

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, 2022

or

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

FOR THE TRANSITION PERIOD FROM _TO _

COMMISSION FILE NUMBER 001-03551

CCC Intelligent Solutions Holdings Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

167 N. Green Street, 9th Floor
Chicago, IL
(Address of principal executive offices)

98-1546280
(IRS Employer
Identification No.)

60607
(Zip Code)

(800) 621-8070

(Registrant's telephone number, including area code)

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, par value \$0.0001 per share	CCCS	The Nasdaq Stock Market LLC

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

The aggregate market value of the common shares of CCC Intelligent Solutions Holdings Inc. held by non-affiliates as of June 30, 2022, was approximately \$1,273 million.

As of February 24, 2023, 625,056,959 shares of common stock, \$0.0001 par value, of the registrant were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Our definitive proxy statement relating to our 2023 annual meeting of shareholders will be filed with the Securities and Exchange Commission within 120 days after the close of our fiscal year ended December 31, 2022 and is incorporated by reference in Part III to the extent described therein.

	<u>Page</u>
<u>Special Note Regarding Forward Looking Statements and Risk Factors</u>	4
<u>PART I</u>	
Item 1. <u>Business</u>	5
Item 1A. <u>Risk Factors</u>	14
Item 1B. <u>Unresolved Staff Comments</u>	34
Item 2. <u>Properties</u>	34
Item 3. <u>Legal Proceedings</u>	34
Item 4. <u>Mine Safety Disclosures</u>	34
<u>PART II</u>	
Item 5. <u>Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	35
Item 6. <u>Reserved</u>	36
Item 7. <u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	37
Item 7A. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	54
Item 8. <u>Financial Statements and Supplementary Data</u>	55
Item 9. <u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	91
Item 9A. <u>Controls and Procedures</u>	91
Item 9B. <u>Other Information</u>	91
Item 9C. <u>Disclosures Regarding Foreign Jurisdictions that Prevent Inspection Item 9C.</u>	91
<u>PART III</u>	
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	92
Item 11. <u>Executive Compensation</u>	92
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	92
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	92
Item 14. <u>Principal Accounting Fees and Services</u>	92
<u>PART IV</u>	
Item 15. <u>Exhibits, Financial Statement Schedules</u>	93
Item 16. <u>Form 10-K Summary</u>	94

In this Annual Report on Form 10-K, the terms “we,” “us,” “our,” the “Company” and “CCC” mean CCC Intelligent Solutions Holdings Inc. (formerly Dragoneer Growth Opportunities Corp.) and our subsidiaries. On July 30, 2021, Dragoneer Growth Opportunities Corp., a Cayman Islands exempted company (“Dragoneer”), consummated a business combination (the “Business Combination”) pursuant to the terms of the Business Combination Agreement, dated as of February 2, 2021 (the “Business Combination Agreement”), as amended, by and among Dragoneer and Cypress Holdings Inc., a Delaware corporation (“CCCIS”). Immediately upon the consummation of the Business Combination and the other transactions contemplated by the Business Combination Agreement (collectively, the “Transactions”, and such completion the “Closing”), CCCIS merged with and into Chariot Merger Sub, a wholly-owned direct subsidiary of Dragoneer, with CCCIS surviving the Business Combination as a wholly-owned direct subsidiary of Dragoneer (the “Merger”). In connection with the Transactions, Dragoneer changed its name to “CCC Intelligent Solutions Holdings Inc.”

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND RISK FACTORS

This Annual Report on Form 10-K contains “forward-looking statements” for purposes of the federal securities laws. Our forward-looking statements include, but are not limited to, statements regarding our or our management team’s expectations, hopes, beliefs, intentions or strategies regarding the future, including those relating to the future financial performance and business strategies and expectations for our business. In addition, any statements that refer to projections, forecasts or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The words “anticipate,” “believe,” “contemplate,” “continue,” “could,” “estimate,” “expect,” “intends,” “may,” “might,” “plan,” “possible,” “potential,” “predict,” “project,” “should,” “will,” “would” and similar expressions may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward-looking. Forward-looking statements may include information concerning our possible or assumed future results of operations, client demand, business strategies, technology developments, financing and investment plans, competitive position, our industry and regulatory environment, potential growth opportunities and the effects of competition.

Important factors that could cause actual results to differ materially from our expectations include:

- our revenues, the concentration of our customers and the ability to retain our current customers;
- our ability to negotiate with our customers on favorable terms;
- our ability to maintain and grow our brand and reputation cost-effectively;
- the execution of our growth strategy;
- the impact of public health outbreaks, epidemics or pandemics, including the global COVID-19 pandemic, on our business and results of operations;
- our projected financial information, growth rate and market opportunity;
- the health of our industry, claim volumes, and market conditions;
- changes in the insurance and automotive collision industries, including the adoption of new technologies;
- global economic conditions and geopolitical events;
- competition in our market and our ability to retain and grow market share;
- our ability to develop, introduce and market new enhanced versions of our solutions;
- our sales and implementation cycles;
- the ability of our research and development efforts to create significant new revenue streams;
- changes in applicable laws or regulations;
- changes in international economic, political, social and governmental conditions and policies, including corruption risks in China and other countries;
- our reliance on third-party data, technology and intellectual property;
- our ability to protect our intellectual property;
- our ability to keep our data and information systems secure from data security breaches;
- our ability to acquire or invest in companies or pursue business partnerships;
- our ability to raise financing in the future and improve our capital structure;
- our success in retaining or recruiting, or changes required in, our officers, key employees or directors;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our ability to expand or maintain our existing customer base; and
- our ability to service our indebtedness.

The forward-looking statements contained in this Annual Report on Form 10-K are based on current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments affecting us will be those that we have anticipated. These forward-looking statements involve a number of risks, uncertainties (some of which are beyond our control) or other assumptions that may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those described above and elsewhere in this Annual Report on Form 10-K. Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. There may be additional risks that we consider immaterial or which are unknown. It is not possible to predict or identify all such risks. We do not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Item 1. Business.

Founded in 1980, CCC is a leading provider of innovative cloud, mobile, artificial intelligence (“AI”), telematics, hyperscale technologies and applications for the property and casualty (“P&C”) insurance economy. Our software-as-a-service (“SaaS”) platform connects trading partners, facilitates commerce, and supports mission-critical, AI-enabled digital workflows. Leveraging decades of deep domain experience, our industry-leading platform processes more than \$100 billion in annual transaction value across this ecosystem, digitizing workflows and connecting more than 30,000 companies across the P&C insurance economy, including insurance carriers, collision repairers, parts suppliers, automotive manufacturers, financial institutions and others.

Our business has been built upon two foundational pillars: automotive insurance claims and automotive collision repair. For decades we have delivered leading software solutions to both the insurance and repair industries, including pioneering Direct Repair Programs (“DRP”) in the United States (“U.S.”) beginning in 1992. DRP connects auto insurers and collision repair shops to create business value for both parties, and requires digital tools to facilitate interactions and manage partner programs. Insurer-to-shop DRP connections have created a strong network effect for CCC’s platform, as insurers and repairers both benefit by joining the largest network to maximize opportunities. This has led to a virtuous cycle in which more insurers on the platform drives more value for the collision shops on the platform, and vice versa.

We believe we have become a leading insurance and repair SaaS provider in the U.S. by increasing the depth and breadth of our SaaS offerings over many years. Our insurance solutions help insurance carriers manage mission-critical workflows across the claims lifecycle, while building smart, dynamic experiences for their own customers. Our software integrates seamlessly with both legacy and modern systems alike and enables insurers to rapidly innovate on our platform. Our repair solutions help collision repair facilities achieve better performance throughout the collision repair cycle by digitizing processes to drive business growth, streamline operations, and improve repair quality. We have more than 300 insurers on our network, connecting with over 28,000 repair facilities through our multi-tenant cloud platform. We believe our software is the architectural backbone of insurance DRP systems and is the primary driver of material revenue for our collision shop customers and a source of material efficiencies for our insurance carrier customers.

Our platform is designed to solve the “many-to-many” problem faced by the insurance economy. There are numerous internally and externally developed insurance software solutions in the market today, with the vast majority of applications focused on insurance-only use cases and not on serving the broader insurance ecosystem. We have prioritized building a leading network around our automotive insurance and collision repair pillars to further digitize interactions and maximize value for our customers. We have tens of thousands of companies on our platform that participate in the insurance economy, including insurers, repairers, parts suppliers, automotive manufacturers, and financial institutions. Our solutions create value for each of these parties by enabling them to connect to our vast network to collaborate with other companies, streamline operations, and reduce processing costs and dollars lost through claims management inefficiencies, or claims leakage. Expanding our platform has added new layers of network effects, further accelerating the adoption of our software solutions.

We have processed more than \$1 trillion of historical data across our network, allowing us to build proprietary data assets that leverage insurance claims, vehicle repair, automotive parts and other vehicle-specific information. We believe we are uniquely positioned to provide data-driven insights, analytics, and AI-enhanced workflows that strengthen our solutions and improve business outcomes for our customers. Our AI solutions increase automation across existing insurance and repair processes including vehicle damage detection, claim triage, repair estimating, and intelligent claims review. We deliver real-world AI with more than 100 U.S. auto insurers actively using AI-powered solutions in production environments. We have processed more than 14 million unique claims using CCC deep learning AI as of December 31, 2022, an increase of more than 50% over December 31, 2021.

One of the primary obstacles facing the P&C insurance economy is increasing complexity. Complexity in the P&C insurance economy is driven by technological advancements, Internet of Things (“IoT”) data, new business models, supply-chain disruption, and changing consumer expectations. We believe digitization plays a critical role in managing this growing complexity while meeting consumer expectations. Our technology investments are focused on digitizing complex processes and interactions across our ecosystem, and we believe we are well positioned to power the P&C insurance economy of the future with our data, network, and platform.

