UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 10-K

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2021

OR

☐TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from

Commission file number 001-39096

AKERNA CORP.

(Exact name of registrant as specified in its charter)

 Delaware
 83-2242651

 (State or other jurisdiction of incorporation or organization)
 (I.R.S. Employer Identification No.)

 1550 Larimer Street #246 Denver, Colorado
 80202

 (Address of principal executive offices)
 (Zip Code)

Registrant's telephone number, including area code: (888) 932-6537

Securities registered pursuant to Section 12(b) of the Act:

 Title of each class
 Trading Symbol(s)
 Name of each exchange on which registered

 Common Stock, \$0.0001 par value per share
 KERN
 Nasdaq Stock Market LLC (Nasdaq Capital Market)

 Warrants to purchase one share of common stock
 KERNW
 Nasdaq Stock Market LLC (Nasdaq Capital Market)

 Securities registered under Section 12(g) of the Act: None

1

Indicate by check m	nark if the registrant is a well-k	nown seasoned issuer, as defined in	n Rule 405 of the Securities Act. Yes □ No ⊠	
Indicate by check m	nark if the registrant is not requ	aired to file reports pursuant to Sect	tion13 or Section 15(d) of the Act. Yes □ No ⊠	
			filed by Section13 or 15(d) of the Securities Exchange reports), and (2) has been subject to such filing require	
			eractive Data File required to be submitted pursuant to I t the registrant was required to submit such files).Yes ⊠	
			elerated filer, a non-accelerated filer, or a smaller rep- naller reporting company," and "emerging growth comp	
Large accelerated filer Non-accelerated filer			Accelerated filer Smaller reporting company Emerging growth company	□ ⊠ ⊠
		eck mark if the registrant has elected Section 13(a) of the Exchange Act	ted not to use the extended transition period for complet. \Box	ying with any new or
			o its management's assessment of the effectiveness of it eregistered public accounting firm that prepared or issue	
Indicate by check m	nark whether the registrant is a	shell company (as defined in Rule	12b-2 of the Act) Yes \square No \boxtimes	
	set value of the voting and no per share of \$4.03 on June 30,		a Corp held by non-affiliates of Akerna Corp wasappro	ximately \$94.6 million
As of March 16, 20	22, 32,054,463 shares of the re	egistrant's common stock,\$0.0001 p	par value per share, were issued and outstanding.	
		Documents Incorporated	by Reference	
	ally referenced, portions of Ak ference into Part III of this For		ment on Schedule 14A for the 2022 Annual General Me	eting of Shareholders
		2		

INDEX

	<u>PART I</u>	5
Item 1.	<u>Business</u>	5
Item 1A.	Risk Factors	14
Item 1B.	<u>Unresolved Staff Comments</u>	29
Item 2.	<u>Properties</u>	29
Item 3.	<u>Legal Proceedings</u>	29
Item 4.	Mine Safety Disclosures	29
	<u>PART II</u>	30
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuers Purchases of Equity Securities	30
Item 6.	Selected Financial Data	32
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operation	32
Item 7A.	Quantitative and Qualitative Disclosure about Market Risk	47
Item 8.	Financial Statements and Supplementary Data	47
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	48
Item 9A.	Controls and Procedures	48
Item 9B.	Other Information	49
	<u>PART III</u>	50
Item 10.	Directors, Executive Officers and Corporate Governance	50
Item 11.	Executive Compensation	50
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	50
Item 13.	Certain Relationships and Related Transactions and Director Independence	50
Item 14.	Principal Accounting Fees and Services	50
	<u>PART IV</u>	51
Item 15.	Exhibits, Financial Statement Schedules	51
Item 16.	Form 10-k Summary	53
	<u>Signatures</u>	54

3

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This annual report on Form 10-K, including all exhibits hereto and any documents that are incorporated by reference as set forth on the face page under "Documents incorporated by reference," contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding future events or our future results of operations, financial condition, business, strategies, financial needs, and the plans and objectives of management. In some cases, forward-looking statements can be identified because they contain words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "might," "likely," "plan," "potential," "predict," "project," "seek," "should," "target," "will," "would," or similar expressions and the negatives of those terms. Forward-looking statements are based on information available to our management as of the date of this Annual Report and our management's good faith belief as of such date with respect to future events and are subject to a number of risks, uncertainties, and assumptions that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements, in particular the substantial risks and uncertainties related to the ongoing COVID-19 pandemic. Important factors that could cause such differences to include, but are not limited to:

- our ability to continue as a going-concern;
- our ability to sustain our revenue growth rate, to achieve or maintain profitability, and to effectively manage our anticipated growth
- · our short operating history makes it difficult to evaluate our business and future prospects;
- our dependence on the commercial success of our clients, the continued growth of the cannabis industry and the regulatory environment in which the cannabis industry operates;
- our ability to attract new clients on a cost-effective basis and the extent to which existing clients renew and upgrade their subscriptions;
- the timing of our introduction of new solutions or updates to existing solutions;
- our ability to successfully diversify our solutions by developing or introducing new solutions or acquiring and integrating additional businesses, products, services, or content;
- our ability to respond to changes within the cannabis industry;
- the effects of adverse changes in, or the enforcement of, federal laws regarding our clients' cannabis operations or our receipt of proceeds from such operations;
- our ability to manage unique risks and uncertainties related to government contracts;
- our ability to manage and protect our information technology systems;
- our ability to maintain and expand our strategic relationships with third parties;
- our ability to deliver our solutions to clients without disruption or delay;
- our exposure to liability from errors, delays, fraud, or system failures, which may not be covered by insurance;
- our ability to expand our international reach;
- our ability to retain or recruit officers, key employees, and directors;
- our ability to manage potential conflicts of interest involving our Chief Financial Officer moving to part-time;
- · our ability to raise additional capital or obtain financing in the future;
- our ability to successfully integrate acquired businesses with Akerna's business within anticipated timelines and at their expected costs;
- our ability to complete planned acquisitions on time or at all due to failure to obtain stockholder approval or governmental or regulatory clearances, or the failure to satisfy other conditions to completion, or the failure of completion for any other reason;
- our response to adverse developments in the general market, business, economic, labor, regulatory, and political conditions, including worldwide demand for cannabis and the spot price and long-term contract price of cannabis;
- our response to competitive risks;
- our ability to protect our intellectual property;
- the market reaction to negative publicity regarding cannabis;
- · our ability to manage the requirements of being a public company;
- our ability to service our convertible debt;
- our accounting treatment of certain of our private warrants;
- our ability to effectively manage any disruptions to our business and/or any negative impact to our financial performance caused by the economic and social
 effects of the COVID-19 pandemic and measures taken in response; and
- other factors discussed in other sections of this Annual Report on Form 10-K, including the sections of this report titled "Management's Discussion and Analysis
 of Financial Condition and Results of Operations" under Part II, Item 7 and "Risk Factors" Part I, Item 1A.

Should one or more of these risks or uncertainties materialize should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, estimated, or expected. We caution readers not to place undue reliance on any such forward-looking statements, which speak only as of the date made. We disclaim any obligation to revise subsequently any forward-looking statements to reflect events or circumstances after the date of such statements or to reflect the occurrence of anticipated or unanticipated events. We qualify all the forward-looking statements contained in this Annual Report by the foregoing cautionary statements.

PART I

Item 1. Business.

Business Overview

Akerna is a leading provider of enterprise software solutions within the cannabis industry. Cannabis businesses face significant complexity due to the stringent regulations and restrictions that shift based on regional, state, and national governing bodies. As the first to market more than ten years ago, Akerna's family of software platforms help to enable regulatory compliance and inventory management across the entire supply chain When the legal cannabis market started to grow, we identified a need for organic material tracking and regulatory compliance software as a service (SaaS) solution customized specifically for the unique needs of the industry. By providing an integrated ecosystem of applications and services that help our clients enable compliance, regulation, consumer safety and taxation, Akerna is building the technology backbone of the cannabis industry. While designed specifically for the unique needs of the cannabis market, our solutions are adaptable for other industries requiring government regulatory oversight, or where the tracking of organic materials from seed or plant to end products is desired.

Executing upon our expansion strategy, we acquire complementary cannabis brands to grow the scope of Akerna's cannabis ecosystem. Since 2019, we have integrated six new brands into the Akerna product and service offering. Our first acquisition, Solo Sciences ("Solo"), was initiated in the fall of 2019, with the full acquisition completed in July 2020. We added Trellis Solutions ("Trellis") to our portfolio on April 10, 2020 and finalized the acquisition of Ample Organics ("Ample") and Last Call Analytics ("Last Call") on July 7, 2020. More recently, on April 1, 2021 we completed our acquisition of Viridian Sciences Inc. ("Viridian"), a cannabis business management software system built on SAP Business One, followed by the acquisition of The NAV People, Inc. d.b.a 365 Cannabis ("365 Cannabis"), a cannabis business management software system built on Microsoft Business Central, on October 1, 2021. Through our growing family of companies, Akerna provides highly versatile platforms that equip our clients with a central data management system for tracking regulated products. Our solutions also provide clients with integrated security, transparency, and scalability capabilities, all while helping maintaining compliance with their governing regulations.

On the commercial side, our products help state-licensed businesses operate in compliance with applicable regional laws. Our integrated ecosystem provides integrations with third-party vendors and add-ons that enhance the capabilities of our commercial software platforms. On the regulatory side, we provide track and trace solutions that allow state governments to monitor compliance of licensed cannabis businesses. To date, our software has helped monitor the compliance of more than \$30 billion in legal cannabis. While our software facilitates the success of legal cannabis businesses, we do not handle any cannabis-related material, do not process cannabis sales transactions within the United States ("U.S."), and our revenue is generated from a fixed-fee based subscription and professional services model and is not related to the type or amount of sales made by our clients.

We drive revenue growth through the development of our product line, our acquisitions and from continued expansion of the cannabis, hemp, and CBD industry. Businesses across the regulated cannabis industry use our solutions. The brand recognition of our existing products, our ability to provide services in all areas of the seed-to-sale life cycle, and our wealth of relevant experience attracts cultivation, manufacturing, and dispensary clients who are seeking comprehensive business optimization solutions. Our software solutions are designed to be scalable, and while mid-market and smaller customers have historically been our primary target segment, we are focused on extending our customer reach to address the needs of the emerging enterprise level operator. We believe these larger multi-state/multi-vertical operations represent significant long-term future growth opportunities as the cannabis industry continues to consolidate at a rapid rate. The sophistication of our platform accommodates the complexities of both multi-vertical and multi-state business needs, making us critical partners and allowing us to cultivate long-term, successful relationships with our clients.

Our platforms provide licensed businesses with a true enterprise solution for managing their inventory and compliance and allow government regulators to engage in accurate and real-time compliance monitoring. Key capabilities of our technology infrastructure include:

Seed-to-Sale Tracking allows the tracking of products from cultivation, through harvest and processing and manufacturing, to the monitoring of the final sale to the patient or consumer. Our traceability technology captures every step in an individual plant's life, providing visibility into the supply chain from any measurement of finished product dispensed to a patient or customer, back to the plant it came from, and all activity, transportation, and transactions that happen in between. While we do not provide payment processing, and never take, own, or handle any product or cash transaction, our platform records all sales as part of state and jurisdictional compliance Track-and-Trace processes. The data gathered throughout all of these processes is captured, and provides the insights and information needed to run an efficient and streamlined cannabis business. Seed-to-Sale software operates in a complementary relationship with state-mandated Track-and-Trace systems, replicating the reporting functionality and eliminating the need for operators to duplicate their compliance data into two disparate systems. Track-and-Trace systems are designed solely for government regulators to maintain compliance and do not have the sophistication or functionality to provide cannabis business owners with the insights and tools for effective business management. Our seed-to-sale platforms integrate with the state Track-and-Trace compliance system, reporting in the mandated data along the supply chain while also providing business owners with the capabilities to make informed business decisions based on the fully overview of their operations.

Track-and-Trace is the compliance reporting system used by regulatory bodies in most states. In order to adhere to their state-specific compliance regulations, cannabis operators are required to enter specific data points along the supply chain into the state-mandated track-and-trace system. By doing so, regulators can track the movement of cannabis inventory through the full supply chain, even when it moves between facilities or operators. The aggregated view that Track-and-Trace software seeks to ensure that the end product being sold has been grown, harvested, processed, transferred and sold compliantly, and provides assurance of safety to consumers.

Single System Integration allows state-licensed clients to manage inventory, customer records, and staff in one tracking system. MJ Platform and Leaf Data Systems platforms can be fully integrated with one another to create a streamlined Seed-to-Sale/Track-and-Trace solution. Additionally, our platforms can also be integrated with systems of numerous third-party suppliers. We have certified integrations with world class accounting solutions, including Sage, SAP, Microsoft and Netsuite.

Anti-Counterfeiting Technology. Solo sciences provides next-generation anti-counterfeiting technology fused with a direct communication system between brands and consumers. The solo sciences mission is to build confidence and establish trust among consumers, while enabling retailers and distributors to close the loop with creators and producers.

Cannabis Market Insights are curated using the anonymized data aggregated through our Seed-to-Sale platform for key industry intelligence. With over \$30 billion in cannabis sales tracked over the past twelve years, we have cultivated a substantial legal cannabis dataset across 30+ states and multiple countries. This data provides a detailed overview of key industry trends, giving us the ability to provide banks, investors, researchers, cannabis businesses, and non-cannabis businesses with cannabis market intelligence and comparison data.

Enterprise Resource Planning (ERP) software is a business process management software that manages and integrates a company's financials, manufacturing, inventory, supply chain, operations, commerce, and reporting activities. ERP systems improve an operator's efficiency and effectiveness by eliminating disparate systems, consolidating business critical information in a single location, reducing double entry data, and streamlining operations. ERP software solutions built for cannabis operators combine traditional accounting, manufacturing, inventory, and supply chain management with cannabis-specific track and trace and compliance functionality.

Using our years of experience, proprietary databases, and resources to identify trends and predict changes in the cannabis industry we evolve our products and better assist our clients in operating in compliance with the applicable laws of their jurisdictions and capitalizing on commercial opportunities within the applicable regulatory framework, with accuracy, efficiency, and geographic specificity. We have worked with clients and governments across the globe to create customized solutions that fit their specific regulatory and commercially compliant needs. While the majority of our clients are in the U.S. and Canada, our solutions allow cannabis businesses to operate efficiently in this fast-changing industry and comply with state, local, and federal (in countries such as Canada, Italy, Macedonia, and Colombia). Akerna and our family of companies is well-positioned to provide compliance solutions for the expanding national and international legal cannabis market.

Industry & Competition

We believe the growing cannabis industry in numerous U.S. states and other countries represents a significant market opportunity for our technology, as legally licensed operating companies need to ensure they operate within applicable laws and carefully track inventory. With democratic leadership and the new legislation passed during the 2020 election improving the outlook of the industry and a congress that is committed to push forward cannabis policy, the industry's growth potential has large near-term upside. Since state governments require supply chain transparency to ensure compliance and the maintenance of the seed-to-sale life cycle within their jurisdictions, each new regulated jurisdiction offers an expanded market opportunity for Akerna.

The regulated cannabis industry (medicinal and adult-use) is experiencing rapid growth. According to BDSA's 2021 Essential Cannabis Insights, December 2021 Vol 4, Issue 10, legal cannabis sales in the U.S. passed \$25 billion in 2021, growth of 40% over 2020's \$18 billion. BDSA's Cannabis Market Forecast update from September 2021 noted sales are forecasted to rise to \$46 billion in 2026, a CAGR of 14% from 2021. Global cannabis sales reached nearly \$9\$ billion in 2021, an increase of 45% over 2020 sales of \$20 billion. BDSA forecasts global cannabis sales will grow from \$9\$ billion in 2021 to \$61 billion in 2026, a compound annual growth rate (CAGR) of more than 16%.

The COVID-19 pandemic has had a positive effect on the growth and acceptance of the cannabis industry. Fitting into a non-cyclical, vice product category has worked to the industry's advantage overall based on the 2020 sales data. Although many cannabis companies felt extremely adverse circumstances, and some were even forced to close or sell their businesses, this has accelerated a predictable M&A marketplace in which licenses are being acquired for a fraction of what they cost only 1 year ago. The largest Multi-State Operators (MSOs) are growing and financing faster than ever before. For example, Curaleaf, one of the largest MSOs, opened their 100th retail location in February 2021. As a result of the current M&A marketplace, the landscape is beginning to position itself in a similar way that the alcohol industry has, with major companies controlling a vast majority of market share. Akerna is positioned as an enterprise-level offering to address the needs of these large MSOs that continue to grow through consolidation. The addition of the MJ Analytics seed-to-sale reporting engine, built on the architecture of leading business intelligence platform, Domo, further positions Akerna as an enterprise-level solution.

Further to our current addressable market, the regulatory changes in the 2018 Farm Bill in the U.S. have created an opportunity for hemp-based CBD in general retail and pharmaceutical channels. Additionally, multiple countries across the world have legalized hemp for growth and export including Canada, China, Italy, Australia, and South Korea. In the U.S., hemp-derived CBD is available broadly across retailers (not solely licensed cannabis dispensaries), including online, drug and convenience stores, natural product, beauty, grocery, and pet stores. According to Grand View Research, Industrial Hemp Market Analysis, The global cannabidiol market size was valued at USD 2.8 billion in 2020 and is expected to expand at a compound annual growth rate (CAGR) of 21.2% from 2021 to 2028.

The unfortunate events of the 2019 vape scare in the U.S. prompted regulatory changes and additional requirements, including anti-counterfeiting tags and codes. With major investment and partnership with Solo, Akerna has provided a solution to address the issue for both regulators and operators. The combined supply chain transparency solution was chosen by the State of Utah, requiring all medical dispensary products to be validated. Markets and Markets projects that the anti-counterfeit packaging market size will grow from \$105.9 billion in 2018 to \$182.2 billion by 2023, at a CAGR of 11.5%. The anti-counterfeit packaging market is projected to witness high growth due to the increasing focus of manufacturers on brand protection to reduce counterfeiting. By leveraging this investment, we strengthen our current addressable market with an essential compliance tool.

The cannabis industry is a fast-growing, increasingly complex, and rapidly changing landscape. Arcview Market Research and BDS Analytics note that the range of regulatory schemes is wide, and fines for non-compliance are steep. Proper, safe, and profitable operation of a cannabis business requires a full understanding of applicable laws, the ability to track plants and products to ensure compliance with these laws, and the ability to operate at scale in a competitive environment.

Competitive Landscape

The competitive set within the cannabis technology and consulting space has traditionally been comprised of several smaller and specialized companies with limited access to capital. As part of our growth strategy, we may seek to acquire assets or companies that are synergistic with our business. We have built a scalable infrastructure to support both rapid organic growth and targeted acquisitions. By providing the full seed-to-sale solution, we believe we are well-positioned to be an acquirer of cannabis technology solutions throughout the supply chain. We compete with numerous technology and consulting companies that offer services that are similar to some of our services including, but not limited to, Acumatica, BDS Analytics, BioTrackTHC, Canna Advisors, Cova Cannabis, Dutchie, Flowhub, Headset, Jane, Metrc, New Frontier Data, Nextec, 3C, Treez, and TILT Holdings.

We face competition in each of the revenue segments in which we operate. We believe, however, that we possess relative strengths in each segment that provide us with competitive advantages, including:

- the range of services offered by us;
- · our management personnel and their industry knowledge and experience; and
- our proprietary databases, which are only available to users of our platforms and consulting services.

Range of Services

We believe we possess a unique viewpoint into the industry because we offer solutions to, and work with, both commercialbusinesses and government regulatory agencies towards the common goal of ensuring regulatory compliance and real-time monitoring of inventory and sales. We offer a complete range of both software and services to meet these needs for both state governments and commercial businesses. While we do not face competition from firms focusing on specific subsets of our markets, there are a very limited number of competitors providing products or services that compete with our complete range of products and services. We compete with software companies offering a product to businesses only in a certain geographic region or of a certain business type. We also compete with consulting firms serving a specific phase of the cannabis plant life cycle.

Industry Knowledge and Experience

Our management personnel have extensive technical and business operations knowledge and experience within the cannabis and technology industries, which has been developed through numerous years of service in key roles with a broad range of both cannabis and technology companies, both in terms of product and service type and size. We leverage this knowledge and experience to guide our product and service development and delivery. Our management team possesses significant compliance expertise, allowing us to continually monitor changes in legislation and regulation within the markets we and our clients operate. We face competition from companies that have teams with technical expertise or cannabis industry experience, but there are a limited number of competitors who have both and who understand the interplay between software and technology development and the application of the same to the evolving cannabis compliance landscape.

Proprietary Databases

Twelve years of operations have provided us with a statistically significant dataset of cannabis transaction information that we believe cannot be readily duplicated by new entrants into the marketplace. This growing database includes proprietary sales, market trends, customer preferences, pricing, and regulatory data. We use this dataset to predict trends more accurately in the marketplace and make this dataset available to users of our platforms, providing greater utility to clients in this regard than can be provided by competing platforms.

Products and Solutions

Software

SMB Market:

Akerna's suite of small and medium business ("SMB" or "Non-Enterprise") products including MJ Platform, Ample Organics, and Trellis provide SaaS offerings for legal cannabis, hemp and CBD businesses. We provide government-licensed cultivators, manufacturers, distributors, and retail dispensaries with a data-driven seed-to-sale tracking platform that provides clients with an enterprise resource planning solution for managing their inventory and regulatory compliance. Akerna's products and ecosystem of connections are used by clients to compliantly track inventory through all phases of the seed-to-sale cycle – from cultivation to extraction and infusion to packaging, distribution and retail sales. Data points are collected at every stage of the product life cycle and about multiple aspects of the plant's growing environment, manufacturing processes, and ingredients, as well as retail pricing and purchase data. In Canada, the first G7 country with a federally legal market, we have a pharmacy portal and insurance adjudication.

We service licensed operators in all verticals of the industry, including cultivation, manufacturing, distribution, and retail dispensaries. We have significant client presence for our commercial software solutions in mature cannabis markets such as Arizona, California, Michigan, Pennsylvania, Colorado, Utah, Illinois, Oklahoma, and Puerto Rico, as well as Canada.

We have exclusivity in the Pennsylvania and Utah markets due to our government contracts, which require operators in the states to use MJ Platform.

Solo Sciences - Anti-counterfeiting Technology

Solo is a technology provider for legal cannabis businesses with a focus on providing a cannabis tracking technology that provides seed-to-sale-to-self data throughout a product's life cycle and empowers consumers with the ability to confirm the quality and authenticity of a product they have purchased.

Solo uses proprietary technology to place a unique encrypted arrangement of patterns, the solo*TAGTM or solo*CODETM, onto individual packaging labels. Solo technology is significantly lower cost and more secure than traditional tagging technologies like radio-frequency identification. The technology includes a free consumer mobile application, granting end-users and regulatory agencies the ability to track products in the supply chain, verify their authenticity, and learn more detailed information about the product such as its origins and ingredients.

The Solo technology platform also enables brands to connect directly with consumers. Through it, product creators can provide end-users with push notifications, targeted news, product insights, loyalty points, etc. Brands embrace the platform as it enables them to increase their revenues and create a more tailored marketing experience. Clients benefit from product incentives while gaining trust in the products they are buying and consuming.

Solo has developed several key partnerships including the Utah Department of Health and Department of Agriculture, through Akerna's Leaf Data Systems contract including solo*TAGTM, a key tagging and technology component in a closed-loop system used by all Utah cannabis licensees as the state's primary tracking system at the retail, wholesale, cultivation, and manufacturing levels.

Enterprise Market:

Akerna's Enterprise product suite provides a comprehensive vertically integrated cannabis ERP and business management software system with a choice of being built on the Microsoft Dynamics 365 Business Central platform or the SAP Business One platform. Our enterprise products were built by cannabis experts with cannabis-specific functionality built into the core of the solution and are designed to meet present and future needs of growing businesses. The software solutions allow business clients to manage their entire operations from cultivation to retail and incorporates Cultivation, Production, Global Compliance, QC, Finance, Dispensing & Retail, CRM, Warehousing, Distribution, Multi-Facility, Multi-Company, Multi-Entity, Language, Currency and more with a client base comprised of leading U.S.-based MSOs and single-state operators, and Canadian LPs, in addition to global cannabis clients outside North America. Our enterprise offerings leverage shared Akerna infrastructure for access to Akerna's broad ecosystem of offerings and to facilitate compliance with our up-to-date regulatory integrations, unparalleled state and country reporting knowledge, and dedicated team of compliance experts.

Government Market:

Leaf Data Systems - Government Regulatory Software

Leaf Data Systems is our SaaS product for government agencies. Leaf Data Systems provides regulatory authorities with visibility into the operations of licensed medical and recreational cannabis businesses. Government regulators desire visibility at critical junctures within the seed-to-sale chain of custody in order to ensure public safety, monitor sales data for the purposes of taxation, and perform physical inspections of cannabis industry facilities. Leaf Data Systems allows for specific data points captured during these workflows to be compiled into the state and regional view retrievable by regulatory officials.

Licensed cannabis facilities within a state can track plant and product movement and waste across their organization, which is processed into reporting tailored to the government agencies that regulate and enforce the rules of the industry. This gives regulators a tool for transparency and accountability across the cannabis supply chain to ensure public and product safety as well as to monitor sales and inventory within the industry. Leaf Data Systems is customized to the regulations of the state in which it is contracted and tailored to capture the relevant data points desired by regulatory officials.

As of the date of this report, Leaf Data Systems serves two state clients, the Commonwealth of Pennsylvania and the State of Utah. The State of Utah mandates the use of our proprietary solo*TAGTM the world's first cryptographically-secure, cannabis product authentication system, exclusively for governments as an alternative to radio-frequency identification tracking. This customized system includes an electronic verification and inventory control system to track plants and products throughout the compliance supply chain.

Business Intelligence and Data Analytics Products

We have four data products: MJ Analytics ("MJA"); and Akerna Acumen Big Data, which both leverage the extensive data captured in each of MJ Platform's cultivation, E&I, distribution, and retail modules; AmpleData, which leverages data obtained through Canadian regulated retail channels; and Last Call Analytics, which provides retail sales analytics for alcohol brands.

MJ Analytics

MJA gives MJ Platform clients access to aggregate data across their organization to keep track of emerging legal and commercial trends, allowing for informed actionable insights at various levels within the organization, including room, location, state, brand, and administration. MJ Platform allows users to align their operational data from three vantage points: in real-time, past trends, and predictive future. This proprietary database assists the user in making important decisions in real-time with respect to product monitoring, tracking, planning, and pricing.

Built in partnership with Domo and Snowflake, MJA is monetized through the provision of Data Analytics subscriptions to clients. We typically grant a limited, non-exclusive, non-sublicensable license to use our industry data for internal management, reporting, and business optimization purposes. The information typically supplied to clients is aggregated and anonymized information regarding products, which may or may not be those of the client, sold through sales generated through our online service platforms.

Akerna Acumen Business Intelligence

We have cultivated a substantial legal cannabis dataset with over\$30 billion in sales tracked and twelve years of data across 30+ states and multiple countries. With the contractual ability to aggregate and anonymize this data, we have launched the Akerna Acumen product to provide banks, investors, researchers, cannabis businesses, and non-cannabis businesses with cannabis market intelligence and valuable market comparison data. The data is available in various formats and is available with updates as frequently as daily.

Last Call Analytics & Ample Data

Ample's wholly owned subsidiary, Last Call Analytics ("LCA"), is a retail analytics platform designed for the beverage alcohol industry, with a focus on allowing our clients to use data to empower retail operations and generate revenue growth. The platform ingests sales and product data from a wide variety of sources, normalizes and homogenizes the dataset, and displays the resultant analysis in a proprietary application.

With the underlying technologies built by LCA, Ample has created AmpleData, a retail analytics platform for the cannabis industry that applies the same proven solution to data streams ingested from various points within the regulated supply chain. Ample Data is designed to provide key insights for Canadian cannabis license holders, cannabis agencies and government regulators.

Cannabis Business Consulting

We provide project-focused consulting services to clients that are initiating or expanding their cannabis businesses or are interested in data consulting engagements regarding the legal cannabis industry. We typically provide our consulting services to clients in emerging markets that are seeking consultation on newly introduced licensing regimes and assistance with the regulatory compliant build-out of operations in newly opened states.

Entering the cannabis industry is a significant undertaking. We work with clients to efficiently comply with state requirements in connection with the launch and operations of their cannabis businesses. Our management and key personnel bring deep cannabis industry experience to us. Our management team and key personnel have broad experience gained from working with numerous cannabis businesses, with operational experience across every vertical (e.g., cultivation, processing, and retail). Our team members have previously managed projects, including cultivation facilities exceeding 100,000 square feet, retail operations with locations in multiple states, and online businesses serving an entire country.

Competitive Advantage

Partner API. We host an open API ecosystem and are continually developing and maintaining an extensive collection of integrations that are designed to connect our solutions to over 80 partners, provide full-service solutions at all points in the cannabis business life cycle, including compliance, hardware, banking, accounting, online ordering, payment solutions, CRM and loyalty, delivery, and business analytics. We believe these integrations provide a competitive advantage as they reduce implementation time, effort, and cost while providing a holistic cannabis solution; We have certified API integration with tier one ERP software providers supplying sophisticated accounting solutions that collect and store business transactions to satisfy external reporting requirements. Additionally, we leverage revenue sharing agreements and referral programs with our strategic partners to further grow our business and our revenue.

Technology. As the inventors of Seed-To-Sale technology, our proprietary platform is an AWS cloud-based software solution. We offer specialized cannabis workflows specific to the needs of the industry. We serve all verticals of the cannabis supply chain (cultivation, manufacturing, distribution, retail and delivery). We are one of the few true, single-platform Seed-To-Sale solutions in the cannabis space, and the sophistication of our technology allows us to uniquely scale across legal markets. Our platform has processed over \$30 billion in legal cannabis sales, with speed, reliability, and security capabilities designed to serve the needs of even the largest of enterprise customers. Compliance with state regulations is built into our platform infrastructure, assisting clients in their efforts to operate within the regulation parameters of their individual markets. The business insights provided by the data collection throughout the supply chain enables businesses to optimize their operations and make crucial data-driven decisions for their business. These insights are easily analyzed and made actionable by our MJ Analytics module, built in partnership with Domo, a leading BI platform.

Learning Management System. Through our license with ZolTrain, we are able to provide our Akerna clients with training modules to educate and on-board their staff and improve the patient /consumer experience by pairing education with product information both in person and through digital channels. The Zoltrain platform allows cannabis employees to self-direct their own learning and certification through an Akerna specific curriculum, and their employers are able to monitor and track their progress, assisting clients in ensuring that their staff is fully trained and knowledgable about the software they are required to use within their job functions. This is one of the only LMS platforms specifically designed both for the industry and for our software. It provides detailed notes, takeaways, scored exams and certificates of completion, ensuring staff knows their Seed-To-Sale software inside and out. Zoltrain modules are dynamic, and can be easily updated to accommodate new content or education on new product offerings. The AmpleLearn platform is a similar onboarding and education tool developed for Ample Organics clients to assist with building their proficiency using the software in Canada. Similar to Zoltrain, AmpleLearn is built on industry tested content within a dynamic learning environment. There are assessments, progress reports and certifications that are all available to both the employee and their supervisor. The AmpleLearn product is maintained by the internal team at Ample Organics, ensuring that the content is always up-to-date with the most recent software upgrades and functionality.

Strategy

We intend to leverage our scale and capital markets access to pursue additional growth through organic initiatives and to pursue our ecosystem strategy which leverages integrations, partnerships, and inorganic growth. We believe having a scaled ecosystem gives us more opportunities to leverage our footprint and increase wallet share by providing more value to our clients through having what we believe is the most robust cannabis technology suite available. We intend to pursue additional growth through organic initiatives, including increased marketing personnel and resources, acquisitions, and strategic relationships.

- Graduate our SMB clients to Enterprise. Consolidation, limited license markets, and natural industry maturation are leading many companies in our SMB portfolio
 to look at enterprise technology to scale their business. These market forces are an opportunity for us to convert more of our client base to our Enterprise solutions as
 they grow and expand into other states. We have mobilized ongoing marketing and sales campaigns to identify and actively engage these opportunities to convert to
 Enterprise.
- Broaden our base of clients. With increasing cannabis legislation, rapid industry consolidation, and opportunities in other supply-chain driven industries, Akerna will continue to focus on expanding our leadership and market share in the mid-market, while optimizing our offerings for the multi-state/multi-vertical enterprise segment. We will continue to invest in our sales and marketing efforts and intend to expand into new markets to grow our client base.
- Grow revenue from our existing clients. With increased product line offerings, such as MJ Analytics, as well as our growing API partner network, we are able to offer continued opportunities for our customers to optimize and streamline their operations. By leveraging our existing client base and provide them with an array of tools and solutions, we are able to increase the revenue opportunity without the burden of new client acquisition costs.
- Expand and deepen our partner ecosystem. We have an extensive network of API integrated cannabis application providers and other referral sources providing us with new avenues of qualified leads and new client opportunities. By continuing to grow and optimize these partner agreements and relationships, we have increased exposure to larger client pools, and revenue sharing agreements.

Customers

Businesses across the cannabis and hemp industries and of all sizes, ranging from small, single location/ single vertical businesses to multi-state enterprise operations, use the Akerna family of solutions. The cannabis industry is still very much in its infancy compared to more established markets, and as it matures, we are seeing a shift in the typical business model. In the beginning, most operators only managed a single location, or a single vertical operation, and therefore many of our longer-standing clients fall into the small to mid-market size business. Over the past few years, and significantly expedited by the COVID-19 pandemic, we are witnessing large-scale, rapid consolidation within the industry. Many of the original small licensees are being purchased and assumed into larger, multi-state, enterprise level organizations. Our software solutions are designed to be scalable, and as we see this shift in the market, we are focused on extending our customer reach to address the needs of the emerging enterprise level operator. We believe these larger multi-state/multi-vertical operations represent significant long-term future growth opportunities as the cannabis industry continues to consolidate. As more states legalize, these operators are identifying future growth opportunities into these expanded legal markets and need a software solution that can grow with them.

Sales and Marketing

We sell our solutions primarily on a subscription basis with module-based and user-seat pricing, allowing businesses to customize their solution based on their specific business model or vertical. With our integrations to major accounting solutions and cannabis service providers, we are able to customize solutions for all sizes and types of businesses. To gain market share and expand beyond the small to mid-size market, Akerna invests in specialized go-to-market strategies for sales and marketing unique to each state and customer segment.

Our omnichannel marketing program, which includes paid and unpaid digital advertising, event marketing, account-based marketing, content marketing, prospect database nurturing, and other digital marketing activities, is designed to capture inbound marketing leads. We also leverage our expertise and industry intel to identify and engage directly with our prospective customers, especially at the enterprise level. Additionally, we have a broad ecosystem of partners across the cannabis industry and have selectively implemented referral and revenue sharing opportunities with the key players.

We reach each market segment, from emerging small business to enterprise, through channels and tactics that match their expectations for content, outreach, timeliness, and service level. This can require high touch service for some enterprise customers, with more a traditional purchase path for the smallest companies. We hire and train both sales and marketing professionals specialized for the market and the customer segment.

For growth in the regulatory and consulting side, we stay current on emerging legal markets, both nationally and globally to actively conduct outreach and education programs to engage with state regulators and business owners. This strategy strongly supports the growth of our consulting client bases, as we provide license application assistance in new markets, and require in-depth understanding of the regulatory guidelines to be able to successfully win licenses for our customers. We leverage our expertise to provide thought-leadership and industry guidance in order to gain recognition as a leader in the space.

Government Regulation

Cannabis and Cannabis-derived Products

We do not grow, handle, process, or sell cannabis or cannabis-derived products, nor do we ever possess any such material or process any transactions related to the sale of the same. We only provide a technology platform for our clients to assist them with their compliance with state law and to monitor and control their inventory in compliance with state regulatory environments. We do not receive any commissions from sale by our clients and our revenue generation is not based on the sales of cannabis products by our clients, but rather we generate revenues through a fixed-fee based subscription and professional services revenue model. We are not directly subject to state or federal government drug regulation and our products are only intended to be used to assist with compliance with applicable state laws, under which our clients operate.

Our clients are subject to state and federal law as it relates to cannabis growth, processing, and sale. 37 U.S. states have legalized cannabis in some form. The federal government regulates drugs through the Controlled Substances Act (CSA) (21 U.S.C. § 811), which does not recognize the difference between medical and recreational use of cannabis. State laws regulating cannabis are in direct conflict with the CSA, which prohibits cannabis use and possession. Although certain states and territories authorize medical or recreational cannabis cultivation, manufacturing, production, distribution, and sales by licensed or registered entities, under federal law, the cultivation, manufacture, distribution, possession, use, and transfer of cannabis and any related drug paraphernalia, unless specifically exempt, is illegal and any such acts are criminal acts under the CSA.

While the U.S.Department of Justice has used prosecutorial discretion to not prioritize enforcement actions against state-legal cannabis businesses that are compliant with state, county, municipal and other local laws and regulations and which do not trigger any other federal enforcement priorities, the Department of Justice reserves the right to enforce federal law and there can be no assurance that the federal government will not enforce the CSA and related federal laws in the future. Any shift in enforcement priority at the Department of Justice or with the individual U.S. Attorneys with jurisdiction over our clients, could have a drastic and adverse impact upon our clients and our business.

While we do not grow, handle, process or sell cannabis or cannabis-derived products, our receipt of funds from clients that do conduct such operations in violation of federal law exposes us to risks related to federal racketeering laws. The Racketeer Influenced Corrupt Organizations Act ("RICO") is a federal statute providing criminal penalties in addition to a civil cause of action for acts performed as part of an ongoing criminal organization. Under RICO, it is unlawful for any person who has received income derived from a pattern of racketeering activity (which includes most felonious violations of the CSA), to use or invest any of that income in the acquisition of any interest, or the establishment or operation of, any enterprise which is engaged in interstate commerce. RICO also authorizes private parties whose properties or businesses are harmed by such patterns of racketeering activity to initiate a civil action against the individuals involved. Although RICO suits against the cannabis industry are rare, a few cannabis businesses have been subject to a civil RICO action.

