



LAMPIX, INC.

AR, Blockchain Pioneer Set to Change Machine Learning-enabled Computer Vision

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COMPANY SNAPSHOT

Lampix is an award-winning augmented reality (AR) technology company that combines a proprietary object-sensing software platform with an advanced smart projector and camera system. Lampix recognizes hands, objects, and documents, bridging the gap between the physical and the digital with universal and communal augmented data. The company's largest customers include Bloomberg, BMW, Nespresso, and PricewaterhouseCoopers. Lampix was named winner of Highway 1 (2016), the AR/VR category in the Accelerator Pitch event at SXSW (2017), and was named Best Augmented Reality Display by Next Reality (2017).

KEY STATISTICS

Inception Date	2015
Funding to Date	\$14M
Addressable Market Size	\$133B
Est. Near Term Trading Price	\$0.03
Est. Supply	135M
Est. 12-Mo Trading Price	\$0.10

COMPANY INFORMATION

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 New York NY 10018

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www.PIXtoken.co
 Email : info@lampix.co
 Phone : 347.347.263.8483

TRADING HIGHLIGHTS

Lampix offers a unique opportunity to participate in the hyper-growth of AR, blockchain and digital currency technologies and markets. The Company's innovative crowdsourced data mining approach and token-based payment ecosystem represents Lampix's secret sauce and keys to success.

The AR market is projected to jump from \$3.3B in 2015 to \$133.8B in 2021, a tremendous 85% CAGR. Key industries driving growth include retail, small businesses, restaurants, manufacturing, engineering, etc.

The Lampix "smart lamp" transforms ordinary tabletops into an interactive tabletop augmented reality system that can be manipulated with your hands. Given the strength of the technology and limitless applications due to its open API architecture, Lampix already boasts several Fortune 500 clients such as Bloomberg, BNP Paribas, BMW, Konica Minolta and others.

Through the PIX ecosystem, miners are paid in PIX tokens to source images and descriptions while developers are paid to design apps. Lampix plans to source 1 billion images, and introduce many developer-designed applications, likely generating big activity in the token, going forward.

In concert with its 1-year anniversary, Lampix scheduled an airdrop to close October 2nd. This event, combined with a series of other future successes, should raise token volume and profile.

Utilizing a variety of standard valuation methods such as equity methods as a corollary, we believe that PIX will trade around \$0.03 in the near term, and \$0.10 in the next 12 months, with higher prices expected as the technology and volume advance.

COMPANY OVERVIEW

The Big Picture

As evidenced by its numerous prestigious technology awards, **Lampix, Inc.** has introduced an out-of-the-box innovation that combines seemingly disparate next-generation technologies into a platform that could transform how we interact with the digital world: *An interactive tabletop augmented reality system that uses blockchain-based image sourcing to recognize and react to the world.* The Lampix LED table lamp houses a high definition projector and camera that does more than just display your screen on a flat surface. Lampix recognizes fine hand movements and intelligently responds to an ever-growing list of real-world objects, inviting interaction on a whole new scale.

The Company has created a combination hardware and software platform that transforms any horizontal tabletop into a smart, augmented reality surface enabling human manipulation and interaction with the converted surface using one's hands. Applications incorporating this technology are virtually limitless and are designed to be used in retail, office, manufacturing, and even home environments by bridging the gap between the physical and the digital. The smart device enables users to interact with digital images and physical objects such as laptops and smartphones.

In a clever and unique effort to swiftly build a library of one billion images, Lampix has turned to crowdsourcing via its PIX ecosystem. The ecosystem is the first blockchain based 'image mining' network for augmented reality or any other computer vision system, such as the Lampix product. This Ethereum-based blockchain launches this quarter and will hold datasets of real-world objects, with an image and description. This data is a vital prerequisite for augmenting reality systems ranging from smartphones, wearable glasses, and the Lampix device, which offers enviable functionality and ease-of-use in AR and can maximize the use of the datasets. To enable Lampix to reach its full potential, the Company plans to launch its billion-picture-and-description database in October 2018 and will use PIX tokens (digital currency) to grow the data ecosystem through purchases and payments.