While our position in the P&C insurance economy is grounded in the automotive insurance sector, the largest insurance sector in the U.S. representing nearly half of Direct Written Premiums (“DWP”), we believe our integrations and cloud platform are capable of driving innovation across the entire P&C insurance economy. Our customers are increasingly looking for CCC to expand its solutions to other parts of their business where they can benefit from our technology, service, and partnership. In response, we are investing in new solutions that we believe will enable us to digitize the entire automotive claims lifecycle, and over time expand into adjacencies including other insurance lines. For example, CCC’s acquisition of Safekeep in February 2022 added subrogation solutions that can span insurance lines including automotive, property, and worker’s compensation.

We have strong customer relationships in the end-markets we serve, and these relationships are a key component of our success given the long-term nature of our contracts and the interconnectedness of our network. We have customer agreements with more than 300 insurers (including carriers, self-insurers and other entities processing insurance claims), including 18 of the top 20 automotive insurance carriers in the U.S., based on DWP, and hundreds of regional carriers. We have more than 30,000 total customers, including over 28,000 automotive collision repair facilities (including repairers and other entities that estimate damaged vehicles), more than 4,500 parts suppliers, 13 of the top 15 automotive manufacturers, based on new vehicle sales, and numerous other companies that participate in the P&C insurance economy.

We generate revenue through the sale of software subscriptions and other revenue, primarily from professional services. We generated \$782.4 million of revenue for the year ended December 31, 2022, an increase of 13.7% from the prior year. Net income for the year ended December 31, 2022 was \$38.4 million, compared to a net loss for the year ended December 31, 2021 of \$248.9 million, mainly due to \$209.9 million of stock-based compensation expense recognized in conjunction with the Business Combination in the prior year. Adjusted EBITDA increased 16.8% year-over-year to \$305.4 million.

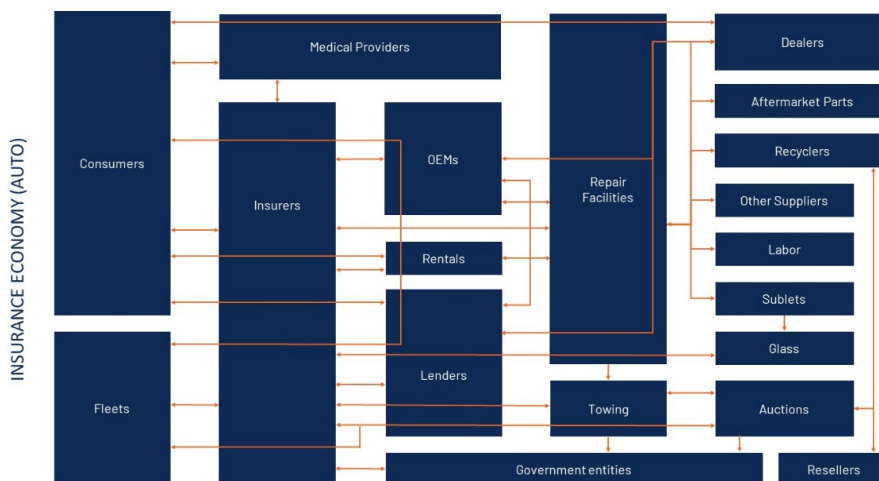
P&C Insurance Economy

P&C insurance is one of the largest global industries. The U.S. P&C insurance industry alone serviced approximately \$700 billion in DWP in 2021. Insurance is a necessity for the majority of businesses and consumers, and, as a result, the P&C insurance industry has seen steady long-term growth.

P&C insurers face a number of challenging market dynamics in today’s environment, including increasing customer expectations, competition from new entrants and business models, emerging technologies, labor shortages, and cost pressures. Insurers are often reliant on legacy on-premise systems to assist with policy and claims adjustments and processing, which can be inflexible and costly to maintain, challenging their ability to innovate and respond to market dynamics.

Further complicating matters, the P&C insurance industry is dependent on the P&C insurance economy, an interconnected economy of industries that interact to service, underwrite, finance, and repair insured assets. Insurance carriers invest in data, systems, services and partnerships to manage the many required collaboration points across these industries. To deliver end-to-end digital workflows and improved customer experiences, technology needs to extend beyond insurance organizations and include its supporting economy, in order to enable the many interactions and handoffs required to process insurance events.

In the automotive insurance sector, which represents nearly half of the U.S. P&C insurance industry, processing a single event, such as a claim, can require hundreds of micro-transactions across its supporting economy, involving consumers, lenders, collision repair facilities, automotive manufacturers, dealers, parts suppliers, medical providers, vehicle auctions, and others. These transactions depend on extensive hyper-local decisions and data, creating a level of complexity that can increase processing costs as well as the potential for fraud and other forms of claims leakage. For automotive claims, the end result is more than one billion days of cumulative claims cycle time (loss date to claim completion date) in the U.S. each year. For our insurance partners, cycle time is costly, which is one reason why, as of 2022, CCC’s platform is relied upon by 18 of the top 20 auto insurers based on DWP in the U.S. to digitize complexity and improve business outcomes.



The complexity seen in one auto claim grows exponentially more difficult to manage at scale, and complexity is continuing to increase across the P&C insurance economy. In the automotive sector, this is due to several converging factors including, without limitation:

- *Vehicle parts proliferation:* Repairable parts per auto claim have increased 46% since 2011
- *Internal technology systems:* The average lines of software code per new vehicle doubled from 100 million in 2015 to 200 million in 2020
- *Growing connected car capabilities:* By 2030, 95% of new vehicles sold globally are expected to be connected
- *Transportation as a Service (“TaaS”) and other new business models:* 10% of Transportation Network Company (TNC) users postpone the purchase of a new car due to availability of TNCs
- *Advanced Driver Assistance Systems (“ADAS”) and diagnostics systems:* The number of vehicles receiving a diagnostic scan as part of a collision repair has increased 1,375% since 2017
- *Vehicle Electrification and related infrastructure:* Globally, electrification represented more than 65% of overall end-use investment in the transport sector in 2021 and is estimated to have increased to more than 74% in 2022
- *Supply chain disruption:* More than 80% of Specialty Equipment Market Association (SEMA) members reported supply chain disturbances severely or moderately impacting their business in 2021

We believe the only way to effectively manage increasing complexity is through digitization. Since our inception over forty years ago, we have focused our technology on what we believe to be our customers’ most complex problems. We have digitized total loss valuations, repair

estimates, DRP programs, shop management functions, repair workflows, medical claims, parts ordering, subrogation, and much more. In the process, we have built integrations and facilitated partnerships that enable information sharing across our vast network of customer companies. Our solutions are well-suited for the next wave of complexity, and we believe these trends will continue to accelerate adoption of CCC's platform and applications.

Our Approach

Serving as the platform for the P&C insurance economy is a significant challenge that CCC is uniquely positioned to address. We believe our proprietary data and network assets, combined with our track record of innovation on our cloud platform, differentiates us from other potential P&C platform companies. Our approach is to continue to innovate and expand our solutions to create value for the P&C insurance economy.

CCC's foundation for innovation is built upon decades of data and extensive network assets. We have deep proprietary data assets and more than \$1 trillion of historical data, enabling us to provide insights, analytics, and AI-driven workflows. Our leading network was built company by company, and spans the P&C insurance economy, giving us the ability to deploy cross-market solutions and create seamless customer experiences. We believe our data and network assets are highly differentiated and very difficult to replicate.

Our innovative cloud-based applications provide the P&C insurance economy with the capabilities required to manage their businesses, optimize decision making, and digitize intricate workflows. We have a proven Research & Development (R&D) engine with a strong track record of software innovation and deployment on our cloud platform. CCC's innovations are helping to deliver on the industry's vision of achieving Straight-Through-Processing (STP) – processing claims digitally with limited to no human intervention. CCC's Estimate – STP is the industry's first estimating experience capable of delivering touchless line level estimate detail in minutes. By combining artificial intelligence, insurer driven rules and a connected ecosystem, Estimate – STP is designed to revolutionize the estimating experience for insurers and policyholders. CCC Estimate – STP has already been deployed in-market with fifteen insurance carriers.

We believe our ability to rapidly innovate and deploy new software solutions via our cloud technology platform, along with our depth of data and leading network, sets us apart from the competition. The key benefits we deliver for our customers include:

- **Multi-tenant cloud platform enabling flexibility and innovation:** CCC's platform operates in a secure multi-tenant cloud environment, with over 650,000 registered users and 4.9 billion database transactions processed per day. Our platform enables us to innovate in response to new market trends and customer needs and rapidly deploy new solutions to our more than 30,000 customers. We continuously enhance existing solutions and bring new solutions to market, deploying more than 1,600 software releases in 2022.
- **Deep domain expertise:** With decades of experience serving the insurance economy, we have developed a deep understanding of the industries and ecosystem we serve. Our domain expertise enables us to offer tailored solutions to help our customers achieve their business objectives. We understand the importance of the role we play as the independent party facilitating interactions across various ecosystem participants, and as a result, we have developed deep and trusting relationships with our customers. We are well positioned to enable cross-market programs and partnerships and have a decades-long history playing this role. Our business is led by a deep and experienced management team with a customer-centric mindset.
- **Long-term customer relationships:** Over several decades we have developed strong relationships with leading insurers, collision repair groups, and automotive manufacturers, among others. Our company-wide Net Promoter Score is 82, which underscores the customer-centric focus that defines our organization including our sales, marketing, product, technology, and operations teams. We are a trusted partner to our clients, which allows us to collaborate and adapt our business based on customer feedback and changing expectations to stay ahead of our competition.
- **Network access:** CCC's cloud platform is used by more than 30,000 companies, including insurers, repairers, automotive manufacturers, parts suppliers, financial institutions, and others. Integrating to CCC's platform unlocks real-time cloud connections across our ecosystem, enabling customers to digitize workflows that are otherwise cumbersome and costly. Our network processes more than 500 million interface transactions each year where information is passed from one network participant to another; for example, from an insurer to a repair facility.
- **Proven R&D engine:** We invest heavily in R&D efforts and are committed to delivering market-leading technology for the P&C insurance economy. In recent years, our innovation efforts have focused on Mobile and AI technology, and we have released several new solutions incorporating Mobile and AI that have experienced rapid industry adoption as our customers look to improve customer experience and enable automation. We deploy real-world AI solutions at enterprise scale. Our AI solutions combine our data assets with proprietary machine learning and analytics frameworks to automate processes so as to reduce processing costs and leakage for our customer base. Today, CCC has developed more than 300 AI models, some of which are in use across more than 100 insurers, including 18 of the top 20 U.S. automotive insurers based on DWP.
- **Proprietary data assets:** CCC's platform has processed more than \$1 trillion of historical data, enabling us to deliver unique analytics and insights for our customers leveraging our deep proprietary data assets. Our platform allows customers to make optimal decisions by incorporating event-specific factors, local geographic factors, and historical data. Database solutions and corresponding rules engines can be configured and adjusted in real-time based on business needs and market trends.
- **Enterprise scale and support:** We process more than \$100 billion of transactions annually for our more than 30,000 customers, delivering mission-critical SaaS solutions that our customers can count on. Since January 2018, CCC's systems have achieved 99.95% uptime on average, giving our customers the confidence to depend on CCC's performance. We have dedicated implementation and training teams, and have proven success in implementing solutions for leading insurance carriers and thousands of small businesses.

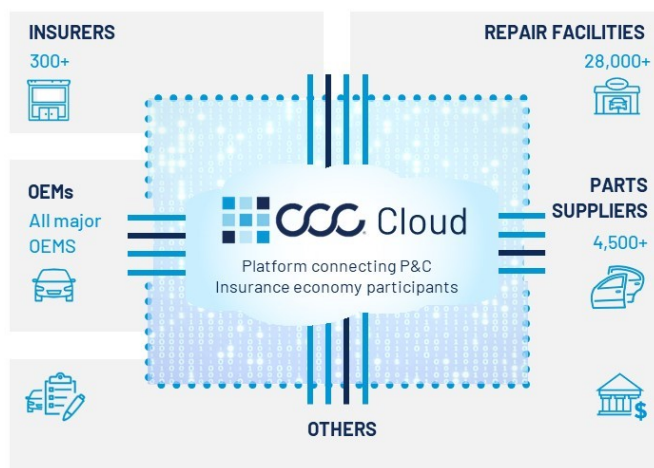
Our Growth Strategy

We intend to extend our position as the leading provider of SaaS solutions for the P&C insurance economy. The key components of our strategy are:

- **Growing our customer base:** Our customers span the P&C insurance economy, and we believe we have significant opportunity to continue to grow our customer base by targeting key new accounts and expanding our sales and marketing capabilities. We believe there is ample opportunity to add new customers within the U.S., where our business is most established.
- **Deepening relationships with existing customers:** We seek to grow our revenue base with existing customers primarily by selling additional software subscriptions. We regularly launch new solutions and have a proven track record of cross-selling software across our customer segments, as well as up-selling customers based on package and feature upgrades. We intend to build upon strong customer relationships and access to key customer decision makers to increase software adoption and usage.
- **Expanding the breadth of our solutions:** Our long-term focus is to digitize all P&C insurance economy workflows, targeting processing costs and leakage. In 2022, our R&D spend was 20% of revenue; however, including the impact of capitalized time related to internal use software, our total spend was 24% of revenue on R&D with a primary focus on technology leadership and continuous innovation. In 2022, we launched offerings that expanded the breadth and depth of our solutions across a number of areas including OEM-Net, Casualty Mobile Portal, and CCC Diagnostics extensions, among others.
- **Broadening our network ecosystem:** We have a large network of companies on our platform that are dependent on the P&C insurance economy and derive value from connecting to others across the ecosystem through CCC. The breadth and depth of our platform creates network effects that accelerate the demand for our software solutions. We intend to extend our network of companies to enhance our value proposition and create new market growth opportunities.
- **Growing our geographic footprint:** We believe there is significant opportunity for our solutions outside of the U.S. For example, in China we have built an early leadership position with four of the top five insurance carriers and are positioning ourselves to establish an ecosystem that is similar to ours in the U.S. We believe similar opportunities exist in other markets across the world which we expect to pursue over time.
- **Pursuing acquisitions:** We have acquired and integrated numerous businesses throughout CCC's history. In 2022, we acquired Safekeep and integrated their digital subrogation capabilities into CCC's suite of insurance solutions. We intend to continue to pursue targeted acquisition opportunities to accelerate our business strategy and growth through solution, market, or geographic expansion.

Our Solutions

We provide an integrated suite of software applications built on our cloud platform to serve the P&C insurance economy, including insurance, repair, and other end-markets. Our SaaS solutions are sold individually, bundled, or in packages, depending on the specific solution and end-market.



CCC Insurance Solutions

CCC's solutions help insurers digitize processes, from customer intake to claim resolution, while building smart, dynamic experiences for their customers. Many of our solutions leverage the power of the CCC network by facilitating ecosystem interactions required to complete insurer processes. All of our insurance solutions are cloud-based SaaS solutions that power critical carrier workflows. Our insurance solutions represent approximately 50% of our 2022 total revenues, with 94% of that representing software revenue and 6% representing other revenue. Our key insurance solutions include:

- *CCC Workflow:* Our suite of workflow tools support end-to-end digital insurance workflows, from customer intake to claim resolution. Our solutions enable mobile experiences, modern communications, configurable workflows, and network integrations, all while empowering insurers to seamlessly customize and configure solutions to meet unique business needs. Mobile modules provide a digital channel for communicating with the modern consumer, starting with vehicle documentation when a new insurance policy is created. Our solutions support critical claims processes, including claims documentation, photo capture, repair scheduling, and two-way text communications. Our workflow solutions leverage a sophisticated rules engine to customize routing for escalations, review, and approval processes. Our network management capability powers insurance DRPs, enabling insurers to seamlessly connect and collaborate with repair facilities and other companies to provide accurate and timely information about a claim flow from the right party at the right time.
- *CCC Estimating:* Our insurance automotive repair estimating solution is built on CCC's proprietary estimating database that has been cultivated for decades to deliver best-in-class repair estimating data and decisioning. CCC estimating innovations have enabled virtual inspections using consumer photos, integrated to CCC's portal. Estimates are further automated by AI that combines machine learning and estimating logic to predict repair requirements, suggest estimate lines, and generate fast baseline estimates. Our Estimate – STP solution takes estimate automation to the next level by combining AI, digital workflows, data, and partner connections to automatically initiate and populate detailed estimates within seconds. The outcome is actionable estimates with line-level detail, including parts, labor operations and hours, and taxes. Our estimating solutions accelerate auto physical damage estimation to reduce costs and cycle time for our customers.
- *CCC Total Loss:* Total loss solutions enable our insurance customers to identify, value, and resolve total loss automotive claims digitally. We deliver valuations representing a vehicle's fair market value based on CCC's market-driven valuation methodology and provide insurers with information to make total loss determinations. Once a total loss has been identified, we support our carrier customers in managing lender payoff requests, letters of guarantee, lien and title resolution, and signature collection. Throughout the process, our mobile solutions deliver a seamless customer experience integrated into CCC's holistic workflow suite.
- *CCC Casualty:* Personal injuries resulting from automotive accidents lead to casualty claims, which require insurers to process medical bills and demand packages for first and third-party claims, respectively. Our casualty solutions automate and expedite casualty claims processing by applying intelligent rules engines based on insurer-specific parameters to process casualty claims data quickly and segment payment-ready bills from those that the insurer wants to review. Our tools and services modernize a manual, paper-burdened system with a comprehensive, configurable experience to help insurers make timely, consistent payments across bill types, and provide analytics dashboards to visualize trends and industry benchmarks.
- *CCC Subrogation:* In subrogation, insurance companies work with one another to resolve claims settlements when a first-party carrier seeks compensation from a third-party carrier whose insured is partially or wholly at fault for a claim paid out to the first-party claimant. CCC's subrogation solutions automate subrogation opportunity identification for carriers by applying AI and Natural Language Processing to claims data. Our solutions also digitize subrogation workflows including the creation and distribution of demand packages with third-party carriers that include supporting evidence for subrogation claims. CCC's subrogation solutions can apply to multiple lines of insurance, including automotive, property, and workers' compensation.
- *CCC AI and Analytics:* We inject AI and Analytics throughout CCC's software offerings to accelerate decision-making and improve outcomes. We have numerous AI solutions in production with leading insurers and are continuing to invest to improve our AI and launch new AI-enabled solutions. All of our core software offerings are supported by Analytics solutions that allow our customers to benchmark and manage their business performance across key performance indicators.