Our receipt of payments from clients engaged in state-legal cannabis operations could also subject us to the consequences of a variety of federal laws and regulations that involve money laundering, financial record keeping and proceeds of crime, including the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act) and any related or similar rules, regulations or guidelines, issued, administered or enforced by the federal government. Because the funds from activities that are illegal under the CSA, banks and other financial institutions providing services to us risk violation of federal anti money laundering statutes (18 U.S.C. §§ 1956 and 1957), the unlicensed money-remitter statute (18 U.S.C. § 1960) and the Bank Secrecy Act, among other applicable federal statutes. Banks often refuse to provide banking services to businesses involved in the cannabis industry due to the present state of federal laws and regulations governing financial institutions. The lack of banking and financial services presents unique and significant challenges to businesses in the cannabis industry and we may experience similar difficulties in obtaining and maintaining regular banking and financial services because of the activities of our clients.

Any violations of federal laws and regulations could result in significant fines, penalties, administrative sanctions, convictions or settlements arising from civil proceedings conducted by either the federal government or private citizens or criminal charges, including but not limited to, seizure of assets, disgorgement of profits, cessation of business activities or divestiture. In the event that any of our operations, or any proceeds thereof, any dividends or distributions therefrom, or any profits or revenues accruing from such operations were found to be in violation of money laundering legislation or otherwise, such transactions may be viewed as proceeds of crime under one or more of the statutes noted above or any other applicable legislation. This could restrict or otherwise jeopardize our ability to declare or pay dividends or effect other distributions. Furthermore, while there are no current intentions to declare or pay dividends in the foreseeable future, in the event that a determination was made that our proceeds from operations (or any future operations) could reasonably be shown to constitute proceeds of crime, we may decide or be required to suspend declaring or paying dividends without advance notice and for an indefinite period of time.

Privacy & Customer Data

Regulation related to the provision of services over the Internet is evolving, as federal, state, and foreign governments continue to adopt new, or modify existing, laws and regulations addressing data privacy and the collection, processing, storage, transfer, and use of data. In some cases, data privacy laws and regulations, such as the European Union's ("EU") General Data Protection Regulation ("GDPR") that took effect in May 2018, impose new obligations directly on us as both a data controller and a data processor, as well as on many of our clients. In addition, domestic data privacy laws, such as the California Consumer Privacy Act ("CCPA"), which took effect in January 2020, continue to evolve and could expose us to further regulatory burdens. Further, laws such as the EU's proposed e-Privacy Regulation are increasingly aimed at the use of personal information for marketing purposes and the tracking of individuals' online activities.

Although we monitor the regulatory environment and have invested in addressing these developments, such as GDPR and CCPA readiness, these laws may require us to make additional changes to our services to enable us or our clients to meet the new legal requirements, and may also increase our potential liability exposure through higher potential penalties for non-compliance. These new or proposed laws and regulations are subject to differing interpretations and may be inconsistent among jurisdictions. These and other requirements could reduce demand for our services, require us to take on more onerous obligations in our contracts, restrict our ability to store, transfer, and process data or, in some cases, impact our ability or our clients' ability to offer our services in certain locations, to deploy our solutions, to reach current and prospective customers, or to derive insights from customer data globally. The costs of compliance with, and other burdens imposed by, privacy laws, regulations, and standards may limit the use and adoption of our services, reduce overall demand for our services, make it more difficult to meet expectations from or commitments to clients, lead to significant fines, penalties or liabilities for non-compliance, impact our reputation, or slow the pace at which we close sales transactions, any of which could harm our business.

Furthermore, the uncertain and shifting regulatory environment and trust climate may cause concerns regarding data privacy and may cause our clients or our clients' customers to resist providing the data necessary to allow our clients to use our services effectively. Even the perception that the privacy of personal information is not satisfactorily protected or does not meet regulatory requirements could inhibit sales of our products or services and could limit the adoption of our cloud-based solutions.

Patents and Trademarks

We primarily rely upon a combination of confidentiality procedures, contractual provisions, copyright, trademark, patent, and trade secret laws, and other similar measures to protect our proprietary information and intellectual property.

We hold 2 patents in the U.S., through Solo, related to its Solo*ID proprietary technology. One patent has an issue date of December 1, 2009 and is set to expire on December 1, 2029. The other patent has an issue date of May 31, 2011 and is set to expire on July 11, 2025. We also have 2 patent applications that are currently pending action by the U.S.Patent Office. One was filed on April 22, 2011 by MJF and the other was filed on January 22, 2022 related to Solo blockchain technology.

We and our wholly-owned subsidiaries hold 19 trademarks in the U.S., principally related to Akerna, MJ Freeway, Leaf Data Systems, our Daily Dose mailer, Solo*ID and our logos and designs, 7 in Canada, principally related to Ample, AmpleCentral, AmpleData, AmpleExchange and Ample's logos and designs and 1 in Colombia, 1 in Jamaica and 1 on EUIPO related to Ample's logo and designs.

Employees

As of December 31, 2021, we had 204 full time employees. Of these employees, 157 are based in the U.S. and 47 are based in Canada. Our workforce is highly educated, with most of our employees working in engineering, technical, or professional roles. None of our employees are a member of a union or a party to any collective bargaining agreement. We believe our employee relations are good.

Company Information

Emerging Growth Company

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, (the "JOBS Act") because we went public in the U.S. in January 2018 and meet the criteria outlined in the JOBS Act. We will remain an emerging growth company until up to the last day of the fiscal year following the fifth anniversary of our initial public offering, or until the earliest of (i) the last day of the first fiscal year in which our annual gross revenue exceeds \$1.07 billion, (ii) the date that we become a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock that is held by non-affiliates exceeds \$700 million as of the last business day of our most recently completed second fiscal quarter or (iii) the date on which we have issued more than \$3\$ billion in non-convertible debt during the preceding three-year period. As allowed by the JOBS Act, we have elected to utilize the extended transition period provided to non-public companies for complying with new or revised accounting standards.

Available Information

We make available, free of charge, on or thorough our website, at www.akerna.com, our annual report on Form 10-K, our quarterly reports on Form 10-Q and our current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the U.S. Securities Exchange Act of 1934. Our website and the information contained therein or connected thereto are not intended to be, and are not incorporated into this Annual Report on Form 10-K.

Item 1A. Risk Factors.

In addition to the other information contained in this report on Form 10-K, the following Risk Factors should be considered carefully in evaluating our business. If any of the following risks actually occur, our business, financial condition, and results of operations could be materially and adversely affected.

Risks Relating to Our Financial Condition and Operating History

There is substantial doubt about our ability to continue as a going concern.

Our financial statement footnotes include disclosure regarding the substantial doubt about our ability to continue as a going concern. Our financial statements do not include any adjustments that might result from the outcome of the uncertainty regarding our ability to continue as a going concern. This going concern opinion could materially limit our ability to raise additional funds through the issuance of equity or debt securities or otherwise. Further reports on our financial statements may include an explanatory paragraph with respect to our ability to continue as a going concern is uncertain and dependent upon obtaining the financing necessary to meet our financial commitments and to continue our ongoing operations as currently planned. We do not have sufficient funds to meet planned expenditures over the next twelve months, and will need to seek additional debt or equity financing to meet our planned expenditures. We will require additional financing in the second quarter of 2022 to meet our ongoing operational working capital requirements and continue to meet the financial covenants of our covertible notes. We plan to meet those requirements in part through the use of our at-the-market facility, but there are no guarantees that the facility will permit us to raise sufficient cash to meet our ongoing requirements. These factors raise substantial doubt regarding our ability to continue as a going concern. We we are unable to raise sufficient capital we may have to reduce operations which could significantly affect our results of operations. If we fail to meet the financial covenants of our debt and cannot obtain a waiver from such provisions or otherwise come to an agreement with the holders of our debt, such holders may declare a default on the debt which could subject our assets to seizure and sale, negatively impacting our business. See "Risks Relating to our Convertible Debt" below.

We have a history of losses, expect to continue to incur losses in the near term and may not achieve or sustain profitability in the future.

We have incurred significant losses in each fiscal year since our inception in2010. For the year ended December 31, 2021, we had a net loss of \$16.2 million. For fiscal year ended June 30, 2020, we had a net loss of \$14.4 million. These losses have been due to the substantial investments we have made to develop our monitoring and compliance platforms and related software, market these products to government regulatory agencies and commercial businesses and growing our infrastructure to support the increased business. We expect to continue to invest in the further development of our platforms, software, and related product offerings and to grow both our government regulatory and commercial business client base. As a result, we expect our operating expenses to increase in the future due to expected increased sales and marketing expenses, operational costs, product development costs, and general and administrative costs and, therefore, our operating losses will continue or even increase at least through the near term. In addition, because we are now a public company, we will incur significant legal, accounting, and other expenses that MJF did not incur as a non-public company. Furthermore, to the extent that we are successful in increasing our client base, we will also incur increased expenses because costs associated with generating and supporting client agreements are generally incurred upfront, while revenue is generally recognized ratably over the term of the agreement. You should not rely upon our recent revenue growth as indicative of future performance. We may not reach profitability in the near future or at any specific time in the future. If and when our operations do become profitable, we may not sustain profitability.

We have a relatively short operating history, which makes it difficult to evaluate our business and future prospects.

We have a relatively short operating history, which makes it difficult to evaluate our business and future prospects. Our wholly-owned subsidiary, MJF, has been in existence since 2010, and much of our revenue growth has occurred during the pastfour years. We have encountered, and will continue to encounter, risks and difficulties frequently experienced by growing companies in rapidly changing industries, including those related to:

- market acceptance of our current and future products and services;
- · changing regulatory environments and costs associated with compliance;
- our ability to compete with other companies offering similar products and services;
- our ability to effectively market our products and services and attract new clients;
- existing client retention rates and the ability to upsell clients;
- the amount and timing of operating expenses, particularly sales and marketing expenses, related to the maintenance and expansion of our business, operations, and infrastructure;
- our ability to control costs, including operating expenses;
- our ability to manage organic growth and growth fueled by acquisitions;
- public perception and acceptance of cannabis-related products and services generally; and
- general economic conditions and events.

If we do not manage these risks successfully, our business and financial performance will be adversely affected.

Our long-term results of operations are difficult to predict and depend on the commercial success of our clients, the continued growth of the cannabis industry generally, and the regulatory environment within which the cannabis industry operates.

Our offers of products and services globally to help government regulatory agencies and commercial businesses monitor regulatory compliance and operate efficiently and successfully in compliance with applicable state laws. Our long-term results will directly depend on the continued growth of the legalized cannabis industry (and public acceptance of cannabis-related products) and the ability of our current and future clients to successfully market their own products and services. If the legalized cannabis marketplace does not continue to grow because the public does not increasingly accept cannabis-related products or government regulators adopt laws, rules, or regulations that terminate or diminish the ability for commercial businesses to develop, market, and sell cannabis-related products, our business and financial performance would be materially adversely affected. Additionally, even if the cannabis marketplace continues to grow rapidly, and government regulation allows for the free-market development of this industry, products, and services competitive with those offered by us may enjoy better market acceptance.

The legalized cannabis industry may not continue to grow and the regulatory environment may not remain favorable to participants in the industry. More generally, our products and services may not experience growing market acceptance, which would adversely impact our ability to grow revenue.

Direct and indirect consequences of the COVID-19 pandemic may have material adverse consequences.

The current COVID-19 pandemic is creating extensive disruptions to the global economy. Governments, businesses, and the public are taking unprecedented actions to contain the spread of COVID-19 and to mitigate its effects, including quarantines, travel bans, shelter-in-place orders, closures of businesses, fiscal stimulus, and legislation designed to deliver monetary aid and other relief. While the scope, duration, and full effects of COVID-19 are rapidly evolving and not fully known, the pandemic and related efforts to contain it have disrupted global economic activity, adversely affected the functioning of financial markets, impacted interest rates, increased economic and market uncertainty, and disrupted trade and supply chains. If these effects continue for a prolonged period or result in sustained economic stress or recession, we may experience adverse effects on our operations. Specifically, if our clients are forced to reduce business hours or close their businesses for an extended period of time or if their customer base experiences financial hardship, our clients may experience a sharp decline in revenue and be unable to meet their obligations to us under existing agreements or be unwilling to extend their agreements past current terms, which may adversely impact our financial results. Further, we may experience a decrease in new clients due to a lack of financial resources or a decline in new markets as businesses and financial markets deal with the impact of COVID-19. As governments are focused on relief efforts and fiscal stimulus measures, important legislation to expand or clarify certain existing or new markets for our products may be postponed or abandoned, which may adversely impact our results. Further, these conditions may impact our ability to access financial markets to obtain the necessary funding to operate our business as currently contemplated, which may adversely affect our liquidity and working capital. To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this registration statement, such as those relating to our operations and financial condition. Due to the highly uncertain and dynamic nature of events relating to the COVID-19 pandemic, it is not currently possible to estimate the impact of the pandemic on our business. However, these effects could have a material impact on our operations, and we will continue to monitor the COVID-19 situation closely. Through December 31, 2021, we have experienced delays in our consulting projects and the corresponding delay in revenue recognition for such projects, which we believe could be the result of government shutdowns and other regulatory uncertainty surrounding COVID-19.

Risks Related to the Cannabis Industry

As a company whose clients operate in the cannabis industry, we face many unique and evolving risks.

We currently serve government and private clients with respect to their tracking, monitoring, and compliance needs as they operate in the growing cannabis industry. Any risks related to the cannabis industry that may adversely affect our clients and potential clients may, in turn, adversely affect demand for our products. Specific risks faced by companies operating in the cannabis industry include, but are not limited to, the following:

Marijuana remains illegal under U.S. federal law

Marijuana is a Schedule-I controlled substance under the Controlled Substances Act ("CSA"), and is illegal under federal law. It remains illegal under U.S.s federal law to grow, cultivate, sell or possess marijuana for any purpose or to assist or conspire with those who do so. Additionally, 21 U.S.C. 856 a.1. states that it shall be unlawful to "knowingly open, lease, rent, use, or maintain any place, whether permanently or temporarily, for the purpose of manufacturing, distributing, or using any controlled substance." Even in those states in which the use of marijuana has been authorized, its use remains a violation of federal law. Since federal law criminalizing the use of marijuana is not preempted by state laws that legalize its use, strict enforcement of federal law regarding marijuana would likely result in our clients' inability to proceed with their operations, which would adversely affect demands for our products.

Uncertainty of federal enforcement

On January 4, 2018, former Attorney General Sessions rescinded the previously issued memoranda (known as the Cole Memorandum) from the U.S. Department of Justice ("DOJ") that had de-prioritized the enforcement of federal law against marijuana users and businesses that comply with state marijuana laws, adding uncertainty to the question of how the federal government will choose to enforce federal laws regarding marijuana. Former Attorney General Sessions issued a memorandum to all U.S.s Attorneys in which the DOJ affirmatively rescinded the previous guidance as to marijuana enforcement, calling such guidance "unnecessary." This one-page memorandum was vague in nature, stating that federal prosecutors should use established principles in setting their law enforcement priorities. Under previous administrations, the DOJ indicated that those users and suppliers of medical marijuana who complied with state laws, which required compliance with certain criteria, would not be prosecuted. On November 7, 2018, Jeff Sessions resigned from his position as Attorney General. The current Attorney General, Merrick Garland, has not indicated any change in enforcement priority for state-compliant marijuana businesses, however, substantial uncertainty regarding federal enforcement remains. Regardless, the federal government has always reserved the right to enforce federal law regarding the sale and disbursement of medical or recreational marijuana, even if state law sanctioned such sale and disbursement. Although the rescission of the Cole Memorandum does not necessarily indicate that marijuana industry prosecutions are now affirmatively a priority for the DOJ, there can be no assurance that the federal government will not enforce such laws in the future. As a result, it is now unclear if the DOJ will seek to enforce the CSA against those users and suppliers who comply with state marijuana laws.

In 2014, Congress passed a spending bill, (the "2015 Appropriations Bill"), containing a provision (the "Appropriations Rider"), blocking federal funds and resources allocated under the 2015 Appropriations Bill from being used to "prevent such States from implementing their own State medical marijuana law." The Appropriations Rider provided a budgetary constraint on the federal government from interfering with the ability of states to administer their medical marijuana laws, although it did not codify federal protections for medical marijuana patients and producers. Moreover, despite the Appropriations Rider, the DOJ maintains that it can still prosecute violations of the federal marijuana ban and continue cases already in the courts. However, the Ninth Circuit Court of Appeals and other courts have interpreted the language to mean that the DOL cannot prosecute medical marijuana operators complying strictly with state medical marijuana laws. Additionally, the Appropriations Rider must be re-enacted every year. The Appropriations Rider was renewed on December 20, 2019 through the signing of the fiscal year 2020 omnibus spending bill, effective through September 30, 2020, continued re-authorization of the Appropriations Rider cannot be guaranteed. Subsequently, the Appropriations Rider was extended through a series of stopgap spending bills on October 1, December 11, December 18, December 20 and December 22, 2020. On December 27, 2020 the Appropriations Rider was included in the fiscal year 2021 omnibus spending bill and will remain in effect through September 30, 2022. If the Appropriation Rider is not extended in the future, the risk of federal enforcement and override of state medical marijuana laws would increase.

Despite the rescission of the Cole Memorandum, the Department of the Treasury, Financial Crimes Enforcement Network, has not rescinded the "FinCEN Memo" dated February 14, 2014, which de-prioritizes enforcement of the Bank Secrecy Act against financial institutions and marijuana-related businesses which utilize them. This memo appears to be a standalone document and is presumptively still in effect. At any time, however, the Department of the Treasury, Financial Crimes Enforcement Network, could elect to rescind the FinCEN Memo. This would make it more difficult for us and our clients and potential clients to access the U.S. banking systems and conduct financial transactions, which would adversely affect our operations.

We could become subject to racketeering laws

While we do not grow, handle, process or sell cannabis or cannabis-derived products, our receipt of funds from clients that do conduct such operations in violation of federal law exposes us to risks related to federal racketeering laws. The Racketeer Influenced Corrupt Organizations Act ("RICO") is a federal statute providing criminal penalties in addition to a civil cause of action for acts performed as part of an ongoing criminal organization. Under RICO, it is unlawful for any person who has received income derived from a pattern of racketeering activity (which includes most felonious violations of the CSA), to use or invest any of that income in the acquisition of any interest, or the establishment or operation of, any enterprise which is engaged in interstate commerce. RICO also authorizes private parties whose properties or businesses are harmed by such patterns of racketeering activity to initiate a civil action against the individuals involved. Although RICO suits against the cannabis industry are rare, a few cannabis businesses have been subject to a civil RICO action. Any violation of RICO could result in significant fines, penalties, administrative sanctions, convictions or settlements arising from civil proceedings conducted by either the federal government or private citizens or criminal charges, including but not limited to, seizure of assets, disgorgement of profits, cessation of our business activities or divestiture.

Banking regulations could limit access to banking services and expose us to risk

Our receipt of payments from clients engaged in state-legal cannabis operations could also subject us to the consequences of a variety of federal laws and regulations that involve money laundering, financial record keeping and proceeds of crime, including the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act) and any related or similar rules, regulations or guidelines, issued, administered or enforced by the federal government. Since we fund from activities that are illegal under the CSA, banks and other financial institutions providing services to us risk violation of federal anti-money laundering statutes (18 U.S.C. § 1956 and 1957), the unlicensed money-remitter statute (18 U.S.C. § 1960) and the Bank Secrecy Act, among other applicable federal statutes. Banks often refuse to provide banking services to businesses involved in the cannabis industry due to the present state of federal laws and regulations governing financial institutions. The inability to open bank accounts may make it difficult for us or our clients to operate and our client's reliance on cash can result in a heightened risk of theft, which could harm their businesses and, in turn, harm our business. Additionally, some courts have denied marijuana-related businesses bankruptcy protection, thus, making it very difficult for lenders to recoup their investments, which may limit the willingness of banks to lend to our clients and to us. The lack of banking and financial services presents unique and significant challenges to businesses in the cannabis industry and we may experience similar difficulties in obtaining and maintaining regular banking and financial services because of the activities of our clients.

Dividends and distributions could be prevented if our receipt of payments from clients is deemed to be proceeds of crime

In the event that any of our operations, or any proceeds thereof, any dividends or distributions therefrom, or any profits or revenues accruing from such operations were found to be in violation of money laundering legislation or otherwise, such transactions may be viewed as proceeds of crime under one or more federal statutes or any other applicable legislation. This could restrict or otherwise jeopardize our ability to declare or pay dividends or effect other distributions. Furthermore, while there are no current intentions to declare or pay dividends in the foreseeable future, in the event that a determination was made that our proceeds from operations (or any future operations) could reasonably be shown to constitute proceeds of crime, we may decide or be required to suspend declaring or paying dividends without advance notice and for an indefinite period of time.

Further legislative development beneficial to our operations is not guaranteed

Among other things, our business involves the provision of an online platform that provides monitoring and tracking of those involved in the cultivation, distribution, manufacture, storage, transportation, and/or sale of medical and adult-use cannabis products in compliance with applicable state law. The success of our business depends on the continued development of the cannabis industry and the activity of commercial business and government regulatory agencies within the industry. The continued development of the cannabis industry is dependent upon continued legislative and regulatory authorization of cannabis at the state level and a continued laissez-faire approach by federal enforcement agencies. Any number of factors could slow or halt progress in this area. Further regulatory progress beneficial to the industry cannot be assured. While there may be ample public support for legislative action, numerous factors impact the legislative and regulatory process, including election results, scientific findings or general public events. Any one of these factors could slow or halt progressive legislation relating to cannabis and the current tolerance for the use of cannabis by consumers, which could adversely affect the demand for our product and operations.

The cannabis industry could face strong opposition from other industries

We believe that established businesses in other industries may have a strong economic interest in opposing the development of the cannabis industry. Cannabis may be seen by companies in other industries as an attractive alternative to their products, including recreational marijuana as an alternative to alcohol, and medical marijuana as an alternative to various commercial pharmaceuticals. Many industries that could view the emerging cannabis industry as an economic threat are well established, with vast economic and federal and state lobbying resources. It is possible that companies within these industries could use their resources to attempt to slow or reverse legislation legalizing cannabis. Any inroads these companies make in halting or impeding legislative initiatives that would be beneficial to the cannabis industry could have a detrimental impact on our clients and, in turn on our operations.

The legality of marijuana could be reversed in one or more states

The voters or legislatures of states in which marijuana has already been legalized could potentially repeal applicable laws that permit the operation of both medical and retail marijuana businesses. These actions might force businesses, including those that are our clients, to cease operations in one or more states entirely.

Changing legislation and evolving interpretations of the law

Laws and regulations affecting the medical and adult-use marijuana industry are constantly changing, which could detrimentally affect our clients and, in turn, our operations. Local, state, and federal marijuana laws and regulations are broad in scope and subject to evolving interpretations, which could require our clients and thus us to incur substantial costs associated with modification of operations to help ensure such clients' compliance. In addition, violations of these laws, or allegations of such violations, could disrupt our clients' business and result in a material adverse effect on our operations. In addition, it is possible that regulations may be enacted in the future that will limit the amount of cannabis growth or related products that our commercial clients are authorized to produce. We cannot predict the nature of any future laws, regulations, interpretations, or applications, nor can we determine what effect additional governmental regulations or administrative policies and procedures, when and if promulgated, could have on our operations.

Dependence on client licensing

Our business is dependent on our clients obtaining various licenses from various municipalities and state licensing agencies. There can be no assurance that any or all licenses necessary for our clients to operate their businesses will be obtained, retained or renewed. If a licensing body were to determine that a client of ours had violated applicable rules and regulations, there is a risk the license granted to that client could be revoked, which could adversely affect our operations. There can be no assurance that our existing clients will be able to retain their licenses going forward, or that new licenses will be granted to existing and new market entrants.

Insurance risks

In the U.S, many marijuana-related businesses are subject to a lack of adequate insurance coverage. In addition, many insurance companies may deny claims for any loss relating to marijuana or marijuana-related operations based on their illegality under federal law, noting that a contract for an illegal transaction is unenforceable.

The cannabis industry is an evolving industry and we must anticipate and respond to changes.

The cannabis industry is not yet well-developed, and many aspects of this industry's development and evolution cannot be accurately predicted. While we have attempted to identify any risks specific to the cannabis industry, you should carefully consider that there are other risks that cannot be foreseen or are not described in this Annual Report, which could materially and adversely affect our business and financial performance. We expect that the cannabis market and our business will evolve in ways that are difficult to predict. For example, it is anticipated that over time, we will reach a point in most markets where we have achieved a market penetration level in which new client acquisitions are less productive, and the continued growth of our revenue will require more focus on increasing the rate at which existing clients purchase products and services across our platforms. Our long-term success will depend on our ability to successfully adjust our strategy to meet the changing market dynamics. If we are unable to successfully adapt to changes in the cannabis industry, our operations could be adversely affected.

Risks related to Our Business

A significant portion of our business is and is expected to be, from government contracts, which present certain unique risks.

Contracts for Leaf Data Systems with government agencies in Pennsylvania, Washington, and Utah represented 16%, 25% and 39% of our revenue for the year ended December 31, 2021, the six months ended December 31, 2020 and fiscal year ended June 30, 2020, respectively. In order to obtain a government contract for Leaf Data Systems, we are required to follow a competitive bidding process in each state where we seek a contract. Government contracts have very specific compliance requirements that often require contractors to invest material time and money to prepare a bid to ensure that our technology, processes, and staff meet these specific requirements. After expenditures of such time and money, there is no assurance that the bid will result in an award of a contract. Further, even if a contract is awarded, there are strict procedures that government agencies follow when it comes to reimbursement of the costs incurred in the course of fulfilling contracts. Accordingly, it is possible that some or all costs might not be reimbursed under a government contract as contemplated by us.

Government agencies also typically audit and investigate government contractors. These agencies review a contractor's performance under its contracts, its cost structure, its business systems, and compliance with applicable laws, regulations, and standards. If an audit or investigation uncovers improper or illegal activities, we may be subject to civil or criminal penalties and administrative sanctions, including reductions of the value of contracts, contract modifications or terminations, forfeiture of profits, suspension of payments, penalties, fines, and suspension, or prohibition from doing business with the government. In addition, we could suffer serious reputational harm if allegations of impropriety were made against us. Any such imposition of penalties, or the loss of such government contracts, could materially adversely affect our business, financial condition, results of operations, and growth prospects.

There also is typically a longer window of liability under government contracts than private contracts, and the government can seek claims after the contract has ended and payments under the contract have been made. The terms of government contracts may also require the sharing of proprietary information, processes, software, and product development efforts with the government. Additionally, government employees are required to follow certain protocols to ensure there is no appearance of impropriety in the bidding process. As a result, bidders on government contracts must ensure that there is no appearance of favoritism, gift-giving, bribery, or the exertion of other influences in the bidding process. Any finding of the same can result in fines to the bidder and cancellation of contracts. The applicable state government generally has the ability to terminate our contract, in whole or in part, without prior notice, for convenience or for default based on performance. If a government contract were to be terminated for convenience, we generally would be protected by provisions covering reimbursement for costs incurred on the contract and profit on those costs, but not the anticipated profit that would have been earned had the contract been completed. The state government also has the ability to stop work under a contract for a limited period of time for its convenience.

We cannot assure you that we will be successful in navigating the government contract bidding process or that we will be able to maintain our existing government contracts or obtain additional government contracts in the future.

Our operations may be adversely affected by disruptions to our information technology, or IT, systems, including disruptions from cybersecurity breaches of our IT infrastructure.

We rely on information technology networks and systems, including those of third-party service providers, to process, transmit, and store electronic information. In particular, we depend on our information technology infrastructure for a variety of functions, including financial reporting, data management, project development, and email communications. Any of these systems may be susceptible to outages due to fire, floods, power loss, telecommunications failures, terrorist attacks, sabotage, and similar events. Global cybersecurity threats and incidents can range from uncoordinated individual attempts to gain unauthorized access to our information technology systems to sophisticated and targeted measures known as advanced persistent threats. The ever-increasing use and evolution of technology, including cloud-based computing, create opportunities for the unintentional dissemination or intentional destruction of confidential information stored in our systems or in non-encrypted portable media or storage devices. We could also experience a business interruption, information theft of confidential information, or reputational damage from industrial espionage attacks, malware, or other cyber-attacks, which may compromise our system infrastructure or lead to data leakage, either internally or at our third-party providers. Despite the implementation of network security measures and disaster recovery plans, our systems and those of third parties on which we rely may also be vulnerable to computer viruses, break-ins, and similar disruptions. If we or our vendors are unable (or are perceived as unable) to prevent such outages and breaches, our operations may be disrupted, and our business reputation could be adversely affected.

We expect that risks and exposures related to cybersecurity attacks will remain high for the foreseeable future due to the rapidly evolvingnature and sophistication of these threats.

Privacy regulation is an evolving area and compliance with applicable privacy regulations may increase our operating costs or adversely impact our ability to service our clients and market our products and services.

Because we store, processes, and use data, some of which contains personal information, we are subject to complex and evolving federal, state, and foreign laws and regulations (including Canada's Cannabis Act and related regulations and the European Union's general data protection regulation, or GDPR) regarding privacy, data protection, and other matters. While we believe we are currently in compliance with applicable laws and regulations, many of these laws and regulations are subject to change and uncertain interpretation, and could result in investigations, claims, changes to our business practices, increased cost of operations, and declines in user growth, retention, or engagement, any of which could seriously harm our business.

We rely on third parties for certain services made available to users of our platforms, which could limit our control over the quality of the user experience and our cost of providing services.

Some of the applications and services available through the Leaf Data System and MJ Platform are provided through relationships with third-party service providers. We do not typically have any direct control over these third-party service providers. These third-party service providers could experience service outages, data loss, privacy breaches, including cyber-attacks, and other events relating to the applications and services they provide that could diminish the utility of these services and which could harm users thereof. The MJ Platform itself does not depend on any third-party software or applications and is based entirely on open source technologies and custom programming. The MJ Platform, however, is hosted by Amazon Web Services, a third-party service provider. There are readily available alternative hosting services available should we desire or need to move to a different web host. Certain ancillary services provided by us also uses the services of third-party providers, for which, we believe, there are readily available alternatives on comparable economic terms. Offering integrated platforms, such as the Leaf Data System and MJ Platform which rely, in part, on the services of other providers lessens the control that we have over the total client experience. Should the third-party service providers we rely upon not deliver at standards we expect and desires, acceptance of our platforms could suffer, which would have an adverse effect on our business and financial performance. Further, we cannot be assured of entering into agreements with such third-party service providers on economically favorable terms.

Acquisitions and integration issues may expose us to risks.

Our business strategy includes making targeted acquisitions. Any acquisition that we make may be of significant size, may change the scale of our business and operations, and may expose us to new geographic, political, operating, financial, and geological risks. Our success in our acquisition activities depends on our ability to identify suitable acquisition candidates, negotiate acceptable terms for any such acquisition, and integrate the acquired operations successfully with our own. Any acquisitions would be accompanied by risks. For example, there may be significant changes in our market value after we have committed to complete the transaction and have established the purchase price or exchange ratio; a potential targeted acquisition's business and prospects may prove to be below expectations; we may have difficulty integrating and assimilating the operations and personnel of any acquired companies, realizing anticipated synergies and maximizing the financial and strategic position of the combined enterprise and maintaining uniform standards, policies, and controls across the organization; the integration of the acquired business or assets may disrupt our ongoing business and our relationships with employees, clients, suppliers, and contractors; and the acquired business or assets may have unknown liabilities that may be significant. If we choose to use equity securities as consideration for such an acquisition, existing shareholders may suffer dilution. Alternatively, we may choose to finance any such acquisition with our existing resources. There can be no assurance that we would be successful in overcoming these risks or any other problems encountered in connection with such acquisitions. To grow and be successful, we need to attract and retain qualified personnel.

In any future acquisitions, we may not be able to successfully integrate acquired personnel, operations, and technologies, or effectively manage the combined business following the acquisition. We also may not achieve the anticipated benefits from future acquisitions due to a number of factors, including: (a) an inability to integrate or benefit from acquisitions in a profitable manner; (b) unanticipated costs or liabilities associated with the acquisition; (c) the incurrence of acquisition-related costs; (d) the diversion of management's attention from other business concerns; (e) the loss of our or the acquired business' key employees; or (f) the issuance of dilutive equity securities, the incurrence of debt, or the use of cash to fund such acquisitions.

To grow and be successful, we need to attract and retain qualified personnel.

Our growth and success will depend to a significant extent on our ability to identify, attract, hire, train, and retain qualified professional, creative, technical, and managerial personnel. Competition for experienced and qualified talent in the cannabis industry can be intense. We may not be successful in identifying, attracting, hiring, training, and retaining such personnel in the future. If we are unable to hire, assimilate, and retain qualified personnel in the future, such inability could adversely affect our operations.

We may experience risks related to our Chief Financial Officer moving to part-time.

Mr. Fowle, our Chief Financial Officer, will move to a part-time position beginning April 1, 2022. While Mr. Fowle has committed to us to spend at least [15] hours a week on our matters, Mr. Fowle may experience conflicts of interest between his requirements to us as our Chief Financial Officer and his obligations to any other positions he may accept in the time no dedicated to us. If Mr. Fowle cannot manage his financial department properly in the amount of time dedicated to us or otherwise experiences difficulty in managing his time between us and his other ventures, we could experience risks regarding the timing and preparation of our financial reports, internal financial management matters or otherwise experience risks regarding our disclosure controls and procedures and internal control over financial reporting which could negatively impact our business and our stockholders.

We are smaller and less diversified than many of our potential competitors.

While we believe we are a leading provider in the software solutions segment of the cannabis industry, there are general software design and integrated business platform companies seeking to provide online and software-based business solutions and operations integration to clients in numerous industries. The continued growth of the cannabis industry will likely attract some of these existing companies and incentivize them to produce solutions that are competitive with those offered by us. Many of these potential competitors are a part of large diversified corporate groups with a variety of other operations and expansive resources. We may not be able to successfully compete with larger enterprises devoting significant resources to compete in our target market space, which may negatively affect operations.

Our business and stock price may suffer as a result of our limited public company operating experience and if securities or industry analysts do not publish or cease publishing research or reports about us, our business, or our market, or if they change their recommendations regarding our common stock in an adverse manner, the price and trading volume of our common stock could decline.

If we are unable to execute our business strategy, either as a result of our inability to manage effectively our business in a public company environment or for any other reason, our business, prospects, financial condition, and operating results may be harmed.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts may publish about us, our business, our market, or our competitors. We currently have limited coverage by securities and industry analysts. If no additional securities or industry analysts commence coverage of us, our stock price and trading volume would likely be negatively impacted. If any of the analysts who cover, or who may cover us in the future, change their recommendation regarding our stock in an adverse manner, or provide more favorable relative recommendations about our competitors, the price of our common stock would likely decline. If any analyst who may cover us were to cease coverage of us or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

Risks related to Intellectual Property

Protecting and defending against intellectual property claims may have a material adverse effect on our business.

Our ability to compete depends, in part, upon successful protection of our intellectual property relating to our Leaf Data Systems and MJ Platform, and intellectual property acquired in business combinations, such as Solo, Trellis, and Ample. We seek to protect our proprietary and intellectual property rights through patent applications, available copyright and trademark laws, nondisclosure agreements, and licensing and distribution arrangements with reputable companies in our target markets. While patent protection for inventions related to cannabis and cannabis-related products is available, there are substantial difficulties faced in the patent process by cannabis-related businesses. Further, patent applications may be rejected for numerous other reasons beyond those related to the cannabis industry, including that the subject matter of the application is found to be non-patentable. Our previous patent applications were denied and while we are continuing to pursue such applications and believe they are with merit, there can be no assurance that patents will be issued on these applications. The failure to be awarded patents on our technology could weaken our ability to enforce our intellectual property rights. Any such enforcement, whether we have been granted patent protection or not, would be costly, and there can be no assurance that we will have the resources to undertake all necessary action to protect our intellectual property rights could require us to redirect resources to actions necessary to protect the same and could distract management from our underlying business operations. The infringement of our material intellectual property rights and resulting actions could adversely affect our operations.

Our success depends in part upon our ability to protect our core technology and intellectual property.

Our success depends in part upon our ability to protect our core technology and intellectual property. To establish and protect our proprietary rights, we rely on a combination of patent applications, trade secrets, including know-how, license agreements, confidentiality procedures, non-disclosure agreements with third parties, employee disclosure and invention assignment agreements, and other contractual rights.

We generally control access to and use of our proprietary technology and other confidential information through the use of internal and external controls, including contractual protections with employees, contractors, clients, and partners, and our software is protected by the U.S. and international copyright laws.

Despite efforts to protect our trade secrets and proprietary rights through intellectual property rights, licenses, and confidentiality agreements, unauthorized parties may still copy or otherwise obtain and use our software and technology, as was the case when our source code was compromised in June 2017. We have taken significant actions to improve security but will be required to regularly modify our systems to combat new hacking approaches as they develop. In addition, as our international operations expand, effective intellectual property protection may not be available or may be limited in foreign countries.

Others may assert intellectual property infringement claims against us.

Companies in the software and technology industries own large numbers of patents, copyrights, trademarks, and trade secrets, and frequently enter into litigation based on allegations of infringement, misappropriation, or other violations of intellectual property or other rights. In addition, various "non-practicing entities" that own patents and other intellectual property rights often attempt to aggressively assert their rights in order to extract value from technology companies. It is possible that others may claim from time to time that our products misappropriate or infringe the intellectual property rights of third parties. Irrespective of the validity or the successful assertion of any such claims, we could incur significant costs and diversion of resources in defending against these claims, which could adversely affect our operations. We may receive unfavorable preliminary or interim rulings in the course of litigation, and there can be no assurances that favorable final outcomes will be obtained in all cases. We may decide to settle such lawsuits and disputes on terms that are unfavorable to us. As a result, we may also be required to develop alternative non-infringing technology or practices or discontinue the practices. The development of alternative non-infringing technology or practices could require significant effort and expense or may not be feasible.

Risks related to Our Charter Documents

Anti-takeover provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws, as well as provisions of Delaware law, could impair a takeover attempt and limit the price investors might be willing to pay in the future for our common stock and could entrench management.

Our Amended and Restated Certificate of Incorporation contains provisions that may discourage unsolicited takeover proposals that stockholders may consider to be in their best interests. We are also subject to anti-takeover provisions under Delaware law, which could delay or prevent a change of control. Together these provisions may make more difficult the removal of management and may discourage transactions that otherwise could involve payment of a premium over prevailing market prices for our securities.