The Revenue Model and Ecosystem

While on the surface it appears that augmented reality, machine learning, blockchain, and cryptocurrency are unrelated, there is in fact a symbiotic relationship between the technologies that sets Lampix apart from players in each segment.

A recent Zion Research report on the global augmented reality market projects that this segment will leap from \$3.3 billion in 2015 to over \$133 billion by 2021, an 85% CAGR. Drivers include applications in retail, education, healthcare, office collaboration, the introduction of new devices and applications, etc. These forecasts clearly dovetail with the Lampix model. The Company projects that the bulk of its revenue growth will be generated via the implementation of applications into the retail, restaurant, small business, office, and large enterprise (i.e., manufacturing) segments, along with sales

of the Lampix products, monthly service fees for access to the cloud for images and infrastructure of the ecosystem. Lampix products can be paid for either via cash or through PIX tokens. Revenue is also generated via the sale of SDKs to developers seeking to design apps around the platform.

It should be noted that already in its young cycle, the Company boasts several Fortune 1000 clients, including BMW, GE, Bloomberg, BNP Paribas, Audi, Ford, Shoprite, Konica/Minolta, major restaurant and retail chains and others. In fact, nearly 200 of the companies on this list have expressed an interest in exploring the Lampix technology platform for initial testing and deployment. Interestingly, while these clients as major validators of the approach, efficacy, and functionality, management believes that sales will be driven largely by the small/medium sized businesses and bricks and mortar retail, including restaurants.

A year ago, Lampix launched its initial coin offering (ICO) raising over \$14M in its PIX token crowdsale. PIX will have a fixed max supply of 657,154,880 tokens. Lampix recently announced the Company's upcoming airdrop campaign of its PIX tokens, in conjunction with its one-year anniversary. These utility coins are used in the Company's proprietary, crowdsourced marketplace for labeled image datasets (image & description) for all computer vision, augmented reality and machine learning projects. The airdrop will proportionately award bonus PIX tokens into the portfolio of existing PIX holders. The Lampix ICO was structured with a 30% reserve, of which 25% will be unlocked with 10% earmarked for four annual commemorative airdrops. The first PIX airdrop snapshot/cutoff will be 2 October at 1700 GMT.

As part of the unique ecosystem, those that submit datasets are paid in PIX tokens, along with those that vote (audit) the datasets as well. Users can also pay for the Lampix product or monthly cloud service fee via tokens.

Looking Ahead

A number of milestones lie ahead for Lampix, notably including the pending airdrop, completion of image-mining, updated and upgraded versions of the hardware product, along with product sales and technology deployment into the commercial sector. It should be noted that many early stage companies seek to raise capital via traditional venture capital or private equity rounds, leading to an IPO. In this case, Lampix elected to raise \$14 million via an ICO.

It is no secret that the value of cryptocurrencies has dropped dramatically in recent months following a brilliant upward spike. The value and market cap of Lampix reflects this situation. At current levels of just over \$0.0126, the Lampix market cap is around \$1.6M. In our view, Lampix is grossly undervalued and its current price represents the lack of trading activity, rather than its prospects. Moreover, we believe it could rise sharply following the airdrop and expect it to be somewhat event-driven due to the aforementioned milestone events.

