	-	-	-	-
Payments on senior convertible note	-	(8,418)	(26,243)	(1,566)	(4,904)	-
Payments on related party notes	-	(560)	-	-	-	-
Proceeds from PhunCoin deposits	212	-	-	-	-	-
Proceeds from common stock, net of issuance costs	-	9,177	94,737	-	-	-
Proceeds from common stock subscriptions, net of issuance costs	-	-	-	-	-	-
Proceeds from warrant exercise	6,092	-	4,635	-	-	-
Proceeds from exercise of options to purchase common stock	287	99	179	16	65	-
Issuances of and redemptions/dividend payments Series A preferred stock	<u>(6,240)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<b>Net cash provided (used) by Financing</b>	<u>99</u>	<u>14,596</u>	<u>88,019</u>	<u>(1,550)</u>	<u>(4,839)</u>	<u>5,000</u>
<b>Effect of exchange rates</b>	36	46	(14)	(32)	(32)	-
Net change in Cash and restricted cash	(5,982)	3,669	19,106	(12,322)	(20,568)	(1,614)
Cash and restricted cash Beginning of Period	<u>6,344</u>	<u>362</u>	<u>4,031</u>	<u>23,137</u>	<u>23,137</u>	<u>2,569</u>
Cash (and restricted) End of Period	<u>\$ 362</u>	<u>\$ 4,031</u>	<u>\$ 23,137</u>	<u>\$ 10,815</u>	<u>\$ 2,569</u>	<u>\$ 956</u>

Source: Company reports and Taglich Brothers estimates

Taglich Brothers, Inc.

**Price Chart**



**Taglich Brothers Current Ratings Distribution**



56 % Buy | 44 % Hold

<b>Investment Banking Services for Companies Covered in the Past 12 Months</b>		
<u>Rating</u>	<u>#</u>	<u>%</u>
Buy	5	25
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.

All research issued by Taglich Brothers, Inc. is based on public information. In April 2020, the company paid Taglich Brothers a monetary fee of \$4,500 (USD) representing payment for the creation and dissemination of research reports for three months. In September 2020, the company began paying Taglich Brothers a monthly monetary fee of \$1,500 (USD) for the creation and dissemination of research reports.

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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.**

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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.