These provisions:

- create a staggered Board of Directors making it more difficult for stockholders to remove a majority of the Board of Directors and take control;
- grant the Board of Directors the ability to designate the terms of and issue new series of preferred shares, which can be created and issued by the Board of Directors without prior stockholder approval, with rights senior to those of the common stock;
- · impose limitations on our stockholders' ability to call special stockholders' meetings; and
- make it more difficult the removal of management and may discourage transactions that otherwise could involve payment of a premium over prevailing market prices for our securities.

In addition, we are subject to the provisions of Section 203 of the Delaware General Corporation Law, which may prohibit certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These and other provisions in our Amended and Restated Certificate of Incorporation, our bylaws, and Delaware law could make it more difficult for stockholders or potential acquirers to obtain control of our Board of Directors or initiate actions that are opposed by our thencurrent Board of Directors, including to delay or impede a merger, tender offer or proxy contest involving us. Any delay or prevention of a change in control transaction or changes in our Board of Directors could cause the market price of our common stock to decline.

Our corporate opportunity provisions in our Amended and Restated Certificate of Incorporation could enable management to benefit from corporate opportunities that might otherwise be available to us.

Our Amended and Restated Certificate of Incorporation provides that the doctrine of corporate opportunity, or any other analogous doctrine, shall not apply with respect to us, or any of our directors or officers in circumstances where the application of such doctrine would conflict with any fiduciary duties or contractual obligations they may otherwise have.

Our management may become aware, from time to time, of certain business opportunities (such as acquisition opportunities) and may direct such opportunities to other businesses in which they have invested, in which case we may not become aware of or otherwise have the ability to pursue such opportunity. Further, such businesses may choose to compete with us for these opportunities, possibly causing these opportunities to not be available to us or causing them to be more expensive for us to pursue. These potential conflicts of interest could adversely impact our business or prospects if attractive business opportunities are procured by such parties for their own benefit rather than for ours.

Our amended and restated certificate of incorporation provides, subject to limited exceptions, that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for certain stockholder litigation matters, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders.

Our amended and restated certificate of incorporation requires, to the fullest extent permitted by law, that derivative actions brought in our name, actions against directors, officers, and employees for breach of fiduciary duty, actions under the Delaware general corporation law or under our amended and restated certificate of incorporation, or actions asserting a claim governed by the internal affairs doctrine may be brought only in the Court of Chancery in the State of Delaware and, if brought outside of Delaware, the stockholder bringing the suit will be deemed to have consented to service of process on such stockholder's counsel. This choice of forum provision does not preclude or contract the scope of exclusive federal or concurrent jurisdiction for any actions brought under the Securities Act or the Exchange Act of 1934, as amended, or the Exchange Act. Accordingly, our exclusive forum provision will not relieve us of our duties to comply with the federal securities laws and the rules and regulations thereunder, and our stockholders will not be deemed to have waived our compliance with these laws, rules and regulations.

Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and consented to the forum provisions in our amended and restated certificate of incorporation. This choice of forum provision does not exclude stockholders from suing in federal court for claims under the federal securities laws but may limit a stockholder's ability to bring such claims in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims.

Alternatively, if a court were to find the choice of forum provision contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, operating results and financial condition.

Risks Relating to our Convertible Debt

The issuance of shares of our common stock pursuant to our Senior Convertible Notes may result in significant dilution to our stockholders.

The conversion of our outstanding Senior Convertible Notes, issued on October 5, 2021, could result in the issuance of a significant number of shares of our common stock. The original \$20 million principal amount of Senior Convertible Notes is convertible at a price of \$4.05 per share, which would result in the issuance of 4,938,272 shares of our common stock upon the conversion of the Senior Convertible Notes in full. At the option of Akerna, the installment payments on the Senior Convertible Notes can be converted into shares of common stock of Akerna at a price per share equal to the lower of (i) the conversion price then in effect, or (ii) the greater of (x) the floor price of \$0.54 and (y) 90% of the lower of (A) the volume-weighted average price of the common stock as of the trading day immediately preceding the applicable date of determination and (B) the quotient of (I) the sum of the volume-weighted average price of the common stock for each of the two (2) trading days with the lowest volume-weighted average price of the common stock during the trading day immediately prior to the applicable date of determination, divided by (II) two.

Due to the variable nature of the adjustments of installment conversion prices and the formula that sets certain conversion prices of these securities based on a discount to the then-current market price, we could issue up to 37,037,037 shares of common stock as of December 31, 2021, upon conversion of the Senior Convertible Notes at the floor price, which may result in significant dilution to our stockholders and could negatively impact the trading price of our common stock.

Our obligations to the holders of our Senior Convertible Notes are secured by a security interest in substantially all of our assets, if we default on those obligations, the Senior Convertible Note holders could foreclose on our assets.

Our obligations under the Senior Convertible Notes, issued on October 5, 2021, and the related transaction documents are secured by a security interest in substantially all of our assets. As a result, if we default on our obligations under such Senior Convertible Notes, the collateral agent on behalf of the holders of the Senior Convertible Notes could foreclose on the security interests and liquidate some or all of our assets, which would harm our business, financial condition and results of operations and could require us to reduce or cease operations and investors may lose all or part of your investment.

Events of default under the Senior Convertible Notes include: (i) the failure of the registration statement to which this prospectus relates (under the registration rights agreement between the Company and the holders) to be filed with the SEC or the failure of the applicable registration statement to be declared effective by the SEC by deadlines set forth in the registration rights agreement; (ii) (x) the effectiveness of the applicable registration statement lapses for any reason or such registration statement is unavailable to any holder of registrable securities and Rule 144 (subject to certain conditions) is not unavailable to any holder of the conversion shares; (iii) suspension of trading of the Company's common stock on a national securities exchange for five days; (iv) uncured conversion failure; (v) failure by the Company to maintain required share allocations for the conversion of the Senior Convertible Notes; (vi) failure by the Company to pay principal when due; (vii) failure of the Company to remove restricted legends from shares issued to a holder upon conversion of the Senior Convertible Notes; (viii) the occurrence of any default under, redemption of or acceleration prior to maturity of at least an aggregate of \$50,000 of indebtedness of the Company; (ix) bankruptcy, insolvency, reorganization or liquidation proceedings or other proceedings for the relief of debtors shall be instituted by or against the Company or any subsidiary and not dismissed within 45 days of initiation; (x) the commencement by the Company or any subsidiary of a voluntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law; (xi) the entry by a court of a decree, order, judgment or other similar document in respect of the Company or any subsidiary of a voluntary or involuntary case or proceeding under any applicable federal, state or foreign bankruptcy, insolvency, reorganization or other similar law; (xii) final judgment for the payment of money aggregating in excess of \$50,000 are rendered against the Company or any subsidiary of the Company and not bonded or discharged within 30 days; (xiii) failure of the Company or any subsidiary to pay when due any debts in excess of \$50,000 due to any third party; (xiv) breaches by the Company or any subsidiary of any representations or warranties in the securities purchase agreement for the Senior Convertible Notes or any document contemplated thereby; (xv) a false or inaccurate certification by the Company that either (A) the "Equity Conditions" (as defined in the Senior Convertible Notes) are satisfied, (B) there has been no "Equity Conditions Failure," (as defined in the Senior Convertible Notes) or (C) as to whether any Event of Default has occurred; (xvi) failure of the Company or any subsidiary to comply with certain of the covenants in the Senior Convertible Notes; (xvii) the occurrence of (A) at any time after the six month anniversary of the issuance date, any current public information failure that remains outstanding for a period of twenty (20) trading days or (B) any restatement of any financial statements of the Company filed with the SEC; (xviii) any material adverse effect occurring; (xix) any provision of any transaction document shall at any time for any reason cease to be valid and binding or enforceable; (xx) any security document shall for any reason (other than pursuant to the express terms thereof or due to any failure or omission of the collateral agent) fail or cease to create a separate valid and perfected and, except to the extent permitted by the terms hereof or thereof, first priority lien; (xxi) any material damage to, or loss, theft or destruction of, any collateral, that is material to the business of the Company or any subsidiary and is not reimbursed by insurance; or (xxii) any Event of Default occurs under any other Senior Convertible Notes.

The holders of the Senior Convertible Notes have certain additional rights upon an event of default under such Senior Convertible Notes, which could harm our business, financial condition, and results of operations and could require us to reduce or cease our operations.

Under the Senior Convertible Notes, the holders have certain rights upon an event of default. Such rights include (i) the remaining principal amount of the Senior Convertible Notes bearing interest at a rate of 15% per annum, (ii) during the event of default the holders of the Senior Convertible Notes will be entitled to convert all or any portion of the Senior Convertible Notes at an alternate conversion price equal to the lower of (i) the conversion price then in effect, and (ii) 80% of the lower of (x) the volume weighted average price of the common stock as of the trading day immediately preceding the applicable date of determination and (y) the quotient of (A) the sum of the volume weighted average price of the common stock for each of the two (2) trading days with the lowest volume weighted average price of the common stock during the trading day immediately prior to the applicable date of determination, divided by (B) two, but not less than the floor price, and (iii) the holder having the right to demand redemption of all or a portion of the Senior Convertible Notes, as described below. At any time after certain notice requirements for an event of default are triggered, a holder of Senior Convertible Notes may require us to redeem all or any portion of the convertible note by delivering written notice. The redemption price will equal the greater of (i) 115% of the outstanding principal of the convertible note to be redeemed and accrued and unpaid interest and unpaid late charges thereon, and (ii) an amount equal to the market value of the shares of the common stock underlying the Senior Convertible Notes, as determined in accordance with the Senior Convertible Notes. Upon the occurrence of certain events of default relating to the bankruptcy of Akerna, whether occurring prior to or following the maturity date, Akerna will be required to immediately redeem the Senior Convertible Notes, in cash, for an amount equal to 115% of the outstanding principal of the Senior Convertible Notes, and accrued and unpaid

The exercise of any of these rights upon an event of default could substantially harm our financial condition, substantially dilute our other shareholders and force us to reduce or cease operations and investors may lose all or part of their investment.

Risks Relating to Our Common Stock

We may seek to raise additional funds, finance acquisitions, or develop strategic relationships by issuing securities that would dilute investors' ownership. Depending on the terms available to us, if these activities result in significant dilution, it may negatively impact the trading price of our shares of common stock.

Any additional financing that we secure, may require the granting of rights, preferences, or privileges senior to, opari passu with, those of our common stock. Any issuances by us of equity securities may be at or below the prevailing market price of our common stock and in any event, may have a dilutive impact on stockholders' ownership interest, which could cause the market price of our common stock to decline. We may also raise additional funds through the incurrence of debt, subject to the limitations imposed by our current outstanding Senior Convertible Notes, or the issuance or sale of other securities or instruments senior to our shares of common stock. We cannot be certain how the repayment of our Senior Convertible Notes will be funded and we may issue further equity or debt in order to raise funds to repay the promissory notes, including funding that may be highly dilutive. The holders of any securities or instruments we may issue may have rights superior to the rights of our common stockholders. If we experience dilution from the issuance of additional securities and we grant superior rights to new securities over holders of our common stock, it may negatively impact the trading price of our shares of common stock and stockholders may lose all or part of their investment.

Warrants are exercisable for our common stock, which could increase the number of shares eligible for future resale in the public market and result in dilution to our stockholders.

Currently, there are warrants to purchase 5,813,804 shares of our common stock. Each one of our warrants is exercisable for one share of common stock at \$11.50 per share. To the extent such warrants are exercised, additional shares of common stock will be issued, which will result in dilution to the then-existing holders of common stock and increase the number of shares eligible for resale in the public market. Sales of substantial numbers of such shares in the public market could adversely affect the market price of our common stock.

Certain of our warrants are accounted for as a warrant liability and are recorded at fair value upon issuance with any changes in fair value each period reported in our statement of operations, which may have an adverse effect on the market price of our securities.

We had 225,635 warrants that were issued in private placements that occurred concurrently with the initial public offering of MTech, our successor (the "private warrants"). These private warrants and the shares of Company common stock issuable upon the exercise of the private warrants are exercisable for cash or on a cashless basis, at the holder's option, and are non-redeemable so long as they are held by the initial purchasers or their permitted transferees. If the private warrants are held by someone other than the initial purchasers or their permitted transferees, the private warrants will be redeemable by the Company and exercisable by such holders on the same basis as the warrants included in the units sold in the initial public offering, in which case the 225,635 private warrants could be redeemed by the Company for \$2,256.35. Under generally accepted accounting principles in the United States ("GAAP"), the Company is required to evaluate contingent exercise provisions of these warrants and then their settlement provisions to determine whether they should be accounted for as a warrant liability or as equity. As a result of the provision that the private warrants, when held by someone other than the initial purchasers or their permitted transferees, will be redeemable by the Company, the requirements for accounting for these warrants as equity are not satisfied. Therefore, the Company is required to account for these private warrants as a warrant liability and record (a) that liability at fair value and (b) any subsequent changes in fair value as of the end of each period for which earnings are reported. The impact of changes in fair value on earnings may have an adverse effect on the market price of our common stock.

We may face additional risks, including regulatory, litigation, stockholder or other actions and negative impacts on our stock price, as a result of the material weakness in our internal control over financial reporting and revisions to our financial statements.

As a result of our material weaknesses in internal control over financial reporting, the change in accounting for certain warrants, and the related revisions to our prior financial statements or that may in the future be raised by the SEC, we face potential additional risks, including regulatory, litigation, stockholder or other actions and negative impacts on our stock price, which may include, among others, claims invoking the federal and state securities laws, contractual claims or other claims arising from the material weakness in our internal control over financial reporting and the preparation of our financial statements. As of the date of this report, we have no knowledge of any such litigation or dispute. However, we can provide no assurance that such litigation or dispute will not arise in the future. Any such litigation or dispute, whether successful or not, could have a material adverse effect on our business, results of operations and financial condition.

The market price of our shares of common stock is particularly volatile given our status as a relatively new public company with a generally small and thinly traded public float, which could lead to wide fluctuations in our share price. Stockholders may be unable to sell their shares of common stock at or above their purchase price, which may result in substantial losses to them.

The market for our shares of common stock is characterized by significant price volatility when compared to the shares of larger, more established companies that trade on a national securities exchange and have large public floats, and we expect that our share price will continue to be more volatile than the shares of such larger, more established companies for the indefinite future. The volatility in our share price is attributable to a number of factors, including the fact that our shares are thinly traded relative to larger, more established companies. The price for our shares of common stock could, for example, decline precipitously in the event that a large number of our shares of common stock are sold on the market without commensurate demand. As of the December 31, 2021, there are public warrants to purchase 5,813,804 shares of our common stock at \$11.50 per share and a \$20 million in principal amount of Senior Convertible Notes at a price of \$4.05 per share, which if exercised or converted and sold into the open market could cause our stock price to decline. In addition, because we may be considered a speculative or "risky" investment due to our lack of profits to date, certain investors may, under the fear of losing all or most of their investment in the event of negative news or lack of progress, be more inclined to sell their shares of common stock on the market more quickly and at greater discounts, thus resulting in a rapid downward decline in the price of our common stock. Many of these factors are beyond our control and may decrease the market price of our shares of common stock, regardless of our operating performance.

The market price of our common stock is still likely to be highly volatile and subject to wide fluctuations, and stockholders may be unable to resell shares of common stock at or above the price at which they are acquired.

The market price of our common stock is likely to be highly volatile and could be subject to wide fluctuations in response to a number of factors that are beyond our control, including, but not limited to:

- · Variations in our revenues and operating expenses;
- Actual or anticipated changes in the estimates of our operating results or changes in stock market analyst recommendations regarding our common stock, other comparable companies, or our industry generally;
- Market conditions in our industry, the industries of our clients, and the economy as a whole;
- · Actual or expected changes in our growth rates or our competitors' growth rates;
- Developments in the financial markets and worldwide or regional economies;
- Announcements of innovations or new products or services by us or our competitors;
- Announcements by the government relating to regulations that govern our industry;
- · Sales of our common stock or other securities by us or in the open market; and
- Changes in the market valuations of other comparable companies.

The trading price of our shares of common stock might also decline in reaction to events that affect other companies in our industry, even if these vents do not directly affect us. In the past, following periods of volatility in the market, securities class-action litigation has often been instituted against companies. Such litigation, if instituted against us, could result in substantial costs and diversion of management's attention and resources, which could materially and adversely affect our business, operating results, and financial condition.

We have not paid dividends in the past and do not expect to pay dividends for the foreseeable future, and any return on investment may be limited to potential future appreciation in the value of our common stock.

We currently intend to retain any future earnings to support the development and expansion of our business and do not anticipate paying cash dividends on our shares of common stock in the foreseeable future. Our payment of any future dividends will be at the discretion of our Board of Directors after taking into account various factors, including without limitation, our financial condition, operating results, cash needs, growth plans, and the terms of any credit agreements that we may be a party to at the time. To the extent we do not pay dividends, our shares of common stock may be less valuable because a return on investment will only occur if and to the extent our stock price appreciates, which may never occur. In addition, investors must rely on sales of their common stock after price appreciation as the only way to realize their investment, and if the price of our common stock does not appreciate, then there will be no return on investment. Investors seeking cash dividends should not purchase our common stock.

General Risks

We may not be able to timely and effectively implement controls and procedures required by Section 404 of the Sarbanes-Oxley Act of 2002.

The standards required for a public company under Section 404 of the Sarbanes-Oxley Act of 2002 are significantly more stringent than those required of MJF as a privately held company. Management may not be able to effectively and timely implement controls and procedures that adequately respond to the regulatory compliance and reporting requirements that are applicable to us. If we are not able to implement the additional requirements of Section 404 in a timely manner or with adequate compliance, we may not be able to conclude that our internal controls over financial reporting are effective, which may subject us to adverse regulatory consequences and could harm investor confidence and the market price of our common stock.

Failure to remediate material weaknesses in internal controls over financial reporting could result in material misstatements in our financial statements.

Our management has identified material weaknesses in our internal controls over financial reporting and has concluded that due to such material weaknesses, our internal controls over financial reporting (including disclosure controls and procedures) were not effective as of December 31, 2021. If not remediated, our failure to establish and maintain effective disclosure controls and procedures over financial reporting could result in material misstatements in our financial statements and a failure to meet our reporting and financial obligations, each of which could have a material adverse effect on our financial condition and the trading price of our common stock.

The requirements of being a public company may strain our resources and divert management's attention.

As a public company, we are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Act, the listing requirements of NASDAQ, and other applicable securities rules and regulations. Compliance with these rules and regulations increase our legal and financial compliance costs, make some activities more difficult, time-consuming or costly and increase demand on our systems and resources, particularly after we are no longer an "emerging growth company." The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. In order to maintain and, if required, improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could adversely affect our business and operating results. We may need to hire more employees in the future or engage outside consultants to comply with these requirements, which will increase our costs and expenses.

In addition, changing laws, regulations, and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time-consuming. These laws, regulations, and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations, and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations, and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us and our business may be adversely affected.

We are an "emerging growth company" and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our shares of common stock less attractive to investors.

We are an "emerging growth company," as defined in the JOBS Act, and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies" including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. Additionally, as an emerging growth company, we have elected to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. As such, our financial statements may not be comparable to companies that comply with public company effective dates. It cannot be predicted if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our share price may be more volatile.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.

Under Section 382 and related provisions of the Internal Revenue Code of 1986, as amended (the "Internal Revenue Code"), if a corporation undergoes an "ownership change" (generally defined as a greater than 50% change (by value) in its equity ownership over a three year period), the corporation's ability to use its prechange net operating loss carryforwards and other pre-change tax attribute to offset its post-change income may be limited. We may, in the future, as a result of subsequent shifts in our stock ownership, experience, an "ownership change." Thus, our ability to utilize carryforwards of our net operating losses and other tax attributes to reduce future tax liabilities may be substantially restricted. At this time, we have not completed a study to assess whether an ownership change under Section 382 of the Internal Revenue Code has occurred at any time in the past or may occur in the foreseeable future, due to the costs and complexities associated with completing such a study. Therefore, we may not be able to take full advantage of these carryforwards for federal or state tax purposes.

Our operations could be adversely affected by events outside of our control, such as natural disasters, wars, or health epidemics.

We may be impacted by business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters including earthquakes, typhoons, floods, and fires. An outbreak of any of the foregoing or fear of any of the foregoing could adversely impact us by disrupting the operations of our clients, which could result in delayed payments, non-renewal of contracts, and other adverse effects on the market for our products or by causing product development and implementation delays and disruptions (including as a result of government regulation and prevention measures). We may incur expenses or delays relating to such events outside of our control, which could have a material adverse impact on our business, operating results, and financial condition.

Item 1B. Unresolved Staff Comments.

Not Applicable.

Item 2. Properties.

Our corporate headquarters are located in Denver, Colorado, although we do not lease or own any real property associated with our corporate headquarters as our workforce is primarily remote. We have one facility that we lease in Las Vegas, Nevada which serves as office space for our Las Vegas based employees. We believe that our existing facilities are adequate for our current needs and that suitable additional or alternative space would be available to us to lease on commercially reasonable terms if and when we need it.

Item 3. Legal Proceedings.

From time to time, we may become involved in other legal proceedings or be subject to claims arising in the ordinary course of our business. Regardless of the outcome of any existing or future litigation, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources, and other factors.

Refer to "Commitments and Contingencies" under Note 14 to our consolidated financial statements included elsewhere in this Form 10-K for a further discussion of our current legal proceedings.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information for Common Stock and Warrants

Our common stock and warrants have been listed on the Nasdaq Capital Market since June 19, 2019 under the symbols "KERN" and "KERNW", respectively.

Holders

As of December 31, 2021, we had 261 holders of record of our common stock and 6 holders of record of our warrants. Because many of our shares of common stock are held by brokers and other institutions on behalf of shareholders, we are unable to estimate the total number of shareholders represented by these record holders.

Dividends

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our common stock in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our Board of Directors and will depend on our financial condition, results of operations, capital requirements, general business conditions, and other factors that our Board of Directors may deem relevant.

Unregistered Sales of Equity Securities

All unregistered sales of equity securities during the year ended December 31, 2021, were previously reported in our Current Reports on Form 8-K.

Repurchase of Securities

During the year ended December 31, 2021, neither we nor any of our affiliates repurchased shares of our common stock or warrants registered under Section 12 of the Exchange Act.

2019 Long Term Incentive Plan Summary

The purpose of the Incentive Plan is to enable Akerna to offer its employees, officers, directors and consultants whose past, present and/or potential future contributions to Akerna have been, are, or will be important to its success, an opportunity to acquire a proprietary interest in Akerna. The various types of incentive awards that may be provided under the Incentive Plan are intended to enable Akerna to respond to changes in compensation practices, tax laws, accounting regulations and the size and diversity of its business.

Plan Administration

The Incentive Plan is administered by the compensation committee of the Akerna Board (the "Compensation Committee") or by the full Akerna Board, which may determine, among other things, (1) the persons who are to receive awards, (2) the type or types of awards to be granted to such persons, (3) the number of shares of common stock to be covered by, or with respect to what payments, rights, or other matters are to be calculated in connection with the awards, (4) the terms and conditions of any awards, (5) whether, to what extent, and under what circumstances awards may be settled or exercised in cash, shares of common stock, other securities, other awards or other property, or cancelled, forfeited, or suspended and the method or methods by which awards may be settled, exercised, cancelled, forfeited, or suspended, (6) whether, to what extent, and under what circumstances the delivery of cash, shares of common stock, other securities, other awards or other property and other amounts payable with respect to an award, and (7) make any other determination and take any other action that the Compensation Committee deems necessary or desirable for the administration of the Incentive Plan.

Stock Options

Stock options granted under the Incentive Plan may be of two types: (i) Incentive Stock Options (as defined in the Incentive Plan) and (ii) Non-qualified Stock Options (as defined in the Incentive Plan). Any stock option granted under the Incentive Plan shall contain such terms, as the Compensation Committee may from time to time approve.

The term of each stock option shall be fixed by the Compensation Committee; provided, however, that no stock option may be exercisable after the expiration of ten years from the date of grant; provided, further, that no Incentive Stock Option granted to a person who, at the time of grant, owns stock possessing more than 10% of the total combined voting power of all classes of voting stock of Akerna ("10% Shareholder") may be exercisable after the expiration of five years from the date of grant.

The exercise price per share purchasable under a stock option shall be determined by the Compensation Committee at the time of grant; provided, however, that the exercise price of a stock option may not be less than 100% of the fair market value on the date of grant; provided, further, that the exercise price of an Incentive Stock Option granted to a 10% Shareholder may not be less than 110% of the fair market value on the date of grant.

Stock Appreciation Rights

The Compensation Committee may grant Stock Appreciation Rights in tandem with a stock option or alone and unrelated to a stock option. The Compensation Committee may grant stock appreciation rights to participants who have been or are being granted stock options under the Incentive Plan as a means of allowing such participants to exercise their stock options without the need to pay the exercise price in cash. In the case of a Non-qualified Stock Option, a stock appreciation right may be granted either at or after the time of the grant of such Non-qualified Stock Option. In the case of an Incentive Stock Option, a stock appreciation right may be granted only at the time of the grant of such Incentive Stock Option. Stock appreciation rights shall be exercisable as shall be determined by the Compensation Committee. All or a portion of a stock appreciation right granted in tandem with a stock option shall terminate and shall no longer be exercisable upon the termination or after the exercise of the applicable portion of the related stock option.

Restricted Stock and Restricted Stock Units

Shares of restricted stock may be awarded either alone or in addition to other awards granted under the Incentive Plan. The Compensation Committee shall determine the eligible persons to whom, and the time or times at which, grants of restricted stock will be awarded, the number of shares to be awarded, the price (if any) to be paid by the holder, any restriction period, the vesting schedule and rights to acceleration thereof, and all other terms and conditions of the awards. In addition, the Compensation Committee may award restricted stock units, which may be subject to vesting and forfeiture conditions during the applicable restriction period, as set forth in an agreement.

Restricted stock constitutes issued and outstanding shares of common stock for all corporate purposes. The holder will have the right to vote such restricted stock and to exercise all other rights, powers and privileges of a holder of common stock with respect to such restricted stock, subject to certain limited exceptions. Upon the expiration of the restriction period with respect to each award of restricted stock and the satisfaction of any other applicable restrictions, terms and conditions, all or part of such restricted stock shall become vested in accordance with the terms of the agreement. Any restricted stock that does not vest shall be forfeited to Akerna and the holder shall not thereafter have any rights with respect to such restricted stock.

The Compensation Committee may provide that settlement of restricted stock units will occur upon or as soon as reasonably practicable after the restricted stock units vest or will instead be deferred, on a mandatory basis or at the holder's election, in a manner intended to comply with tax laws. A Holder will have no rights of a holder of common stock with respect to shares subject to any restricted stock unit unless and until the shares are delivered in settlement of the restricted stock unit. If the Committee provides, a grant of restricted stock units may provide a holder with the right to receive dividend equivalents.

Other Stock-Based Awards

Other Stock-Based Awards may be awarded, subject to limitations under applicable law, that are denominated or payable in, valued in whole or in part by reference to, or otherwise based on or related to, shares of common stock, as deemed by the Compensation Committee to be consistent with the purposes of the Incentive Plan, including, without limitation, purchase rights, shares of common stock awarded that are not subject to any restrictions or conditions, convertible or exchangeable debentures, or other rights convertible into shares of common stock and awards valued by reference to the value of securities of or the performance of specified subsidiaries.

Change of Control Provisions

The Incentive Plan provides that in the event of a change of control event, (1) all of the then outstanding options and stock appreciation rights granted pursuant to the Incentive Plan will immediately vest and become immediately exercisable as of a time prior to the change in control and (2) any performance goal restrictions related to an award will be deemed achieved at 100% of target levels and all other conditions met as of a time prior to the change in control. In the event of the sale of all of Akerna's assets or a change of control event, then the Compensation Committee may (1) accelerate the vesting of any and all Stock Options and other awards granted and outstanding under the Incentive Plan; (2) require a holder of outstanding options to relinquish such award to Akerna upon the tender by Akerna to holder of cash, stock or other property, or any combination thereof pursuant to the terms of the Incentive Plan and (3) terminate all incomplete performance periods in respect of awards in effect on the date the acquisition occurs, determine the extent to which performance goals have been met based upon such information then available as it deems relevant and cause to be paid to the holder all or the applicable portion of the award based upon the Compensation Committee's determination of the degree of attainment of performance goals, or on such other basis determined by the Compensation Committee.

The Akerna Board may at any time, and from time to time, amend alter, suspend or discontinue any of the provisions of the Incentive Plan, but no amendment, alteration, suspension or discontinuance shall be made that would impair the rights of a holder under any agreement theretofore entered into hereunder, without the holder's consent, except as set forth in this Incentive Plan or the agreement. Notwithstanding anything to the contrary herein, no amendment to the provisions of the Incentive Plan shall be effective unless approved by the stockholders of Akerna to the extent stockholder approval is necessary to satisfy any provision of the Ethics Code or other applicable law or the listing requirements of any national securities exchange on which Akerna's securities are listed.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information as of December 31, 2021, with respect to the shares of our common stock that may be issued under our existing equity compensation plans:

	Number of securities to be issued upon exercise of outstanding options, warrants and rights or vesting of restricted stock units (column - a)	Weighted- average exercise price of outstanding options, warrants and rights or vesting of restricted stock units (column - b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (column - c)
2019 - Equity compensation plan approved by security holders	683,767	\$	459,539
Total	683,767	\$	459,539

Item 6. [RESERVED]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

The following discussion and analysis should be read in conjunction with our consolidated financial statements for the year ended December 31, 2021, the six month transition period ended December 31, 2020, and the year ended June 30, 2020, and the related notes thereto, which have been prepared in accordance with GAAP. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of many factors, including, but not limited to, those set forth under the section heading "Item 1A. Risk Factors" above and elsewhere in this report on Form 10-K. See section heading "Note Regarding Forward-Looking Statements" above.

Akerna is the leading provider of enterprise software solutions within the cannabis industry. By providing an integrated ecosystem of applications and services that enables compliance, regulation, consumer safety and taxation, Akerna is building the technology backbone of the cannabis industry. Our solutions provide clients with integrated security, transparency, and scalability capabilities, all while maintaining compliance with their governing regulations.

We intend to leverage our scale and capital markets access to pursue additional growth through organic initiatives and to pursue our ecosystem strategy which leverages integrations, partnerships, and inorganic growth. We believe having a scaled ecosystem gives us more opportunities to leverage our footprint and increase wallet share by providing more value to our clients through having what we believe is the most robust cannabis technology suite available. We intend to pursue additional growth through organic initiatives, including increased marketing personnel and resources, acquisitions, and strategic relationships. we will continue scaling our platform for continued growth, adding new features and functionality, supporting new products and content types, and improving the user experience.

We offer our software solutions to our customers as a subscription-based service. Subscription fees are based upon the chosen package which includes differentiated platform capabilities, support and user accounts. As customers recognize the value of our platform, we increasingly engage with them to facilitate broad adoption across other parts of their business.

We believe having a scaled ecosystem gives us more opportunities to leverage our footprint and increase wallet share by providing more value to our clients through having what we believe is the most robust cannabis technology suite available. In order to accelerate customer growth, we intend to pursue additional initiatives, including increased marketing personnel and resources, acquisitions, and strategic relationships. We believe we are underpenetrated in the overall market and have significant opportunity to expand our customer base over time.

We have invested in professional services, customer support and customer success functions to support our sales force by helping customers successfully deploy our platform. We actively engage with our customers to assess whether they are satisfied and fully realizing the benefits of our platform. While these efforts often require a substantial commitment and upfront costs, we believe our investment in product, customer support, customer success and professional services will create opportunities to expand our customer relationships over time.

We plan to continue to make investments in areas of our business to continue to expand our platform functionality to enhance current offerings and build new features.

On April 1, 2021 and October 1, 2021, we completed our acquisitions of Viridian and 365 Cannabis which is reflected in the consolidated financial statements for the fiscal year ended December 31, 2021. The impact of the acquisition is discussed in our results of operations below.

Key Business Metrics

In addition to our results determined in accordance with U.S. Generally Accepted Accounting Principles, or GAAP, we believe earnings before interest, taxes, depreciation and amortization, or EBITDA, and Adjusted EBITDA are useful in evaluating our operating performance. We use EBITDA and Adjusted EBITDA, to evaluate our ongoing operations and for internal planning and forecasting purposes. Please see the heading Non-GAAP Financial Measures for additional discussion and a reconciliation of GAAP net loss to these non-GAAP measures.

Impact of COVID-19

In December 2019, COVID-19 was first reported. After ongoing assessment of the rapid spread, number of cases and countries affected, on March 11, 2020, the World Health Organization characterized COVID-19 as a pandemic. The COVID-19 pandemic has created significant global economic uncertainty, impacted the business of our clients, impacted our consulting business and our results of operations and could further impact our results of operations, and our cash flows in the future.

The COVID-19 pandemic impacted our clients' business and the industry. Nearly every state and country where medical and adult use cannabis was legal declared access essential, which we believe is a significant shift in sentiment. Our clients also have experienced increased consumer demand throughout the year, including during the pandemic. We believe COVID-19 has accelerated consolidation in the cannabis industry. At the peak of the crisis, cannabis companies lost on average75% to 90% of their value, however, industry sales in 2021 increased 40% over 2020. As we move towards economic recovery from the pandemic, more state governments are looking to cannabis legalization to generate tax revenue and create jobs. During the November 2020 election, a total of7 initiatives in 5 states passed with overwhelming majority support, showing increased bi-partisan support. These initiatives bring the total number of states with legal, medical markets to 36 and adult-use markets to 17, plus Washington, DC. Various additional states have pending legislation aimed at expanding or adding legalization to their markets. In terms of job creation, over 107,059 jobs were added to the cannabis workforce in 2021, raising the total number of full-time equivalent jobs in the industry to 428,059.

The ultimate extent of the impact of the COVID-19 pandemic on our operational and financial performance will depend on certain developments, including the duration of the outbreak, the severity of the disease, responsive actions taken by public health officials, the impacts on our clients and our sales cycles, our ability to generate new business, the impacts on our clients, employee and industry events, and the effects on our vendors, all of which are uncertain and currently cannot be predicted. As a result, the extent to which the COVID-19 pandemic will continue to impact our financial condition or results of operations is uncertain. Due to our subscription-based business model, the effect of the COVID-19 pandemic may not be fully reflected in our results of operations until future periods. If the COVID-19 pandemic has a substantial impact on our employees', partners' or clients' productivity, our results of operations and overall financial performance may be harmed.

See the section entitled "Risk Factors" for further discussion of the impact and possible future impacts of the COVID-19 pandemic on our business.

Strategic Acquisitions

We have pursued and expect to continue to pursue acquisitions that align with our strategic objectives to build relevant content, technology, and expertise to best serve our current and future customers. Accordingly, the comparability of periods covered by our consolidated financial statements are, and in the future may be, affected by the impact of these acquisitions.

Components of Results of Operations

Revenue

We generate revenue from two primary sources: (1) software and (2) consulting services. Revenue from software comprised approximately 92%, 86% and 79% of our revenue for the year ended December 31, 2021, six months ended December 31, 2020, and year ended June 30, 2020, respectively. Revenue from consulting services comprised approximately 7%, 12% and 19% of our revenue for the year ended December 31, 2021, six months ended December 31,2020, and year ended June 30, 2020, respectively.

Software. Our software is solutioned for our key markets, SMB and enterprise customers. Our SMB customers become a natural funnel for our larger, more robust enterprise offerings built on SAP and Microsoft. In either market, software revenue is generated from subscriptions and services related to the use of our commercial software platforms, MJ Platform, Ample, Trellis, Viridian, and 365 Cannabis, our government regulatory platform, Leaf Data Systems, and the sale of business intelligence, data analytics and other software related services. Software contracts are generally quarterly or annual contracts paid monthly, quarterly, or annually in advance of service and cancellable upon 30 or 90 days' notice, although we do have many multi-year commercial software contracts. Leaf Data Systems contracts are generally multi-year contracts payable annually or quarterly in advance of service. Commercial software and Leaf Data Systems contracts generally may only be terminated early for breach of contract as defined in the respective agreements. Amounts that have been invoiced are initially recorded as deferred revenue or contract liabilities. Subscription revenue is recognized on a straight-line basis over the service term of the arrangement beginning on the date that our solution is made available to the customer and ending at the expiration of the subscription term.

Consulting Services. Consulting services revenue is generated by providing solutions for operators in the pre-application of licensures and pre-operational phases of development. These services include application and business plan preparation as they seek licenses to be granted. Consulting projects completed during the pre-application phase generally solidify us as the software vendor of choice for subsequent operational phases once the operator is granted the license. As a result, our consulting revenue is driven as new emerging states pass legislation, and as our client-operators gain licenses. Accordingly, we expect our consulting services to grow over time as more states emerge with legalization reforms.

Other Revenue. Our other revenue is derived primarily frompoint-of-sale hardware and other non-recurring revenue.

Cost of Revenue and Operating Expenses

Cost of Revenue

Our cost of revenue is derived from direct costs associated with operating our commercial and government regulatory software platforms and providing consulting services. The cost of revenue for our commercial and government regulatory platforms relates primarily to hosting and infrastructure costs and subcontractor expenses incurred in connection with certain government contracts. Consulting cost of revenue relates primarily to our employees' and consultants' salaries and other related compensation expenses. We record the cost of revenue using the direct cost method. This method requires the allocation of direct costs including support services and materials to the cost of revenue.

Product Development Expenses

Our product development expenses include salaries and benefits, nearshore contractor expenses, technology expenses, and other overhead related to the ongoing maintenance of our commercial and government regulatory software platforms and planning for new software development. Product development costs, other than software development expenses qualifying for capitalization, are expensed as incurred. Capitalized software development costs consist primarily of employee-related costs. We devote substantial resources to enhancing and maintaining our technology infrastructure, developing new and enhancing existing solutions, conducting quality assurance testing, and improving our core technology.