CCC Repair Solutions

CCC's solutions help automotive collision repairers achieve better repair facility performance, from lead generation through repair completion and payment. Our platform improves every stage and level of the collision repair cycle, combining key business operations into one solution to drive more business, improve repair quality, simplify operations, and exceed consumer expectations for our collision facility customers. Collision repairers use our platform to connect with the industry's leading network of partners and suppliers across the insurance and repair ecosystem. Our repair solutions represented approximately 43% of our 2022 total revenues, with 99% of that representing software revenue and 1% representing other revenue. Our key repair solutions include:

- *CCC Estimating:* Our collision repair estimating solution is built on CCC's proprietary database that enables repair estimate creation while connecting repairers to real-time parts pricing and availability, Original Equipment Manufacturer ("OEM") repair procedures, and insurer guidelines. Repairers can capture photos and repair information at the vehicle with CCC Estimating's mobile application and collaborate on repair estimates digitally with insurance partners. Users have access to our network of insurers and their corresponding requirements, which can accelerate estimate reviews and supplemental requests. Our Estimating-IQ upgrade incorporates AI into the repair estimating application to provide repairers with a jump start on estimating by applying machine learning to prepopulate estimates with parts and labor operations based on photos of vehicle damage and individual repair facility configurations. Our estimating solutions help reduce errors and improve cycle time for collision repairers and their partners.
- *CCC Network Management:* We provide software solutions that power collaboration between repairers and insurers. Our technology facilitates the majority of the automotive insurance DRP in the U.S. Participating repairers benefit from our connected technology platform that allows them to receive repair assignments and collaborate with partner insurers throughout the repair process, delivering on program metrics that drive their business. We also provide tools that allow repair Multi Store Operators ("MSOs") to manage performance, metrics, and compliance across their repair facility network.
- *CCC Repair Workflow:* Repair workflow is the industry's leading repair management tool that accelerates productivity and simplifies operations for thousands of repair facilities. Repairers can schedule and track vehicle repair status, assign tasks, and manage

productivity across their operation. Configurable dashboards provide visibility into performance. Repairers can also streamline repair management leveraging CCC's real-time parts ordering platform, selecting parts from multiple vendors through a single shopping cart and invoice. CCC repair workflow solutions also integrate customer interactions. CCC Engage helps collision repairers attract qualified leads and simplify the estimate process by initiating appointment and estimate creation online. CCC Engage integrates into participating insurer workflows for direct appointment scheduling through insurer channels. CCC repair workflow solutions also enables integrated customer-to-shop payments, automatically storing payment records and simplifying reconciliation.

- *CCC Repair Quality:* We provide advanced solutions to help repairers deliver quality repairs. Our repair procedures provide technicians with a single source for data-driven insights to assist them in conducting thorough, consistent repairs, reducing the need for multiple subscriptions and enabling access to current OEM guidelines and processes. Our checklist solutions enable documentation of standard operating procedures and tracking of performance which allows repair facility managers to identify areas for improvement. CCC Diagnostics is a two-part solution that connects repairers to a network of industry leading diagnostic service providers, and enables repairers to properly document and bill diagnostic operations based on repairer-defined rules. The combined solution simplifies service initiation, documentation, and reporting with integrated functionality that creates transparency for insurers to validate completed service events.

CCC Other Ecosystem Solutions

CCC's solutions support other segments of the insurance ecosystem, including parts suppliers, automotive manufacturers, and financial institutions. These solutions extend the CCC network and create value for companies connecting to our platform to improve business outcomes. Other ecosystem solutions represent approximately 6% of our 2022 total revenue, with 93% of that representing software revenue and 7% representing other revenue. Some of CCC's other ecosystem solutions include:

- *CCC Parts Solutions:* Our parts platform allows automotive parts wholesale dealers, aftermarket parts suppliers, and parts recyclers to make their inventory available to our collision repair and insurance networks in real-time. Using this platform, participating customers are able to use our platform to give their parts maximum visibility at the moment when repairers are using CCC software to write their repair estimates. This enables parts providers to display their parts inventory and promotional pricing, while automating order processing, invoicing, and settlement.
- *CCC Automotive Manufacturer Solutions:* We offer a range of automotive manufacturer solutions that give access to our network, enable repair quality, and leverage telematics vehicle data to create valuable efficiencies across insurance and repair workflows. We provide a network management platform to automotive manufacturers including collaboration tools and reporting dashboards that empower data-driven management of certified repair shop networks. We enable the integration of up-to-date OEM repair methods and diagnostics trouble codes into our platform to give our network of repair facilities and technicians the tools to execute a proper repair. Our automotive telematics solutions can enable new use cases across CCC's integrated ecosystem, including connected safety and vehicle diagnostics solutions. Our telematics solutions are designed to integrate vehicle telemetry data, such as driving data, accident data, and diagnostics trouble codes, into existing insurance and repair workflows, expediting decisions and reducing cycle time across our ecosystem. Auto manufacturers also benefit from CCC Parts and Lender solutions, across their parts and financing businesses, respectively.
- *CCC Diagnostics Service Provider Solutions:* Our repair diagnostics platform allows companies that provide diagnostics, calibration, and programming service solutions to connect to the CCC Diagnostics repair network. Service provider integrations allow repair facilities to capture and document scan information in CCC workfiles, streamlining diagnostics processes. Repairers using the solution can share results of vehicle scans with consumers and participating insurers within CCC Repair Workflow.
- *CCC Lender Solutions:* Our lender portal integrates into CCC's insurance solutions, enabling financial institutions with automotive loans to optimize vehicle total loss processes. Auto lenders connect with participating insurers to receive earlier notice of a potential total loss, digitally exchange documents, and quickly settle existing loans while minimizing the likelihood of missed customer payments. This improves customer experience, boosts productivity, and reduces cycle time.
- *CCC Payments:* Our enterprise payments platform enables electronic payment flows via a third-party payment processing partner for companies across the P&C insurance economy. CCC payments functionality is designed to integrate into existing CCC applications, presenting payment information within existing workflows. The solution is initially focused on insurer outbound payments, where it enables payments across P&C lines. Recipients of payments only need to enter their payment information once to have it seamlessly deployed across the CCC network, making it easy to activate electronic payments at scale. Our payments platform reduces administrative costs and cycle time while improving customer satisfaction.

CCC International Solutions

CCC provides insurance claims software to four of the top five automotive insurers in China. Our software solutions are tailored for the Chinese market, and include workflow, estimating, audit and analytics solutions. We are expanding our software solutions in China to the automotive repair market, where we are building momentum with repair facilities and automotive dealers. We are assessing other international market expansion opportunities by evaluating partnerships and acquisitions of strategic assets. Our international solutions represent approximately 1% of our 2022 total revenue, with 100% of that representing software revenue.

Our Technology

CCC has been a technology leader in the P&C insurance economy for several decades and has a strong track record of innovation. We were one of the leaders in the transition to cloud services, launching our initial CCC cloud capabilities beginning in 2003. Today, our solutions are

powered by our secure multi-tenant cloud. Our cloud architecture creates several benefits for our customers and partners across the P&C insurance economy, including:

- **Ease of implementation:** We are able to implement solutions rapidly and cost-effectively, with average customer implementations taking less than three months. Implementations are performed by CCC's service operations and training teams, and rarely require the support of external consultants. We utilize an Application Programming Interface ("API") framework to integrate to our customers' existing systems, enabling CCC's solutions to perform high-value workflows without disrupting existing business processes.
- **Flexibility:** Our solutions are highly flexible, enabling customers to deploy our software in various ways to meet their needs. For example, our insurer mobile services can be integrated into customer applications via Software Development Kits ("SDK"), deployed via HTML5, or enabled by API calls. In addition, customers can configure and adjust rules based on business outcomes, which can be deployed in real-time via the CCC cloud. For example, our configurable carrier workflow allows insurers to design custom workflows that create differentiated experiences and adjust parameters to deliver targeted results.
- **Innovation:** We invest heavily in R&D and continuously bring new innovative solutions to market. For existing customers with integrations to CCC's platform, new solutions can be deployed into production environments as soon as configuration and training is complete, enabling our customers to keep up with rapidly changing industry trends and consumer expectations. We continuously update and enhance our software, deploying more than 1,600 releases in 2022, with a software release quality success rate averaging more than 96% since 2018.
- **Security and Quality:** CCC's software suite is provided as SaaS hosted in multiple geographically diverse hosting locations with data replication between primary hosting locations and secondary locations in near real-time. CCC protects its services through a series of layered security controls and services, including but not limited to strong authentication, privileged access controls, malware detection and prevention controls, enhanced threat detection and response, secure application development controls, controls for data at rest, and in transmission, threat and prevention testing, software vulnerability disclosure program, benchmarking and 24x7 Security Operations Center ("SOC") monitoring.
- **Availability and Uptime:** CCC's application environment is designed for high availability utilizing redundant databases, servers, network components, and storage, which maximizes availability through a network architecture designed to compartmentalize web, application, and database layers. Since 2018, CCC system availability has been 99.95% while meeting CCC's customer service performance and processing commitments.

Our technology infrastructure offers proven performance at enterprise scale and is designed to support the future needs of our industry as data continues to proliferate. As of year-end 2022, we process more than 176 terabytes of network traffic and execute nearly 4.9 billion database transactions each day. We have invested in hyperscale infrastructure, enabling us to effectively process and store extremely large amounts of information, photos, videos, and driving data. For example, we receive, process, and store nearly 800 million photos each year.

Our application layer delivers solutions to a base of more than 650,000 registered users. CCC applications power end-to-end customer experiences, digital workflows, AI, network management, and telematics capabilities across the markets we serve. Our AI approach is based on automated deep learning and parallel processing of mathematical models. This comprehensive approach to data science allows us to continuously improve the accuracy of existing models and release new models that automate time consuming workloads.

Network integrations across more than 300 insurers, 28,000 repair facilities, and thousands of other ecosystem participants unlock the power of the CCC platform. Our network creates tremendous value for our customers, is not easily replicated, and sets us apart from other vertical software companies. We believe that integrating to the insurance economy is the only way to deliver full end-to-end digital workflows across insurance processes. Today we enable more than 500 million interface transactions each year.