Valuation

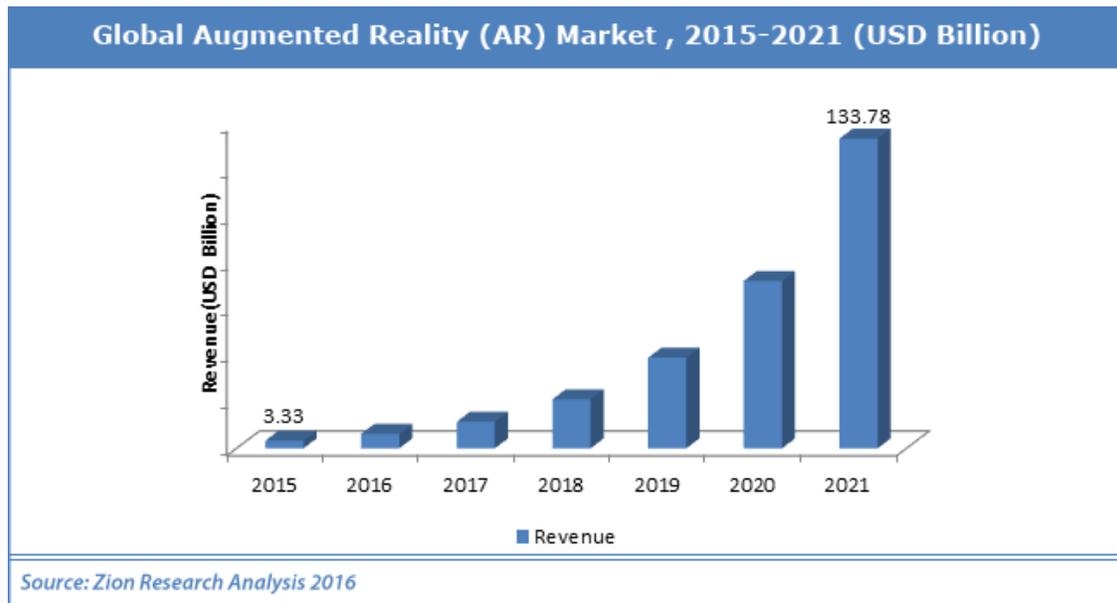
In our view, although utilizing an equity valuation method is not an apples-to-apples comparison in the token-based world, it is instructive nonetheless, considering the transformative nature of the Lampix platform. For example, in the equity world, pre-revenue technology companies tend to be valued between \$20-30M (post-money) following a \$10M+ Series A or Series B round, based on figures gleaned from recent angel, VC, and private equity reports. These early stage, next-gen technology companies experiencing losses and limited top-line results prior to enjoying hyper sales growth tend to be valued based on discounted cash flow or net present value analyses. Typical price/sales ratios for revenue-generating pure plays in high growth sectors tend to be 5-8x current year's estimated sales or a NPV with a discount rate on future sales.

Against this backdrop, we believe that Lampix could trade back to the \$0.10 area within the next twelve months, which is still less than half of its all-time high. From the qualitative perspective, progress on the technology, image-mining and sales fronts dramatically de-risk the token and in turn should have a very favorable reflect on its activity and its pricing. Quantitatively, if we assessed a 5x P/S multiple on 2020 sales, discounted it back at a heavy discount to account for business risk and trading risk, we infer that could reach a conservative market cap of \$17.8M market cap (or north of \$0.10), rather than its current under-the-radar price.

As commercial sales are closed, the ecosystem is active, and other events occur, we believe that PIX could trade to the \$0.03 level in the near term and could rise incrementally over the next 2-3 years, ultimately approaching its year high of over \$0.26. After all, since the PIX ecosystem can markedly improve the efficiency of computer vision with its database of computer vision datasets, many AR markets could create a huge demand for the datasets and in turn for the PIX token, since the use of the images remains device agnostic. Moreover, as AR technology advances so too should its market cap.

INDUSTRY OVERVIEW

One of the fastest and highest profile industry segments is AR/VR (Augmented Reality/Virtual Reality). A recent Zion Research report on the global augmented reality market projects that this segment will leap from \$3.3 billion in 2015 to over \$133 billion by 2021, an 85% CAGR. Drivers include applications in retail, education, manufacturing, aerospace and defense, healthcare, office collaboration, etc. Other catalysts include the varying form factors and how the technology purports to be used, with respect to the introduction of new devices and applications, etc. It is apparent that AR is one of the emerging display technologies primed for disruption in the near future.



Still not sure if you have ever seen AR in action? Chances are that you have if you have ever watched a football game. The “yellow line” indicating where a first down can be achieved or circling a specific player on the screen are rudimentary but effective forms of AR.