Sales and Marketing Expenses

Sales and marketing expense is primarily salaries and related expenses, including commissions, for our sales, marketing, and client service staff. We also categorize payments to partners and marketing programs as sales and marketing expenses. Marketing programs consist of advertising, events, such as trade shows, corporate communications, brand building, and product marketing activities. We plan to continue to invest in marketing and sales by expanding our domestic and international selling and marketing activities, building brand awareness, attracting new clients, and sponsoring additional marketing events. The timing of these marketing events will affect our marketing costs in a particular quarter.

We defer the portion of sales commissions that is considered a cost of obtaining a new contract with a customer in accordance with the revenue recognition standard and amortize these deferred costs over the period of benefit, currently one year. We expense the remaining sales commissions as incurred. The rates at which sales commissions are earned varies depending on a variety of factors, including the nature of the sale (new, renewal, or add-on service offering), the type of service or solution sold, and the sales channel.

General and Administrative Expenses

Our general and administrative expenses include salaries and benefits and other costs of departments serving administrative functions, such as executives, finance and accounting, human resources, public relations and investor relations. In addition, general and administrative expense includes non-personnel costs, such as professional fees and other supporting corporate expenses not allocated to cost of revenue, product and development or sales and marketing.

Total Other (Income) Expense, Net

Total other (income) expense, net consists of interest income on cash and cash equivalents, interest expense on our debt, quarterly remeasurement of the fair value of our convertible notes and derivative liability, foreign currency gains and losses, and other nonoperating gains and losses.

Results of Operations for the Year Ended December 31, 2021 (audited) compared with the Year Ended December 31, 2020 (unaudited)

The following table highlights the various sources of revenues and operating expenses for the year ended December 31, 2021 as compared to the year ended December 31, 2020 (unaudited). The results for the year ended December 31, 2020 were derived by combining the audited six-month transition period ended December 31, 2020 with Akerna's three-month period ended March 31, 2020 and three-month period ended June 30, 2020:

		Year Ended December 31,		Change		
		2021	2020 (unaudited)		Period over period	
Revenue						
Software	\$	18,998,409	\$ 11,963,028	\$	7,035,381	59%
Consulting		1,510,413	1,739,683		(229,270)	(13)%
Other revenue		176,152	196,257		(20,105)	(10)%
Total revenue		20,684,974	13,898,968		6,786,006	49%
Cost of revenue		8,119,487	6,355,825		1,763,662	28%
Gross profit		12,565,487	7,543,143		5,022,344	67%
Operating Expenses						
Product development		6,271,966	5,129,814		1,142,152	22%
Sales and marketing		9,108,173	8,085,897		1,022,276	13%
General and administrative		10,422,207	11,018,356		(596,149)	(5)%
Depreciation and amortization		5,735,150	3,223,844		2,511,306	78%
Impairment of long-lived assets		14,383,310	6,887,000		7,496,310	109%
Total operating expenses		45,920,806	34,344,911	1	1,575,895	34%
	_					
Loss from operations	\$	(33,355,319)	\$ (26,801,768) \$ ((6,553,551)	24%

nm - percentage change not meaningful

Total Revenue

Total revenue increased to \$20.7 million for the year ended December 31, 2021 from \$13.9 million for the year ended December 31, 2020, an increase of \$6.8 million, or 49%. The increase in total revenue was driven primarily by growth in our software business of \$7.0 million, or 59% compared to the prior period. The growth in software was offset by a decline in consulting revenue of \$0.2 million, or 13%, primarily a result of government shut-down related to COVID-19 as discussed below.

Software Revenue

Total software revenue increased to \$19.0 million for the year ended December 31, 2021 from \$12.0 million for the year ended December 31, 2020, for an increase of \$7.0 million, or 59%. Software revenue related to our enterprise offering, Viridian and 365 Cannabis, during the year ended December 31, 2021, were \$4.8 million compared to \$0 in the prior year and software revenue related to our non-enterprise offerings, which include MJ Platform, Ample, Trellis, Solo, and Leaf Data Systems, for the year ended December 31, 2021, were \$12.8 million compared to \$11.6 million in the prior year. There was also in an increase in partnership and data revenue which was \$1.4 million for the year ended December 31, 2021, compared to \$0.4 million for the same period in the prior year. Software revenue accounted for 92% and 86% of total revenue in 2021 and 2020, respectively. As indicated above, the increase in software revenue for the year ended December 31, 2021 was primarily attributable to our acquisitions of Ample, Viridian, and 365 Cannabis.

Consulting Revenue

Consulting revenue includes revenue generated from consulting services delivered to prospective and current cannabis, hemp and CBD businesses and business operators. Our consulting revenue was \$1.5 million for the year ended December 31, 2021 compared to \$1.7 million for the year ended December 31, 2020, a decrease of \$0.2 million, or 13%. Consulting revenue was 7% and 13% of total revenue for 2021 and 2020, respectively. Due to the nature of consulting revenue, our dependence on emerging market activity as well as the ongoing pandemic as a driver of demand, the percentage of consulting revenue over total revenue has varied from period to period depending on whether state legislation has expanded to allow new market entrants or growth of existing market participant operations.

Other Revenue

Other revenue includes retail/resale revenue, which was generated from point-of-sale hardware. Other revenue was\$0.2 million for the years ended December 31, 2021 and 2020 and was approximately 1% of total revenue for the years ended December 31, 2021 and 2020.

Cost of Revenue

Cost of revenue increased to \$8.1 million for the year ended December 31, 2021 from \$6.3 million for the year ended December 31, 2020, for an increase of \$1.8 million, or 28%. Total cost of revenue increased primarily as a result of our acquisitions of Ample, Viridian, and 365 Cannabis, the specific drivers being an increase in hosting expenses by \$1.6 million and fees for SAP and Microsoft licenses in the amount of \$0.5 million. These increases from acquisitions were partially offset by net savings of \$0.6 million in Leaf Data Systems contractor costs during the year ended December 31, 2021 compared to the year ended December 31, 2020.

Gross Profit

Gross profit increased to \$12.6 million for the year ended December 31, 2021 from \$7.5 million for the year ended December 31, 2020, for an increase of \$5.0 million, or 67%. Gross margin increased to 61% for the year ended December 31, 2021 from 54% for the year ended December 31, 2020. This improvement in gross margin was primarily due to operating synergies realized from our acquired assets, our ongoing initiatives to drive operating effectiveness and acquiring additional B2B customers, which have a higher gross margin.

Operating Expenses

Product Development

Product development expense increased to \$6.3 million for the year ended December 31, 2021 from\$5.1 million for the year ended December 31, 2020, for an increase of \$1.2 million, or 22%. Product development expense increased primarily due the acquisitions of Ample, Viridian, and 365 Cannabis which resulted in a \$1.4 million increase in salary-related expenses and a \$0.3 million increase in stock compensation expense for the year ended December 31, 2021 compared to year ended December 31, 2020. These increases were partially offset by savings on contractor expenses in the amount of \$0.7 million.

Sales and Marketing

Sales and marketing expense increased to \$9.1 million for the year ended December 31, 2021 from \$8.1 million for the year ended December 31, 2020, for an increase of \$1.0 million or 13%. The increase in sales and marketing expense is primarily related to the acquisitions of Ample, Viridian, and 365 Cannabis which resulted in an increase of \$1.0 million in salary-related expenses and a \$0.1 million increase in stock compensation expense for the year ended December 31, 2021 compared to year ended December 31, 2020. These increases were slightly offset by a reduction in external marketing consulting costs as we moved more of our marketing initiatives in house

General and Administrative

General and administrative expense decreased to \$10.4 million for the year ended December 31, 2021 from \$11.0 million for the year ended December 31, 2020, for a decrease of \$0.6 million, or 5%. This decrease was primarily related to a reduction in acquisition-related expenses of \$2.9 million, as we completed two acquisitions, Viridian and 365 Cannabis, during the year ended December 31, 2021 compared to three acquisitions, Solo, Trellis, and Ample, during 2020. There was also a decrease of \$0.6 million in rental expenses related to the termination of our office spaces in Denver in December 2020 and Toronto in June 2021, a decrease in financing fees of \$0.9 million, and a decrease of \$0.3 million in salary-related expenses as a direct result of cost-saving measures placed into service during 2020. Partially offsetting these decreases is a \$1.9 million increase in restructuring charges during 2021 attributable to a lease settlement agreement for relinquishing office space in Toronto and the related write off of leasehold improvements associated with the lease termination, as well as an increase of \$0.6 million for legal, audit, tax and other professional service fees as our business has continued to grow. We also had a \$2.0 million change in fair value of contingent consideration during the year ended December 31, 2020 related to the 2020 acquisitions.

Depreciation and Amortization

Depreciation and amortization expense increased to \$5.7 million for the year ended December 31, 2021 from \$3.2 million for the year ended December 31, 2020. The increase in amortization expense is entirely related to the acquired intangible assets from our acquisitions completed in calendar year 2021 and 2020.

Impairment of long-lived assets

Due to a continued decline in market conditions and declines in the operating results of our non-enterprise reporting unit, we recorded an impairment charge of \$14.4 million during the year ended December 31, 2021. During the year ended December 31, 2020, we recorded a \$6.9 million impairment charges (see Note 6 – Goodwill and Intangible Assets, Net to the consolidated financial statements for further discussion on the impairments recorded).

Results of Operations for the Six Months Ended December 31, 2020 (audited) compared with the Six Months Ended December 31, 2019 (unaudited)

The following table highlights the various sources of revenues and operating expenses for the six months ended December 31, 2020 as compared to the six months ended December 31, 2019:

	Si	x Months Ende			
	2020			Change Period over per	iod
Revenue			_		
Software	\$	6,766,985	\$ 4,802,654	\$ 1,964,331	41%
Consulting		916,099	1,556,363	(640,264)	(41)%
Other revenue		141,700	140,076	1,624	1%
Total revenue	· <u></u>	7,824,784	6,499,093	1,325,691	20%
Cost of revenue		3,141,041	2,994,940	146,101	5%
Gross profit		4,683,743	3,504,153	1,179,590	34%
Operating Expenses					
Product development		3,166,088	1,234,403	1,931,685	156%
Sales and marketing		3,928,028	3,725,012	203,016	5%
General and administrative		4,435,067	4,655,207	(220,140)	(5)%
Depreciation and amortization		2,007,237	104,667	1,902,570	nm
Impairment of long-lived assets		6,887,000	_	6,887,000	nm
Total operating expenses		20,423,420	9,719,289	10,704,131	nm
Loss from operations	\$	(15,739,677)	\$ (6,215,136)	\$ (9,524,541)	153%

nm - percentage change not meaningful

Total Revenue

Total revenue increased to \$7.8 million for the six months ended December 31, 2020 from \$6.5 million for the six months ended December 31, 2019, an increase of \$1.3 million, or 20%. The increase in total revenue was driven primarily by growth in our software business of \$2.0 million, or 41% compared to the prior period. The growth in software was offset by a decline in consulting revenue of \$0.6 million, or 41%, primarily a result of government shut-down related to COVID-19 as discussed below.

Software Revenue

Total software revenue increased to \$6.8 million for the six months ended December 31, 2020 from \$4.8 million for the six months ended December 31, 2019, for an increase of \$2.0 million, or 41%. Total software revenue increased \$2.8 million primarily as a result of the acquisition of Ample, Trellis and Solo, offset by a decline in government revenue of \$0.4 million, primarily as a result of these contracts maturing to a run-and-maintain mode, and a decline in other software revenue of \$0.4 million. Total software revenue accounted for 86% and 74% of total revenue for the six months ended December 31, 2020, and 2019, respectively.

Consulting Revenue

Consulting revenue includes revenue generated from consulting services delivered to prospective and current cannabis, hemp and CBD businesses and business operators. Our consulting revenue was \$0.9 million for the six months ended December 31, 2020 compared to \$1.6 million for the six months ended December 31, 2019, a decrease of \$0.6 million, or 41%. This decrease is mainly due to the impact of COVID-19. Consulting services are also correlated to state legalizations and other regulatory expansion activity. As a result, individual year-over-year comparisons may experience variability depending on the timing of recent legislative changes. During the COVID-19 pandemic and resulting shut-down, state legislatures have turned their focus to the pandemic and tabled work on cannabis legislation, which resulted in delays in our providing consulting services during the six months ended December 31, 2020. However, many state ballot initiatives were passed in the November 2020 election that provides for new medical or adult-use marijuana. We expect, despite the slowing of our consulting activity experienced during the pandemic, we will see increased demand for our services following the November 2020 election. As a sign consulting revenue is starting to rebound from the impacts of the COVID-19 pandemic, consulting revenue increased to \$0.6 million for the three months ended September 30, 2020, an increase of \$0.3 million, or 100%.

Consulting revenue was 12% and 24% of total revenue for the six months ended December 31, 2020 and 2019, respectively. Due to the nature of consulting revenue and our dependence on emerging market activity as well as the ongoing pandemic as a driver of demand, the quarters in which we recognize consulting revenue has varied from year to year depending on whether state legislation has expanded to allow new market entrants or growth of existing market participant operations.

Other Revenue

Other revenue includes retail/resale revenue, which was generated from point-of-sale hardware. Other revenue was \$0.1 million for the six months ended December 31, 2020 and \$0.1 million for the six months ended December 31, 2020 and 2019.

Cost of Revenue

Cost of revenue increased to \$3.1 million for the six months ended December 31, 2020 from \$3 million for the six months ended December 31, 2019, for an increase of \$0.1 million, or 5%. Total cost of revenue increased \$0.4 million as a result of the acquisition of Ample, Trellis and Solo, offset by a decline in professional services costs of \$0.3 million due to declining use of third-party consulting firms for our government solution as a result of these contracts maturing to a run-and-maintain mode.

Gross Profit

Gross profit increased to \$4.7 million for the six months ended December 31, 2020 from \$3.5 million for the six months ended December 31, 2019, for an increase of \$1.2 million, or 34%. Gross margin increased to 60% for the six months ended December 31, 2020 from 54% for the six months ended December 31, 2019. Total gross profit increased \$2.6 million as a result of the acquisition of Ample, Trellis and Solo, offset by the decline in consulting revenue of \$0.6 million, a decline government revenue of \$0.4 million, primarily as a result of these contracts maturing to a run-and-maintain mode and a decline in other software revenue of \$0.4 million.

Operating Expenses

Product Development

Product development expense increased to \$3.2 million for the six months ended December 31, 2020 from \$1.2 million for the six months ended December 31, 2019, for an increase of \$1.9 million, or 156%. The increase was due primarily to \$1.3 million in employee-related costs from higher headcount and other operating cost related to acquisitions. Stock compensation expense increased \$0.4 million compared to the prior period. Software costs increased \$0.3 million primarily a result of additional investment in information technology security and reporting tools and software hosting costs, including data infrastructure.

Sales and Marketing

Sales and marketing expense increased to \$3.9 million for the six months ended December 31, 2020 from \$3.7 million for the six months ended December 31, 2019, for an increase of \$0.2 million or 5%. Total sales and marketing expense increased \$0.8 million as a result of the acquisition of Ample, Trellis and Solo, offset by a decline other sales and marketing expense of \$0.6 million primarily a result of decreased travel costs and a reduction in customer event spend due primarily to cancelling all inperson customer activities and events as a result of the COVID-19 pandemic.

General and Administrative

General and administrative expense decreased to \$4.4 million for the six months ended December 31, 2020 from \$4.7 million for the six months ended December 31, 2019, for a decrease of \$0.2 million, or 5%. Total general and administrative expense increased \$0.6 million as a result of the acquisition of Ample, Trellis and Solo. Bad debt expense decreased \$0.6 million during the six months ended December 31, 2020, as compared to the six months ended December 31, 2019, due to our improvement in the overall quality of our revenue and client portfolio, and the enhancement of our sales and marketing team which has resulted in a steady decline in the number and amount of delinquent accounts. We recorded a benefit of \$1.0 million to reflect the estimated fair value of contingent consideration paid for our acquisition of Trellis and Ample. During 2020, we vacated certain leased offices in the U.S. following the dislocation of our workforce because of the COVID-19 pandemic. As a result, we recorded a restructuring charge of \$0.4 million, which was recorded in general and administrative expenses. Stock compensation expenses increased \$0.3 million for the six months ended December 31, 2020, as compared to the six months ended December 31, 2019

Depreciation and Amortization

Depreciation and amortization expense increased to \$2.0 million for the six months ended December 31, 2020 from \$0.1 million for the six months ended December 31, 2019. Amortization expense increased entirely as a result of acquired intangible assets from our acquisitions completed in calendar 2020.

As a result of delays in executing on strategic initiatives related to acquisitions completed in calendar 2020 we recorded a \$6.9 million impairment adjustment during the six months ended December 31, 2020. There were no similar charges during the six months ended December 31, 2019. A goodwill impairment charge of \$4.2 million was recorded related to our Ample reporting unit and an intangible asset charge of \$2.7 million was recorded for intangible assets acquired from our Solo transaction (see Note 6 – Goodwill and Intangible Assets, Net to the consolidated financial statements for further discussion on the impairments recorded).

Non-GAAP Financial Measures

In addition to our results determined in accordance with GAAP, we believe the following non-GAAP measures are useful in evaluating our operating performance. We use the following non-GAAP financial information to evaluate our ongoing operations and for internal planning and forecasting purposes. We believe that non-GAAP financial information, when taken collectively, may be helpful to investors because it provides consistency and comparability with past financial performance. However, non-GAAP financial information is presented for supplemental informational purposes only, has limitations as an analytical tool, and should not be considered in isolation or as a substitute for financial information presented in accordance with GAAP.

Investors are cautioned that there are material limitations associated with the use of non-GAAP financial measures as an analytical tool. Other companies, including companies in our industry, may calculate similarly titled non-GAAP measures differently or may use other measures to evaluate their performance, all of which could reduce the usefulness of our non-GAAP financial measures as tools for comparison. We attempt to compensate for these limitations by providing specific information regarding the GAAP items excluded from these non-GAAP financial measures.

Investors are encouraged to review the related GAAP financial measures and the reconciliation of these non-GAAP financial measures with their most directly comparable GAAP financial measures and not rely on any single financial measure to evaluate our business.

EBITDA and Adjusted EBITDA

We believe that EBITDA and Adjusted EBITDA, when considered with the consolidated financial statements determined in accordance with GAAP, are helpful to investors in understanding our performance and allows for comparison of our performance and credit strength to our peers. EBITDA and Adjusted EBITDA should not be considered alternatives to net loss as determined in accordance with GAAP as indicators of our performance or liquidity.

We define EBITDA as net loss before interest income and expense, changes in fair value of convertible notes, changes in fair value of derivative liabilities, provision for income taxes, and depreciation and amortization. We calculate Adjusted EBITDA as EBITDA further adjusted to exclude the effects of the following items for the reasons set forth below:

- impairment of long-lived assets, as this is a non-cash, non-recurring item, which effects the comparability of results of operations and liquidity,
- stock-based compensation expense, as this represents a non-cash charge and our mix of cash and share-based compensation may differ from other companies, which effects the comparability of results of operations and liquidity;
- costs incurred in connection with business combinations and mergers that are required to be expensed as incurred in accordance with GAAP, because business combination and merger related costs are specific to the complexity and size of the underlying transactions as well as the frequency of our acquisition activity these costs are not reflective of our ongoing operations;
- costs incurred in connection with non-recurring financing, including fees incurred as a direct result of electing the fair value option to account for our debt instruments:
- restructuring charges, which include costs to terminate a lease and the related writeoff of leasehold improvements and furniture, as we believe these costs are not representative of operating performance;
- gain on forgiveness of PPP loan, as this is a one-time forgiveness of debt that is not recurring across all periods and we believe inclusion of the gain is not representative of operating performance;
- equity in losses of investees because our share of the operations of investees is not representative of our own operating performance and may not be monetized for a number of years;
- and changes in the fair value of contingent consideration because these adjustments are not recurring across all periods and we believe these costs are not representative of operating performance.
- other non-operating expenses which includes a one-time gain on debt extinguishment and one-time loss on disposal of fixed assets which effects the comparability
 of results of operations and liquidity;

The reconciliation of net loss to EBITDA and Adjusted EBITDA is as follows:

	 Year Ended Dec	ember 31,	Six Months Ended	December 31,
	2021	2020	2020	2019
	(unaudited)	(unaudited)	(unaudited)	(unaudited)
Net Loss	\$ (31,328,711) \$	(26,888,791) \$	(16,219,296) \$	(3,757,952)
Interest expense (income)	1,531,497	161,646	193,084	(125,239)
Change in fair value of convertible notes	1,365,904	195,273	961,273	_
Change in fair value of derivative liability	(248,198)	(376,811)	((746,852))	(2,332,075)
Income tax expense (benefit)	(2,262,225)	31,185	200	104,667
Depreciation and amortization	5,735,150	3,223,844	2,007,237	_
EBITDA	\$ (25,206,583) \$	(23,653,654) \$	(13,804,354) \$	(6,110,599)
Impairment of long-lived assets	14,383,310	6,887,000	6,887,000	_
Stock-based compensation expense	1,967,817	1,871,069	1,197,589	492,650
Business combination and merger related costs	449,940	3,339,864	1,094,503	733,867
Non-recurring financing fees	458,691	1,316,984	139,594	_
Restructuring charges	2,419,908	490,146	490,146	_
Changes in fair value of contingent consideration	_	(1,991,000)	(993,000)	_
Gain on forgiveness of PPP loan	(2,234,730)	_	_	_
Equity in losses of investee	7,564	16,335	12,643	_
Other non-operating expense (income)	(186,177)	59,397	59,271	130
Adjusted EBITDA	\$ (7,940,260) \$	(11,663,859) \$	(4,916,608) \$	(4,883,952)

Going Concern and Management's Liquidity Plans

In accordance with the Financial Accounting Standards Board's ("FASB") standard on going concern, Accounting Standard Update, or ASU No. 2014-15, The Company assesses going concern uncertainty in its consolidated financial statements to determine if it has sufficient cash, cash equivalents and working capital on hand, including marketable equity securities, and any available borrowings on loans, to operate for a period of at least one year from the date the consolidated financial statements are issued, which is referred to as the "look-forward period" as defined by ASU No. 2014-15. As part of this assessment, based on conditions that are known and reasonably knowable to The Company, it will consider various scenarios, forecasts, projections, estimates and will make certain key assumptions, including the timing and nature of projected cash expenditures or programs, and its ability to delay or curtail expenditures or programs, if necessary, among other factors. Based on this assessment, as necessary or applicable, The Company makes certain assumptions around implementing curtailments or delays in the nature and timing of programs and expenditures to the extent The Company deems probable those implementations can be achieved and it has the proper authority to execute them within the look-forward period in accordance with ASU No. 2014-15.

The accompanying consolidated financial statements have been prepared on the basis that we will continue as a going concern, which contemplates realization of assets and the satisfaction of liabilities in the normal course of business. However, since our inception we have incurred recurring operating losses, used cash from operations, and relied on capital raising transactions to continue ongoing operations. During the year ended December 31, 2021, six months ended December 31, 2020, and year ended June 30, 2020, we incurred a loss from operations of \$3.3.4 million, \$15.7 million, and \$17.3 million, respectively, and used cash in operations of \$8.2 million, \$8.7 million, and \$14.3 million, respectively. At December 31, 2021, the Company had a working capital deficit of \$10.9 million with \$13.9 million in cash available to fund future operations. These factors raise substantial doubt, as defined by GAAP, about the ability of the Company to continue to operate as a going concern for the twelve months following the issuance of these consolidated financial statements. These consolidated financial statements do not include any adjustments related to the recoverability and classification of assets or the amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

On July 23, 2021, we entered into an Equity Distribution Agreement with Oppenheimer & Co. Inc. and A.G.P./Alliance Global Partners ("ATM Program"). Pursuant to the terms of the ATM Program, we may offer and sell from time to time, up to \$25 million of shares of our common stock. As of December 31, 2021, we have raised gross proceeds of \$1.9 million through the issuance of 556,388 shares through the ATM program. While no assurance can be provided that we will be able to raise further capital under the program, we intend to use the net proceeds from the sale of our shares of common stock, if any, for general corporate purposes, including working capital, marketing, product development, capital expenditures and merger and acquisition activities.

On October 5, 2021, we entered into a securities purchase agreement with thetwo institutional investors that held the Company's convertible notes issued in June of 2020 (the "2020 Notes") to sell senior secured notes in a private placement (the "Senior Convertible Notes"). The Senior Convertible Notes have an aggregate principal amount of \$20 million, an aggregate original issue discount of 10%, and rank senior to all our other outstanding and future indebtedness. Approximately \$3.3 million of the proceeds from the Senior Convertible Notes were used to payoff the 2020 Notes, which were then to be cancelled. The net proceeds from the issuance of the Senior Convertible Notes was approximately \$14.6 million, following the original issue discount and deductions for expenses and paydown of the 2020 Notes. These net proceeds will be used to support Akerna's ongoing growth initiatives and continued investment in current and future technology infrastructure. The Senior Convertible Notes are convertible into shares of common stock of Akerna at a conversion price of \$4.05 per share. The Senior Convertible Notes mature on October 5, 2024 and are to be repaid in monthly installments beginning on January 1, 2022. The Senior Convertible Notes can be repaid in common shares or cash.

Management's plan for the Company to continue as a going concern includes raising additional capital from our ATM program, subject to certain effects on the Senior Convertible Notes should we utilize the program, including resetting the conversion price of the Senior Convertible Notes should we raise more than \$5 million under the ATM program, settling our contingent consideration and Senior Convertible Notes in common stock rather than cash as it comes due, and implementing certain cost cutting strategies throughout the organization, while continuing to seek to grow our customer base and realize synergies as we continue to integrate our recent acquisitions. If the Company is unable to raise sufficient additional funds through the ATM Program, it will have to develop and implement a plan to extend payables, reduce expenditures, or scale back our business plan until sufficient additional capital is raised through other equity or debt offerings to support further operations. Such offerings may include the issuance of shares of common stock, warrants to purchase common stock, preferred stock, convertible debt or other instruments that may dilute our current stockholders.

The ability of the Company to continue as a going concern is dependent upon its ability to successfully accomplish the plans described in the preceding paragraph and eventually secure other sources of financing and attain profitable operations. We will require additional financing in the second quarter of 2022 to meet our ongoing operational working capital requirements and continue to meet the financial covenants of the Senior Convertible Notes. As noted above, we plan to meet those requirements in part through the use of our ATM Facility, but there are no guarantees that the ATM Facility will permit us to raise sufficient cash to meet our ongoing requirements. These factors raise substantial doubt about the Company's ability to continue as a going concern for one year from the issuance of the consolidated financial statements. If we are unable to raise sufficient capital we may have to reduce operations which could significantly affect our results of operations. If we fail to meet the financial covenants of the Senior Convertible Notes and cannot obtain a waiver from such provisions or otherwise come to an agreement with the holders of our debt, such holders may declare a default on the debt which could subject our assets to seizure and sale, negatively impacting our business. The accompanying consolidated financial statements do not include any adjustments relating to the recoverability and classification of assets and liabilities that might be necessary if the Company is unable to continue as a going concern.

Our corporate liquidity requirements primarily include payroll costs and corporate general and administrative expenses and our current sources of corporate liquidity include the cash on hand from our Senior Convertible Notes as well as the proceeds we anticipate from the access to our ATM Program.

Cash Flows

Our cash and restricted cash balance was \$14.4 million and \$18.3 million as of December 31, 2021 and 2020, respectively. Cash flow information are as follows:

Cash provided by (used in): 31, 2021 31, 2020	
Operating activities \$ (8,167,904) \$ (8,70	5,738)
Investing activities $(10,485,085)$ $(7,13)$	9,047)
Financing activities14,736,2529,53	2,380
Effect of change in exchange rates on cash and restricted cash 18,623	(2,783)
Net decrease in cash and restricted cash \$ (3,898,114) \$ (6,31	5,188)

Operating Activities

Our largest source of operating cash is cash collections from our customers for subscriptions to our products. Our primary uses of cash in operating activities are for employee-related expenditures, marketing expenses and third-party hosting costs. Net cash used in operating activities is impacted by our net loss adjusted for certain non-cash items, including depreciation and amortization expenses, change in fair value of convertible notes and derivative liabilities, stock-based compensation, deferred income taxes, as well as the effect of changes in operating assets and liabilities.

Net cash used in operating activities totaled \$8.2 million during the year ended December 31, 2021 and \$8.7 million during the six months ended December 31, 2020. For the year ended December 31, 2021, cash was consumed from operations by a net loss of \$31.3 million, less non-cash items of \$24.0 million and a net change in assets and liabilities of \$0.8 million. For the six months ended December 31, 2020, cash was consumed from operations by a net loss of \$16.2 million, less non-cash items of \$9.7 million and a net change in assets and liabilities of \$2.2 million.

Investing Activities

Our primary investing activities have consisted of capitalization of internal-use software necessary to deliver significant new features and functionality in our platform which provides value to our customers. As our business grows, we expect our capital expenditures to continue to increase. Other investing activities include cash outflows related to purchases of property and equipment, and from time-to-time, the cash paid for asset and business acquisitions.

Net cash used in investing activities totaled \$10.5 million during the year ended December 31, 2021, as a result of net cash paid as consideration for the 365 Cannabis acquisition and amounts invested in the development of our software products. Net cash used by investing activities during the six months ended December 31, 2020 was \$7.1 million as a result of amounts invested in the development of our software products and the net cash paid as consideration for the acquisition of Ample.

Financing Activities

Our financing activities have consisted primarily of proceeds from issuance of our common stock, issuances of convertible debt and proceeds from the exercise of warrants

Net cash provided by financing activities totaled \$14.7 million during the year ended December 31, 2021 and represents cash proceeds of \$18.0 million from the issuance of convertible debt in October 2021, proceeds from our ATM program in the amount of \$1.8 million partially offset by the value of shares withhold for tax withholdings and payments on our convertible debt in the amount of \$0.5 million and \$4.6 million, respectively. Net cash provided by financing activities was \$9.5 million for the six months ended December 31, 2020, of which \$12 million was related to the common stock offering that closed on October 30, 2020, partially offset by \$1.5 million in payments on our financing obligations and \$1.0 million of offering costs from issuing common stock.

ATM Program

On July 23, 2021, we entered into an Equity Distribution Agreement with Oppenheimer & Co. Inc. and A.G.P./Alliance Global Partners (the "ATM Program"). Pursuant to the terms of the Agreement, we may offer and sell from time to time, up to \$25 million of shares of our common stock. As of December 31, 2021, we have raised gross proceeds of \$1.9 million through the issuance of 556,388 shares through the ATM program.

Senior Secured Convertible Notes Issuance

On October 5, 2021, we entered into a Securities Purchase Agreement ("SPA") with the two institutional investors that held the Company's convertible notes issued on June 8, 2020 (the "2020 Notes") to sell a new series of senior secured notes in a private placement (the "Senior Convertible Notes"). The Senior Convertible Notes have an aggregate principal amount of \$20,000,000, an aggregate original issue discount of 10%, and rank senior to all our other outstanding and future indebtedness. Approximately \$3.3 million of the proceeds from the Senior Convertible Notes were used to payoff the 2020 Notes, which were then to be cancelled. The net proceeds from the issuance of the Senior Convertible Notes was approximately \$14.6 million, following the original issue discount and deductions for expenses and paydown of the 2020 Notes. These net proceeds will be used to support Akerna's ongoing growth initiatives and continued investment in current and future technology infrastructure. The Senior Convertible Notes are convertible into shares of common stock of Akerna at a conversion price of \$4.05 per share. The Senior Convertible Notes can be repaid in common shares or cash.

Maturity and Repayment Dates

The Senior Convertible Notes mature on October 5, 2024, or the Maturity Date. The principal amount is payable in monthly installments beginning on January 1, 2022. Unless deferred by the holder, on installment dates from January 1, 2022 through, and including, June 1, 2023, \$1.1 million in principal amount will be payable and on installment date July 1, 2023, \$0.2 million in principal amount will be payable. With respect to installment dates from August 1, 2023 through and including the maturity date of October 5, 2024, any deferred payments from prior installment dates will be payable. We may not prepay any portion of the principal amount nor interest, if any.

Interest

The Senior Convertible Notes are being sold with an original issue discount and do not bear interest except upon the occurrence of an Event of Default (described below), in which event the applicable rate will be 15.0% per annum.

Conversion

The Senior Convertible Notes are convertible at any time in whole or in part, at the option of the Note Holders, into shares of the common stock at a rate equal to the amount of principal, interest (if any) and unpaid late charges (if any), divided by a conversion price of \$4.05, or the Conversion Price. The Conversion Price is subject to standard adjustments in the event of any stock split, stock dividend, stock combination, recapitalization or other similar transaction.

In connection with the occurrence of Events of Default, the Note Holders will be entitled to convert all or any portion of the Senior Convertible Notes at an alternate conversion price equal to the lower of (i) the conversion price then in effect, and (ii) 80% of the lower of (x) the volume-weighted average price, or VWAP, of the common stock as of the trading day immediately preceding the applicable date of determination and (y) the quotient of (A) the sum of the VWAP of the common stock for each of the two trading days with the lowest VWAP of the common stock during theten consecutive trading day period ending on and including the trading day immediately prior to the applicable date of determination, divided by (B) two, but not less than the floor price of \$0.54

Events of Default

The Senior Convertible Notes are subject to certain customary events of default see Item 1A. "Risk Factors – Risks Related to our Convertible Debt" for a short discussion of events of default under the Senior Convertible Notes.

Off-Balance Sheet Arrangements

None.

Critical Accounting Policies and Significant Judgments and Estimates

Our consolidated financial statements and the related notes included in this Annual Report on Form 10-K are prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. To the extent that there are material differences between these estimates and actual results, our financial condition or results of operations would be affected. We evaluate our estimates and assumptions on an ongoing basis. Our estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Our actual results could differ from these estimates.

Critical accounting policies and estimates are those that we consider critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Revenue Recognition

We generate revenue through the sale of our cloud-based software and the delivery of consulting services. Revenues are recognized when control of these services is transferred to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those services. We determine revenue recognition through the following steps:

- · Identification of the contract, or contracts, with a customer
- Identification of the performance obligations in the contract
- · Determination of the transaction price
- · Allocation of the transaction price to the performance obligations in the contract
- · Recognition of revenue when, or as, we satisfy a performance obligation

We recognize subscription on a ratable basis over the contract term beginning on the date that our service is made available to the customer. Our subscription contracts range from twelve months to thirty-six months in duration, are billed in advance and are non-cancelable. We consider the access to our platform and related support services in a customer contract to be a series of distinct services which comprise a single performance obligation because they are substantially the same and have the same pattern of transfer. Amounts that have been invoiced are recorded in accounts receivable and in deferred revenue or revenue, depending on whether transfer of control to customers has occurred. We record contract liabilities to deferred revenue when cash payments are received or due. Deferred revenue consists of the unearned portion of customer billings.

Consulting revenue contracts have an initial set of proprietary deliverables that are provided to clients upfront, which is considered a separate performance obligation. As such, 30% of the contract value is recognized upfront when deliverables are provided, with the remaining recognized over the life of the contract as the consulting services are performed.

Capitalized Software Development Costs

We capitalize software development costs incurred to develop functionality for our commercial software platforms and government regulatory software platform, as well as certain upgrades and enhancements that are expected to result in enhanced functionality. These costs include personnel and related expenses for employees, costs of third-party contractors and other services directly associated with the development projects. We capitalize certain software development costs for new offerings as well as upgrades to our existing software platforms. We amortize these development costs over the estimated useful life of two to five years on a straight-line basis. We believe there are two key estimates within the capitalized software balance, which are the determination of the amounts to be capitalized and the determination of the useful life of the software.

We determine the amount of software development costs to be capitalized based on the amount of time spent by our developers on projects in the application stage of development. Costs associated with building or significantly enhancing our commercial software platform and our government regulatory platform are capitalized, while costs associated with planning new developments and maintaining our software platforms are expensed as incurred. There is judgment involved in estimating the time allocated to a particular project in the application stage as well as the determination of whether the project is an enhancement to the existing software or maintenance thereof. A significant change in the time spent on each project or the determination of the nature of projects involving existing software platforms could have a material impact on the amount capitalized and related amortization expense in subsequent periods.

We determined that a two-to-five-year life is appropriate for our capitalized software based on our best estimate of the useful life of the software after considering factors such as continuous developments in the technology, obsolescence and anticipated life of the service offering before significant upgrades. Based on our prior experience, software will generally remain in use for a minimum of two to five years before being significantly replaced or modified to keep up with evolving client needs. While we do not anticipate any significant changes to this two-to-five-year estimate, a change in this estimate could produce a material impact on our consolidated financial statements. For example, if we received information that indicated the useful life of all software was one year rather than two to five, our capitalized software balance would materially decrease, and our expense would materially increase.

Stock-Based Compensation

Stock-based compensation for all employee and non-employee stock-based awards, including restricted stock units and restricted stock, is measured at fair value on the date of grant and recognized over the service period. The fair value of restricted stock units and restricted stock are calculated based on the fair value of our common stock on the date of grant.

Stock-based compensation expense is recognized over the requisite service periods of awards, which is typically one to four years for restricted stock units and restricted stock. The estimated forfeiture rate applied to employee awards is based on historical forfeiture rates. The estimated number of stock-based awards that will ultimately vest requires judgment, and to the extent actual results, or updated estimates, differ from our current estimates, such amounts will be recorded as a cumulative adjustment in the period actual results are realized or estimates are revised. A higher forfeiture rate will result in an adjustment that will decrease stock-based compensation expense, whereas a lower forfeiture rate will result in an adjustment that will increase stock-based compensation expense. We do not apply a forfeiture rate assumption to value non-employee awards, given the nature of the services provided.

Business Combinations

We account for business acquisitions using the purchase method of accounting, in accordance with which assets acquired and liabilities assumed are recorded at their respective fair values at the acquisition date. Goodwill represents the excess of the purchase price over the estimated fair values of the assets acquired and liabilities assumed

Significant judgment is used in determining fair values of assets acquired and liabilities assumed, as well as intangible assets and their estimated useful lives. Fair value and useful life determinations are based on, among other factors, estimates of future expected cash flows attributable to the acquired intangible assets and appropriate discount rates used in computing present values. Management applied significant judgement in estimating the fair value of the acquired developed technology intangible asset, which involved significant estimates and assumptions with respect to forecasted revenue growth rates, the revenue attributable to the acquired intangible asset over its estimated economic life and the discount rate. These judgments may materially impact the estimates used in allocating the purchase price consideration to the fair value of assets acquired and liabilities assumed, as well as our current and future operating results. Actual results may vary from these estimates that may result in adjustments to goodwill and acquisition date fair values of assets and liabilities during a measurement period or upon a final determination of asset and liability fair values, whichever occurs first. Adjustments to the fair value of assets acquired and liabilities assumed made after the end of the measurement period are recorded within our operating results.