Research and Development

Our market leading research and development efforts focus on enhancing our solutions to meet the complex requirements of our customers with a focus on capabilities, operational efficiency, security, and privacy in the cloud. In addition, we invest in new solutions that expand the breadth of our software offerings and create new capabilities for our customers, leveraging current technologies. Our research and development efforts are intended to help our customers improve their operations; drive greater digital engagement with their customers and business partners; and gather, store, and analyze data to improve business decisions. We also invest significantly in developing our solutions, services and necessary integrations to meet market requirements, including regulations, language, currency, and local terminology. This market-specific functionality must be updated regularly to stay current with regulatory changes in each market. We rely on a geographically dispersed engineering team, which has grown organically and through acquisitions.

Sales and Marketing

CCC marketing and sales organizations directly engage with decision-makers and industry leaders across the P&C insurance economy to drive software adoption. Our digital marketing provides CCC with a platform to execute highly targeted outreach to tens of thousands of active and prospective clients by customizing communications based on specific client needs or marketplace trends.

Our sales teams are structured to address the different needs of our markets. For our small business sales efforts, CCC employs a geographically dispersed account team structure to facilitate in-person demos and direct sales, along with an inside sales team. For larger insurance and automotive clients, CCC combines both enterprise and regional account teams with solutions and consulting services to lead marketing and sales efforts. Custom analysis, pilot programs, and highly consultative account teams drive customer software expansion and adoption.

As a thought leader across the P&C insurance economy, CCC delivers valued data and perspectives to these industries. As the publisher of Crash Course, a robust industry dataset on Auto Physical Damage and Casualty claims trends, CCC engages clients and prospects with custom

content, industry analysis, and unique insights. Monthly reports and trends data underpin our marketing outreach generating awareness in trade journals, industry presentations, and online publications. CCC collaborates with partners, clients, and thought leaders to market our solutions and expand our network. Clients participate with us in industry roundtables, including CCC-hosted advisory councils across each of the industries we serve. Additionally, CCC hosts an invitation-only Industry Conference annually.

We leverage our strategic partnerships and networks to drive sales and market software functionality. Suppliers and clients on the CCC network, including major parts suppliers, diagnostics service providers, and OEM and insurance partners, help to market CCC software. These co-marketing efforts expand our network and reinforce client value.

Our Customers

We believe we have strong customer relationships across the more than 30,000 total customers in the end markets we serve, and these relationships are a key component of our success given the long-term nature of our contracts and interconnectedness of our network.

We have more than 300 total insurance customers in the U.S., comprised of national carriers and regional carriers. In 2022, our national carrier customers included 18 of the top 20 automotive insurers based on DWP, with average customer relationships spanning more than 10 years, and numerous exclusive arrangements. Our national carrier customers also represent 18 of the top 20 overall P&C insurers in the U.S based on DWP. We work with hundreds of regional carriers, and across all our insurance customers our average contract is approximately three to five years in duration.

We have more than 28,000 automotive collision repair customers, including national MSOs, regional MSOs, independent repair facilities, and automotive dealers that perform collision repair. We partner with all of the national MSOs across the U.S. Our average repair facility contract is approximately 3 years in duration, though MSO customers can have longer contract terms.

In addition to insurance and repair, our customers include more than 4,500 parts suppliers, 13 of the top 15 automotive manufacturers as of 2022, and other companies that participate in the P&C insurance economy. Our software solutions and platform are designed to create value for our customers by boosting efficiency, improving cycle time, increasing innovation potential, and enhancing end-customer experiences.

Competition

The P&C insurance economy software market is highly competitive and fragmented. This market is subject to changing technology, shifting customer needs, and introductions of new and innovative software solutions. Our competitors vary in size, breadth, and scope of their solutions. Our current principal competitors include the following:

- **Internally developed software:** Our large customers have sufficient IT resources to maintain and update their own proprietary internal systems and to invest in new technology capabilities. Often these in-house technology programs will be supported by large-scale consulting firms.
- **P&C insurance software vendors:** A number of vendors provide software solutions that are specifically designed to meet the needs of the P&C insurance industry, including core systems providers, underwriting data and software providers, and claims software providers. Some of these vendors have supporting ecosystems that enable integration to third parties to facilitate interaction with the supporting P&C insurance economy.
- **Other ecosystem software vendors:** Other established vendors and startups offer software targeting specific needs for certain segments of the P&C insurance economy, such as collision repair facility software solutions and parts e-commerce platforms.

Competitive factors in our industry will vary across solution and ecosystem segments. The principal competitive factors include software functionality, performance and value delivery, innovation potential, network breadth, implementation and support, and customer references. We believe that we compete favorably on the basis of each of these factors.

Intellectual Property

We own or have pending patents and patent applications, which generally apply to our software. As of December 31, 2022, we owned 27 issued U.S. patents, which are scheduled to expire between October 2023 and December 2040, and 13 patent applications pending for examination in the U.S.

In addition, we enter into confidentiality and proprietary rights agreements with employees, consultants, contractors and business partners, and employees and contractors are also subject to invention assignment provisions. As part of our contracting process with third parties, we use contract terms such as limited licenses, restrictions on use, and confidentiality, as additional measures to protect our intellectual property.

Environmental, Social and Governance (“ESG”)

We are currently formalizing our approach to ESG to ensure that stakeholder needs and material ESG topics have appropriate strategies and governance in place. To date, we have formed a cross-functional ESG working group, conducted an ESG issues assessment, and performed an inaugural greenhouse gas emissions assessment. We are currently finalizing a formal framework for our ESG program that we will report on in the future. We look forward to enhancing our disclosures for ESG as we continue to make progress on this critical initiative.

Human Capital Management

As of December 31, 2022, we had approximately 2,375 employees and 500 contingent employees. As of December 31, 2022, we had approximately 2,250 employees in the U.S. and approximately 125 employees internationally. None of our employees are represented by a labor union and we have not had any work stoppages.

We have continued to prioritize the health and safety of our employees, offering a flexible work model that balances business requirements and employee preferences. We believe this approach helped us continue to retain our current employees and remain competitive when hiring future talent.

Our highly engaged workforce is a result of employees' collective demonstration of our values—integrity, customer-focus, innovation, inclusion and diversity ("I&D"), and tenacity—as well as our collaborative and results-oriented culture. Our annual performance management process embeds behavioral competencies holding our leaders accountable for maintaining highly engaged teams and supporting the development of others. Every employee is encouraged to work with their manager to create an individual development plan focused on their career aspirations and documenting objectives they will strive to achieve through opportunities such as self-directed e-learning, soft-skill and technical/product training via our Learning Academy, professional certifications, stretch assignments, and our formal mentorship program. We also offer tuition reimbursement for employees who wish to continue their formal education.

Our goal is to hire individuals who share the passion for and commitment to the work we do. We offer a comprehensive compensation and benefits program that includes competitive wages, a 401(k) with match, an Employee Stock Purchase Program, and a holistic wellness program. Recognizing the importance of work/life balance to mental and physical health, we offer an Employee Assistance Program and paid time off ("PTO") plan that we encourage employees to use. To ensure we are advancing our under-represented hiring, we have partnered with several job boards and technical event-based recruiting companies who help to expand our reach to a broader, more diverse set of candidates. We have a formal internship program, targeting leading universities throughout the Midwest and partnering with under-represented university groups. Through our focus on increasing the diversity of our candidate pool, we increased the number of 2022 new hires from under-represented backgrounds as compared to the prior year.

We believe a diverse workforce at all levels and an inclusive culture are foundational to our success and will enable us to better serve our customers. We have a Diversity Advisory Council ("DAC") whose mission is to support the development and execution of our I&D strategy. Through the DAC, we organized several unique cultural/heritage events to celebrate and honor the diversity of our team members and support employee-driven employee resource groups ("ERGs") – the African American Alliance, the Women's Network, and the Growing Professionals ERG.

We recognize that women and people of color continue to be under-represented in the technology and collision repair industries, and that is why we prioritize our corporate giving to those organizations whose mission is to increase access and exposure to careers in these fields. In 2022, we continued our support of Black Girls Code and the Thurgood Marshall College Foundation, as well as the Collision Repair Education Foundation, Collision Industry Foundation, and Women's Industry Network. We also introduced a company-wide volunteer opportunity with Hour of Code whose mission is to introduce young people to computer science, and initiated sponsorships for local chapters of the National Society of Black Engineers.

Item 1A. Risk Factors.

Investing in our securities involves risks. You should consider carefully the risks and uncertainties described below, together with all of the other information in this Annual Report on Form 10-K, including the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes, before deciding whether to purchase any of our securities. These risk factors are not exhaustive and investors are encouraged to perform their own investigation with respect to our business, financial condition and prospects. We may face additional risks and uncertainties that are not presently known to us or that we currently deem immaterial, which may also impair our business or financial condition. In such event, the market price of our securities could decline, and you could lose all or part of your investment.

Risks Relating to Business and Industry.

A substantial portion of our revenue is derived from a relatively small number of customers in the P&C insurance and automotive collision industries, and the loss of any of these customers, or a significant revenue reduction from any of these customers, could materially impact our business, results of operations and financial condition.

Our revenue is dependent on customers in the P&C insurance and automotive collision industries, and historically a relatively small number of customers have accounted for a significant portion of our revenue. There were no customers which individually accounted for more than 10% of total revenue during the year ended December 31, 2022. We expect that we will continue to depend upon a relatively small number of customers for a significant portion of our revenue for the foreseeable future. As a result, if we fail to successfully renew our contracts with one or more of these customers, or if any of these customers reduce or cancel services or defer purchases, or otherwise terminate their relationship with us, our business, results of operations and financial condition would be adversely impacted. Some of our SaaS arrangements with our customers can be canceled or not renewed by the customer after the expiration of the SaaS term, as applicable, on relatively short notice. Additionally, we may be involved in disputes with our customers in the future and such disputes may impact our relationship with these customers. The loss of business from any of our significant customers, including from cancellations or due to disputes, could materially impact our business, results of operations and financial condition.