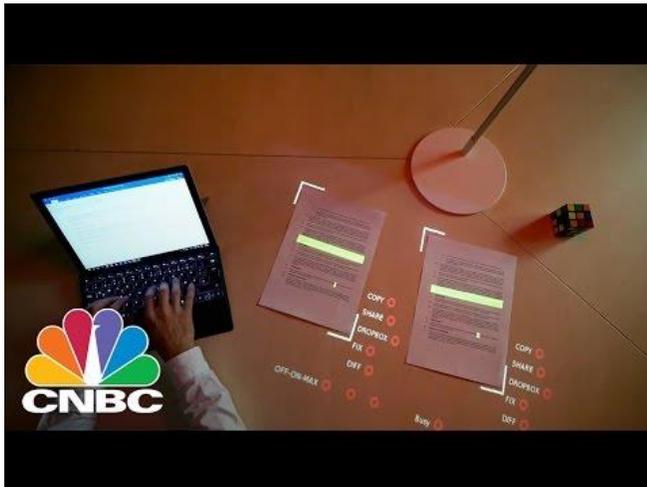
Speaking of sports, the gaming sector serves as low-hanging fruit as it naturally thrives on being engaging and interactive. The implementation of AR would only leverage these features further. According to Goldman Sachs, other sectors impacted or disrupted are live events, real estate, education, healthcare, and engineering. It should be noted that emerging trends such as the escalating convergence between wearable devices, AR, self-driving vehicles and GPS are anticipated to drive demand in the augmented reality market. The high penetration of smartphones and other handheld devices are key factors in fueling market adoption by consumers, along with wearables.

At its core, AR is a technology that utilizes machine learning and computer vision-based recognition algorithms to augment sound, video, graphics and other sensor-based inputs on real-world objects using the camera of your device. As described by 3Pillar Global, *“It is a good way to render real-world information and present it in an interactive way so that virtual elements become part of the real world.”* Not only that, but a Harvard Business Review article noted that:

“Wearable AR devices are now being used in manufacturing and industrial settings and can boost workers’ productivity on an array of tasks the first time they’re used, even without prior training. These technologies increase productivity by making workers more skilled and efficient, and thus have the potential to yield both more economic growth and better jobs...shows a side-by-side time-lapse comparison of a GE technician wiring a wind turbine’s control box using the company’s current process,

and then doing the same task while guided by line-of-sight instructions overlaid on the job by an AR headset. The device improved the worker's performance by 34% *on first use.*"

One application which may trump the others in terms of a high profile is the use of AR with driver-less cars. Apple is testing a pre-generated 3D model which could include data about road routes, points of interest, and other areas useful to drivers, which could be held remotely in cloud storage. This data is collected together into smaller chunks, like 3D versions of tiles used by online mapping services. Relevant sections of the 3D model are provided to the car's AR system which are tied into sensors, aiding the correct driving course and speed. How soon will we see this tech? ABI Research predicts that 15 million AR HUDs (Heads Up Display) will ship by 2025, with 11 million to be built right into cars.



Still, the near-term applications, in our view, will be dominated by office environments (enterprise/office collaboration) and the retail/restaurant market. Markets and Markets issued an industry report stating that the enterprise collaboration market size is estimated to grow from \$26.6B in 2016 to \$49.5B by 2021, an estimated Compound Annual Growth Rate (CAGR) of 13.2%.

Meanwhile, with so many restaurants and bars, along with other bricks and mortar retail outlets having difficulty attracting and maintaining customers, the use of AR for ordering, paying for goods, gaming, etc. could be a boon to their respective businesses. Moreover, once one chain offers this type of service, all of the chains in those categories will be forced to do so, lest they be left behind.