Contingent Consideration Liabilities

ASC 805 requires that contingent consideration be estimated and recorded at fair value as of the acquisition date as part of the total consideration transferred. Contingent consideration is an obligation of the acquirer to transfer additional assets or equity interests to the selling shareholders in the future if certain future events occur or conditions are met, such as the attainment of product development milestones. Contingent consideration also includes additional future payments to selling shareholders based on achievement of components of earnings, such as "earn-out" provisions or percentage of future revenues, including royalties paid to the selling shareholders based on a percentage of revenues generated from CHI and Sera Labs over the contractual period.

The fair value of milestone-based contingent consideration was determined using a scenario analysis valuation method which incorporates our assumptions with respect to the likelihood of achievement of revenue and gross margin percentage milestones, as defined in the Sera Labs Merger Agreement, credit risk, timing of the contingent consideration payments and a risk-adjusted discount rate to estimate the present value of the expected payments, all of which require significant management judgment and assumptions. Since the contingent consideration payments are based on nonfinancial, binary events, management believes the use of the scenario analysis method is appropriate.

The fair value of all contingent consideration after the Sera Labs Merger Date is reassessed by us as changes in circumstances and conditions occur, with the subsequent change in fair value recorded in our consolidated statements of operations. Changes in key assumptions can materially affect the estimated fair value of contingent consideration liabilities and, accordingly, the resulting gain or loss that we record in our consolidated financial statements. See Note 17 to our consolidated financial statements included elsewhere in this Report.

Impairment of Goodwill and Acquired Intangible Assets

Goodwill is not amortized but rather tested for impairment at least annually, or more frequently if events or changes in circumstances indicate that goodwill may be impaired. Goodwill impairment is recognized when the carrying value of goodwill exceeds our implied fair value. Goodwill is evaluated for impairment annually on October 31, and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable.

Acquisition intangible assets consist primarily of technology, customer relationships and trade names. Purchased intangible assets are recorded at fair value on the date of acquisition and amortized over their estimated useful lives following the pattern in which the economic benefits of the assets will be consumed, generally straight-line. We continually evaluate whether events and circumstances have occurred that indicate the remaining estimated useful life of amortizable long-lived assets may warrant revision or that the remaining balance may not be recoverable. When factors indicate that acquisition intangible assets should be evaluated for possible impairment, we use an estimate of the related undiscounted future cash flows over the remaining life of the amortizable long-lived assets in measuring whether they are recoverable. if the estimated undiscounted future cash flows do not exceed the carrying value of the asset, a loss is recorded as the excess of the asset's carrying value over its fair value.

Determining if an impairment triggering event has occurred (which may include, but is not limited to, a significant adverse change in customer demand or business climate or a significant decrease in expected cash flows) requires significant management judgement.

Senior Convertible Notes

We determined at the issuance of our Senior Convertible Notes to elect the fair value option. At issuance, the carrying value of the Senior Convertible Notes was recorded at estimated fair value calculated using probability weighted valuations of various settlement scenarios. The valuations of the various settlement outcomes were calculated using Monte Carlo simulation models and discounted cash flow models. We remeasure the Senior Convertible Notes to estimated fair value on each reporting period using valuation techniques similar to those applied at issuance. The change in the fair value resulting from changes in instrument specific credit risk is recognized as other comprehensive income with the remainder of the change recognized in current earnings. We believe key estimates used in accounting for the Senior Convertible Notes are the fair value at the reporting period end as well as the determination of the portion of the change resulting from instrument specific credit risk, including assumptions regarding the probability of various outcomes and the volatility of Akerna's common stock. A significant change in the probability weighting or the volatility could have a material impact to the carrying value of the Senior Convertible Notes as well as the amount of change recognized during the period in earnings.

Income Taxes

Income taxes are accounted for using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax basis of other assets and liabilities. We provide for income taxes at the current and future enacted tax rates and laws applicable in each taxing jurisdiction. We use a two-step approach for recognizing and measuring tax benefits taken or expected to be taken in a tax return and disclosures regarding uncertainties in income tax positions. We recognize interest and penalties related to income tax matters in selling, general and administrative expenses in the consolidated statement of operations.

We recognize deferred tax assets to the extent that its assets are more likely than not to be realized. In making such a determination, we consider all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax planning strategies, and results of recent operations. If we determine that we would be able to realize our deferred tax assets in the future in excess of its net recorded amount, we will make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes.

Going Concern Assessment

With the implementation of FASB's standard on going concern, ASU No. 2014-15, we assess going concern uncertainty in our consolidated financial statements to determine if we have sufficient cash and cash equivalents on hand and working capital, including available loans or lines of credit, if any, to operate for a period of at least one year from the date our consolidated financial statements are issued, which is referred to as the "look-forward period" as defined by ASU No. 2014-15. As part of this assessment, based on conditions that are known and reasonably knowable to us, we consider various scenarios, forecasts, projections, and estimates, and we make certain key assumptions, including the timing and nature of projected cash expenditures or programs, and our ability to delay or curtail those expenditures or programs, in necessary, among other factors. Based on this assessment, as necessary or applicable, we make certain assumptions around implementing curtailments or delays in the nature and timing of programs and expenditures to the extent we deem probable those implementations can be achieved and we have the proper authority to execute them within the look-forward period in accordance with ASU No. 2014-15.

Recent Accounting Pronouncements

Please refer to Note 2 - "Summary of Significant Accounting Policies" to the consolidated financial statements for our discussion about new accounting pronouncements adopted and those pending.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Not applicable

Item 8. Financial Statements and Supplementary Data.

The independent registered public accounting firm's report and, consolidated financial statements listed in the "Index to Financial Statements" on page F-1 of this Report are filed as part of this report and incorporated herein by this reference.

Item 9. Changes In and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) or Rule 15d-15(e) under the Securities Exchange Act of 1934, as amended, (the "Exchange Act")), as of the end of the period covered by this report. Based on such evaluation and as a result of the unremediated material weaknesses described below, our chief executive officer and chief financial officer have concluded that as of the end of such period, our disclosure controls and procedures were not effective in ensuring that: (i) information required to be disclosed by us in reports that we file or submit to the SEC under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in applicable rules and forms and (ii) material information required to be disclosed in our reports filed under the Exchange Act is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow for accurate and timely decisions regarding required disclosure.

Management determined that our disclosure controls and procedures were ineffective due to certain material weaknesses in our internal control over financial reporting as set forth below.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) and 15d-15(f) under the Exchange Act as a process designed by, or under the supervision of, our principal executive and principal financial officers and effected by our Board of Directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and includes those policies and procedures that:

- · pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of assets;
- · provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures are being made only in accordance with authorizations of our management and directors; and
- · provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risks that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of our internal control over financial reporting as of December 31, 2021. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control - Integrated Framework* (2013 Framework).

Based on this assessment, management concluded that as of December 31, 2021, we have not maintained effective internal control over financial reporting.

Material Weaknesses

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our financial statements will not be prevented or detected on a timely basis. Pursuant to management's review of disclosure controls and procedures and internal control over financial reporting, management determined that the following material weaknesses in our internal control over financial reporting and prevented management from concluding that our disclosure controls and procedures and internal controls over financial reporting were effective as of the end of the period covered by this report:

The Company's internal controls over financial reporting pertaining to certain key process areas of financial reporting were not properly designed and/or operating effectively.

Notwithstanding the identified material weaknesses described above, management believes that the consolidated financial statements included in this Report on Form 10-K are fairly presented in all material respects in accordance with GAAP, and our chief executive officer and chief financial officer have certified that, based on their knowledge, the consolidated financial statements included in this report fairly present in all material respects our financial condition, results of operations and cash flows for each of the periods presented in this report.

Remediation

We are in the process of executing our remediation plans to address the material weaknesses described above. During the year ended December 31, 2021, we have:

- · Hired additional experienced resources with the appropriate skills to fill key accounting functions.
- Engaged an outside firm to assist in the overall evaluation and documentation of the design and operating effectiveness of our internal controls over financial reporting and have remediated past deficiencies in the design of our internal control framework for certain key process areas including revenue, capitalized software, business combinations, intangibles, goodwill, stock-based compensation, general financial reporting, and information technology.
- Developed a long-term plan to both (i) complete the remediation of the design of our internal controls over financial reporting for our remaining process areas, and (ii) begin the remediation of the deficiencies in operating effectiveness of our internal controls over financial reporting across all process areas.

We believe these actions and the improvements we expect to achieve, when fully implemented, will strengthen our internal control over financial reporting and remediate the material weaknesses. However, the material weaknesses will not be considered fully remediated until the applicable controls operate for a sufficient period of time for management to test the results for operating effectiveness. While no assurance can be provided, the Company believes it will make further progress in remediating these material weaknesses during 2022.

Attestation Report of Independent Registered Public Accounting Firm

An attestation report on our internal control over financial reporting by our independent registered public accounting firm is not included herein, because, as an emerging growth company, we are exempt from the requirement to provide such report.

Changes in Internal Control over Financial Reporting

During the most recently completed fiscal quarter, there have been changes in our internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting, as described above in our remediation efforts.

Inherent Limitations on Effectiveness of Controls

Management recognizes that a control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud or error, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving our stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Item 9B. Other Information.

Not applicable.

Item 9C. Disclosure regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated by reference to the relevant information from our Proxy Statement to be filed in connection with our 2022 Annual Meeting of Shareholders within 120 days after the end of the fiscal year ended December 31, 2021.

Code of Business Conduct and Ethics

We have a code of business conduct and ethics, or the Code of Ethics, that applies to all of our employees, officers and directors of Akerna and our affiliated entities. The Code of Ethics is available on our website at www.akerna.com and we will post any amendments to, or waivers from, including an implicit waiver, the Code of Ethics on that website.

Item 11. Executive Compensation

The information required by this item is incorporated by reference to the relevant information from our Proxy Statement to be filed in connection with our 2022 Annual Meeting of Shareholders within 120 days after the end of the fiscal year ended December 31, 2021.

Item 12. Security Ownership of Certain Beneficial Owners and Management, and Related Stockholder Matters

The information required by this item is incorporated by reference to the relevant information from our Proxy Statement to be filed in connection with our 2022 Annual Meeting of Shareholders within 120 days after the end of the fiscal year ended December 31, 2021.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated by reference to the relevant information from our Proxy Statement to be filed in connection with our 2022 Annual Meeting of Shareholders within 120 days after the end of the fiscal year ended December 31, 2021.

Item 14. Principal Accounting Fees and Services

The information required by this item is incorporated by reference to the relevant information from our Proxy Statement to be filed in connection with our 2022 Annual Meeting of Shareholders within 120 days after the end of the fiscal year ended December 31, 2021.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

The following documents are filed as part of this Report:

(1) Financial Statements

Our audited consolidated balance sheets as of December 31, 2021, and 2020, the related consolidated statements of operations, comprehensive loss, changes in stockholders' equity and cash flows for the year ended December 31, 2021, the transitional six months ended December 31, 2020 and the year ended June 30, 2020, the footnotes thereto, and the report of Marcum LLP, independent registered public accounting firm, are filed herewith.

(2) Financial Schedules:

None.

Financial statement schedules have been omitted because they are either not applicable or the required information is included in the financial statements or notes hereto.

Exhibits

Exhibit

Number	Description
2.1+	Agreement and Plan of Merger, dated as of October 10, 2018, by and among MTech Acquisition Corp., Akerna Corp., Purchaser Merger Sub Inc.,
	Company Merger Sub LLC, MTech Sponsor LLC in the capacity as the Purchaser Representative thereunder, MJ Freeway LLC and Harold Handelsman in
	the capacity as the Seller Representative thereunder (incorporated by reference to Exhibit 2.1 to Akerna's Registration Statement on Form S-4 (File No.
	333-228220))
2.2	First Amendment to Agreement and Plan of Merger, effective as of April 17, 2019, by and among MTech Acquisition Corp., Akerna Corp., MTech
	Purchaser Merger Sub Inc., MTech Company Merger Sub LLC, MTech Sponsor LLC, in the capacity as the Purchaser Representative under the Merger
	Agreement, MJ Freeway LLC, and Jessica Billingsley, in the capacity as the Seller Representative under the Merger Agreement (incorporated by reference
	to Exhibit 2.2 to Akerna's Registration Statement on Form S-4 (File No. 333-228220))
2.3	Arrangement Agreement dated December 18, 2019 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Akerna on
	December 18, 2019)
2.4	Amendment to Arrangement Agreement dated February 28, 2020 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by
	Akerna on March 3, 2020)
2.5	Amendment No. 2 to Arrangement Agreement dated May 26, 2020 (incorporated by reference to Exhibit 4.3 to the Current Report on Form 8-K filed by
2.6	Akerna on July 8, 2020)
2.6	Amendment No. 3 to Arrangement Agreement dated June 1, 2020 (incorporated by reference to Exhibit 4.4 to the Current Report on Form 8-K filed by
2.1	Akerna on July 8, 2020)
3.1	Amended and Restated Certificate of Incorporation of Akerna Corp. (incorporated by reference to Exhibit 3.1 on Current Report on Form 8-K filed by
3.2*	Akerna on June 21, 2019) Amended and Restated Bylaws (incorporated by reference to Exhibit 3.1 to the Form 10-KT filed by Akerna on March 31, 2021)
3.3	Certificate of Designation for the Special Voting Share (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K filed by Akerna on July
2.4*	8, 2020) Description of Committee
3.4*	Description of Securities
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to Akerna's Registration Statement on Form S-4 (File No. 333-228220))
4.2	Specimen Warrant Certificate (incorporated by reference to Exhibit 4.2 to Akerna's Registration Statement on Form S-4 (File No. 333-228220))
4.3	Form of Warrant Agreement (incorporated by reference to Exhibit 4.3 on Current Report on Form 8-K filed by Akerna on June 21, 2019)

4.4	Stock Purchase Agreement, dated September 13, 2021, relating to the 365 Cannabis acquisition (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Akerna on September 21, 2021)
4.5	Securities Purchase Agreement, dated October 5, 2021 (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Akerna on October 5, 2021)
4.6	Form of Secured Convertible Notes (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by Akerna on October 5, 2021)
4.7	Form of Security Agreement (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed by Akerna on October 5, 2021)
4.8	Form of Guaranty Agreement (incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K filed by Akerna on October 5, 2021)
9.1	Voting and Exchange Trust Agreement (incorporated by reverence to Exhibit 9.1 to the Current Report on Form 8-K filed by Akerna on July 8, 2020)
10.1	Registration Rights Agreement, dated January 29, 2018, by and among MTech Acquisition Corp., MTech Sponsor LLC, and MTech Sponsor LLC (incorporated by reference to Exhibit 10.1 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.2	First Amendment to Registration Rights Agreement, dated June 17, 2019, by and among MTech Acquisition Corp., Akerna Corp. and MTech Sponsor LLC (incorporated by reference to Exhibit 10.2 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.3	Stock Escrow Agreement, dated January 29, 2018, by and among MTech Acquisition Corp., MTech Sponsor LLC, and Continental Stock Transfer & Trust Company (incorporated by reference to Exhibit 10.3 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.4	Amendment to Stock Escrow Agreement, dated June 17, 2019, by and among MTech Acquisition Corp., Akerna Corp., MTech Sponsor LLC, and Continental Stock Transfer & Trust Company (incorporated by reference to Exhibit 10.4 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.5	Non-Competition and Non-Solicitation Agreement dated June 17, 2019, by and among Jessica Billingsley, Akerna Corp., MJ Freeway and MTech Sponsor LLC (incorporated by reference to Exhibit 10.5 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.6	Non-Competition and Non-Solicitation Agreement dated June 17, 2019, by and among Amy Poinsett, Akerna Corp., MJ Freeway and MTech Sponsor LLC (incorporated by reference to Exhibit 10.6 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.7	Form of Indemnification Agreement of Officers and Directors (incorporated by reference to Exhibit 10.7 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.8	Form of Subscription Agreement, by and among MTech Acquisition Corp., Akerna Corp., and each purchaser signatory thereto (incorporated by reference to Exhibit 10.8 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.9	Form of Agreement to Transfer Sponsor Shares, by and among MTech Acquisition Corp., Akerna Corp., each transferee signatory thereto, and Continental Stock Transfer & Trust Company (incorporated by reference to Exhibit 10.9 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.10^	Employment Agreement, dated June 17, 2019, by and between Jessica Billingsley and Akerna Corp. (incorporated by reference to Exhibit 10.10 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.11^	MTech Acquisition Holdings Inc. 2019 Long Term Incentive Plan (incorporated by reference to Exhibit 10.5 to Akerna's Registration Statement on Form S-4 (File No. 333-228220))
10.12^	Form of Option Grant Certificate (incorporated by reference to Exhibit 10.12 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.13^	Form of Restricted Stock Unit Award (incorporated by reference to Exhibit 10.13 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.14^	Form of Stock Award (incorporated by reference to Exhibit 10.14 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.15^	Form of Restricted Stock Award (incorporated by reference to Exhibit 10.15 on Current Report on Form 8-K filed by Akerna on June 21, 2019)

10.16^	Form of Appreciation Rights Award (incorporated by reference to Exhibit 10.16 on Current Report on Form 8-K filed by Akerna on June 21, 2019)
10.17	Form of Lock-Up Agreement, by and among MTech Acquisition Holdings, Inc., MTech Sponsor LLC, and each holder signatory thereto (incorporated by
10.17	reference to Exhibit 10.3 to Akerna's Registration Statement on Form S-4 (File No. 333-228220))
10.18	Office Service Agreement, dated September 30, 2019, effective February 1, 2020 (incorporated by reference to Exhibit 10.1 to Akerna's Quarterly Report on
	Form 10-Q for the three months ended September 30, 2019)
10.19	Stock Purchase Agreement, dated November 25, 2018 (incorporated by reference to Exhibit 10.1 to Akerna's Current Report on Form 8-K filed on
	November 26, 2019)
10.20^	Letter Agreement effective September 23, 2019 between Akerna and Nina Simosko (incorporated by reference to Exhibit 10.1 to the Current Report on
	Form 8-K filed by Akerna on October 1, 2019)
10.21^	Letter Agreement effective September 26, 2019 between MJ Freeway, LLC and Ray Thompson (incorporated by reference to Exhibit 10.2 to the Current
10.22	Report on Form 8-K filed by Akerna on October 1, 2019)
10.22	Covenant Agreement effective September 23, 2019 between Akerna and Nina Simosko (incorporated by reference to Exhibit 10.3 to the Current Report of Form 8-K filed by Akerna on October 1, 2019)
10.23	Covenant Agreement between Akerna Corp. and Ray Thompson (incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K filed by
10.23	Akerna on October 1, 2019)
10.24^	Letter Agreement dated December 17, 2019 between Akerna and John Fowle (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K
	filed by Akerna on December 23, 2019)
10.25	Covenant Agreement dated December 17, 2019 between Akerna and John Fowle (incorporated by reference to Exhibit 10.2 to the Current Report on Form
	8-K filed by Akerna on December 23, 2019)
10.26	Exchangeable Share Support Agreement (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by Akerna on July 8, 2020)
10.27	Escrow Agreement (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by Akerna on July 8, 2020)
10.28	Rights Indenture (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed by Akerna on July 8, 2020)
10.29	Agreement and Plan of Reorganization with Navigator Acquisition Corp. dated March 10, 2021 (incorporated by reference to Exhibit 10.1 to the Form 10-Q
	filed by Akerna on May 21, 2021)
10.30	At-the-Market Distribution Agreement dated July 23, 2021 (incorporated by reference to Exhibit 10.1 to the Form 8-K filed by Akerna on July 23, 2021)
10.31	Form of Lock-Up Agreement (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K filed by Akerna on October 4, 2021)
10.32	Registration Rights Agreement with Sellers of 365 Cannabis (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K filed by Akerna
	on October 4, 2021)
10.33	Form of Registration Rights Agreement (incorporated by reference to Exhibit 10.5 to the Current Report on Form 8-K filed by Akerna on October 5, 2021)
10.34	Form of Voting Agreement (incorporated by reference to Exhibit 10.6 to the Current Report on Form 8-K filed by Akerna on October 5, 2021)
21.1*	Subsidiaries of Akerna Corp.
23.1*	Consent of Marcum LLP
31.1*	Chief Executive Officer certification under Section 302 of Sarbanes-Oxley Act of 2002
31.2*	Chief Financial Officer certification under Section 302 of Sarbanes-Oxley Act of 2002.
32.1*	Chief Executive Officer and Chief Financial Officer certification under Section 906 of Sarbanes-Oxley Act of 2002.
101*	Interactive Data Files

* Filed herewith

Item 16. Form 10-K Summary

None.

The exhibits and schedules to this Exhibit have been omitted pursuant to Item 601(b)(2) of Regulation S-K. The registrant hereby agrees to furnish a copy of any omitted schedules to the Commission upon request.

[^] Management contract or compensatory plan or arrangement

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Exchange Act, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

AKERNA CORP.

By: /s/ Jessica Billingsley

Name: Jessica Billingsley
Title: Chief Executive Officer
Date: March 31, 2022

Pursuant to the requirements of the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Jessica Billingsley Jessica Billingsley	Chief Executive Officer and Director (Principal Executive Officer)	March 31, 2022
/s/ John Fowle John Fowle	Chief Financial Officer (Principal Financial and Accounting Officer)	March 31, 2022
/s/ Scott Sozio Scott Sozio	- Director	March 31, 2022
/s/ Matthew R. Kane Matthew R. Kane	- Director	March 31, 2022
/s/ Tahira Rehmatullah Tahira Rehmatullah	- Director	March 31, 2022
/s/ Barry Fishman Barry Fishman	Director	March 31, 2022
	54	

AKERNA CORP.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm (PCAOB 00688); Marcum LLP, Los Angeles, CA	F-2
Consolidated Balance Sheets as of December 31, 2021 and 2020	F-3
Consolidated Statements of Operations for the Year Ended December 31, 2021, the Six Months Ended December 31, 2020 and the Year Ended June 30, 2020	F-4
Consolidated Statements of Comprehensive Loss for the Year Ended December 31, 2021, the Six Months Ended December 31, 2020 and the Year Ended June 30, 2020	F-5
Consolidated Statements of Changes in Equity for the Year Ended December 31, 2021, the Six Months Ended December 31, 2020 and the Year Ended June 30, 2020	F-6
Consolidated Statements of Cash Flows for the Year Ended December 31, 2021, the Six Months Ended December 31, 2020 and the Year Ended June 30, 2020	F-7
Notes to Consolidated Financial Statements	F-8
P. 1	
F-1	

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of Akerna Corp.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Akerna Corp. (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of operations, comprehensive loss, changes in equity and cash flows for the year ended December 31, 2021, for the transitional six months ended December 31, 2020, and for the year ended June 30, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for the year ended December 31, 2021, for the transitional six months ended December 31, 2020, and for the year ended June 30, 2020, in conformity with accounting principles generally accepted in the United States of America.

Explanatory Paragraph - Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As more fully described in Note 1, the Company has a significant working capital deficiency, has incurred significant losses and needs to raise additional funds to meet its obligations and sustain its operations. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Marcum llp

Marcum llp

We have served as the Company's auditor since 2018.

Los Angeles, CA March 31, 2022

AKERNA CORP. Consolidated Balance Sheets

	D	December 31, 2021	Do	ecember 31, 2020
Assets				
Current assets:	Φ.	12.024.265	Ф	17 040 640
Cash	\$	13,934,265	\$	17,840,640
Restricted cash		508,261		500,000
Accounts receivable, net		1,403,774		1,753,547
Prepaid expenses and other current assets		2,383,764		2,458,727
Total current assets		18,230,064		22,552,914
Fixed assets, net		153,151		1,193,433
Investment, net		226,101		233,664
Capitalized software, net		7,311,676		3,925,739
Intangible assets, net		21,609,794		7,388,795
Goodwill		46,942,681		41,874,527
Other noncurrent assets		9,700		41,674,327
Total assets	\$	94,483,167	•	77,169,072
Total assets		94,465,107	.	77,109,072
Liabilities and Equity				
Comment Park Platers				
Current liabilities:	¢.	(0(2 520	di .	2 100 576
Accounts payable, accrued expenses and other current liabilities	\$	6,063,520	3	3,188,576
Contingent consideration payable		6,300,000		
Deferred revenue		3,543,819		843,900
Current portion of long-term debt		13,200,000		11,707,363
Derivative liability		63,178		311,376
Total current liabilities	_	29,170,517		16,051,215
Long-term portion of deferred revenue		582,676		_
Long-term debt, less current portion		4,105,000		3,895,237
Deferred tax liabilities		675,291		
Deterred that industries		075,271		
Total liabilities	_	34,533,484		19,946,452
		, ,		, ,
Commitments and contingencies (Note 14)				
Equity:				
Preferred stock, par value \$0.0001; 5,000,000 shares authorized, 1 share special voting preferred stock issued and outstanding at				
December 31, 2021 and December 31, 2020		_		_
Special voting preferred stock, par value \$0.0001; 1 share authorized, issued and outstanding as of December 31, 2021 and				
December 31, 2020, with \$1 preference in liquidation; exchangeable shares, no par value, 309,286 and 2,667,349 shares issued and		2.266.029		20 405 210
outstanding as of December 31, 2021 and December 31, 2020, respectively (See Note 4)		2,366,038		20,405,219
Common stock, par value \$0.0001; 75,000,000 shares authorized, 31,001,884 and 19,901,248, issued and outstanding at		2 100		1 000
December 31, 2021 and December 31, 2020, respectively		3,100		1,990
Additional paid-in capital		146,027,258		94,086,433
Accumulated other comprehensive loss		61,523		(91,497)
Accumulated deficit		(88,508,236)		(57,179,525)
Total equity		59,949,683		57,222,620
Total liabilities and equity	\$	94,483,167	\$	77,169,072
The accompanying notes are an integral part of these consolidated financial statements.				

AKERNA CORP. Consolidated Statements of Operations

	1	Year Ended December 31, 2021		Six Months Ended eccember 31, 2020		ear Ended June 30, 2020
D						
Revenue	\$	18,998,409	\$	6,766,985	\$	9,976,580
Consulting	φ	1,510,413	Ф	916,099	Ф	2,379,947
Other revenue		176,152		141,700		216,749
Total revenue	_	20,684,974	_	7,824,784	_	12,573,276
Cost of revenue		8,119,487		3,141,041		6,209,724
Gross profit	_	12,565,487	_	4,683,743	_	6,363,552
Total Operating expenses:		12,000,107		1,005,715		0,505,552
Product development		6,271,966		3,166,088		3,206,310
Sales and marketing		9,108,173		3,928,028		7,792,480
General and administrative		10,422,207		4,435,067		11,320,715
Depreciation and amortization		5,735,150		2,007,237		1,315,898
Impairment of long-lived assets		14,383,310		6,887,000		_
Total operating expenses		45,920,806	_	20,423,420		23,635,403
Loss from operations		(33,355,319)		(15,739,677)		(17,271,851)
·				,		
Other (expense) income:						
Interest (expense) income, net		(1,531,497)		(193,084)		156,678
Change in fair value of convertible notes		(1,365,904)		(961,273)		766,000
Change in fair value of derivative liability		248,198		746,852		1,962,034
Gain on forgiveness of PPP Loan		2,234,730		_		_
Other (expense) income		186,420		(59,273)		(254)
Total other (expense) income		(228,053)		(466,778)		2,884,458
Net loss before income taxes and equity in losses of investee		(33,583,372)		(16,206,455)		(14,387,393)
Income tax (expense) benefit		2,262,225		(200)		(30,985)
Equity in losses of investee		(7,564)		(12,641)		(3,692)
Net Loss	\$	(31,328,711)	\$	(16,219,296)	\$	(14,422,070)
Net loss attributable to noncontrolling interest in consolidated subsidiary		_		8,815		849,759
Net loss attributable to Akerna shareholders	\$	(31,328,711)	\$	(16,210,481)	\$	(13,572,311)
Basic and diluted weighted average common shares outstanding		25,641,950		16,056,030		11,860,212
Basic and diluted net loss per common share	\$	(1.22)	\$	(1.01)	\$	(1.14)

The accompanying notes are an integral part of these consolidated financial statements

AKERNA CORP. Consolidated Statements of Comprehensive Loss

	Year Ended December 31,		Months Ended ecember 31,	7	Year Ended June 30,
	2021 2020		021 2020		2020
Net loss	\$ (31,328,711)	\$	(16,219,296)	\$	(14,422,070)
Other comprehensive (loss) income:					
Foreign currency translation	53,020		(21,497)		_
Unrealized (loss) gain on convertible notes	100,000		(133,000)		63,000
Comprehensive loss	(31,175,691)		(16,373,793)		(14,359,070)
Comprehensive loss attributable to the noncontrolling interest			8,815		849,759
Comprehensive loss attributable to Akerna shareholders	\$ (31,175,691)	\$	(16,364,978)	\$	(13,509,311)

The accompanying notes are an integral part of these consolidated financial statements.

AKERNA CORP. Consolidated Statements of Changes in Equity

	Co			Stock	Additional Paid-In	Accumulated Other Comprehensive	Accumulated S	Total	Noncontrolling Interest n Consolidated	Total
•	Special Voting Pro	eferred Stock	Shares	Amount	Capital	Loss	Deficit	Equity	Subsidiary	Equity
Balance as of June 30, 2019			40.500.546.0	4.050.0	46.000.000.00		(25 502 550)	10.515.50		10.515.501
Common stock issued upon warrant	— \$	_	10,589,746 \$	1,059 \$	46,299,233 \$	— \$	(27,582,558) \$	18,717,734 \$	— \$	18,717,734
exercise	_	_	369,311	37	4,247,028		_	4,247,065	_	4,247,065
Common stock issued in business combinations	_	_	2,299,650	230	20,081,236	_	_	20,081,466	_	20,081,466
Non-controlling interest in acquired subsidiary	_	_	_	_	_	_	_	_	5,554,011	5,554,011
Stock-based compensation amortization	_	_	_	_	1,253,234	_	_	1,253,234	_	1,253,234
Forfeitures of restricted shares	_	_	(54,901)	(5)	5	_	_	_	_	_
Change in fair value of Convertible Notes	_	_	_	_	_	63,000	_	63,000	_	63,000
Warrant Adjustment	_	_	_	_	21,738	_	_	21,738	_	21,738
Net loss	_	_	_	_	_	_	<u>(</u> 13,572,311)	(13,572,311)	<u>(</u> 849,759)	(14,422,070)
Balance as of June 30, 2020	_ s		13,203,806 \$	1,321 \$	71,902,474 \$	63,000 \$	(41,154,869) \$	30,811,926 \$	4,704,252 \$	35,516,178
Adoption of ASC 606 Adjustment						<u> </u>	185,825	185,825		185,825
Balance as of July 1, 2020	_ s		13,203,806 \$	1,321 \$	71,902,474 \$	63,000 \$	(40,969,044) \$	30,997,751 \$	4,704,252 \$	35,702,003
Issuance of common stock	_	_	5,000,000	500	11,031,880	_	_	11,032,380	_	11,032,380
Special voting preferred stock issued	2 204 574	25 202 400						25 202 400		25 202 400
in business combination Conversion of exchangable shares to	3,294,574	25,203,490	_	_	_	_		25,203,490		25,203,490
common	(627,225)	(4,798,271)	627,225	63	4,798,208	_	_	_	_	_
Acquisition of noncontrolling interest	_	_	800,000	80	4,695,357	_	_	4,695,437	(4,695,437)	_
Stock-based compensation amortization	_	_	_	_	1,298,540	_	_	1,298,540	_	1,298,540
Settlement of convertible debt	_	_	112,867	11	359,989	_	_	360,000	_	360,000
Restricted stock unit vesting	_	_	157,350	15	(15)	_	_	_	_	_
Unrealized loss (gains) on Convertible Notes	_	_		_	_	(133,000)	_	(133,000)	_	(133,000)
Foreign currency translation adjustments	_	_	_	_	_	(21,497)	_	(21,497)	_	(21,497)
Net loss						<u> </u>	(16,210,481)	(16,210,481)	(8,815)	(16,219,296)
Balance - December 31, 2020	2,667,349 \$	20,405,219	19,901,248 \$	1,990 \$	94,086,433 \$	(91,497)\$	(57,179,525) \$	57,222,620 \$	— \$	57,222,620
Conversion of Exchangeable Shares	(2.250.062)	(10.020.101)	2.250.062	227	10.020.044					
to common stock Settlement of convertible debt	(2,358,063)	(18,039,181)	2,358,063	237	18,038,944		_	_	_	
Shares withheld for withholding	_	_	3,094,129	309	11,610,277	_	_	11,610,586	_	11,610,586
taxes	_	_	(121,786)	(12)	(520,383)		_	(520,395)	_	(520,395)
Shares issued in connection with Viridian Acquisition	_	_	1,031,000	103	6,187,897	_	_	6,188,000	_	6,188,000
Shares issued in connection with Asset Purchase		_	83,333	8	299,992		_	300,000	_	300,000
Shares issued in connection with 365 Cannabis Acquisition	_	_	3,571,429	357	11,995,704	=	_	11,996,061	_	11,996,061
Stock-based compensation	_			_	2,070,358		_	2,070,358		2,070,358
Shares issued in connection with the ATM program	_	_	556,388	56	1,828,063	_	_	1,828,119	_	1,828,119
Settlement of liabilities with shares	_	_	101,705	10	430,015		_	430,025	_	430,025
Restricted stock vesting	_	_	427,711	42	(42)		_		_	
Forfeitures of restricted shares		_	(1,336)	_	_	_	_	_		
Foreign currency translation			(1,550)							
adjustments Unrealized loss (gains) on	_	_	_	_	_	53,020	_	53,020	_	53,020
convertible notes		_	_	_	_	100,000	_	100,000		100,000
Net loss							(31,328,711)	(31,328,711)		(31,328,711)
Balance – December 31, 2021	309,286 \$	2,366,038	31,001,884 \$	3,100 \$	146,027,258 \$	61,523 \$	(88,508,236) \$	59,949,683 \$	<u> </u>	59,949,683

The accompanying notes are an integral part of these consolidated financial statements.

AKERNA CORP. Consolidated Statements of Cash Flows

Year Ended December 31, Six Months Ended December 31, Year Ended June December 31, 2021 2020 2020	December 31,	
2020 2020		Cash flows from operating activities
\$ (31,328,711) \$ (16,219,296) \$ (14,422,070)	\$ (31,328,711)	Net Loss Adjustment to reconcile net loss to net cash used in operating activities
7,564 12,643 3,692	7,564	Equity in losses of investment
556,890 72,832 1,094,507		Bad debt expense
2,070,359 1,197,589 1,166,130	2,070,359	Stock-based compensation expense
1,045,179 — —	1,045,179	Loss on write off of fixed assets
(2,234,730) — —	(2,234,730)	Gain on forgiveness of PPP loan
5,735,150 2,007,237 1,315,898	5,735,150	Depreciation and amortization
492,683 228,766 —		Amortization of deferred contract costs
1,009,331 32,727 —		Non-cash interest expense
(3,312) — — —		Foreign currency gain
14,383,310 6,887,000 —		Impairment of long-lived assets
(186,177) — — —	(186,177)	Gain on debt extinguishment
— 84,835 —	_	Loss on sale of fixed asset
	1 365 904	Debt issuance costs
(248,198) (746,852) (1,962,034		Change in fair value of convertible notes
$\begin{array}{cccc} (246,196) & (140,032) & (1,902,032) \\ & - & (993,000) & (998,000) \end{array}$	(248,198)	Change in fair value of derivative liability Change in fair value of contingent consideration
— (373,000) (378,000)	_	Changes in operating assets and liabilities:
849,785 1,008,775 (1,621,262	849 785	Accounts receivable
(8,988) (689,729) (592,807	· · · · · · · · · · · · · · · · · · ·	Prepaid expenses and other current assets
— 41,925 (58,925		Other assets
1,610,470 (2,498,375) 1,602,751	1,610,470	Accounts payable, accrued expenses and other current liabilities
(2,274,295) — —		Deferred tax liabilities
(1,010,118) (94,088) (286,922	(1,010,118	Deferred revenue
(8,167,904) (8,705,738) (14,347,652	(8,167,904)	Net cash used in operating activities
		·
		Cash flows from investing activities
(5,427,230) (1,847,710) (3,102,728		Developed software additions
(39,263) (12,203) (156,636		Furniture, fixtures, and equipment additions
(5,018,592) (5,279,134) (88,720	(5,018,592)	Cash paid for business combinations, net of cash acquired Investment in equity method investee
<u> </u>	(10.485.085)	Net cash used by investing activities
(10,100,000)	(10,102,002)	Net eash used by investing activities
		Cash flows from financing activities
(520,395) — —	(520,395)	Value of shares withheld related to tax withholdings
1,828,119 — —	1,828,119	Proceeds from stock offering, net
18,000,000 — 17,164,600	18,000,000	Proceeds from the issuance of long term debt
		Payments of principal amounts of debt
$(4,571,472) \qquad (1,500,000) \qquad -$	(4,571,472)	Payments on debt
— — (1,177,390		Cash paid for debt issuance costs
	_	Proceeds from the exercise of warrants
— 12,000,000 — (967,620) —		Proceeds from the issuance of common stock Offering costs from the issuance of common stock
14,736,252 9,532,380 20,234,275	14 736 252	Net cash provided by financing activities
18,623 (2,783) —		Effect of exchange rate changes on cash and restricted cash
\$ (3,898,114) \$ (6,315,188) \$ 2,288,539		Net (decrease) increase in cash and restricted cash
18,340,640 24,655,828 22,367,289		Cash and restricted cash - beginning of period
\$ 14,442,526 \$ 18,340,640 \$ 24,655,828		Cash and restricted cash - end of period
\$ 10,570 \$ - \$		Cash paid for taxes
\$ 507,941 \$ 150,000 \$ —		Cash paid for interest
105.026		Supplemental disclosure of non-cash investing and financing activity:
— 185,826 — 42 15 —	42	Adjustments due to the adoption of ASC 606 Vesting of restricted stock units
11,610,586 327,273 —		Settlement of convertible notes in common stock
36,915 100,951 87,104		Stock-based compensation capitalized as software development
— 4,695,437 —	_	Acquisition of noncontrolling interest
554,127 189,198 —	554,127	Capitalized software included in accrued expenses
	10 020 044	
	18,038,944	
	430.015	
8 – –		Shares issued in connection with an assetpurchase
		Assets acquired and liabilities assumed in business combinations:
527,346 445,269 —		Cash
408,973 596,233 27,860	408,973	rrepaid expenses and other current assets
- 4,695,437 554,127 189,198 - 25,203,490 18,038,944 4,798,271 - 14,300 430,015 - 8 -	554,127 18,038,944 430,015 8 527,346 1,041,912	Acquisition of noncontrolling interest Capitalized software included in accrued expenses Special voting preferred stock issued in business combination Conversion of exchangeable shares to common stock Adjustment to Trellis purchase price allocation Settlement of liabilities with common stock Shares issued in connection with an assetpurchase Assets acquired and liabilities assumed in business combinations:

Fixed assets	93,365	1,326,996	2,410
Intangible assets	16,933,000	3,795,000	8,010,000
Goodwill	19,451,464	25,805,615	20,254,309
Accounts payable and accrued liabilities	1,174,961	805,114	1,441,062
Deferred tax liabilities	2,949,586	_	_
Deferred revenue	4,301,514	549,311	31,220
Contingent consideration	6,300,000	604,000	1,387,000

The accompanying notes are an integral part of these consolidated financial statements.