Our large customers have negotiating leverage, which may require us to agree to terms and conditions that result in increased cost of sales, decreased revenue, lower average selling prices and gross margins, and increased contractual liability risks, all of which could harm our results of operations.

Some of our customers include the largest P&C insurers and auto collision repair organizations in the U.S. These customers have significant bargaining power when negotiating new licenses or subscriptions or renewals of existing agreements and have the ability to buy similar solutions from other vendors or develop such systems internally. These customers have and may continue to seek advantageous pricing and other commercial and performance terms that may require us to develop additional features in the solutions we sell to them or add complexity to our customer agreements. In the past, we have been required to, and may in the future be required to, reduce the average selling price of our solutions or otherwise agree to materially less favorable terms in response to these pressures. If we are unable to avoid reducing our average selling prices or renegotiate our contracts on commercially reasonable terms, our results of operations could be adversely impacted.

Our business depends on our brand, and if we fail to develop, maintain, and enhance our brand and reputation cost-effectively, our business and financial condition may be adversely affected.

We believe that the brand identity we have developed and acquired has significantly contributed to the success of our business. We also believe that developing, maintaining, and enhancing awareness and integrity of our brand and reputation are critical to achieving widespread acceptance of our solutions and expanding adoption of our solutions to new customers in both existing and new markets. Maintaining and enhancing our brand requires us to make substantial investments and these investments may not be successful or cost-efficient. We believe that the importance of our brand and reputation will increase as competition in our market further intensifies. Successful promotion of our brand depends on the effectiveness of our marketing efforts and our ability to provide a reliable, useful and valuable collection of solutions at competitive prices. These factors are essential to our ability to differentiate our offerings from competing solutions. In addition, our brand and reputation could be impacted if our end users or insured parties have negative experiences in the claim process, which ultimately largely depends on the quality of service from our customers, but also may depend on the insured’s perceived value of its vehicle. See “—Litigation Risk Factors—We are currently, and have been in the past, a party to litigation, which could result in damage to our reputation and harm our future results of operations.” For example, putative class action lawsuits have alleged that the use of the Company’s total loss valuation solution has led to undervaluation of insureds’ loss vehicles.

Maintaining and enhancing our brand will depend largely on our ability to be a technology innovator, to continue to provide high quality solutions and protect and defend our brand names and trademarks, which we may not do successfully. We have not engaged in extensive direct brand promotion activities, and we may not successfully implement brand enhancement efforts in the future. Our solutions and services generally are branded and are likely associated with the overall experiences of a participant in the insurance economy, which is largely outside of our control. Any brand promotion activities we undertake may not yield increased revenue, and even if they do, the increased revenue may not offset the expenses we incur in building and maintaining our brand and reputation. If we fail to promote and maintain our brand successfully or to maintain loyalty among our customers, we may fail to attract new customers and partners or retain our existing customers and partners and our business and financial condition may be adversely affected. Any negative publicity relating to our customers, employees, partners, or others associated with these parties, may also tarnish our own reputation simply by association and may reduce the value of our brand. Damage to our brand and reputation may result in reduced demand for our solutions and increased risk of losing market share to competitors. Any efforts to restore the value of our brand and rebuild our reputation may be costly and may not be successful.

Our revenue growth rate depends on existing customers renewing and upgrading their SaaS software subscriptions for our solutions. A decline in our customer renewals and expansions could adversely impact our future results of operations.

Our customers have no obligation to renew their contracts for our solutions after the expiration of their contract periods and our customers may choose not to renew contracts for a similar mix of solutions. Our customers’ renewal rates may fluctuate or decline as a result of a

number of factors, including customer dissatisfaction, customers' spending levels, increased competition, changes in tax or data privacy laws or rules, prices of our services, the prices of services offered by our competitors, spending levels due to the macroeconomic environment or other factors, deteriorating general economic conditions, or legislative and regulatory changes. If our customers do not renew their contracts or reduce the solutions purchased under their contracts, our revenue could decline and our business may be adversely impacted.

Our future success also depends in part on our ability to sell additional solutions to existing customers. If our efforts to sell our additional solutions to our customers are not successful, our revenue growth would decrease and our business, results of operations, and financial condition would be adversely impacted.

Our growth strategy depends on continued investment in and delivery of innovative SaaS solutions. If we are unsuccessful in delivering innovative SaaS solutions, it could adversely impact our results of operations and financial condition.

To address demand trends across the P&C insurance economy, we have focused on and plan to continue focusing on the growth and expansion of our SaaS business. This growth strategy has required and will continue to require a considerable investment of technical, financial and sales resources. These investments may not result in an increase in SaaS software revenue and we may not be able to scale such investments efficiently, or at all, to meet customer demand and expectations. Our focus on our SaaS business may increase our costs in any given period and may be difficult to predict over time.

Our SaaS arrangements also contain service level agreement clauses which may include penalties for matters such as failing to meet stipulated service levels. The consequences in such circumstances could include monetary credits for current or future service engagements, reduced fees for additional solution sales, cancellations of planned purchases, a customer's refusal to pay their contractually-obligated SaaS or professional service fees, and our reputation being tarnished. Should these penalties be triggered, our results of operations may be adversely affected. Furthermore, any factor adversely affecting sales of our SaaS solutions, including application release cycles, delays or failures in new functionality, market acceptance, product competition, performance and reliability, reputation, price competition and economic and market conditions, could have a material adverse effect on our business, financial condition and results of operations. Additionally, the entry into new markets or the introduction of new features, functionality or applications beyond our current markets and functionality may not be successful. If we invest in the development of new solutions, we may not recover the "up-front" costs of developing and marketing those solutions, or recover the opportunity cost of diverting management, technical and financial resources away from other efforts. If we are unable to successfully grow our SaaS business and navigate our growth strategy in light of the foregoing uncertainties, our reputation could suffer and our results of operations may be impacted, which may cause our stock price to decline.

Public health outbreaks, epidemics or pandemics, including the global COVID-19 pandemic, could harm our business and results of operations.

Public health outbreaks, epidemics and pandemics could materially and adversely impact our business. Responses to the COVID-19 pandemic included, and responses to future outbreaks, epidemics or pandemics could include, certain intensified preventative or protective public health measures undertaken by governments, businesses and individuals, including orders to shelter-in-place and restrictions on travel and permitted business operations. These responses resulted, with respect to the COVID-19 pandemic, and could result in global business disruptions that adversely affected workforces, organizations, economies, and financial markets globally, leading to an economic downturn and increased market volatility.

We continued to conduct business during the COVID-19 pandemic, with modifications to employee travel and work locations as well as virtualization, postponement or cancellation of certain sales and marketing events, among other changes. We continue to observe governments, businesses and individuals taking precautionary measures to address COVID-19. While governments, businesses and individuals in many geographies are removing COVID-19 related business restrictions, we continue to actively monitor the situation and may take further actions to alter our business operations, at the local level or globally, that we determine are appropriate, including in response to COVID-19 outbreaks and new variants. The extent of the impact of any such modifications on our business, including the effects on our customers, prospects and employees, and on our financial results, remains uncertain.

The impact of a public health outbreak, epidemic or pandemic, including a resurgence in the COVID-19 pandemic, on the global economy could decrease technology spending by our existing and prospective customers and adversely affect their demand for our solutions. Further, responses to such events may impact our sales and implementation cycles which could result in us providing contract terms more favorable to customers and a potentially longer delay between incurring operating expenses and the generation of corresponding revenue or in difficulty in accurately predicting our financial forecasts. Additionally, any economic downturn or rising unemployment rates resulting from such an outbreak, epidemic or pandemic have the potential to significantly reduce individual and business disposable income and depress consumer confidence, which could limit the ability or willingness of some consumers to obtain and pay for our customers' products in both the short- and medium-terms, which may negatively impact the ability of our customers to pay for our services or require such customers to request amended payment terms for their outstanding invoices. We are unable to predict the impact that a public health outbreak, epidemic or pandemic, including a resurgence in the COVID-19 pandemic, may have going forward on the business, results of operations or financial position of any of our major customers, which could impact each customer to varying degrees and at different times and could ultimately impact our own financial performance.

The COVID-19 pandemic presented operational challenges as our workforce shifted to a hybrid working model of in-person and remote work, which continues to create inherent productivity, connectivity, and oversight challenges. It is possible that continued remote work arrangements may have a negative impact on our operations, the execution of our business plans, the productivity and availability of key personnel and other employees necessary to conduct our business, and may increase the risk of cyberattacks. A further change to our operating model, at the local level or globally, could exacerbate these impacts and may also result in employee retention, engagement or other impacts. These impacts and disruptions could negatively affect our operations or internal controls over financial reporting and may require us to implement new processes, procedures and controls to respond to further changes in our business environment.

To the extent a public health outbreak, epidemic or pandemic, including a resurgence in the COVID-19 pandemic, adversely affects our business and financial results, it may also have the effect of heightening other risks described in this “Risk Factors” section, such as those relating to our liquidity.

Factors outside of our control including but not limited to natural catastrophes, war, and terrorism, may adversely impact the P&C insurance economy, preventing us from expanding or maintaining our existing customer base and increasing our revenue.

Our largest customers are carriers who have experienced, and will likely experience in the future, losses from catastrophes, natural disasters or terrorism that may adversely impact their businesses. Catastrophes can be caused by various events, including, without limitation, hurricanes, tsunamis, floods, windstorms, earthquakes, hail, tornadoes, explosions, severe weather, epidemics, pandemics and fires. Global warming trends are contributing to an increase in erratic weather patterns globally and intensifying the impact of certain types of catastrophes. Moreover, acts of terrorism or war could cause disruptions to our business or our customers’ businesses or the economy as a whole.