LAMPIX: THE AR INNOVATOR

Judging by its series of high-level awards, Lampix and its patent-pending AR platform appears to be a leading innovator of augmented reality technology. Lampix was named winner of Highway 1 (2016), the AR/VR category in the Accelerator Pitch event at SXSW (2017), the Best Augmented Reality Display by Next Reality (2017). The Company was just recently named to CIO Applications Magazine's top blockchain technology solutions providers for 2018. To be certain, in addition to the functionality and feature-set of the AR technology, the real difference-maker, and the tie that binds success in deployment and implementation is the PIX ecosystem.



PIX

In order to build applications using AR devices such as the Lampix smart lamp, a huge library of usable images must be sourced. For computer vision systems and AR products such as the smart lamp. Thus, the PIX ecosystem was born. Given that one of the key inherent characteristics of digital currency is decentralization, management designed a clever and unique method to swiftly build a massive library of real-world objects: crowdsourcing.

Today, on behalf of one (central) entity or organization, many users provide or source images for no remuneration. As a member of the PIX ecosystem proving images on behalf of all current and prospective users, these “members” are paid via PIX tokens for their complete (image and description) dataset submissions or votes (audits).

This data is a vital prerequisite for augmenting reality systems---without the datasets and coincident machine learning and computer vision system functionality, there would be limited AR application development. To enable Lampix to reach its full potential, the Company plans to launch a billion-picture-and-description to grow the data ecosystem through purchases and payments. The initial need is for images and descriptions of an estimated 10,000 hand images.

AR

The Lampix LED table lamp houses a high definition projector and camera that does more than just display your screen on a flat surface. Lampix recognizes fine hand movements and intelligently responds to an ever-growing list of real-world objects, inviting interaction on a whole new scale. The Company boasts several Fortune 1000 clients, including BMW, GE, PwC, Bloomberg, BNP Paribas, Audi, Ford, Shoprite, Konica/Minolta, major restaurant and retail chains and others. In fact, many of the companies on this list

have expressed an interest in exploring the Lampix technology platform for initial testing and deployment. Interestingly, while these clients are major validators of the approach, efficacy, and functionality, management believes that sales will be driven largely by the small/medium sized businesses and bricks and mortar retail, including restaurants. At the end of the day, much like it takes a village to raise a child it takes a PIX community to ensure ubiquity in AR deployment and utilization: Developers, miners, voters, and the Lampix sales and development teams.



SPECIFICATIONS

- CONNECTIVITY**
WIFI/LAN/USB2.0
- DIMENSIONS**
9' x 9' x 41.4"
- WEIGHT**
4.8lbs (including stand and base)
- PROJECTION RESOLUTION**
1280p x 800p
- CAMERA DEPTH RESOLUTION**
1280p x 720p
- CAMERA COLOR RESOLUTION**
1920p x 1080p
- CONTRAST**
20,000:1
- PROJECTION AREA @ 35.4" HEIGHT**
43' x 27'
- PROJECTION AREA @ 23.6" HEIGHT**
30' x 18'
- TOUCH INTERFACE**
Multi-touch operation
- PROJECTOR LUMINOSITY**
500-700 lumens
- APP RUNTIME ENVIRONMENT**
HTML5, CSS3, JavaScript
- STORAGE**
32 GB eMMC
- SOUND**
Built-in speaker
- ETHERNET**
1x GB Ethernet (full speed) RJ-45
- PROCESSOR**
Intel Atom® x5-Z8350 Processor
- CPU**
2M Cache, 1.44 GHz up to 1.92 GHz) CPU with 64-bit architecture; Quad Core

MANAGEMENT TEAM

The Lampix team, which consists of over two dozen members across 2 continents, is led by a management team, and deep advisory board that may be second to none in the space. This is another reason why the Company has enjoyed such a high profile right out of the gate. Although the actual leadership team is too long to provide, we have elected to highlight 3 members, along with a link to the Lampix team page.

<https://lampix.com/pages/about>

George Popescu, CEO, Co-Founder

George is an MIT alumnus based in New York and has 3 Master's degrees in Computer Science and Electrical Engineer, 3D Printing and Nanosciences. He was the founder of Boston Technologies (BT), the #1 fastest growing company in Boston in 2011. BT was also on the Inc 500/5000 list for 4 years in a row. He built 9+ companies to date. He lives in Hell's Kitchen in New York. He is of Romanian origin.