Note 1 -Description of Business, Liquidity, and Capital Resources

Description of Business

Akerna Corp., herein referred to as we, us, our or Akerna, through our wholly-owned subsidiaries MJ Freeway, LLC, or MJF, Trellis Solutions, Inc., or Trellis, Ample Organics, Inc, or Ample, solo sciences, inc., or Solo, Viridian Sciences Inc., or Viridian, and The NAV People, Inc. d.b.a. 365 Cannabis, or 365 Cannabis, provides enterprise software solutions that enable regulatory compliance and inventory management. Our proprietary, broad and growing suite of solutions are adaptable for industries in which interfacing with government regulatory agencies for compliance purposes is required, or where the tracking of organic materials from seed or plant to end products is desired. We develop products intended to assist states in monitoring licensed businesses' compliance with state regulations and to help state-licensed businesses operate in compliance with such law. We provide our commercial software platform, MJ Platform®, Trellis®, Ample, Viridian and 365 Cannabis to state-licensed businesses, and our regulatory software platform, Leaf Data Systems®, to state government regulatory agencies. Through Solo, we provide an innovative, next-generation solution for state and national governments to securely track product and waste throughout the supply chain with solo*TAGTM. The integration of MJ Platform® and solo*CODETM results in technology for consumers and brands that brings a consumer-facing mark designed to highlight the authenticity and signify transparency. Our Viridian and 365 Cannabis offerings are considered enterprise offerings and all other solutions are considered non-enterprise offerings that meet the needs of our small and medium business customers.

We consult with clients on a wide range of areas to help them successfully maintain compliance with state laws and regulations. We provide project-focused consulting services to clients who are initiating or expanding their cannabis business operations or are interested in data consulting engagements with respect to the legal cannabis industry. Our advisory engagements include service offerings focused on compliance requirement assessments, readiness and best practices, compliance monitoring systems, application processes, inspection readiness, and business plan and compliance reviews. We typically provide our consulting services to clients in emerging markets that are seeking consultation on newly introduced licensing regimes and assistance with the regulatory compliant build-out of operations.

Going Concern and Management's Liquidity Plans

In accordance with the Financial Accounting Standards Board's ("FASB") standard on going concern, Accounting Standard Update, or ASU No. 2014-15, The Company assesses going concern uncertainty in its consolidated financial statements to determine if it has sufficient cash, cash equivalents and working capital on hand, including marketable equity securities, and any available borrowings on loans, to operate for a period of at least one year from the date the consolidated financial statements are issued, which is referred to as the "look-forward period" as defined by ASU No. 2014-15. As part of this assessment, based on conditions that are known and reasonably knowable to The Company, it will consider various scenarios, forecasts, projections, estimates and will make certain key assumptions, including the timing and nature of projected cash expenditures or programs, and its ability to delay or curtail expenditures or programs, if necessary, among other factors. Based on this assessment, as necessary or applicable, The Company makes certain assumptions around implementing curtailments or delays in the nature and timing of programs and expenditures to the extent The Company deems probable those implementations can be achieved and it has the proper authority to execute them within the look-forward period in accordance with ASU No. 2014-15.

The accompanying consolidated financial statements have been prepared on the basis that we will continue as a going concern, which contemplates realization of assets and the satisfaction of liabilities in the normal course of business. However, since our inception we have incurred recurring operating losses, used cash from operations, and relied on capital raising transactions to continue ongoing operations. During the year ended December 31, 2021, six months ended December 31, 2020, and year ended June 30, 2020, we incurred a loss from operations of \$33.4 million, \$15.7 million, and \$17.3 million, respectively, and used cash in operations of \$8.2 million, \$8.7 million, and \$14.3 million, respectively. At December 31, 2021, the Company had a working capital deficit of \$10.9 million with \$13.9 million in cash available to fund future operations. These factors raise substantial doubt, as defined by generally accepted accounting principles in the United States of America ("GAAP"), about the ability of the company to continue to operate as a going concern for the twelve months following the issuance of these consolidated financial statements. These consolidated financial statements do not include any adjustments related to the recoverability and classification of assets or the amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

On July 23, 2021, we entered into an Equity Distribution Agreement with Oppenheimer & Co. Inc. and A.G.P./Alliance Global Partners ("ATM Program"). Pursuant to the terms of the ATM Program, we may offer and sell from time to time, up to \$25 million of shares of our common stock. As of December 31, 2021, we have raised gross proceeds of \$1.9 million through the issuance of 556,388 shares through the ATM program. While no assurance can be provided that we will be able to raise further capital under the program, we intend to use the net proceeds from the sale of our shares of common stock, if any, for general corporate purposes, including working capital, marketing, product development, capital expenditures and merger and acquisition activities.

On October 5, 2021, we entered into a securities purchase agreement with thetwo institutional investors that held the Company's convertible notes issued in June of 2020 (the "2020 Notes") to sell senior secured notes in a private placement (the "Senior Convertible Notes"). The Senior Convertible Notes have an aggregate principal amount of \$20 million, an aggregate original issue discount of 10%, and rank senior to all our other outstanding and future indebtedness. Approximately \$3.3 million of the proceeds from the Senior Convertible Notes were used to payoff the 2020 Notes, which were then to be cancelled. The net proceeds from the issuance of the Senior Convertible Notes was approximately \$14.6 million, following the original issue discount and deductions for expenses and paydown of the 2020 Notes. These net proceeds will be used to support Akerna's ongoing growth initiatives and continued investment in current and future technology infrastructure. The Senior Convertible Notes are convertible into shares of common stock of Akerna at a conversion price of \$4.05 per share. The Senior Convertible Notes mature on October 5, 2024 and are to be repaid in monthly installments beginning on January 1, 2022. The Senior Convertible Notes can be repaid in common shares or cash.

Management's plan for the Company to continue as a going concern includes raising additional capital from our ATM program, subject to certain effects on the Senior Convertible Notes should we utilize the program, including resetting the conversion price of the Senior Convertible Notes should we raise more than \$5 million under the ATM program, settling our contingent consideration and Senior Convertible Notes in common stock rather than cash as it comes due, and implementing certain cost cutting strategies throughout the organization, while continuing to seek to grow our customer base and realize synergies as we continue to integrate our recent acquisitions. If the Company is unable to raise sufficient additional funds through the ATM Program, it will have to develop and implement a plan to extend payables, reduce expenditures, or scale back our business plan until sufficient additional capital is raised through other equity or debt offerings to support further operations. Such offerings may include the issuance of shares of common stock, warrants to purchase common stock, preferred stock, convertible debt or other instruments that may dilute our current stockholders.

The ability of the Company to continue as a going concern is dependent upon its ability to successfully accomplish the plans described in the preceding paragraph and eventually secure other sources of financing and attain profitable operations. We will require additional financing in the second quarter of 2022 to meet our ongoing operational working capital requirements and continue to meet the financial covenants of the Senior Convertible Notes. As noted above, we plan to meet those requirements in part through the use of our ATM Facility, but there are no guarantees that the ATM Facility will permit us to raise sufficient cash to meet our ongoing requirements. These factors raise substantial doubt about the Company's ability to continue as a going concern for one year from the issuance of the consolidated financial statements. If we are unable to raise sufficient capital we may have to reduce operations which could significantly affect our results of operations. If we fail to meet the financial covenants of the Senior Convertible Notes and cannot obtain a waiver from such provisions or otherwise come to an agreement with the holders of our debt, such holders may declare a default on the debt which could subject our assets to seizure and sale, negatively impacting our business. The accompanying consolidated financial statements do not include any adjustments relating to the recoverability and classification of assets and liabilities that might be necessary if the Company is unable to continue as a going concern.

Note 2 - Summary of Significant Accounting Policies

Basis of Presentation

The accompanying consolidated financial statements have been prepared in accordance with GAAP.

In September 2020, the Company changed its fiscal year from June 30 to December 31. As a result, this annual report on Form 10-K includes the consolidated financial statements as of December 31, 2021 and December 31, 2020 and for (i) the calendar year ended December 31, 2021, (ii) the transitional six months ended December 31, 2020; and (iii) the fiscal year ended June 30, 2020.

Principles of Consolidation

Our accompanying consolidated financial statements include the accounts of Akerna, our wholly-owned subsidiaries, and those entities in which we otherwise have a controlling financial interest. All significant intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of our consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts included in the consolidated financial statements and accompanying notes thereto. Our most significant estimates and assumptions are related to the valuation of acquisition-related assets and liabilities, capitalization of internal costs associated with software development, fair value measurements, impairment assessments, loss contingencies, valuation allowance associated with deferred tax assets, stock based compensation expenses, and useful lives of long-lived intangible assets. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Accordingly, actual results could differ from those estimates.

Reclassifications

Certain prior year amounts have been reclassified to conform to the current year presentation.

Foreign Currency

The functional currency of the Company's non-U.S. operations is the local currency. Monetary assets and liabilities denominated in foreign currencies are translated into U.S. dollars at exchange rates prevailing at the balance sheet dates. Non-monetary assets and liabilities are translated at the historical rates in effect when the assets were acquired or obligations incurred. Revenue and expenses are translated into U.S. dollars using the average rates of exchange prevailing during the period. Translation gains or losses are included as a component of accumulated other comprehensive loss in stockholders' equity. Gains and losses resulting from foreign currency transactions are recognized as other income (expense).

Cash and Cash Equivalents

We consider liquid instruments purchased with an original maturity of three months or less to be cash equivalents. There were no cash equivalents as of December 31, 2021, and 2020. We continually monitor our positions with, and the credit quality of, the financial institutions with which we invest. As of the balance sheet date, and periodically throughout the year, we have maintained balances in various operating accounts in excess of federally insured limits.

Restricted Cash

Restricted cash consists of funds that are contractually or legally restricted as to usage or withdrawal and is presented separately from cash and cash equivalents on our consolidated balance sheets. Our restricted cash serves as collateral for a letter of credit.

Accounts Receivable, Net

We maintain an allowance for doubtful accounts equal to the estimated uncollectible amounts based on our historical collection experience and review of the current status of trade accounts receivable. Receivables are written-off and charged against the recorded allowance when we have exhausted collection efforts without success. The allowance for doubtful accounts was \$0.3 million and \$0.2 million as of December 31, 2021, and 2020, respectively.

The allowance for doubtful accounts consists of the following activity:

	December 31,		Months Ended ecember 31,
			2020
Allowance for doubtful accounts, balance at beginning of period	\$	153,500	\$ 208,422
Bad debt expense		556,890	72,832
Write-off uncollectable accounts		(393,306)	(127,754)
Allowance for doubtful accounts, balance at end of period	\$	317,084	\$ 153,500

Concentrations of Credit Risk

We grant credit in the normal course of business to customers in the United States. We periodically perform credit analysis and monitor the financial condition of our customers to reduce credit risk.

During the year ended December 31, 2021, the six months ended December 31, 2020 and the year ended June 30, \(\textbf{0}20, \) one government client accounted for 11%, 14% and 25% of total revenues, respectively. As of December 31, 2020, two government clients accounted for a total of 36% of net accounts receivable.

Property and Equipment

Property and equipment are recorded at cost. Expenditures for major additions and improvements are capitalized. Depreciation and amortization is provided over the estimated useful lives of the related assets using the straight-line method.

The estimated useful lives for significant property and equipment categories are generally as follows:

Furniture and computer equipment

3 to 7 years

Leasehold improvements

Lesser of remaining lease term or useful life

Repairs and maintenance costs are expensed as incurred.

Warrant Liabilities

Company's Private Warrants are not indexed to the Company's common stock in the manner contemplated by ASC Section 815-40. As a result, these warrants are precluded from equity classification and are recorded as derivative liabilities. At the end of each reporting period, changes in fair value during the period are recognized within the condensed consolidated statements of operations and comprehensive loss. We will continue to adjust the warrant liability for changes in the fair value until the earlier of a) the exercise or expiration of the warrants or b) the redemption of the warrants, at which time the warrants will be reclassified to additional paid-in capital.

Investment

We hold an equity security in Zoltrain, Inc. (Zoltrain) for which the fair value is not readily determinable. Accordingly, we measure this investment at cost minus impairment, plus or minus changes resulting from observable price changes. When indicators of impairment exist, we estimate the fair value and record an impairment charge if the carrying value of the investment exceeds its estimated fair value. Any impairment charges are recorded in other (expense) income, net, in our consolidated statements of operations. Prior to the quarter ended September 30, 2021, we had determined we could exert significant influence over Zoltrain's operations through voting rights and representation on the board of directors and we accounted for our investment in Zoltrain using the equity method of accounting, recording our share in the investee's earnings and losses in the consolidated statement of operations.

Intangible Assets Acquired through Business Combinations

Intangible assets are amortized over their estimated useful lives. We evaluate the estimated remaining useful life of our intangible assets when events or changes in circumstances indicate an adjustment to the remaining amortization may be needed. We similarly evaluate the recoverability of these assets upon events or changes in circumstances indicate a potential impairment. Recoverability of these assets is measured by comparing the carrying amount of each asset to the future undiscounted cash flows the asset is expected to generate. If the undiscounted cash flows used in the test for recoverability are less than the carrying amount of these assets, the carrying amount of such assets is reduced to fair value. We recorded an impairment of \$2.7 million during the six months ended December 31, 2020 related to the intangible assets acquired in the Solo transaction. There were no impairments of intangible assets during the years ended December 31, 2021 or June 30, 2020. See Note 6 – Goodwill and Intangible Assets, Net for further discussion on the impairment.

Goodwill Impairment Assessment

Goodwill represents the excess purchase consideration of an acquired business over the fair value of the net tangible and identifiable intangible assets. Goodwill is evaluated for impairment annually on October 31, and whenever events or changes in circumstances indicate the carrying value of goodwill may not be recoverable. Triggering events that may indicate impairment include, but are not limited to, a significant adverse change in customer demand or business climate or a significant decrease in expected cash flows. An impairment loss is recognized to the extent that the carrying amount exceeds the reporting unit's fair value, not to exceed the carrying amount of goodwill. The Company has the option to first assess qualitative factors to determine whether events or circumstances indicate that it is more likely than not that the fair value of a reporting unit is less than its carrying amount and determine whether further action is needed. If, after assessing the totality of events or circumstances, the Company determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the quantitative impairment test is unnecessary. Due to a continued decline in market conditions and declines in the operating results of our non-enterprise reporting unit, we recognized an impairment to goodwill of \$14.4 million during the year ended December 31, 2021 and we recorded an impairment to goodwill of \$4.2 million during the six months ended December 31, 2020. There were no impairments of goodwill during the year ended June 30, 2020. See Note 6 – Goodwill and Intangible Assets, Net for further discussion on the impairment.

Software Development Costs

Costs incurred during the application development stage of a newly developed application and costs we incur to enhance our existing platforms that meet certain criteria are subject to capitalization and subsequent amortization. Capitalized software development costs were approximately \$5.9 million during the year ended December 31, 2021, \$2.1 million during the six months ended December 31, 2020, and \$3.1 million during the year ended June 30, 2020. Product development costs are primarily comprised of personnel costs such as payroll and benefits, vendor costs, and other costs directly attributable to the project. We capitalize costs only during the development phase. Any costs in connection to planning, design, and maintenance subsequent to release are expensed as incurred. We amortize software development costs over the expected useful life of the specific application, generally 2-5 years. We evaluate capitalized software development costs for impairment when there is an indication that the unamortized cost may not be recoverable.

Fair Value of Financial Instruments

GAAP defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Under this guidance, we are required to classify certain assets and liabilities based on the fair value hierarchy, which groups fair value-measured assets and liabilities based upon the following levels of inputs:

- Level 1 Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;
- Level 2 Quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability;
- Level 3 Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e. supported by little or no market activity).

The fair value of financial instruments is the amount at which the instrument could be exchanged in a current transaction between willing parties. The carrying values of financial instruments such as accounts receivable, accounts payable and accrued liabilities approximate fair value based on their short maturities. Please refer to Note 13- Fair Value Measurements for additional information regarding the fair value of financial instruments that we measure at fair value, including senior secured convertible notes and contingent consideration.

Fair Value Option

The fair value option provides an election that allows a company to irrevocably elect to record certain financial assets and liabilities at fair value on an instrument-by-instrument basis at initial recognition. We have elected to apply the fair value option to certain convertible notes due to the complexity of the various conversion and settlement options available to both the Note Holders and Akerna.

The convertible notes accounted for under the fair value option election are each a debt host financial instrument containing embedded features that would otherwise be required to be bifurcated from the debt-host and recognized as separate derivative liabilities subject to initial and subsequent periodic estimated fair value measurements in accordance with GAAP. Notwithstanding, when the fair value option election is applied to financial liabilities, bifurcation of an embedded derivative is not required, and the financial liability is initially measured at its issue-date estimated fair value and then subsequently remeasured at estimated fair value on a recurring basis as of each reporting period date.

The portion of the change in fair value attributed to a change in the instrument-specific credit risk is recognized as a component of other comprehensive income and the remaining amount of the fair value adjustment is recognized as other income (expense) in our consolidated statement of operations. The estimated fair value adjustment is presented in a respective single line item within other income (expense) in the accompanying consolidated statement of operations because the change in fair value of the convertible notes was not attributable to instrument-specific credit risk.

Revenue Recognition

See Note 3 for further discussion of our revenue recognition policies.

Cost of Revenue

Cost of revenue consists primarily of costs related to providing subscription and other services to our customers, including employee compensation and related expenses for data center operations, customer support and professional services personnel, payments to outside technology service providers, security services, and other tools.

Product Development

Product development expenses consist primarily of employee-related costs for the design and development of the Company's platform, contractor costs to supplement staff levels, third-party web services, consulting services, and allocated overhead. Product development expenses, other than software development costs qualifying for capitalization, are expensed as incurred.

Sales and Marketing Expenses

Sales and marketing expenses consist primarily of personnel and related costs, including salaries, benefits, bonuses, commissions, travel, and stock-based compensation. Other costs included in this expense are marketing and promotional events, online marketing, product marketing, information technology costs, and facility costs.

General and Administrative Expenses

General and administrative expenses consist primarily of personnel and related costs for our executive, finance, legal, human resources, and administrative personnel, including salaries, benefits, bonuses, and stock-based compensation; legal, accounting, and other professional service fees; other corporate expenses; information technology costs; restructuring charges such as lease termination costs; and facility costs.

Legal and Other Contingencies

From time to time, the Company may be a party to litigation and subject to claims incident to the ordinary course of business, including intellectual property claims, labor and employment claims, breach of contract claims and other asserted and unasserted claims. The Company investigates these claims as they arise and accrues estimates for resolution of legal and other contingencies when losses are probable and estimable.

Stock-Based Compensation

We measured stock-based compensation based on the fair value of the share-based awards on the date of grant and recognize the related costs on a straight-line basis over the requisite service period, which is generally the vesting period.

Income Taxes

Income taxes are accounted for using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and the tax basis of other assets and liabilities. We provide for income taxes at the current and future enacted tax rates and laws applicable in each taxing jurisdiction. We use a two-step approach for recognizing and measuring tax benefits taken or expected to be taken in a tax return and disclosures regarding uncertainties in income tax positions. We recognize interest and penalties related to income tax matters in selling, general and administrative expenses in the consolidated statement of operations.

We recognize deferred tax assets to the extent that its assets are more likely than not to be realized. In making such a determination, we consider all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax planning strategies, and results of recent operations. If we determine that we would be able to realize our deferred tax assets in the future in excess of its net recorded amount, we will make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes. As of December 31, 2021, management has applied a valuation allowance to deferred tax assets when it is determined that the benefit from the deferred tax asset will not be able to be utilized in a future period.

Segments

Our chief operating decision maker reviews financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance and information for different revenue streams is not evaluated separately. As such, the Company has one operating segment, and the decision-making group is the senior executive management team. In the following table, we disclose our long-lived assets by geographical location(in thousands):

	As of December 31,		
	 2021	2020	
Long-lived assets:			
United States	\$ 32,356		
Canada	 5,229	5,074	
Total	\$ 37,585	\$ 15,068	

Subsequent Events

The Company performs a review of events subsequent to the balance sheet date through the date the consolidated financial statements were issued. If we determine there are events requiring recognition or disclosure in the consolidated financial statements., we disclose the subsequent event.

Recently Issued Accounting Pronouncements

ASU 2016-02

The Financial Accounting Standards Board, or the FASB, has issued new guidance related to the accounting for leases. The new standard establishes a right-of-use model that requires a lessee to record a right-of-use asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the statement of operations. We have adopted this new standard on January 1, 2022 and due to the immaterial impact of applying this standard to our limited assets subject to operating leases, there was no impact to our results of operations.

ASU 2016-13

The FASB has issued guidance to introduce a new model for recognizing credit losses on financial instruments based on estimated current expected credit losses, or CECL. Under the new standard, an entity is required to estimate CECL on trade receivables at inception, based on historical information, current conditions, and reasonable and supportable forecasts. Following our change in fiscal year-end effective December 31, 2020, the new guidance is effective for us beginning on January 1, 2023. We are evaluating the impact of adoption of the new standard on our consolidated financial statements.

ASU 2018-15

The FASB has issued guidance to help entities evaluate the accounting for fees paid by a customer in a cloud computing arrangement (hosting arrangement) by providing guidance for determining when the arrangement includes a software license. ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The guidance (i) provides criteria for determining which implementation costs to capitalize as an asset related to the service contract and which costs to expense, (ii) requires an entity (customer) to expense the capitalized implementation costs of a hosting arrangement that is a service contract over the term of the hosting arrangement and (iii) clarifies the presentation requirements for reporting such costs in the entity's consolidated financial statements. We have adopted this standard effective December 15, 2021, and there is currently no impact to our consolidated financial statements as a result of this guidance.

ASU 2019-12

In December 2019, the FASB issued ASU No. 2019-12, Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes ("ASU 2019-12"), which aims to reduce complexity in accounting standards by improving certain areas of U.S. Generally Accepted Accounting Principles ("U.S. GAAP") without compromising information provided to users of financial statements. ASU 2019-12 is effective for public entities for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. For all other entities, the standard is effective for fiscal years beginning after December 15, 2021, and interim periods within fiscal years beginning after December 15, 2022. Early adoption is permitted. The Company has adopted ASU 2019-12 effective December 15, 2021 and the adoption of this guidance did not have a significant effect on our consolidated financial statements.

ASU 2020-01

The FASB has issued guidance clarifying the interactions between various standards governing investments in equity securities. The new guidance addresses accounting for the transition into and out of the equity method and measurement of certain purchased options and forward contracts to acquire investments. The standard is effective for us for annual and interim periods beginning on January 1, 2022, with early adoption permitted. Adoption of the standard requires changes to be made prospectively. We do not anticipate a significant impact to our consolidated financial statements as a result of this new guidance.

ASU 2020-06

In August 2020, the FASB issued ASU 2020-06, Debt - Debt with Conversion and Other Options and Derivative and Hedging - Contracts in Entity's Own Equity, which simplifies the accounting for convertible instruments. This guidance eliminates certain models that require separate accounting for embedded conversion features, in certain cases. Additionally, among other changes, the guidance eliminates certain of the conditions for equity classification for contracts in an entity's own equity. The guidance also requires entities to use the if-converted method for all convertible instruments in the diluted earnings per share calculation and include the effect of share settlement for instruments that may be settled in cash or shares, except for certain liability-classified share-based payment awards. This guidance is required to be adopted by us in the first quarter of 2023 and must be applied using either a modified or full retrospective approach. We are currently evaluating the impact this guidance will have on our consolidated financial statements.

ASU 2021-04

On May 3, 2021, FASB issued ASU 2021-04, Earnings Per Share (Topic 260), Debt—Modifications and Extinguishments (Subtopic 470-50), Compensation—Stock Compensation (Topic 718), and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options. This new standard provides clarification and reduces diversity in an issuer's accounting for modifications or exchanges of freestanding equity-classified written call options (such as warrants) that remain equity classified after modification or exchange. This standard is effective for fiscal years beginning after December 15, 2021, including interim periods within those fiscal years. Issuers should apply the new standard prospectively to modifications or exchanges occurring after the effective date of the new standard. We are currently evaluating the impact this guidance will have on our consolidated financial statements..

ASU 2021-08

In October 2021, the FASB issued ASU 2021-08, Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities from Contracts with Customers, which amends the accounting related to contract assets and liabilities acquired in business combinations. Under current GAAP, an entity generally recognizes assets and liabilities acquired in a business combination, including contract assets and contract liabilities arising from revenue contracts with customers, at fair value on the acquisition date. ASU 2021-08 requires that entities recognize and measure contract assets and contract liabilities acquired in a business combination in accordance with ASC Topic 606, Revenue from Contracts with Customers. ASU 2021-08 is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, and should be applied prospectively to businesses combinations occurring on or after the effective date of the amendment. We are currently evaluating the impact this guidance will have on our consolidated financial statements.

Note 3 - Revenue

Financial Statement Impact of Adopting ASC 606, "Revenue from Contracts with Customers"

On July 1, 2020, we adopted ASC 606 using the modified retrospective transition method and applied this method to all contracts that were not complete as of the date of adoption. The reported results as of December 31, 2021 and December 31, 2020, and for the year ended December 31, 2021 and the six months ended December 31, 2020 in the accompanying consolidated financial statements are presented under ASC 606, while the year ended June 30, 2020 has not been adjusted and is reported in accordance with historical accounting guidance in effect for that period.

The most significant impacts of this standard relate to the timing of revenue recognition of fixed fees under our contracts, as well as the accounting for costs to obtain contracts. Under ASC 606, revenue recognition for subscription and implementation fees begins on the launch date and is recognized over time through the term of the contract. We then recognized the remaining balance of the fixed fees ratably over the remaining term of the contract. Additionally, under ASC 606, we now defer recognition of expense for sales commissions ("contract costs"). These contract costs are amortized to expense over the expected period of benefit. Before the adoption of ASC 606, we expensed these contract costs as incurred.

The adoption of ASC 606 under the modified retrospective transition method resulted in a net adjustment reducing the accumulated deficit by\$0.2 million at July 1, 2020 and an increase to capitalized commissions, which are included in prepaid expenses and other current assets on the accompanying balance sheet. The adjustment consisted of \$0.2 million related to the deferral of contract costs that were historically expensed as incurred

Revenue Recognition Policies for the year ended December 31, 2021 and the six months ended December 31, 2020

In accordance with ASC 606, revenue is recognized when a customer obtains the benefit of promised services, in an amount that reflects the consideration the Company expects to be entitled to receive in exchange for those services. In determining the amount of revenue to be recognized, the Company performs the following steps: (i) identification of the contract with a customer; (ii) identification of the promised services in the contract and determination of whether the promised services are performance obligations, including whether they are distinct in the context of the contract; (iii) determination of the transaction price; (iv) allocation of the transaction price to the performance obligations based on estimated selling prices; and (v) recognition of revenue when (or as) the Company satisfies each performance obligation.

Software Revenue. Our software revenue is generated from subscriptions and services related to the use of our commercial software platforms, MJ Platform®, Ample, Trellis, Viridian, 365 Cannabis, and our government regulatory platform, Leaf Data Systems, and the sale of business intelligence, data analytics and other software related services. Software contracts are annual or multi-year contracts paid monthly in advance of service and typically cancellable upon 30 days' notice after the end of the contract period. Leaf Data Systems contracts are generally multi-year contracts payable annually or quarterly in advance of service. Commercial software and Leaf Data Systems contracts generally may only be terminated early for breach of contract as defined in the respective agreements. Amounts that have been invoiced are initially recorded as deferred revenue or contract liabilities. Subscription revenue is recognized on a straight-line basis over the service term of the arrangement beginning on the date that our solution is made available to the customer and ending at the expiration of the subscription term. We typically invoice customers at the beginning of the term, in multi-year, annual, quarterly, or monthly installments. When a collection of fees occurs in advance of service delivery, revenue recognition is deferred until such services commence. Revenue for implementation fees is recognized ratably over the expected term of the contract, including expected renewals.

We include service level commitments to customers warranting certain levels of uptime reliability and performance and permitting those customers to receive credits if those levels are not met. In addition, customer contracts often include: specific obligations that require us to maintain the availability of the customer's data through the service and that customer content is secured against unauthorized access or loss, and indemnity provisions whereby we indemnify customers from third-party claims asserted against them that result from our failure to maintain the availability of their content or securing the same from unauthorized access or loss. To date, we have not incurred any material costs as a result of such commitments. Any such credits or payments made to customers under these arrangements are recorded as a reduction of revenue.

Consulting Revenue. Consulting services revenue is generated by providing solutions for operators in the pre-application of licensures and pre-operational phases of development and consists of contracts with fixed terms and fee structures based upon the volume and activity or fixed-price contracts for consulting and strategic services. These services include application and business plan preparation as they seek licenses to be granted. Consulting projects completed during the pre-application phase generally solidify us as the software vendor of choice for subsequent operational phases once the operator is granted the license. As a result, our consulting revenue is driven as new emerging states pass legislation, and as our client-operators gain licenses. Accordingly, we expect our consulting services to continue to grow as more states emerge with legalization reform. Consulting services revenue When these services are not combined with subscription revenues as a single unit of account, these revenues are recognized as services are rendered and accepted by the customer.

Other Revenue. Our other revenue is derived primarily from point-of-sale hardware and other non-recurring revenue. We sell solo*TAGTM s and solo*CODETMs to customers by the roll of printed labels or as a digital code that allows customers to print directly their packing. When customers active a solo*TAGTM or solo*CODETM, we receive an activation fee, which is recognized upon activation by the customer. From time to time, we may purchase equipment for resale to customers. Such equipment is generally drop-shipped to our customers. We recognize revenue as these products are delivered.

Cost of Revenue. Cost of revenue consists primarily of costs related to providing subscription and other services to our customers, including employee compensation and related expenses for data center operations, customer support and professional services personnel, payments to outside technology service providers, security services, and other tools.

Unbilled Receivables. Unbilled receivables are booked when services are delivered to our customers but not yet invoiced. Once invoiced, the unbilled receivables are reclassified to accounts receivable.

Revenue Recognition Policies for the year ended June 30, 2020

We derive our revenues primarily from the following sources: software revenues, which are primarily comprised of subscription fees from government and commercial customers accessing our enterprise cloud computing services and from customers paying for additional support beyond the standard support that is included in the basic subscription fees; and consulting services provided to operators interested in integrating our platform into their respective operations, such services include: assessing compliance requirements, monitoring systems and readiness; assisting with the application process; and evaluating the operator's inspection readiness and business plan.

We commence revenue recognition when there is persuasive evidence of an arrangement, the service has been or is being provided to the customer, the collection of the fees is reasonably assured, and the amount of fees to be paid by the customer is fixed or determinable.

Deferred Revenue

Deferred revenue consists of payments received in advance of revenue recognition from subscription services. The deferred revenue balance is influenced by several factors, including seasonality, the compounding effects of renewals, contract duration, and invoice frequency. Deferred revenue that will be recognized during the succeeding twelve-month period is recorded as deferred revenue, which is a current liability on the accompanying consolidated balance sheets.

Disaggregation of Revenue

The Company derives the majority of its revenue from subscription fees paid for access to and usage of its SaaS solutions for a specified period of time, typically one to three years. In addition to subscription fees, contracts with customers may include implementation fees for launch assistance and training. Fixed subscription and implementation fees are billed in advance of the subscription term and are due in accordance with contract terms, which generally provide for payment within 30 days. The Company's contracts typically have a one to three year term. The Company's contractual arrangements include performance, termination and cancellation provisions, but do not provide for refunds. Customers do not have the contractual right to take possession of the Company's software at any time.

Sales taxes collected from customers and remitted to government authorities are excluded from revenue.

The following table summarizes revenue disaggregation by product for the following periods (in thousands):

	ar Ended ember 31, 2021	Six Months Ended December 31, 2020	Year Ended June 30, 2020 (1)
Government	\$ 3,258	\$ 1,939	\$ 4,906
Non-government	17,427	5,886	7,667
	\$ 20,685	\$ 7,825	\$ 12,573

(1) As noted above, prior periods have not been adjusted for the adoption of ASC 606 and are presented in accordance with istorical accounting guidance in effect for those periods.

	ear Ended cember 31, 2021	Six Months ded December 31, 2020	J	Year Ended June 30, 2020
United States	\$ 15,800	\$ 5,212	\$	12,573
Canada	4,885	2,613		_
	\$ 20,685	\$ 7,825	\$	12,573

Contracts with Multiple Performance Obligations

Customers may elect to purchase a subscription to multiple modules, multiple modules with multiple service levels, or, for certain of the Company's solutions. We evaluate such contracts to determine whether the services to be provided are distinct and accordingly should be accounted for as separate performance obligations. If we determine that a contract has multiple performance obligations, the transaction price, which is the total price of the contract, is allocated to each performance obligation based on a relative standalone selling price method. We estimate standalone selling price based on observable prices in past transactions for which the product offering subject to the performance obligation has been sold separately. As the performance obligations are satisfied, revenue is recognized as discussed above in the product descriptions.

Transaction Price Allocated to Future Performance Obligations

ASC 606 provides certain practical expedients that limit the required disclosure of the aggregate amount of transaction price that is allocated to performance obligations that have not yet been satisfied. As many of the contracts the Company has entered into with customers are for a twelve-month subscription term, a significant portion of performance obligations that have not yet been satisfied as of December 31, 2021 are part of a contract that has an original expected duration of one year or less. For contracts with an original expected duration of greater tham year, for which the practical expedient does not apply, the aggregate transaction price allocated to the unsatisfied performance obligations was \$16.6 million as of December 31, 2021, of which \$11.1 million is expected to be recognized as revenue over the next twelve months.

Deferred Revenue

Deferred revenue represents the unearned portion of subscription and implementation fees. Deferred revenue is recorded when cash payments are received in advance of performance. Deferred amounts are generally recognized within one year. Deferred revenue is included in the accompanying consolidated balance sheets under Total current liabilities, net of any long-term portion that is included in Other long-term liabilities. The following table summarizes deferred revenue activity for the year ended December 31, 2021 (in thousands):

				As of
	As of		Revenue	December 31,
	January 1, 2021	Net additions	recognized	2021
Deferred revenue	\$ 844	12,657	9,375	\$ 4.126

Of the \$20.7 million of revenue recognized during the year ended December 31, 2021, \$0.7 million was included in deferred revenue as of December 31, 2020.

Costs to Obtain Contracts

In accordance with ASC 606, we capitalize sales commissions that are directly related to obtaining customer contracts and that would not have been incurred if the contract had not been obtained. These costs are included in the accompanying consolidated balance sheets and are classified as Prepaid expenses and other current assets. Deferred contract costs are amortized to sales and marketing expense over the expected period of benefit, which we have determined to be one year based on the estimated customer relationship period. The following table summarizes deferred contract cost activity for the year ended December 31, 2021 (in thousand):

					As of
	A	s of		Amortized	December 31,
	Janua	ry 1, 2021	Additions	costs (1)	2021
Deferred contract costs	\$	228	512	(479)	\$ 261

(1) Includes contract costs amortized to sales and marketing expense during the period.

Note 4 - Acquisitions

2021 Acquisitions

Viridian Sciences

On April 1, 2021, we completed the acquisition of Viridian, a cannabis business management software provider that is built on SAP BusinessOne. We acquired Viridian in exchange for 1.0 million shares of our common stock valued atapproximately \$6.0 million. In addition to the stock consideration, the agreement provides for contingent consideration of up to \$1.0 million, payable in additional common stock, if Viridian meets certain revenue criteria. The contingent consideration will be recorded as the estimated fair value on the acquisition date and adjusted to estimated fair value in each subsequent reporting period until settlement.

	iminary r Value
Shares issued	\$ 6,186
Contingent consideration	2
Total preliminary fair value of consideration transferred	\$ 6,188

The following table summarizes the preliminary fair values of assets acquired and liabilities assumed as of the date of acquisition (in thousands):

	Pr	eliminary
	F	air Value
Accounts receivable		556
Prepaid expenses and other current assets		148
Capitalized software		423
Acquired technology		470
Customer relationships		820
Acquired trade name		20
Goodwill		5,408
Accounts payable and accrued expenses		(350)
Deferred tax liabilities		(307)
Deferred revenue		(1,000)
Net assets acquired	\$	6,188

The excess of purchase consideration over the fair value of assets acquired and liabilities assumed was recorded as goodwill, which is primarily attributed to the assembled workforce and expanded market opportunities, for which there is no basis for U.S. income tax purposes. The fair values assigned to identifiable assets acquired and liabilities assumed are based on management's estimates and assumptions. We expect to finalize the valuation as soon as practicable, but no later than one year from the acquisition date.

The amounts of Viridian's revenue and net income included in our consolidated statement of operations from the acquisition date of April 1, 2021, to December 31, 2021 were \$2.4 million and \$0.3 million, respectively.