The risks associated with natural catastrophes, war and terrorism are inherently unpredictable, and it is difficult to forecast the timing of such events or estimate the amount of losses they will generate. In recent years, for example, parts of the U.S. suffered extensive damage due to multiple hurricanes and fires. The combined effect of those losses on carriers was significant. Such losses and losses due to future events may adversely impact our current or potential customers, which may prevent us from maintaining or expanding our customer base and increasing our revenue as such events may cause customers to postpone purchases of new offerings or to discontinue existing projects. Any of these events could materially impact our business, results of operations and financial condition.

A downturn in the P&C insurance and automotive collision industries, claim volumes, or supporting economy, which are outside of our control, could adversely impact our results of operations.

Revenue for some of our solutions are derived from claims volumes rather than from the subscription fees that represent the majority of our revenue. Claim volume-based solution revenue is driven by individual customer usage and can be impacted by market conditions within the P&C insurance economy. As a result, our transactional revenue can be adversely affected by factors outside of our control, including but not limited to, industry trends, market events, customer-specific usage changes. The transactional portion of the business also presents more challenges to accurately forecasting future revenues.

Changes in the P&C insurance and automotive collision industries, including the adoption of new technologies, such as autonomous vehicles, may significantly impact our results of operations.

Aspects of our business, and our customers’ businesses, which our solutions and services support, can be impacted by events in the P&C insurance and automotive collision industries which are beyond our control. Certain trends in the automotive industry, including the continued adoption of semi-autonomous or autonomous vehicles and the advent of improved automotive safety features, may potentially impact the future market for, and operations of, the P&C insurance and automotive collision industries. While the impacts and timing of these changes are currently unknown, if this has an adverse impact on the P&C insurance or the automotive collision industries, it could have an adverse impact on our future result of operations.

Our customers may defer or forego purchases of our solutions or services in the event of weakened global economic conditions or political transitions.

Our financial performance depends, in part, on the state of the economy. Declining levels of economic activity may lead to declines in spending in the industries we serve, which may result in decreased revenue for us. Concern about the strength of the economy may slow the rate at which businesses are willing to enter into new contractual arrangements, potentially including those for our solutions. If our customers and potential customers experience financial hardship as a result of a weakened economy, industry consolidation, or other factors, the overall demand for our solutions could decrease. If economic conditions worsen, our business, results of operations, and financial condition could be adversely impacted.

Global events such as the imposition of various trade tariffs by the U.S. and China, public health outbreaks such as the COVID-19 pandemic, supply chain disruption, inflationary pressures, labor shortages and the war in Ukraine have created and may continue to create economic uncertainty, including inflationary pressures, in regions in which we have significant operations. These conditions may make it difficult for our customers and us to forecast and plan future business activities accurately, and they could cause our customers to reevaluate their decision to purchase our solutions or services, which could delay and lengthen our sales cycles or result in cancellations of planned purchases. Moreover, during challenging economic times, our customers may be unable to timely access sufficient credit, which could impair their ability to make timely payments to us. If that were to occur, we may not receive amounts owed to us and may be required to record an allowance for doubtful accounts, which would adversely affect our financial results. A substantial downturn in the insurance industry may cause firms to react to worsening conditions by reducing their capital expenditures, reducing their spending on information technology, delaying or canceling information technology projects, or seeking to lower their costs by renegotiating vendor contracts. Negative or worsening conditions in the general economy, both in the U.S. and abroad, including conditions resulting from financial and credit market fluctuations, could decrease corporate spending on enterprise software in general, and in the insurance industry specifically, and negatively affect the rate of growth of our business.

Macroeconomic factors impacting the principal industries we serve could adversely affect adoption, usage, or average selling prices of our solutions.

We expect to continue to derive most of our revenue from solutions and additional services we provide to the P&C insurance industry, the automotive collision industry, and the P&C insurance economy generally, including the automotive industry. Given the concentration of our business activities in these industries, we will be particularly exposed to certain economic downturns affecting them. U.S. and global market and economic conditions have been, and continue to be, disrupted and volatile. General business and economic conditions that could affect us and our customers include fluctuations in economic growth, inflation, debt and equity capital markets, liquidity of the global financial markets, the availability and cost of credit, investor and consumer confidence, and the strength of the economies in which our customers operate. A poor economic environment could result in significant decreases in demand for our solutions, including the delay or cancellation of current or anticipated projects, or could present difficulties in collecting accounts receivables from our customers due to their deteriorating financial condition. Our existing

customers may be acquired by or merged into other entities that use our competitors' products, or they may decide to terminate their relationships with us for other reasons. As a result, our sales could decline if an existing customer is merged with or acquired by another company that has a poor economic outlook or is closed.

In addition, a significant portion of our operating costs are comprised of personnel-related expenses. We have experienced and may, in the future, experience increased labor costs as well as other costs necessary to conduct our business. To the extent we cannot pass along such increased costs to our customers, our results of operations and financial condition may be adversely affected.

Recently, there have been market indicators of a pronounced rise in inflation, which generally increases the costs of our business operations. We have a substantial number of long-term customer contracts, which means we cannot modify the prices paid by the customers under such contracts to pass along such increased costs.

We face competition in our market, which could negatively impact our business, results of operations, and financial condition and cause our market share to decline.

The market for our solutions is competitive. The competitors we face in any sale opportunity may change depending on, among other things, the line of business making the purchase, the solutions(s) being sold, the geography in which the customer is operating, and the size of the customer to which we are selling. These competitors may compete on the basis of price, the time and cost required for software implementation, custom development, or unique product features or functions. Outside of the U.S., we are more likely to compete against vendors that may differentiate themselves based on local advantages in language, market knowledge, existing relationships with customers and content applicable to that jurisdiction.

As we expand our portfolio, we may begin to compete with software, technology and other providers that we have not competed against previously and where technology and applications may, in time, become more competitive with our offerings.

We expect the intensity of competition to remain high in the future, as the amount of capital invested in current and potential competitors, including insurance technology companies, has increased significantly in recent years. As a result, our competitors or potential competitors may develop improved product or sales capabilities, or even a technology breakthrough that disrupts our market. Continuing intense competition could result in increased pricing pressure, increased sales and marketing expenses, and greater investments in research and development, each of which could negatively impact our profitability. Current and potential competitors may be able to devote greater resources to, or take greater risks in connection with, the development, promotion, and sale of their products than we can devote to ours, which could allow them to respond more quickly than we can to new technologies and changes in customer needs, thus leading to their wider market acceptance. We may not be able to compete effectively and competitive pressures may prevent us from acquiring and maintaining the customer base necessary for us to increase our revenue and profitability.

In addition, the P&C insurance economy is evolving rapidly, and we anticipate the market for cloud-based solutions will become increasingly competitive. If our current and potential customers move a greater proportion of their data and computational needs to the cloud, new competitors may emerge that offer services either comparable or better suited than ours to address the demand for such cloud-based solutions, which could reduce demand for our offerings. To compete effectively we will likely be required to increase our investment in research and development, as well as the personnel and third-party services required to improve reliability and lower the cost of delivery of our cloud-based solutions. This may increase our costs more than we anticipate and may adversely impact our results of operations.

Our current and potential competitors may also establish cooperative relationships among themselves or with third parties to further enhance their resources and offerings. Current or potential competitors may be acquired by other vendors or third parties with greater available resources. As a result of such acquisitions, our current or potential competitors might be able to adapt more quickly to new technologies and customer needs, to devote greater resources to the promotion or sale of their products and services, to initiate or withstand substantial price competition, or to take advantage of emerging opportunities by developing and expanding their product and service offerings more quickly than we can. Additionally, they may hold larger portfolios of patents and other intellectual property rights as a result of such relationships or acquisitions. If we are unable to compete effectively with these evolving competitors for market share, our business, results of operations, and financial condition could be materially and adversely affected.

If we are unable to develop, introduce and market new and enhanced versions of our solutions and services, we may be put at a competitive disadvantage and our operating results could be adversely affected.

As technology continues to develop at a rapid pace, both within the P&C insurance economy and more broadly across the insurance ecosystem, the possibility of the development of technological advancements made by other firms will increase. If we are unable to internally develop or acquire suitable alternatives to such developments or otherwise deploy competitive offerings our business and growth opportunities may be challenged. Additionally, certain P&C insurance ecosystem customers may seek to develop internal solutions which could potentially compete with related offerings from us. Technologies such as enhanced modeling, artificial intelligence and machine learning technology may offer certain firms, including insurance carriers, the opportunity to make rapid advancements in the development of tools which may impact the industry broadly.

New solutions utilize and will continue to be based on AI technologies in the future. As such, the market acceptance of AI-based solutions is critical to our continued success. In order for cloud-based AI solutions to be widely accepted, organizations must overcome any concerns with placing sensitive information on a cloud-based platform. Furthermore, our ability to effectively market and sell AI-based solutions to customers is partly dependent upon the pace at which enterprises undergo digital transformation. Additionally, as technologies continue to become more integrated with AI technologies generally, governments may implement data privacy and AI regulations with which we will need to comply, and which may result in the incurrence of additional costs and expenses.

We expect that the needs of our customers will continue to rapidly change and increase in complexity and we will need to improve the functionality and performance of our platform continually to meet these demands. If we are unable to continue to meet customer demands or to achieve more widespread market acceptance of enterprise AI solutions in general or our platform in particular, our business operations, financial results, and growth prospects will be materially and adversely affected.

Our sales and implementation cycles can be lengthy and variable, depend upon factors outside our control, and could cause us to expend significant time and resources prior to generating revenue.