Mihai Dumitrescu, CTO, Co-founder

Mihai is the Founder, CEO and CTO of Rosoftlab. Rosoftlab, since 2006, is a research and development firm in computer vision, augmented reality and related mobile and web apps. Their products and services are used by clients in Germany, Switzerland and many other countries. Employing more than 20 people, Rosoftlab counts among its clients Migros, the largest retailer in Switzerland. Rosoftlab's continuous research and development has led to the creations of multiple companies, such as VanillaNAV, an easy to set up indoor navigation system.

Salvatore Buccellato, Chief Revenue Officer

Sal joins the New York team with experience in the institutional e-commerce trading space, customized technology delivery, and liquidity solutions for high high-frequency traders, brokerage firms, and buy-side money managers across a variety of CFD, FX, and precious metal products. As CRO, Buccellato will lead strategic efforts and oversee partnerships. He will improve underlying business processes and provide the support needed for significant growth in multiple verticals including the retail, restaurant, office collaboration and industrial sectors.

FINANCIALS

As noted in the pro forma projections below, we anticipate the growth rate in revenue will essentially mirror the timing and magnitude as outlined in the Zion Research report, as an education process has to be borne on the sales side while simultaneously the development side is built out both internally and via the PIX ecosystem of miners and developers. It should be noted that we forecast operating profit will occur beginning in 2021.

Lampix, Inc.						
Pro Forma Projected Statements of Income						
(\$, thousands)						
	<u>2017A</u>	<u>2018E</u>	<u>2019E</u>	<u>2020E</u>	<u>2021E</u>	<u>2022E</u>
Revenue						
Token Sales	\$0	\$0	\$0	\$0	\$0	\$0
Retail Sales		\$50	\$600	\$1,800	\$8,000	\$28,000
Small/Med Businesses	\$0	\$0	\$500	\$3,300	\$12,000	\$45,000
Large Enterprise Sales	<u>\$0</u>	<u>\$200</u>	<u>\$600</u>	<u>\$800</u>	<u>\$900</u>	<u>\$1,000</u>
TOTAL REVENUE	\$0	\$250	\$1,700	\$5,900	\$20,900	\$74,000
Cost of Sales						
	<u>\$0</u>	<u>\$100</u>	<u>\$380</u>	<u>\$1,400</u>	<u>\$5,200</u>	<u>\$18,000</u>
Gross Profit	\$0	\$150	\$1,320	\$4,500	\$15,700	\$56,000
<i>Gross Margin</i>	#DIV/0!	60.0%	77.6%	76.3%	75.1%	75.7%
Operating Expenses						
Sales and Marketing	\$0	\$200	\$500	\$1,000	\$3,000	\$11,000
Database	\$0	\$5,000	\$0	\$0	\$0	\$0
General and Administrative	\$0	\$2,500	\$4,000	\$6,000	\$9,000	\$13,000
Total Operating Expenses	\$0	\$7,700	\$4,500	\$7,000	\$12,000	\$24,000
OPERATING INCOME (LOSS)	\$0	(\$7,550)	(\$3,180)	(\$2,500)	\$3,700	\$32,000
<i>Operating Margin</i>	#DIV/0!	-3020.0%	-187.1%	-42.4%	17.7%	43.2%
Sources: Lampix, Inc. and Goldman Small Cap Research						

RISK FACTORS

In our view, Lampix's biggest risks relate to how well the market receives the Lampix product, timing and magnitude of AR application development and deployment, education of the market, and the ability of the PIX ecosystem to mine datasets. Pricing and the introduction of new technologies could also adversely affect the value of the Company's pending patents and may hinder its business model efforts. Volatility and liquidity are typical concerns for token-based trading, especially those that are not generating revenue. Moreover, token sales are not currently regulated by the SEC and there are issues and questions surrounding pending and/or future trading and tax concerns. Finally, there is a risk that the Company may require additional capital in order to achieve its sales and profitability objectives. Still, these risks are typical future concerns and are also consistent with firms of Lampix's size and standing.