365 Cannabis

On October 1, 2021, we acquired all the issued and outstanding shares of 365 Cannabis. Under the terms of the Agreement, the aggregate consideration for the 365 Cannabis shares consists of (1) \$5,000,000 in cash, (2) \$12,000,000 in stock, which was settled by issuing 3.6 million shares of our common stock, and (3) contingent value rights to be issued pursuant to a rights indenture entitling the holders thereof to receive, subject to certain adjustments as set forth in the Agreement, an aggregate of up to \$8,000,000 in stock, in the event that NAV achieves certain revenue targets as specified in the Agreement. These rights are accounted for as contingent consideration and are currently recorded at preliminary fair value which will be updated upon finalization of purchase accounting.

]	Preliminary
		Fair Value
Shares issued	\$	12,000
Cash		5,542
Contingent consideration		6,300
Total preliminary fair value of consideration transferred	<u>\$</u>	23,842

The following table summarizes the preliminary fair values of assets acquired and liabilities assumed as of the date of acquisition (inthousands):

	Preliminary
	Fair Value
Cash	527
Accounts receivable	486
Prepaid expenses and other current asset	261
Fixed Assets	93
Non-compete agreement	80
Acquired technology	1,040
Customer relationships	13,810
Acquired trade name	270
Goodwill	14,043
Accounts payable and accrued expenses	(826)
Deferred tax liabilities	(2,642)
Deferred revenue	(3,300)
Net assets acquired	\$ 23,842

The excess of purchase consideration over the fair value of assets acquired and liabilities assumed was recorded as goodwill, which is primarily attributed to the assembled workforce and expanded market opportunities, for which there is no basis for U.S. income tax purposes. The fair values assigned to identifiable assets acquired and liabilities assumed are based on management's estimates and assumptions. We expect to finalize the valuation as soon as practicable, but no later than one year from the acquisition date.

The amounts of 365 Cannabis' revenue and net loss included in our consolidated statement of operations from the acquisition date of October 1, 2021, to December 31, 2021 were \$2.4 million and \$0.4 million, respectively.

2020 Acquisitions

Trellis Solutions, Inc.

On April 8, 2020, we acquired Trellis, a cannabis cultivation management and compliance software company in an all-stock transaction Our estimated acquisition date fair value of the consideration transferred for Trellis was as follows (in thousands):

Common shares issued	\$ 2,531
Contingent consideration	998
Total estimated fair value of consideration	\$ 3,529

We incurred \$0.1 million of transaction costs directly related to the acquisition that is reflected in general and administrative expenses in our consolidated statement of operations during the year ended June 30, 2020.

We issued 349,650 shares of our common stock valued at\$7.24 per share, the closing price of a share of our common stock on the date of acquisition in exchange for 100% of the outstanding stock of Trellis. We have also agreed to pay additional consideration calculated as annualized revenue derived from previously identified customers for the month of September 2020 multiplied by five. The contingent consideration is payable in shares based on the 20-day volume-weighted average price, or VWAP. At June 30, 2020, we estimated the fair value of the contingent consideration to be \$0 and recorded a gain of \$1.0 million on the change in the fair value of contingent consideration included in general and administrative expenses in the consolidated statement of operations during the year ended June 30, 2020.

The following table summarizes our estimated fair values of assets acquired and liabilities assumed as of the date of acquisition (in thousands):

Cash	\$ 21
Accounts receivable, net	91
Other assets	6
Acquired technology	210
Acquired trade name	80
Customer relationships	220
Goodwill	3,216
Accounts payable and accrued expenses	(284)
Deferred revenue	(31)
Net assets acquired	\$ 3,529

The excess of purchase consideration over the fair value of net tangible and intangible assets acquired was recorded as goodwill, which is primarily attributed to the assembled workforce and expanded market opportunities, for which there is no basis for U.S. income tax purposes. During the six months ended December 31, 2020, we recorded net adjustments to assets and liabilities acquired of \$14.3 thousand. The amounts of Trellis's revenue and net loss included in our consolidated statement of operations from the acquisition date of April 10, 2020 to June 30, 2020 were \$216.0 thousand and \$17.0 thousand, respectively.

solo sciences, inc.

On January 15, 2020, we closed on a stock purchase agreement with substantially all of the shareholders of Solo pursuant to which we acquired all right, title, and interest in 80.4% of the issued and outstanding capital stock of Solo, calculated on a fully diluted basis. As a result of our initial investment, Solo became a controlled subsidiary and we commenced consolidation of Solo on January 15, 2020. The estimated acquisition date fair value of the consideration transferred for Solo was \$17.9 million. During the year ended June 30, 2020, we completed the preliminary valuation of the contingent consideration and recorded a measurement period adjustment to reflect this liability on our balance sheet. The estimated fair value of consideration recorded consisted of the following (in thousands):

Common shares issued	\$ 17,550
Contingent consideration	389
Total estimated fair value of consideration	\$ 17,939

We incurred \$0.3 million of transaction costs directly related to the acquisition, which is reflected in general and administrative expenses in our consolidated statement of operations during the year ended June 30, 2020.

We exchanged 1,950,000 shares of our common stock, valued at \$9.00 per share, the closing price of a share of our common stock on the date of acquisition. In addition to the stock consideration, we agreed to pay contingent consideration in the form of fees payable to the legacy Solo shareholders equal to the lesser of (i) \$0.01 per solo*TAGTM and solo*CODETM sold or (ii) 7% of net revenue. The fees were to be paid annually until the earlier of: (1) our shares trading above \$12 per share for any consecutive 20 trading days in a 30-day period; (b) upon our no longer owning a majority stake in Solo; or (c) upon expiration of the patents related to solo*TAGTM and solo*CODETM, which is December 1, 2029. This fee represents contingent consideration and was recorded at fair value as of the date of acquisition. Contingent consideration is adjusted to fair value each period with changes in fair value being recognized in earnings at each reporting period.

We also acquired an option to acquire the noncontrolling interests in Solo during the 12 months following the close for either cash or shares. Beginning with the expiration of our option, the noncontrolling interests in Solo have a 3-month option to acquire between 40% and 55% of Solo back from us for cash. On July 31, 2020, we entered into an amendment to the stock purchase agreement to exercise our option to acquire the noncontrolling interests in Solo, for 800,000 shares of our common stock, this transaction will be recorded as an equity transaction, with no effect to the value of the assets acquired or liabilities assumed. In connection with the amendment, the selling shareholders agreed to cancel the contingent consideration in the future and waived a right to any amount that would have been earned prior to the amendment. We recorded a gain on settlement of the contingent consideration liability during the six months ended December 31, 2020 in general and administrative expenses in our consolidated statement of operations.

During the year ended June 30, 2020, we obtained additional information regarding the valuation of the assets acquired and liabilities assumed. We have recorded a measurement period adjustment to allocate the acquisition price to intangible assets, goodwill, accrued liabilities, and the fair value of noncontrolling interests. The following table summarizes the estimated fair values of assets acquired and liabilities assumed as of the date of acquisition (in thousands):

Cash	\$ 101
Prepaid expenses and other assets	22
Furniture, fixtures, and equipment	2
Acquired technology	7,160
Acquired trade name	340
Goodwill	17,025
Accounts payable and accrued liabilities	(1,158)
Fair value of noncontrolling interests	(5,553)
Net assets acquired	\$ 17,939

The excess of purchase consideration over the fair value of net tangible and intangible assets acquired was recorded as goodwill, which is primarily attributed to expanded market opportunities, for which there is no basis for U.S. income tax purposes. The amounts of Solo's revenue and net loss included in our consolidated statement of operations from the acquisition date of January 15, 2020 to June 30, 2020 were \$23.0 thousand and \$1.5 million, respectively.

During the six months ended December 31, 2020, the Company recorded an impairment of \$\Darkinstyle{\Darking}\$.7 million related to Solo's developed technology. See Note 6 – Goodwill and Intangible Assets, Net for further discussion of the intangible asset impairment.

Ample Organics

On July 7, 2020, we completed the acquisition of Ample Organics ("Ample"), Ample provides a seed-to-sale platform to clients in Canada, which offers tracking, reporting, and compliance tools to cannabis cultivators, processors, sellers, and clinics. We acquired 100% of the stock of Ample Organics for 3.3 million exchangeable shares of one of our wholly-owned subsidiaries. The exchangeable shares may be exchanged, at the option of the holder, for shares of Akerna common stock on a one-for-one basis, therefore the exchangeable shares issued were valued at \$7.65 per share, the closing price of an equivalent share of Akerna common stock, \$30.7 million was the aggregate value of the exchangeable shares. In addition to the stock consideration, we paid \$5.5 million in cash, which was used to settle all of Ample's then outstanding debt. In addition to the stock and cash consideration, the agreement provides for contingent consideration of up to CAD\$10,000,000, payable in exchangeable shares, payable if Ample's Recurring Revenue recognized during the 12 months after the acquisition date is CAD\$9,000,000 or more. The contingent consideration amount is reduced by an amount equal to the product of CAD\$6.67 multiplied by the difference between CAD\$9,000,000 and the amount of Recurring Revenue realized during the 12 months following the acquisition. The contingent consideration will be recorded as the estimated fair value on the acquisition date and adjusted to estimated fair value in each subsequent reporting period until settlement.

	Preliminary
	Fair Value
Exchangeable shares issued	\$ 25,203
Cash	5,724
Contingent consideration	604
Total estimated fair value of consideration transferred	\$ 31,531

We incurred \$2.9 million of total transaction costs directly related to the acquisition of Ample that is reflected in general and administrative expenses in our consolidated statements of operations, of which \$1.1 million and \$1.8 million was recognized during the six months ended December 31, 2020 and the year ended June 30, 2020, respectively.

The following table summarizes the estimated fair values of assets acquired and liabilities assumed as of the date of acquisition (in thousands):

	Preliminary Fair Value
Cash	\$ 445
Accounts receivable	917
Prepaid expenses and other current assets	595
Acquired technology	850
Customer relationships	2,660
Acquired trade name	285
Goodwill	25,806
Furniture, fixtures and equipment	1,327
Accounts payable and accrued expenses	(805)
Deferred revenue	(549)
Net assets acquired	\$ 31,531

The excess of purchase consideration over the preliminary fair value of assets acquired and liabilities assumed was recorded as goodwill, which is primarily attributed to the assembled workforce and expanded market opportunities, for which there is no basis for U.S. income tax purposes.

During the six months ended December 31, 2020, the Company recorded an impairment to goodwill for \$4.2 million related to Ample. See Note 6 – Goodwill and Intangible Assets, Net for further discussion of the goodwill impairment.

The amounts of Ample's revenue and net income included in our consolidated statement of operations from the acquisition date of July 7, 2020, to December 31, 2020 were \$2.6 million and \$0.1 million, respectively.

Pro Forma Financial Information

The following unaudited pro forma consolidated operating results give effect to the Viridian and 365 Cannabis acquisitions as if they had been completed as of January 1, 2020 (in thousands):

		ar Ended ember 31,
		2021
Revenue	\$	28,847
Net loss	\$	(31,423)

The following unaudited pro forma consolidated operating results give effect to the Viridian and 365 Cannabis acquisitions, as if they had been completed as of January 1, 2020, and the Trellis, Solo and Ample acquisitions, as if they had been completed as of July 1, 2019 (in thousands):

	Six Months	
	Ended December 31,	Year Ended June 30,
	2020	2020
Revenue	\$ 14,026	\$ 27,523
Net loss	\$ (17,650)	\$ (20,250)

The pro forma financial information for all periods presented above has been calculated after adjusting the results of Solo, Trellis, Ample, Viridian, and 365 Cannabis to reflect the business combination accounting effects resulting from this acquisition, including the amortization expense from acquired intangible assets as though the acquisition occurred as of the beginning of the periods indicated above. The pro forma financial information is for informational purposes only and is not indicative of the results of operations that would have been achieved if the acquisition had taken place at the beginning of the years indicated above.

Special Voting Preferred Stock and Exchangeable Shares

In connection with the Ample acquisition, we entered into agreements with our wholly-owned subsidiary and the Ample shareholder representative that resulted in the issuance of a single share of our special voting preferred stock, for the purpose of ensuring that each Exchangeable Share is substantially the economic and voting equivalent of a share of Akerna common stock, and, following the registration of the Akerna shares issuable upon exchange of the Exchangeable Shares under the Securities Act of 1933, ensuring that each Exchangeable Share is exchangeable on a one-for-one basis for a share of Akerna common stock, subject to certain limitations. As a result of these agreements and the issuance of the special voting preferred stock, each holder of Exchangeable Shares effectively has the ability to cast votes along with holders of Akerna common stock. Additionally, these agreements grant exchange rights to the holders of exchangeable shares upon the event of our liquidation, dissolution or winding up.

The special voting preferred stock has a par value of \$0.0001 per share and a preference in liquidation of \$1.00. The special voting preferred stock entitles the holder to an aggregate number of votes equal to the number of the exchangeable shares issued and outstanding from time to time and which we do not own. The holder of the special voting preferred stock and the holders of shares of Akerna common stock will both together as a single class on all matters submitted to a vote of our shareholders. At such time as the special voting preferred stock has not votes attached to it, the share shall be automatically cancelled. The exchangeable shares do not have a par value.

On September 1, 2020, several Ample shareholders exchanged a total of 627,225 exchangeable shares with a value of \$4,798,271 for the same number of shares of Akerna common stock. The exchange was accounted for as an equity transaction and we did not recognize a gain or loss on this transaction. As of December 31, 2021, there were a total of 309,286 Exchangeable Shares issued and outstanding.

Note 5 - Balance Sheet Disclosures

Prepaid expenses and other current assets consisted of the following:

		As of December 31,		
	<u> </u>	2021	2020	
Software and technology	\$	687,740 \$	480,651	
Professional services, dues and subscriptions		546,126	826,195	
Insurance		264,097	243,222	
Deferred contract costs		260,899	227,718	
Unbilled receivable		506,984	612,446	
Other		117,918	68,495	
Total prepaid expenses and other current assets	<u>\$</u>	2,383,764 \$	2,458,727	

Accounts payable, accrued expenses and other current liabilities consisted of the following:

	As of December 31,			1,
		2021	20	020
Accounts payable	\$	1,943,457	\$	513,610
Professional fees		319,590		233,667
Sales taxes		360,361		216,367
Compensation		1,123,467		311,379
Contractors		1,288,730		538,618
Settlements and legal		681,045		831,232
Other		346,870		543,703
Total accounts payable, accrued expenses and other current liabilities	\$	6,063,520	\$	3,188,576

Note 6 - Goodwill and Intangible Assets, Net

Goodwill

The following table reflects the changes in the carrying amount of goodwill:

Balance as of June 30, 2020	\$ 20,254,309
Adjustments to Trellis' goodwill	(14,300)
Additions due to acquisition of Ample	25,806,518
Goodwill impairment	(4,172,000)
Balance as of December 31, 2020	\$ 41,874,527
Additions due to acquisition of Viridian	 5,408,884
Additions due to acquisition of 365 Cannabis	14,042,580
Goodwill impairment	(14,383,310)
Balance as of December 31, 2021	\$ 46,942,681

Impairment

Based on our qualitative assessment of goodwill, we determined it was necessary to perform quantitative valuation of goodwill as of December 31, 2021. We determined there were two reporting units: the enterprise reporting unit which is comprised of the enterprise software offerings and the non-enterprise reporting unit which is comprised of the non-enterprise software offerings. The valuation of our goodwill was determined with the assistance of an independent valuation firm using the income approach (discounted cash flows method) and the market approach (guideline public company method). Our significant assumptions in these analyses include, but are not limited to, future cash flow projections, the weighted average cost of capital, the discount rate, the implied control premium, the terminal growth rate, and the tax rate. The Company's estimates of future cash flows are based on current regulatory and economic climates, recent operating results, and planned business strategies. These estimates could be negatively affected by changes in federal, state, or local regulations or economic downturns. Future cash flow estimates are, by their nature, subjective and actual results may differ materially from the Company's estimates. If the Company's ongoing estimates of future cash flows are not met, the Company may have to record additional impairment charges in future periods. The Company also uses the Guideline Public Company Method, a form of the market approach (utilizing Level 3 unobservable inputs), which is derived from metrics of publicly traded companies or historically completed transactions of comparable businesses. The selection of comparable businesses is based on the markets in which the reporting units operate giving consideration to risk profiles, size, geography, and diversity of products and services. As such, we believe the current assumptions and estimates utilized are both reasonable and appropriate. During the six months ended December 31, 2020, primarily as a result of delays in executing on stra

Enterprise Reporting Unit

For the year ended December 31, 2021, n impairment to goodwill was recorded for our enterprise reporting unit as the fair value exceeded the carrying value as of December 31, 2021. To perform our analysis, we applied a 50% weighting to the market approach and 50% weighted to the income approach.

Non-Enterprise Reporting Unit

For the year ended December 31, 2021, primarily due to a continued decline in market valuation and a flattening in the operating results of our non-enterprise reporting unit compared to acquisition assumption, we recorded an impairment expense of \$14.4 million related to our non-enterprise reporting unit. To perform our analysis, we applied a 25% weighting to the income approach and a 75% weighting to the market approach.

Finite-lived Intangible Assets, Net

We performed a two step impairment test for the asset groups that had indicators of impairment in the current year under ASC 360 and as a result of this analysis we did not identify any impairment. For the six months ended December 31, 2020, we determined that the carrying value of Solo's developed technology and trade name exceeded it's fair value, resulting in an impairment of \$2.7 million.

Intangible assets as of December 31, 2021 consist of the following

	Weighted average remaining amortization period (in years)	Gross carrying amount	Accumulated amortization	Impairment	Net carrying amount
Acquired developed technology	3.35	\$ 7,138,080	\$ (2,815,158)	\$ —	\$ 4,322,922
Acquired trade names	3.09	871,920	(286,799)	_	585,121
Customer relationships	10.18	17,510,000	(878,250)	_	16,631,750
Non-compete agreement	1.75	80,000	(10,000)		70,000
Total Intangible assets		\$ 25,600,000	\$ (3,990,207)	<u> </u>	\$ 21,609,793
Capitalized software - In-service	2.02	8,807,843	(4,423,887)	_	4,383,956
Capitalized software - Work in Progress	N/A	3,224,203	_	(296,483)	2,927,720
Total Capitalized Software		12,032,046	(4,423,887)	(296,483)	7,311,676
Total finite-lived intangible assets		\$ 37,632,046	\$ (8,414,094)	\$ (296,483)	\$ 28,921,469

Intangible assets as of December 31, 2020 consist of the following:

Weighted average remaining amortization period (in years)	Gross carrying amount	Accumulated amortization	Impairment	Net carrying amount
3.77 \$	8,220,000	\$ (1,434,155)	(2,591,920)	\$ 4,193,925
5.12	705,000	(97,676)	(123,080)	484,244
13.04	2,880,000	(169,374)	_	2,710,626
\$	11,805,000	\$ (1,701,205) \$	\$ (2,715,000)	\$ 7,388,795
_				
1.62	4,593,512	(1,401,953)	_	3,191,559
N/A	734,180	_	_	734,180
_	5,327,692	(1,401,953)		3,925,739
\$	17,132,692	\$ (3,103,158)	\$ (2,715,000)	\$ 11,314,534
	average remaining amortization period (in years) 3.77 \$ 5.12 \$ 13.04 \$ \$	average remaining amortization period (in years) 3.77 \$ 8,220,000 5.12 705,000 13.04 2,880,000 \$ 11,805,000 1.62 4,593,512 N/A 734,180 5,327,692	average remaining amortization period (in years) Gross carrying amount Accumulated amortization 3.77 \$ 8,220,000 \$ (1,434,155) 5.12 705,000 (97,676) 13.04 2,880,000 (169,374) \$ 11,805,000 \$ (1,701,205) 1.62 4,593,512 (1,401,953) N/A 734,180 — 5,327,692 (1,401,953)	average remaining amortization period (in years) Gross carrying amount Accumulated amortization Impairment 3.77 \$ 8,220,000 \$ (1,434,155) \$ (2,591,920) 5.12 705,000 (97,676) (123,080) 13.04 2,880,000 (169,374) — \$ 11,805,000 \$ (1,701,205) \$ (2,715,000) 1.62 4,593,512 (1,401,953) — N/A 734,180 — — 5,327,692 (1,401,953) —

We record amortization expense associated with acquired developed technology, acquired trade names, and customer relationships. The amortization expense of all finite-lived intangible assets, which includes capitalized software was \$5.6 million, \$1.8 million, and \$1.3 million for the year ended December 31, 2021, six months ended December 31, 2020, and year ended June 30, 2020, respectively. The amortization expense for the year ended December 31, 2021 includes **6**.3 million of capitalized software write offs.

As of December 31, 2021, expected amortization expense relating to in-service capitalized software and purchased intangible assets for each of the next five years and thereafter is as follows:

	Acquired Intangible		So	pitalized oftware-
		Assets	In	-service
2022	\$	3,445,741	\$ 2	2,722,663
2023		3,131,575	1	1,144,351
2024		2,801,991		275,884
2025		1,973,934		110,215
2026		1,851,434		59,112
Thereafter		8,405,118		71,731
Total	\$	21,609,793	\$ 4	4,383,956

Note 7 - Fixed assets, net

Fixed assets consisted of the following:

	As of December 31, 2021		As of December 31, 2020
Furniture and computer equipment	\$	235,042 \$	131,300
Leasehold improvements		14,064	1,175,556
Less: accumulated depreciation	•	249,106 (95,955) 153,151 \$	1,306,856 (113,423) 1,193,433
Fixed assets, net	Ф	133,131 \$	1,193,433

Depreciation expense related to our fixed assets for the year ended December 31, 2021, six months ended December 31, 2020, and year ended June 30, 2020 was \$127,731, \$240,742, and \$27,951, respectively. During the year ended December 31, 2021, we terminated our office lease in Toronto, Canada and wrote off \$1.2 million of fixed assets. During the six months ended December 31, 2020, we sold furniture and computer equipment for 25,561 with a cost of \$191,389 and accumulated depreciation of \$106,555 resulting in a \$59,273 loss in the consolidated statements of operations for the six months ended December 31, 2020 related to these disposals.

Note 8- Investments

Investment in and License Agreement with Zol Solutions, Inc.

On October 7, 2019, we participated in an offering of preferred stock of Zol Solutions, Inc. ("ZolTrain") along with other investors in which we purchased 203,000 shares of Series Seed Preferred Stock (the "ZolTrain Preferred") for a purchase price of \$250,000, which represents a noncontrolling interest in ZolTrain.

The ZolTrain Preferred is convertible into shares of common stock of ZolTrain at a conversion rate of \$\mathbb{S}\$.232 per share at the option of the holder and contains certain anti-dilution protection in the event of certain future issuances of securities by ZolTrain. We are entitled to vote the number of common shares in which the ZolTrain Preferred is convertible into at any meeting of the ZolTrain stockholders.

The ZolTrain Preferred also provides us with rights of first refusal with respect to newly issued securities of ZolTrain as well as issued and outstanding securities of ZolTrain that are offered to third parties. In connection with the agreement, one of Akerna's executives was appointed as one of three members of ZolTrain's board of directors. At that time, we had determined that ZolTrain is a VIE for accounting purposes, given we could exercise significant influence, however we were not required to consolidate ZolTrain in our consolidated financial statements because we are not ZolTrain's primary beneficiary. We had concluded that the ZolTrain Preferred was insubstance common stock because the liquidation preference provided was not substantive, and the equity method of accounting is applicable to in-substance common stock. As a result of our representation on the board of directors, we determined that we can exert significant influence over the day to day operations of ZolTrain and therefore; we account for this investment using the equity method of accounting, which required us to recognize our share of the ZolTrain operations in our results of operations. For year ended December 31, 2021, we recognized equity in loss of investee of \$12,641 which represents our share of ZolTrain's losses since our investment

During the third quarter of 2021, following the loss of our seat on the Board, we concluded that we should no longer apply the equity method of accounting for the investment in ZolTrain. We determined that we hold an equity security in ZolTrain for which the fair value is not readily determinable. Accordingly, starting in the third quarter we elected to measure the investment at cost minus impairment, plus or minus changes resulting from observable price changes. When indicators of impairment exist, we estimate the fair value and record an impairment charge if the carrying value of the investment exceeds its estimated fair value. Any impairment charges are recorded in other (expense) income, net, in our consolidated statements of operations. The carrying amount of our investment in ZolTrain was \$226,101 as of December 31, 2021 and we did not recognize any impairment on the investment during the current year.

Subsequent to our initial investment, we entered into a nonexclusive license/reseller agreement with ZolTrain, effective October 24, 2019, to provide ZolTrain's online cannabis training platform as a co-branded integration option into our MJ Platform and Leaf Data Systems, which was a related party transaction in the prior year. Under the term of the agreement we entered into, ZolTrain will share subscription-based revenue generated from our customers with us. The amount of the share of the revenue for each of us and ZolTrain will depend on both (a) the number of training modules accessed by a customer and (b) which party created the accessed content. In addition to the revenue sharing arrangement, the license/reseller agreement provides us with the right to receive additional consideration from ZolTrain in the form of an equity earnout if certain revenue milestones are achieved during 2020, 2021, and 2022. Our ability to recognize revenue from the additional earnout consideration in the future will mainly depend on whether it becomes probable that such revenue milestones will be achieved. For the year ended December 31, 2021, the six months ended December 31, 2021, and the year ended June 30, 2020, we recognized \$25.9 thousand, \$0, and \$0 of revenue from this agreement.

Note 9 - Long Term Debt

Long-term debt consisted of the following at December 31, 2021:

Convertible notes (at fair value)	\$ 17,305,000
Less: current maturities	13,200,000
Total long-term debt, less current portion	\$ 4,105,000

Senior Secured Convertible Notes - 2020

On June 8, 2020, we entered into a Securities Purchase Agreement, or SPA, with two institutional investors (the "2020 Note Holders"), to sell a new series of senior secured convertible notes (the "2020 Notes"), of Akerna in a private placement to the 2020 Note Holders, in the aggregate principal amount of \$17.0 million having an aggregate original issue discount of 12%, and ranking senior to all outstanding and future indebtedness of Akerna. The 2020 Notes were sold on June 9, 2020, with an original issue discount pursuant to which the Note Holders paid \$880 per each \$1,000 in principal amount of the 2020 Notes. The 2020 Notes do not bear interest except upon the occurrence of an event of default, in which event the applicable rate will be 15.00% per annum.

Pursuant to the SPA and the 2020 Notes, we and certain of its subsidiaries will enter into a Security and Pledge Agreement (the "Security Agreement") with the lead investor, in its capacity as collateral agent (in such capacity, the "Collateral Agent") for all holders of the Notes. The Security Agreement creates a first priority security interest in all of the personal property of the Company and certain of its subsidiaries of every kind and description, tangible or intangible, whether currently owned and existing or created or acquired in the future (the "Collateral").

Under the Security Agreement we agree to certain conditions on its maintenance and use of the Collateral, including but not limited to the location of equipment and inventory, the condition of equipment, the payment of taxes and prevention of liens or encumbrances, the maintenance of insurance, the protection of intellectual property rights, and limitations on transfers and sales.

Upon the occurrence of an "Event of Default" under the Security Agreement, the Collateral Agent will have certain rights under the Security Agreement including taking control of the Collateral and, in certain circumstances, selling the Collateral to cover obligations owed to the holders of the 2020 Notes pursuant to its terms. "Event of Default" under the Security Agreement means (i) any defined event of default under any one or more of the transaction documents (including the 2020 Notes), in each instance, after giving effect to any notice, grace, or cure periods provided for in the applicable document, (ii) the failure by us to pay any amounts when due under the 2020 Notes or any other transaction document, or (iii) the breach of any representation, warranty or covenant by the Company under the Security Agreement.

The 2020 Notes mature on June 1, 2023, are payable in installments beginning on October 1, 2020, and may not be prepaid. The 2020 Notes are convertible at any time, at the election of the Holders and subject to certain limitations, into shares of common stock at a rate equal to the amount of principal, interest, if any, and unpaid late charges, if any, divided by a conversion price of \$11.50.

In connection with the occurrence of an event of default, the Holders of the 2020 Notes will be entitled to convert all or any portion of the 2020 Notes at an alternate conversion price equal to the lower of (i) the conversion price then in effect, or (ii) 80% of the lower of (x) the volume-weighted average price, or VWAP, of the common stock as of the trading day immediately preceding the applicable date of determination, or (y) the quotient of (A) the sum of the VWAP of the common stock for each of the two trading days with the lowest VWAP of the common stock during theten (10) consecutive trading day period ending and including the trading day immediately prior to the applicable date of determination, divided by (B) two, but not less than \$1.92.

We elected to use the fair value option to account for the 2020 Notes. The fair value of the 2020 Notes on issuance was recorded as \$15.0 million. During the year ended June 30, 2020, the fair value of the 2020 Notes decreased by \$0.8 million. Of the adjustment, a decrease of \$0.1 million resulted from instrument-specific credit risk and was recognized as other comprehensive income and accumulated in equity and a decrease of \$0.7 million was recognized as current period other expense in our consolidated statement of operations.

During the six months ended December 31, 2020, we made \$1.8 million in principal payments on the 2020 Notes, of which \$1.5 million was settled in cash and the remaining \$0.3 million was settled in common stock. During the six months ended December 31, 2020, the fair value of the 2020 Notes increased by \$.0 million. Of the adjustment, an increase of \$0.1 million resulted from instrument-specific credit risk and was recognized as other comprehensive income and accumulated in equity and an increase of \$0.9 million was recognized as current period other expense in our consolidated statement of operations. As of December 31, 2020, the fair value of the 2020 Notes on our consolidated balance sheet was \$13.4 million.

During the year ended December 31, 2021, up until the date the 2020 Notes were paid in full and replaced by the 2021 Senior Convertible Notes we made \$15.2 million in principal payments on our convertible notes, of which \$5.1 million was settled in cash and the remaining \$10.1 million was settled in common stock. During the year ended December 31, 2021, the fair value of the Convertible Notes increased by \$2.0 million. Of the adjustment, an increase of \$0.02 million resulted from instrument-specific credit risk and was recognized as other comprehensive income and accumulated in equity and an increase of \$2.0 million was recognized as current period other expense in our consolidated statement of operations. On October 5, 2021, we recognized a gain of \$0.2 million in connection with the payoff of the 2020 Notes.

Amendment

On December 23, 2020, we entered into waivers with the Holders of the 2020 Notes, pursuant to which we and the Holders, separately and not jointly, agreed to waive certain terms and conditions of the 2020 Notes as follows:

The Holders irrevocably waived the last sentence of Section 8(a) of the Notes requiring that all installment amounts payable under the 2020 Notes prior to April 1, 2021 be paid in cash pursuant to installment redemptions. We may now elect, in its sole discretion, to pay installment amounts under the 2020 Notes prior to April 1, 2021, by issuing shares of common stock pursuant to installment conversions or by paying cash pursuant to installment redemptions, in each case in accordance with the existing terms of the Convertible Notes.

We irrevocably waived the prohibition on acceleration of installment amounts in Section 8(e) of the 2020 Notes solely in relation to the Installment Amount for January 4, 2020, to permit the Holders to accelerate the January 4, 2021 installment amount, in whole or in part, to one or more acceleration dates from December 24, 2020 through to and including January 4, 2021, as elected by each Holder.

We and the Holders agreed that we may irrevocably waive the installment scheduled principal amount for any installment date by setting forth in the installment notice for that installment date an installment amount greater than the installment scheduled principal amount due and payable on the next installment date. Each Holder may then consent to all or a portion of such increased installment amount for such installment date on the trading day immediately prior to such installment date. Any increased amount for an installment amount above the installment scheduled principal amount for such installment date will reduce the principal amount under the 2020 Notes.

In relation to the January 4, 2021 installment amount, the Company delivered installment notices to the Holders increasing the installment amount for January 4, 2021, in the aggregate, by \$2,062,500.

Senior Secured Convertible Notes - 2021

On October 5, 2021, we entered into a securities purchase agreement with the two institutional investors that held the Company's 2020 Notes to sell senior secured notes in a private placement (the "Senior Convertible Notes"). The Senior Convertible Notes have an aggregate principal amount of \$20.0 million, an aggregate original issue discount of 10%, and rank senior to all our other outstanding and future indebtedness. Approximately \$3.3 million of the proceeds from the Senior Convertible Notes were used to payoff the 2020 Notes, which were then to be cancelled. The net proceeds from the issuance of the Senior Convertible Notes was approximately \$14.6 million, following the original issue discount and deductions for expenses and paydown of the 2020 Notes. These net proceeds will be used to support Akerna's ongoing growth initiatives and continued investment in current and future technology infrastructure. The Senior Convertible Notes are convertible into shares of common stock of Akerna at a conversion price of \$4.05 per share. The Senior Convertible Notes mature on October 5, 2024 and are to be repaid in monthly installments beginning on January 1, 2022. The Senior Convertible Notes can be repaid in common shares or cash.

In connection with the occurrence of an event of default, the Holders of the Senior Convertible Notes will be entitled to convert all or any portion of the Senior Convertible Notes at an alternate conversion price equal to the lower of

(i) the conversion price then in effect, or (ii) 80% of the lower of (x) the volume-weighted average price, or VWAP, of the common stock as of the trading day immediately preceding the applicable date of determination, or (y) the quotient of (A) the sum of the VWAP of the common stock for each of the two trading days with the lowest VWAP of the common stock during theten (10) consecutive trading day period ending and including the trading day immediately prior to the applicable date of determination, divided by (B) two, but not less than \$0.54.

We have elected to use the fair value option to account for the Senior Convertible Notes. The fair value of the Senior Convertible Notes on issuance was recorded as \$18.0 million. During the year ended December 31, 2021, the fair value of the Senior Convertible Notes decreased by \$0.7 million. Of the adjustment, a decrease of \$0.03 million resulted from instrument-specific credit risk and was recognized as other comprehensive income and accumulated in equity and a decrease of \$0.7 million was recognized as current period other expense in our consolidated statement of operations. As of December 31, 2020, the fair value of the Senior Convertible Notes on our consolidated balance sheet was \$17.3 million. During the year ended December 31, 2021, we made no principal payments on our Senior Convertible Notes.

Paycheck Protection Program Loan

On March 27, 2020, former President Trump signed the Coronavirus Aid, Relief and Economic Security (the "CARES Act"), which, among other things, outlined the provisions of the Paycheck Protection Program (the "PPP"). On April 24, 2020, the Paycheck Protection Program and Health Care Enhancement Act, was signed into law increasing funding provided by the CARES Act and on June 5, 2020, the Paycheck Protection Program Flexibility Act extended the program until December 31, 2020. Under the terms of the CARES Act, PPP loan recipients can apply for and be granted forgiveness for all, or a portion of loan granted under the program. Such forgiveness will be determined, subject to limitations, based on the use of loan proceeds for payment of payroll costs and any payments of mortgage interest, rent, and utilities.

On April 21, 2020, the Company issued a promissory note to KeyBank National Association ("KeyBank") in the principal aggregate amount of \$2,204,600 (the "PPP Loan") pursuant to the Paycheck Protection Program under the CARES Act. The PPP Loan had a two-year term bearing interest at a rate of 1% per annum with principal and interest payments of \$92,818 to be paid monthly on the 12th of the month beginning 7 months from the date of the PPP Loan. The PPP Loan provides for prepayment of 20% or less of the unpaid principal balance at any time. If more than 20% is prepaid, then all accrued interest must also be paid.

In August 2021, the Company submitted its application for 100% loan forgiveness and on September 3, 2021, the loan was 100% forgiven by the Small Business Administration. As a result, the Company recorded a gain on the forgiveness of the loan in the amount of \$2,234,730.

Maturities of Debt

Maturities of our debt as of December 31, 2021 are presented below.

Year ending December 31:	
2022	\$ 13,200,000
2023	6,800,000
Aggregate maturities	20,000,000
Original issue discount on Convertible Notes	(2,000,000)
Unrealized change in fair value of Convertible Notes	(695,000)
Total debt outstanding as of December 31, 2021	\$ 17,305,000
Current portion	13,200,000
Noncurrent portion	4,105,000

Note 10 - Stockholders' Equity

Common and Preferred Stock

We have one single class of common stock and 75,000,000 authorized shares of common stock, par value \$0.0001 per share.

We also have 5,000,000 authorized shares of preferred stock, \$0.0001 par value per share, of which none are issued and outstanding. The holders of common stock are entitled to one vote per share on all matters submitted to a vote of stockholders of the Company. Subject to the prior rights of all classes or series of stock at the time outstanding having prior rights as to dividends or other distributions, all stockholders are entitled to share equally in dividends, if any, as may be declared from time to time by the Board of Directors out of funds legally available. Subject to the prior rights of creditors of the Corporation and the holders of all classes or series of stock at the time outstanding having prior rights as to distributions upon liquidation, dissolution, or winding up of the Corporation, in the event of liquidation, the holders of Common Stock are entitled to share ratably in all assets remaining after payment of all liabilities. The stockholders do not have cumulative, preemptive rights, or subscription rights.

On October 30, 2020, we issued 5,000,000 shares, at a price of \$2.40 per share, of Akerna common stock in a public offering for gross proceeds of \$12.0 million, offset by offering costs of approximately \$1.0 million for net proceeds \$11.0 million dollars.

Warrants

In connection with MTech Acquisition Corp.'s ("MTech") initial public offering, MTech sold 5,750,000 units at a purchase price of \$10.00 per unit, inclusive of 750,000 units sold to the underwriters on February 8, 2018, upon the DD' election to fully exercise their over-allotment option. Each unit consisted of one share of MTech's common stock and one warrant of MTech ("MTech Public Warrant"). Each Mtech Public Warrant entitled the holder to purchase one share of MTech's common stock at an exercise price of \$11.50. Upon the Mergers, the Public Warrants were converted to those of Akerna at the exchange ratio of one-for-one.

A summary of our common stock warrantsis presented in the following table:

	Shares Issuable Under Warrants	Weighted- average Exercise Price		average		Weighted Average Remaining Life	Aggregate rinsic Value
Outstanding at June 30, 2020	5,813,804	\$	11.50	3.97	\$ _		
Issued	_		_	_	_		
Exercised	_		_	_	_		
Expired/canceled	_		_	_	_		
Outstanding at December 31, 2020	5,813,804	\$	11.50	3.37	\$ _		
Issued	_		_	_	_		
Exercised	_		_	_	_		
Expired/canceled	_		_	_	_		
Outstanding at December 31, 2021	5,813,804	\$	11.50	2.97	\$ _		

There was no aggregate intrinsic value for the warrants outstanding as of December 31, 2021 and December 31, 2020.

Note 11 - Stock-Based Compensation

Restricted Shares and Restricted Stock Units

On June 17, 2019, our stockholders considered and approved the 2019 Long Term Incentive Plan, or the Equity Incentive Plan, and reserved 1,040,038 shares of common stock for issuance thereunder. The Equity Incentive Plan was previously approved, subject to stockholder approval, by the board of directors of Akerna on January 23, 2019. The Equity Incentive Plan became effective immediately upon the Closing of the Mergers. On June 26, 2020, the stockholders approved an amendment to the Equity Incentive Plan and increased the shares authorized for issuance thereunder by 525,000 to 1,565,038.

We grant restricted stock units, or RSUs, that are subject to time-based vesting and require continuous employment, typically over a period offour years from the grant date or the first day of the service period.

Prior to the Mergers, MJF had Profit Interest Incentive Plan in place whereby it could grant Profits Interest Units, or PIUs, to employees or consultants and other independent advisors of the Company. PIUs granted under the Profits Interest Plan would generally vest once a year over four years commencing on the date granted or based on specified performance targets. MJF had the right, but not the obligation, to repurchase vested PIUs from holders upon their termination of employment. Unvested PIUs were to be forfeited upon termination of employment. If the holder was terminated for cause, as defined, all vested and unvested units would be forfeited. PIUs repurchased or canceled or forfeited by the award recipient were available for reissuance. Upon completion of the Mergers, the non-vested PIUs were exchanged for and became subject to restricted stock agreements, or Restricted Shares, with varying vesting terms that reflect the vesting conditions applicable to the individual PIUs at the time of the merger.

We determined the PIUs represented a profit-sharing compensation arrangement that had value only upon a defined liquidating event. Accordingly, no value was accrued for the PIUs prior to the Mergers on June 17, 2019, which met the definition of a liquidating event. As a result, we recorded a one-time charge of approximately \$3.4 million, which represented the charge associated with issuing fully vested shares of common stock in exchange for the PIUs

A summary of our unvested Restricted Shares and RSUs activity is presented in the table below:

	Restricted Shares	Restricted Stock Units	Total	Weighted Average Grant Date Fair Value
Unvested as of June 30, 2020	72,313	534,302	606,615	\$ 6.56
Granted	_	429,974	429,974	4.88
Vested	(8,024)	(157,350)	(165,374)	5.08
Forfeited	_	(43,906)	(43,906)	6.83
Unvested as of December 31, 2020	64,289	763,020	827,309	\$ 6.77
Granted	_	447,642	447,642	4.05
Vested	(30,559)	(427,711)	(458,270)	5.55
Forfeited	(1,336)	(99,184)	(100,520)	4.51
Unvested as of December 31, 2021	32,394	683,767	716,161	5.47

For the year ended December 31, 2021, six months ended December 31, 2020, and year ended June 30, 2020 we recognized tock-based compensation expense related to the ratable amortization of the unvested Restricted Shares and RSUs of \$\mathbb{Q}\$.0 million, \$2.0 million, and \$1.3 million, respectively. Stock-based compensation expense is included in operating expenses and cost of sales on our consolidated statements of operations consistent with the allocation of other compensation arrangements. During the year ended December 31, 2021, six months ended December 31, 2020, and year ended June 30, 2020, we capitalized \$0.04 million, \$0.2 million and \$0.1 million, respectively, in stock-based compensation costs as software development cost. The \$3.7 million of unrecognized costs as of December 31, 2021 related to Restricted Shares and RSUs will be ratably recognized over an estimated weighted average remaining vesting period of 2.41 years.

Note 12 - Loss Per Share

During the year ended December 31, 2021, we used the two-class method to compute net loss per share because we issued securities other than common stock that is economically equivalent to a common share in that the class of stock has the right to participate in dividends should a dividend be declared payable to holders of Akerna common stock. These participating securities were the Exchangeable Shares issued by our wholly owned subsidiary in exchange for interest in Ample. The two-class method requires earnings for the period to be allocated between common stock and participating securities based on their respective rights to receive distributed and undistributed earnings. Under the two-class method, for periods with net income, basic net income per common share is computed by dividing the net income attributable to common stockholders by the weighted average number of shares of common stock outstanding during the period. Net income attributable to common stockholders is computed by subtracting from net income the portion of current period earnings that the participating securities would have been entitled to receive pursuant to their dividend rights had all of the period's earnings been distributed. No such adjustment to earnings is made during periods with a net loss, as the holders of the Exchangeable Shares have no obligation to fund losses.

Diluted net loss per common share is calculated under the two-class method by giving effect to all potentially dilutive common stock, including warrants, restricted stock awards, restricted stock units, and shares of common stock issuable upon conversion of our Convertible Notes. We analyzed the potential dilutive effect of any outstanding convertible securities under the "if-converted" method, in which it is assumed that the outstanding Exchangeable Shares and Convertible Notes are converted to shares of common stock at the beginning of the period or date of issuance, if later. We report the more dilutive of the approaches (two-class or "if-converted) as the diluted net loss per share during the period. The dilutive effect of unvested restricted stock awards and restricted stock units is reflected in diluted loss per share by application of the treasury stock method and is excluded when the effect would be anti-dilutive.

The weighted-average number of shares outstanding used in the computation of diluted earnings per share does not include the effect of potential outstanding common shares that would have been anti-dilutive for the period. The table below details potentially outstanding shares on a fully diluted basis that were not included in the calculation of diluted earnings per share:

	December 31, 2021	December 31, 2020
Shares issuable upon exchange of Exchangeable Shares	309,286	2,667,349
Warrants	5,813,804	5,813,804
Restricted Stock Units	683,767	694,512
Restricted Stock Awards	32,394	64,289
Shares of common stock issuable in upon conversion of Convertible Notes	12,484,395	1,319,368
Total	19,323,646	10,559,322

Note 13 - Fair Value

Contingent Consideration

Solo

In connection with our acquisition of Solo, the Solo selling shareholders have the potential to earn the contingent consideration, which is calculated asthe lesser of (i) \$0.01 per solo*TAGTM and solo*CODETM sold or (ii) 7% of net revenue. The fees were to be paid annually until the earlier of: (1) our shares trading above \$12 per share for any consecutive 20 trading days in a 30-day period; (b) upon our no longer owning a majority stake in Solo; or (c) upon expiration of the patents related to solo*TAGTM and solo*CODETM, which is December 1, 2029.

We record the fair value of the liability in the consolidated balance sheets under the caption "current contingent consideration" and recognize changes to the liability against earnings or loss each reporting period until settlement. The fair value of the contingent consideration on the date of the acquisition of Solowas \$389,000. In connection with our exercise of the option to acquire the remaining interest in Solo, the selling shareholders agreed to retrospectively and prospectively relieve the contingent consideration obligation. Therefore, the settled value of the contingent consideration was \$0. We have recorded a gain of \$389,000 on settlement of the contingent consideration liability during the six months ended December 31, 2020 in general and administrative expenses in our consolidated statement of operations.

Trellis

In connection with our acquisition of Trellis, the Trellis selling shareholders have the potential to earn contingent consideration, which is calculated as five times the annualized revenue of certain customers generated in September 2020. The fair value of the contingent consideration on the date of acquisition of Trellis was \$998,000. The carrying amount at the fair value of the liability for the contingent consideration recorded on our consolidated balance sheet as of June 30, 2020 ws \$0. As such, we recorded a gain of \$998,000 due the change in the fair value of the contingent consideration during the year ended June 30, 2020 in general and administrative expenses in our consolidated statement of operations.

Ample

In addition to the stock and cash consideration, the agreement provides for contingent consideration of up to CAD\$0,000,000, payable in exchangeable shares, payable if Ample's Recurring Revenue recognized during the 12 months after the acquisition date is CAD\$9,000,000 or more. The contingent consideration amount is reduced by an amount equal to the product of CAD\$6.67 multiplied by the difference between CAD\$9,000,000and the amount of Recurring Revenue realized during the twelve months following the acquisition.

We record the fair value of the liability in the consolidated balance sheets as contingent consideration payable and recognize changes to the liability against earnings or loss in general and administrative expenses in the consolidated statements of operations. The fair value of the contingent consideration on the date of the acquisition of Ample was \$604,000. The carrying amount at fair value of the aggregate liability for the contingent consideration recorded on the consolidated balance sheet as of December 31, 2020, is \$0. We have recorded a gain of \$604,000 due the change in the fair value of the contingent consideration during the six months ended December 31, 2020 in general and administrative expenses in our consolidated statement of operations.

Viridian

In connection with our acquisition of Viridian, the Viridian selling shareholders have the potential to earn contingent consideration payable in common stock if Viridian meets certain revenue criteria. The fair value of the contingent consideration on the date of acquisition of Viridian was \$2,000. The carrying amount at the fair value of the liability for the contingent consideration recorded on our consolidated balance sheet as of December 31, 2021 was unchanged at \$2,000.

365 Cannabis

In connection with our acquisition of 365 Cannabis, the 365 Cannabis selling shareholders have the potential to earn contingent considerationpayable in common stock if certain revenue criteria is met. The fair value of the contingent consideration on the date of acquisition of 365 Cannabis was \$6,300,000. The carrying amount at the fair value of the liability for the contingent consideration recorded on our consolidated balance sheet as of December 31, 2021 was unchanged at \$6,300,000.

We valued the contingent consideration using a probability-weighted discounted cash flow model, which incorporates inputs that are not observable in the market and thus represents a Level 3 measurement as defined in GAAP. The unobservable inputs utilized for measuring the fair value of the contingent consideration reflect management's own assumptions about the assumptions that market participants would use in valuing the contingent consideration as of the valuation date, as well as our knowledge of specific transactions that effect the calculation.

Fair Value Option Election - Convertible Notes

We issued Convertible Notes with a principal amount of \$17.0 million at a purchase price of \$15.0 million on June 9, 2020. We elected to account for the Convertible Notes using the fair value option. Under the fair value option, the financial liability is initially measured at its issue-date estimated fair value and subsequently remeasured at estimated fair value on a recurring basis at each reporting period date. The remaining estimated fair value adjustment is presented as a single line item within other income (expense) in our consolidated statement of operations under the caption, change in fair value of convertible notes.

For the 2020 Notes, which are measured at fair value categorized within Level 3 of the fair value hierarchy, the following is a reconciliation of the fair values from June 30, 2020 to October 5, 2021:

Beginning fair value balance on June 30, 2020	\$14,131,000
Payments on Convertible Notes	(1,827,273)
Change in fair value reported in the statements of operations	961,273
Change in fair value reported in other comprehensive income	133,000
Ending fair value balance - December 31, 2020	\$13,398,000
Payments on Convertible Notes	(15,172,727)
Change in fair value reported in the statements of operations	2,030,904
Change in fair value reported in other comprehensive income	(70,000)
Gain on extinguishment of debt reported on the statement of operations	(186,177)
Ending fair value balance - October 5, 2021	<u> </u>

We issued the Senior Secured Notes with a principal amount of \$20.0 million at a purchase price of \$18.0 million on October 5, 2021. We have elected to account for the Senior Secured Notes using the fair value option. Under the fair value option, the financial liability is initially measured at its issue-date estimated fair value and subsequently remeasured at estimated fair value on a recurring basis at each reporting period date. The change in estimated fair value resulting from changes in instrument specific credit risk is recorded in other comprehensive income as a component of equity. The remaining estimated fair value adjustment is presented as a single line item within other income (expense) in our consolidated statement of operations under the caption, change in fair value of convertible notes.

For the Senior Secured Notes, which are measured at fair value categorized within Level 3 of the fair value hierarchy, the following is a reconciliation of the fair values from October 5, 2021 to December 31, 2021:

Beginning fair value balance on October 5, 2021	\$18,000,000
Payments on Convertible Notes	_
Change in fair value reported in the statements of operations	(665,000)
Change in fair value reported in other comprehensive income	(30,000)
Ending fair value balance - December 31, 2021	\$ 17,305,000

The estimated fair value of the Convertible Notes as of December 31, 2021, and December 31, 2020 was computed using a Monte Carlo simulation, which incorporates significant inputs that are not observable in the market, and thus represents a Level 3 measurement as defined by GAAP. The unobservable inputs utilized for measuring the fair value of the Convertible Notes reflects our assumptions about the assumptions that market participants would use in valuing the Convertible Notes as of the issuance date and subsequent reporting period.

We determined the fair value by using the following key inputs to the Monte Carlo Simulation Model:

Fair Value Assumptions - Convertible Notes	De	cember 31, 2021	Dece	ember 31, 2020
Face value principal payable	\$	20,000,000	\$	15,172,272
Original conversion price	\$	4.05	\$	11.5
Value of Common Stock	\$	1.75	\$	3.24
Expected term (years)		2.8		2.3
Volatility		75 %		77 %
Market yield (range)		37.1 %		27.1 to 27.2 %
Risk free rate		1.0 %)	0.1%
Issue date		October 5, 2021		June 9, 2020
Maturity date		October 5, 2024		June 1, 2023

Fair Value Measurement - Warrants

In connection with MTech Acquisition Corp.'s ("MTech") initial public offering, MTech sold 5,750,000 units at a purchase price of \$10.00 per unit, inclusive of 750,000 units sold to the underwriters on February 8, 2018, upon the underwriters' election to fully exercise their over-allotment option. Each unit consisted of one share of MTech's common stock andone warrant of MTech ("MTech Public Warrant"). Each MTech Public Warrant entitled the holder to purchase one share of MTech's common stock at an exercise price of \$11.50. Concurrently with MTech's initial public offering, MTech sold243,750 units at a purchase price of \$10.00 per unit on a private offering basis. Each unit consisted of one share of MTech's common stock andone warrant of MTech ("MTech Private Warrant"). Each MTech Private Warrant entitled the holder to purchase one share of MTech's common stock at an exercise price of \$1.50.

Upon completion of the mergers between MTech and MJF on June 17, 2019, as contemplated by the Merger Agreement dated October 10, 2018, as amended ("Mergers"), the MTech Public Warrants and the MTech Private Warrants were converted, respectively, at an exchange ratio of one-for-one to a warrant to purchase one share of Akerna's common stock with identical terms and conditions as the MTech Public Warrants ("Public Warrant") and the MTech Private Warrants ("Private Warrant"), collectively with the Public Warrants, "Warrants") In connection with the completion of the Mergers, we also issued 189,365 common stock purchase warrants upon the cashless exercise of a unit purchase option, which warrants have identical terms to the Public Warrants and are included in references to Public Warrants and Warrants herein.

For the Private Warrants classified as derivative liabilities, which are measured at fair value categorized within Level 3 of the fair value hierarchy, the following is a reconciliation of the fair values for the year ended December 31, 2021 and December 31, 2020:

		Year Ended December 31,			
	2021			2020	
Fair value balance at beginning of period	\$	311,376	\$	688,187	
Change in fair value reported in the statements of operations		(248,198)		(376,811)	
Fair value balance at end of period	\$	63,178	\$	311,376	

We utilized a binomial lattice model, which incorporates significant inputs, specifically the expected volatility, that are not observable in the market, and thus represents a Level 3 measurement as defined in GAAP. The unobservable inputs utilized for measuring the fair value of the Private Warrants reflect our estimates regarding the assumptions that market participants would use in valuing the Warrants as of the end of the reporting periods.

We record the fair value of the Private Warrants in the consolidated balance sheets under the caption "derivative liability" and recognize changes to the liability against earnings or loss each reporting period. Upon exercise of the Private Warrants, holders will receive a delivery of Akerna shares on a net or gross share basis per the terms of the Private Warrants and any exercise will reclassify the Private Warrants, at the time of exercise, to shareholder's equity to reflect the equity transaction. There are no periodic settlements prior to the holder exercising the Private Warrants. There were no transfers in or out of Level 3 from other levels for the fair value hierarchy.

We estimated the fair value by using the following key inputs:

Fair Value Assumptions - Private Warrants	De	cember 31, 2021	De	ecember 31, 2020
Number of Private Warrants		225,635		225,635
Original conversion price	\$	11.50	\$	11.50
Value of Common Stock	\$	1.75	\$	3.24
Expected term (years)		2.46		3.46
Volatility		85.8%		102.3%
Risk free rate		0.8%		0.2%

Note 14 - Commitments and Contingencies

Operating Leases

As of December 31, 2021, we had one facility under a non-cancelable operating leases in Las Vegas. Rent expense for the year ended December 31, 2021, six months ended December 31, 2020 and the year ended June 30, 2020 was \$157,593, \$552,861, and \$299,629 respectively.

Future minimum lease payments under these leases are as follows:

2022	\$ 252,525
2023	260,100
2024	110,480
Total	\$ 623,105

During the third quarter of 2021, we reached an agreement to terminate our office lease in Toronto, Canada for a termination fee of approximately \$80,000, which is included within the General and Administrative expense line item on the condensed consolidated statement of operations and was paid in full during the year ended December 31, 2021. In connection with the lease termination, we also wrote off certain assets, primarily leasehold improvements, and the resulting loss of \$1,045,209 was also recorded in the General and Administrative expense line item on the condensed consolidated statement of operations.

During the four quarter of 2020, we reached an agreement to terminate our office lease in Denver, CO. The lease termination agreement included the forfeiture of our \$41,250 security deposit and a termination fee of \$402,480. The lease termination fee was settled in the first quarter of 2021 by issuing113,375 shares of common stock, calculated using a VWAP of \$3.55/share.

Letter-of-Credit

As of December 31, 2021 and December 31, 220, we had a standby letter-of-credit with a bank in the amount of \$500,000. The standby letter of credit is collateralized by \$500,000 of cash, which is classified as restricted cash on our consolidated balance sheets. The beneficiary of the letter-of-credit is an insurance company.

Litigation

On December 4, 2020, TechMagic USA LLC filed suit against our wholly-owned subsidiary, Solo, in Massachusetts Superior Court, Department Business Litigation, seeking recovery of up to approximately \$1.07 million for unpaid invoices pursuant to a Master Services Agreement dated February 5, 2018 by and between TechMagic and Solo. The invoices set forth services that TechMagic USA LLC purports to have provided to Solo regarding development of mobile software applications for MJF and Solo between March and November 2020 totaling approximately \$787,000. The suit seeks continued fees under the Master Services Agreement through the end of January 2021. Akerna provided a notice of termination of the Master Services Agreement on November 23, 2020 and the parties dispute the effective date of the termination. Solo disputes the validity of the invoices, in whole or in part, and intends to defend the suit vigorously. Mr. Ashesh Shah, formerly the president of Solo and currently the holder of less than 5% of our issued and outstanding shares of common stock is, to our knowledge, the founder and one of the principal managers of TechMagic USA LLC. As of December 31, 2021 and December 31, 2020, we recognized a loss contingency of \$0.5 million and \$0.6 million, respectively.

On April 2, 2021, TreCom Systems Group, Inc. ("TreCom") filed suit against Akerna and our wholly-owned subsidiary, MJ Freeway, LLC, in federal District Court for the Eastern District of Pennsylvania, seeking recovery of up to approximately \$2 million for services allegedly provided pursuant to a Subcontractor Agreement between MJ Freeway and TreCom. MJ Freeway provided a notice of termination of the operative Subcontractor Agreement on August 4, 2020. MJ Freeway disputes the validity of TreCom's invoices and the enforceability of the alleged agreement that TreCom submitted to the court. Akerna filed counterclaims against TreCom for breach of contract, a declaratory judgment, commercial disparagement, and defamation. TreCom failed to return Akerna's intellectual property and issued numerous disparaging statements to one of Akerna's clients. TreCom subsequently filed a motion to dismiss these counterclaims, which was denied by the court Akerna intends to vigorously defend against TreCom's claims, and pursue its own claims. As of December 31, 2021 and December 31, 2020, we recognized a loss contingency of \$2 million and \$0, respectively.

On May 21, 2021, our wholly-owned subsidiary, Solo, filed suit against two of Solo's former directors, Ashesh Shah and Palle Pedersen. Solo seeks recovery for Mr. Shah's intentional interference with contractual relations, and the defendants' breaches of various fiduciary duties owed to Solo. Defendant Shah engaged in improper communications with Solo's customers with the intent that those customers cease their contractual relations with Solo. The defendants also entered into an improper contract with a contractual counter party that the defendants had a conflict of interest with. The defendants have not asserted any counterclaims, and we therefore have not recognized a loss contingency.

From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business. We will accrue a liability for such matters when it is probable that a liability has been incurred and the amount can be reasonably estimated. When only a range of possible loss can be established, the most probable amount in the range is accrued. If no amount within this range is a better estimate than any other amount within the range, the minimum amount in the range is accrued. The accrual for a litigation loss contingency might include, for example, estimates of potential damages, outside legal fees and other directly related costs expected to be incurred. As of December 31, 2021, and through the date these consolidated financial statements were issued, there were no other legal proceedings requiring recognition or disclosure in the consolidated financial statements.

Employee Benefit Plan

We have a 401(k) Plan (the "Plan") to provide retirement benefits for our employees. Employees may contribute up to a portion of their annual compensation to the Plan, limited to a maximum annual amount as updated annually by the IRS. We do not offer a match of employee contributions nor any discretionary contributions.

Note 15- Income Taxes

Since June 17, 2019, we have been the sole owner of MJF, which is a disregarded entity for federal income taxes. Prior to June 17, 2019 MJF was treated as a partnership for U.S income tax purposes. Accordingly, prior to the business combination, our taxable income and losses were reported on the income tax returns of MJF's members. Therefore, no income tax is provided prior to June 17, 2019.

On March 27, 2020 the Coronavirus Aid, Relief and Economic Security Act, or the CARES Act, was enacted in response to the COVID-19 pandemic. It was determined the CARES Act did not materially impact our tax provision as of December 31, 2021 and December 31, 2020.

The accounting for the business combinations of Viridian and 365 Cannabis reflected in the accompanying consolidated financial statements is preliminary and is based upon estimates and assumptions that are subject to change within the measurement period (up to one year from the acquisition date). The measurement period remains open pending the completion of valuation procedures related to the acquired assets and assumed liabilities, intangible assets and income taxes.

In April 2020, we were granted a loan, or the PPP Loan, from a lender in the aggregate amount of \$2.2 million pursuant to the Paycheck Protection Program under the Coronavirus Aid, Relief, and Economic Security Act, or the CARES Act, which we obtained debt forgiveness on during the year ended December 31, 2021.

The following table sets forth the expense or benefit for income taxes:

	Year Ended Ended Year Ended December 31, December 31, June 30, 2021 2020 2020
Income tax	
Current income taxes	
U.S. federal	\$ — \$ — \$ 30,985
U.S. state	5,800 200 —
Foreign	6,270
Total current income taxes	<u>\$ 12,070</u> <u>\$ 200</u> <u>\$ 30,985</u>
	Year Ended Ended Year Ended December 31, December 31, June 30, 2021 2020 2020
Deferred income tax	
U.S. federal	\$ (2,274,295) \$ — \$ —
U.S. state	
Total deferred income tax benefit	<u>\$ (2,274,295)</u> <u>\$ — </u> <u>\$ — </u>

The following table sets forth reconciliations of the income tax expense at the statutory federal income tax rate to actual expense based on income or loss before income taxes:

			Year Ended December 31, 2021		December 31, December 31,		Ended ecember 31,	June 30, 2020
Income tax expense (benefit) attributable to:								
Federal		\$	(6,692,267)	\$	(3,560,998)	\$ (3,255,706)		
State, net of federal benefit			(672,148)		(553,871)	(862,690)		
Foreign tax rate differential			(138,292)		29,617	(2,645)		
Permanent differences			2,428,631		1,263,151	312,525		
Rate change			54,295		60,220	_		
Changes in valuation allowance			3,361,603		2,762,081	3,884,440		
Provision to return adjustment			273,489		_	(45,134)		
Losses from flow-through entity not subject to tax			_		_	_		
Deferred True-Ups			(928,743)		_	_		
Other adjustments			51,207		<u> </u>	195		
Effective income tax expense (benefit)	T- 40	\$	(2,262,225)	\$	200	\$ 30,985		
	F-42							

	<u>D</u>	December 31, 2021		December 31, 2020	
Noncurrent deferred tax assets:					
Employee compensation	\$	820,410	\$	679,106	
Debt issuance costs		138,778		343,612	
Revenue recognition		105,735		_	
Settlement accrual		146,604		182,896	
Fixed assets		242,006		831,196	
Federal and state net operating loss		10,673,908		6,337,897	
Foreign net operating loss		4,904,857		2,586,671	
Other		225,340		27,410	
Total deferred tax assets	\$	17,257,638	\$	10,988,788	
Noncurrent deferred tax liabilities:					
Fixed assets		_		_	
Intangibles		(6,051,459)		(2,717,717)	
Deferred tax liabilities	\$	(6,051,459)	\$	(2,717,717)	
Valuation allowance		(11,881,470)		(8,271,071)	
Deferred taxes after valuation allowance	\$	(675,291)	\$		

During the year ended December 31, 2021, valuation allowances on deferred tax assets that are not anticipated to be realized increased by \$.6 million of which \$0.2 million was recorded in purchase accounting and the remainder of \$3.4 million was recorded to deferred expense. During the six months ended December 31, 2020, valuation allowances on deferred tax assets that are not anticipated to be realized increased by \$5.5 million of which \$2.7 million was recorded in purchase accounting and the remainder of \$2.8 million was recorded to deferred expense.

Our deferred tax valuation allowances are primarily the result of uncertainties regarding the future realization of recorded tax benefits on tax losses. The measurement of deferred tax assets is reduced by a valuation allowance if based upon available evidence, it is more likely than not that the deferred tax assets will not be realized. We have evaluated the realizability of our deferred tax assets in each jurisdiction by assessing the adequacy of expected taxable income, including the reversal of existing temporary differences, historical and projected operating results, and the availability of prudent and feasible tax planning strategies. Based on this analysis, we have determined that the valuation allowances recorded as of December 31, 2021 and December 31, 2020 are appropriate.

We have deferred tax assets related to U.S. federal tax and state tax carryforwards for net operating losses in the amount of \$4.5 million. The majority of U.S. federal net operating loss carryforwards are carried forward indefinitely. Federal net operating losses generated after 2017 have an indefinite carryforward and are only available to offset 80% taxable income beginning in 2021. U.S. state net operating loss carryforwards expire at various dates of which the majority begin to expire in 2039. We have deferred tax assets related to foreign net operating loss carryforward, which begin to expire in 2034, in the amount of \$18.5 million.

We are not currently under examination for any of the major jurisdictions where we conduct business as of December 31, 2021, however, all of our tax years remain subject to examination. Our management does not believe there are significant uncertain tax positions in 2021 and as a result we do not expect any cash payments in the next 12 months, however, uncertain tax positions related to potential penalties in the amounts of \$30,000 and \$50,000 have been recorded in connection with business combinations during the years ended December 31, 2021 and June 30, 2020, respectively. There is no interest related to uncertain tax positions in 2021 or 2020.

Note 16 - Revisions of Previously Issued Financial Statements

On June 17, 2019, we completed the Mergers with MTech. Prior to the Mergers, MTech was a special purpose acquisition company and had completed an initial public offering in October 2018, which included the issuances of the MTech Private Warrants in a simultaneous private placement transaction. The MTech Private Warrants were exchanged for our Private Warrants as part of the Mergers and our Private Warrants remain outstanding as of December 31, 2021. We initially accounted for these outstanding Private Warrants as components of equity rather than as derivative liabilities. In light of the Staff Statement on Accounting and Reporting Considerations for Warrants Issued by Special Purpose Acquisition Companies ("SPACs") issued by the staff of the SEC on April 12, 2021 (the "SEC Staff Statement"), the Company's management further evaluated our outstanding warrants under Accounting Standards Codification 815-40, Contracts in Entity's Own Equity ("ASC 815-40"), which addresses equity versus liability treatment and classification of equity-linked financial instruments, including warrants, and states that a warrant may be classified as a component of equity only if, among other things, the warrant is indexed to the issuer's common stock.

Based on management's evaluation and in consultation with the Audit Committee, we concluded that the Company's Private Warrants are not indexed to the Company's common stock in the manner contemplated by ASC Section 815-40. As a result, these warrants are precluded from equity classification and should be recorded as derivative liabilities remeasured to fair value at each reporting period. We assessed the materiality of these errors on prior periods' consolidated financial statements and concluded that the errors were not material to any prior annual or interim periods. However, we have revised the prior period financial information included in these consolidated financial statements to reclassify the Private Warrants as derivative liabilities measured at their estimated fair values at the end of each reporting period and recognized changes in the estimated fair value of the derivative instruments from the prior period in the Company's operating results.

The Company's change in accounting for the Private Warrants from components of equity to derivative liabilities has no impact on the Company's current or previously reported cash position.

The tables below disclose the effects on the consolidated financial statements included in this Annual Report on Form 10-K:

	Y ear	Year Ended June 30, 2020		
	As reported	Adjustment	As revised	
Consolidated Statements of Operations				
Change in fair value of derivative liability	_	1,962,034	1,962,034	
Net loss attributable to Akerna shareholders	(15,534,345)	1,962,034	(13,572,311)	
Net loss per share	(1.31)	_	(1.14)	

	Six Months Ended December 31, 2020		
	As reported	Adjustment	As revised
Condensed Consolidated Statements of Operations			
Change in fair value of derivative liability	_	746,852	746,852
Net loss attributable to Akerna shareholders	(16,957,334)	746,852	(16,210,482)
Net loss per share	(1.01)	_	(1.01)

	As o	As of December 31, 2020		
	As reported	Adjustment	As revised	
Consolidated Balance Sheet				
Derivative liability	_	(311,376)	(311,376)	
Total liabilities	(19,635,076)	(311,376)	(19,946,452)	
Additional paid-in capital	95,090,833	(1,004,450)	94,086,433	
Accumulated deficit	(57,872,599)	693,074	(57,179,525)	

DESCRIPTION OF SECURITIES

Common Stock

Our authorized share capital consists of 75,000,000 shares of common stock, \$0.0001 par value per share. As of March 16, 2022, there are 32,054,463 shares of common stock issued and outstanding. We are a Delaware corporation and our affairs are governed by our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws. The following are summaries of material provisions of our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws insofar as they relate to the material terms of our common stock. Complete copies of our Amended and Restated Certificate of Incorporation and Amended and Restated By-laws are filed as exhibits to our Annual Report on Form 10-K.

All outstanding shares of common stock are of the same class and have equal rights and attributes. The holders of common stock are entitled to one vote per share on all matters submitted to a vote of our stockholders. Subject to the prior rights of all classes or series of stock at the time outstanding having prior rights as to dividends or other distributions, all stockholders are entitled to share equally in dividends, if any, as may be declared from time to time by the Board of Directors out of funds legally available. Subject to the prior rights of creditors of Akerna and the holders of all classes or series of stock at the time outstanding having prior rights as to distributions upon liquidation, dissolution or winding up of Akerna, in the event of liquidation, the holders of common stock are entitled to share ratably in all assets remaining after payment of all liabilities. The stockholders do not have cumulative, preemptive rights, or subscription rights. Our board of directors are divided into three classes: Class I; Class II; and Class III. The directors in Class I have a term expiring at the 2022 annual meeting of stockholders, and the directors in Class III have a term expiring at the 2021 annual meeting of stockholders.

Our Amended and Restated Certificate of Incorporation contains provisions that may discourage unsolicited takeover proposals that stockholders may consider to be in their best interests. We are also subject to anti-takeover provisions under Delaware law, which could delay or prevent a change of control. Together these provisions may make more difficult the removal of management and may discourage transactions that otherwise could involve payment of a premium over prevailing market prices for our securities

These provisions:

- · create a staggered Board of Directors making it more difficult for stockholders to remove a majority of the Board of Directors and take control;
- grant the Board of Directors the ability to designate the terms of and issue new series of preferred shares, which can be created and issued by the Board of Directors without prior stockholder approval, with rights senior to those of the common stock;
- · impose limitations on our stockholders' ability to call special stockholder meetings;
- make it more difficult the removal of management and may discourage transactions that otherwise could involve payment of a premium over prevailing market prices for our securities.

Warrants

As of March 16, 2022, there are 5,813,804 common stock purchase warrants issued and outstanding (the "Warrants"). Each Warrant entitles the registered holder to purchase one share of common stock of the Company (a "Warrant Share") at a price of \$11.50 per Warrant Share, subject to adjustment as discussed below. No Warrants will be exercisable for cash unless we have an effective and current registration statement covering the Warrant Shares issuable upon exercise of the Warrants and a current prospectus relating to such Warrant Shares. If a registration statement covering the Warrant Shares issuable upon exercise of the Warrants is not effective, Warrant holders may, until such time as there is an effective registration statement and during any period when we shall have failed to maintain an effective registration statement, exercise Warrants on a cashless basis pursuant to the exemption provided by Section 3(a)(9) of the Securities Act, provided that such exemption is available. If that exemption, or another exemption, is not available, holders will not be able to exercise their Warrants on a cashless basis. In such event, each holder would pay the exercise price by surrendering the Warrants for that number of shares of common stock equal to the quotient obtained by dividing (x) the product of the number of Warrant Shares underlying the Warrants, multiplied by the difference between the exercise price of the Warrants and the "fair market value" (defined below) by (y) the fair market value. The "fair market value" for this purpose will mean the average reported last sale price of the Warrant Shares for the 5 trading days ending on the trading day prior to the date of exercise. The Warrants will expire on June 17, 2024, or earlier upon redemption or liquidation.

The exercise price and number of Warrant Shares issuable on exercise of the warrants may be adjusted in certain circumstances including in the event of a stock dividend, extraordinary dividend or our recapitalization, reorganization, merger or consolidation.

Akerna may call the Warrants for redemption, subject to certain exceptions, in whole and not in part, at a price of \$0.01 per warrant, at any time during the exercise period, upon not less than 30 days' prior written notice of redemption to each warrant holder, if, and only if, the reported last sale price of the common stock equals or exceeds \$18.00 per share (as adjusted for stock splits, stock dividends, reorganizations and recapitalizations), for any 20 trading days within a 30 trading day period ending on the third business day prior to the notice of redemption to warrant holders; and if, and only if, there is a current registration statement in effect with respect to the Warrant Shares underlying such warrants. The right to exercise will be forfeited unless the Warrants are exercised prior to the date specified in the notice of redemption. On and after the redemption date, a record holder of a Warrant will have no further rights except to receive the redemption price for such holder's warrant upon surrender of such Warrant

The Warrants may be exercised upon surrender of the Warrant certificate on or prior to the expiration date at the offices of the warrant agent, with the exercise form on the reverse side of the warrant certificate completed and executed as indicated, accompanied by full payment of the exercise price, by certified or official bank check payable to us, for the number of Warrants being exercised. The Warrant holders do not have the rights or privileges of holders of common stock and any voting rights until they exercise their Warrants and receive Warrant Shares.

No fractional Warrant Shares will be issued upon exercise of the Warrants. If, by reason of any adjustment made pursuant to the warrant agreement, upon exercise of the Warrants, a holder would be entitled to receive a fractional interest in a Warrant Share, Akerna will, upon exercise, round up to the nearest whole number of Warrant Shares to be issued to the Warrant holder.

The Warrants are issued in registered form under the warrant agreement between Continental Stock Transfer & Trust Company, as warrant agent, and Akerna. The warrant agreement provides that the terms of the Warrants may be amended without the consent of any holder to cure any ambiguity or correct any defective provision, but requires the approval, by written consent or vote, of the holders of at least 50% of the then outstanding Warrants in order to make any change that adversely affects the interests of the registered holders.

SUBSIDIARIES OF AKERNA CORP.

Subsidiary	Place of Incorporation
MJ Freeway, LLC	Colorado
Solo Sciences Inc.	Delaware
Trellis Solutions Inc.	Ontario, Canada
Akerna Canada Holdings Inc.	Ontario, Canada
Akerna Canada Ample Exchange Inc.	Ontario, Canada
Ample Organics Inc.	Ontario, Canada
Viridian Sciences, Inc.	Delaware
The NAV People Inc.	Delaware
365 Dynamics People Software and Services Ltd	British Columbia, Canada
Akerna Services, LLC	Colorado
Last Call Analytics Inc.	Ontario, Canada

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in the Registration Statements of Akerna Corp. (the "Company") on Form S-3 (File No. 333-262095, File No. 333-263088, File No. 333-256878, and File No. 333-228220) and on Form S-8 (File No. 333-233480 and File No. 333-242480) of our report, which includes an explanatory paragraph as to the Company's ability to continue as a going concern, dated March 31, 2022, with respect to our audits of the consolidated financial statements of Akerna Corp. as of December 31, 2021 and 2020, for the year ended December 31, 2021, for the transitional six months ended December 31, 2020 and for the year ended June 30, 2020, which report is included in this Annual Report on Form 10-K of Akerna Corp. for the year ended December 31, 2021.

/s/ Marcum LLP

Marcum LLP Los Angeles, CA March 31, 2022

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, Jessica Billingsley, certify that:
- 1. I have reviewed this Annual Report on Form 10-K of Akerna Corp.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2022 By: /s/ Jessica Billingsley

Jessica Billingsley, Chief Executive Officer and Director (Principal Executive Officer)

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

- I, John Fowle, certify that:
- 1. I have reviewed this Annual Report on Form 10-K of Akerna Corp.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
- 5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 31, 2022 By: /s/ John Fowle

John Fowle, Chief Financial Officer (Principal Financial and Accounting Officer)

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. §1350), the undersigned, Jessica Billingsley, Chief Executive Officer of Akerna Corp., a Delaware corporation (the "Company"), and John Fowle, Chief Financial Officer of the Company, do hereby certify, to his and her knowledge, that:

The Annual Report on Form 10-K for the year endedDecember 31, 2021 of the Company (the "Report") fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 31, 2022 By: /s/ Jessica Billingsley

Jessica Billingsley, Chief Executive Officer and Director

(Principal Executive Officer)

Date: March 31, 2022 By: /s/ John Fowle

John Fowle, Chief Financial Officer (Principal Financial and Accounting Officer)

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.