VALUATION AND CONCLUSION

With a top tier management team, Lampix offers a unique pure play opportunity to participate in the hyper-growth of AR, blockchain and digital currency technologies and markets. The Company's innovative crowdsourced data mining approach and token-based payment ecosystem represents Lampix's secret sauce and keys to success. Through the PIX ecosystem, miners are paid in PIX tokens to source images and descriptions and developers are paid to design apps. Lampix plans to source 1 billion images, and introduce many developer-designed applications, likely generating big activity in the token, going forward.

The AR market is projected to jump from \$3.3B in 2015 to \$133.8B in 2021, a tremendous 85% CAGR. Key industries driving growth include retail, small businesses, manufacturing, engineering, etc. The Lampix "smart lamp" transforms ordinary tabletops into an interactive tabletop augmented reality system that can be manipulated with your hands. Given the strength of the technology and limitless applications due to its open API architecture, Lampix already boasts several Fortune 500 clients such as Bloomberg, BNP Paribas, BMW, Konica Minolta and others.

In our view, although utilizing an equity valuation method is not an apples-to-apples comparison in the token-based world, it is instructive nonetheless, considering the transformative nature of the Lampix platform. For example, in the equity world, pre-revenue technology companies tend to be valued between \$20-30M (post-money) following a \$10M+ Series A or Series B round, based on figures gleaned from recent angel, VC, and private equity reports. These early stage, next-gen technology companies experiencing losses and limited top-line results prior to enjoying hyper sales growth tend to be valued based on discounted cash flow or net present value analyses. In fact, these are the key metrics used not just for investments but outright acquisitions by the Googles and Apples of the world. Typical price/sales ratios for revenue-generating pure plays in high growth sectors tend to be 5-8x current year's estimated sales or a NPV with a discount rate on future sales. For example, augmented reality pure play Vuzix (NASDAQ – VUZI – NR) trades 6x next year sales.



Against this backdrop, we believe that Lampix could trade back to the \$0.10 area within the next twelve months, which is still less than half of its all-time high. From the qualitative perspective, progress on the technology, image-mining and sales fronts dramatically de-risk the token and in turn should have a very favorable reflect on its activity and its pricing. Quantitatively, if we assessed a 5x P/S multiple on 2020 sales, discounted it back at a heavy discount to account for business risk and trading risk, we infer that could reach a conservative market cap of \$17.8M market cap (or north of \$0.10), rather than its current under-the-radar price.

As commercial sales are closed, the ecosystem is active, and other events occur, we believe that PIX could trade to the \$0.03 level in the near term and could rise incrementally over the next 2-3 years, ultimately approaching its year high of over \$0.26. After all, since the PIX ecosystem can markedly improve the efficiency of computer vision with its database of computer vision datasets, many AR markets could create a huge demand for the datasets and in turn for the PIX token, since the use of the images remains device agnostic. Clearly, given the unique circumstances and potential for Lampix, these corollaries could prove quite valuable. Moreover, as AR technology advances so too should its market cap.



SENIOR ANALYST: ROBERT GOLDMAN

Rob Goldman founded Goldman Small Cap Research in 2009 and has over 20 years of investment and company research experience as a senior research analyst and as a portfolio and mutual fund manager. During his tenure as a sell side analyst, Rob was a senior member of Piper Jaffray's Technology and Communications teams. Prior to joining Piper, Rob led Josephthal & Co.'s Washington-based Emerging Growth Research Group. In addition to his sell-side experience Rob served as Chief Investment Officer of a boutique investment management firm and Blue and White Investment Management, where he managed Small Cap Growth portfolios and *The Blue and White Fund*.

ANALYST CERTIFICATION

I, Robert Goldman, hereby certify that the view expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the recommendations or views expressed in this research report.

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