Sales cycles for some of our solutions are complex and can be lengthy and unpredictable, requiring pre-purchase evaluation by a significant number of employees in our customers' organizations, and can involve a significant operational decision by our customers. Our sales efforts involve educating our customers about the use and benefits of our solutions, including in the technical capabilities and the potential cost savings achievable by organizations using our solutions. For larger business opportunities, such as converting a new P&C insurance customer, customers undertake a rigorous pre-purchase decision-making and evaluation process which typically involves due diligence and reference checks. We invest a substantial amount of time and resources in our sales efforts without any assurance that our efforts will produce sales. Even if we succeed at completing a sale, we may be unable to predict the size or term of an initial SaaS arrangement until very late in the sales cycle. In addition, we sometimes commit to include specific functions in our base solutions offering at the request of a customer or group of customers. Providing this additional functionality may be time consuming and may involve factors that are outside of our control. Customers may also insist that we commit to certain time frames in which systems built around our solutions will be operational, or that once implemented our solutions will be able to meet certain operational requirements. Our ability to meet such timeframes and requirements may involve factors that are outside of our control, and failure to meet such timeframes and requirements could result in us incurring penalties, costs and/or additional resource commitments, which would adversely affect our business and results of operations.

Unexpected delays and difficulties can occur as customers implement and test our solutions. Solutions can involve integration with our customers' and third-party's systems as well as the addition of customer and third-party data to our platform. This process can be complex, time-consuming and expensive for our customers and can result in delays in the implementation of our solutions, which could adversely affect our business, results of operations and financial condition. Time-consuming efforts such as client setups, training and transition of systems may also increase the amount of services personnel we must allocate to each customer, thereby increasing our costs for these services. These types of changes can also result in a shift in the timing of the recognition of revenue which could adversely affect results of operations and financial condition. The timing of when we sign a large contract can materially impact our results of operations for the period and can be difficult to predict.

Failure to manage our expanding operations effectively could harm our business.

We have expanded our operations, including the number of employees and the locations and scope of our operations, and expect to continue to do so in the future. During the COVID-19 pandemic we transitioned to a hybrid working model of in-person and remote work, which brings new challenges to managing our business and work force that we generally expect to continue for the foreseeable future, including increased risk of cyberattacks due to more employees working remotely. For more information please see — "Public health outbreaks, epidemics or pandemics, including the global COVID-19 pandemic, could harm our business and results of operations." This expansion and changing work environment have placed, and will continue to place, challenges on our operations and our personnel. We will also need to identify, add and retain additional qualified personnel across our operations. To manage our anticipated future operational expansion effectively, we must maintain, and expect to enhance, our IT infrastructure and financial and accounting systems and controls, and manage expanded operations and employees in geographically distributed locations. Our growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of new solutions. If we increase the size of our organization without experiencing an increase in sales of our solutions, we will experience reductions in our gross and operating margins and net income. We may also deem it advisable in the near-term or later to downsize certain of our offices in order to reduce costs, which may cause us to incur related charges. If we are unable to effectively manage our expanding operations or manage the increase in remote employees, our expenses may increase more than expected, our revenue could decline or grow more slowly than expected and we may be unable to implement our business strategy.

If we are unable to develop new markets or sell our solutions into these new and existing markets, our revenue will not grow as expected.

Our ability to increase revenue will depend, in large part, on our ability to further penetrate our existing markets and enter new markets, as well as our ability to increase sales from existing customers and attract new customers. The success of any enhancement or new solution or service depends on several factors, including the timely completion, introduction and market acceptance of enhanced or new solutions, adaptation to new industry standards and technological changes, the ability to maintain and to develop relationships with third parties and the ability to attract, retain and effectively train sales and marketing personnel. Any new solutions we develop or acquire may not be introduced in a timely or cost-effective manner and may not achieve the market acceptance necessary to generate significant revenue. Any new industry standards or practices that emerge, or any introduction by competitors of new solutions embodying new services or technologies, may cause our solutions to become obsolete. Any new markets in which we attempt to sell our solutions, including new countries or regions, may not be receptive or implementation may be delayed due to circumstances beyond our control, including economic and market factors, public health outbreaks, epidemics and pandemics, including the COVID-19 pandemic, natural disasters, war and terrorist attacks. Additionally, any expansion into new markets may require us to comply with new regulatory laws and regimes and increase our monitoring thereof on an ongoing basis, which will increase our costs, as well as the risk that we may not be in compliance on a timely basis or at all. Our ability to further penetrate our existing markets and enter new markets depends on the quality of our solutions and our ability to design our solutions to meet changing consumer demands and industry standards, as well as our ability to assure that our customers will be satisfied with our existing and new solutions. If we are unable to sell our solutions into new markets or attract new customers or to further penetrate existing markets, or to increase sales from existing customers by selling them additional solutions, our revenue will not grow as expected, which would have a material adverse effect on our business, financial condition and results of operations.

Developing significant revenue streams derived from our current research and development efforts may take several months or years, or may not be achieved at all.

Developing software is time consuming and costly, and investment in development may involve a long payback cycle. Our research and development expenses were \$157.0 million, or 20% of our total revenue, for the year ended December 31, 2022. Including capitalized time related to internal use software of \$34.6 million, our total spend was 24% of total revenue for the year ended December 31, 2022. Our future plans include significant investments to develop, improve and expand the functionality of our solutions, which we believe is necessary to maintain our

competitive position. However, we may not recognize significant revenue from these investments for several months or years, or the investments may not yield any additional revenue.

Changes in, or violations by us or our customers of, applicable government regulations could reduce demand for or limit our ability to provide our solutions and services in those jurisdictions.

Our P&C insurance industry customers are subject to extensive government regulations, mainly at the state level in the United States and at the country level in our non-U.S. markets. Some of these regulations relate directly to our software and services, including regulations governing the use of total loss and photo estimating software. If our insurance company customers fail to comply with new or existing insurance regulations, including those applicable to our software and services, they could lose their certifications to provide insurance and/or reduce their usage of our software and services, either of which would reduce our revenues. We have in the past and continue to spend considerable time and resources working with our customers to help them navigate these regulations, including Department of Insurance market conduct examinations and defending against class action lawsuits. If our solutions or services are found to be defective, we could be liable to them. In addition, future regulations could force us to implement costly changes to our software and/or databases or have the effect of prohibiting or rendering less valuable one or more of our offerings. Also, we are subject to direct regulation in some markets, and our failure to comply with these regulations could significantly reduce our revenues or subject us to government sanctions.

Sales to customers or operations outside the United States may expose us to risks inherent in international sales.

Historically, transactions occurring outside of the U.S. have represented a small portion of our overall processed transactions. However, we may expand our international sales efforts. Operating in international markets, including in China, requires significant resources and management attention and will subject us to regulatory, economic, and political risks that are different from those in the U.S. Because of our limited experience operating internationally, our international expansion efforts may not be successful. We may rely heavily on third parties outside of the U.S., and as a result we may be adversely impacted if we invest time and resources into such business relationships but do not see significant sales from such efforts. Potential risks and challenges associated with sales to customers and operations outside the U.S. include:

- compliance with multiple conflicting and changing governmental laws and regulations, including employment, tax, money transmission, privacy, and data protection laws and regulations;
- laws and business practices favoring local competitors;
- new and different sources of competition;
- securing new integrations for international technology platforms;
- localization of our solutions, including translation into foreign languages, obtaining and maintaining local content, and customer care in such languages;
- treatment of revenue from international sources and changes to tax rules, including being subject to foreign tax laws and liability for paying withholding or other taxes in foreign jurisdictions;
- fluctuation of foreign currency exchange rates;
- different pricing environments;
- restrictions on the transfer of funds;
- difficulties in staffing and managing foreign operations;
- availability of reliable internet connectivity in areas targeted for expansion;
- different or lesser protection of our intellectual property;
- longer sales cycles;
- natural disasters, acts of war, terrorism, pandemics, or security breaches;
- import and export license requirements, tariffs, taxes and other trade barriers;
- compliance with sanctions laws and regulations, including those administered by the Office of Foreign Assets Control (“OFAC”) of the U.S. Department of the Treasury;
- the burdens and costs of complying with a wide variety of foreign laws and legal standards, including the General Data Protection Regulation (EU 2016/679) (“GDPR”) in the European Union (“EU”);
- impact of Brexit on operations and growth of business in the European Union;
- compliance with various anti-bribery and anti-corruption laws such as the U.S. Foreign Corrupt Practices Act (“FCPA”);
- regional or national economic and political conditions; and
- pressure on the creditworthiness of sovereign nations resulting from liquidity issues or political actions.

As we continue to expand our business globally, our success will depend, in large part, on our ability to anticipate and effectively manage these and other risks associated with our international operations. Any of these factors could negatively impact our business, results of operations, financial condition and growth prospects.

Changes in China's economic, political or social conditions or government policies, as well as the corruption risks presented by operating in China, could have an adverse effect on our efforts to expand our business in China.

The Chinese economy differs from the economies of most developed countries in many respects, including the degree of government involvement, level of development, growth rate, control of foreign exchange and allocation of resources. Accordingly, our business, prospects, financial condition and results of operations may be affected to a significant degree by political, economic and social conditions in China generally. Although the Chinese government has implemented measures emphasizing the utilization of market forces for economic reform, the reduction of state ownership of productive assets and the establishment of improved corporate governance in business enterprises, a substantial portion of productive assets in China are still owned or controlled by the government. By virtue of our serving customers in China that are at least partially owned or controlled by the government, there is also an increased risk of running afoul of the FCPA and other laws and regulations concerning anti-bribery and anti-corruption, including local Chinese laws, particularly given that China is perceived to present a heightened risk from an anti-corruption perspective. Additionally, as we continue to expand our business operations in China, we may engage with partners and third-party intermediaries who may have direct or indirect dealings with those deemed by anti-corruption laws to be government officials, further increasing the risk of violations of such laws that may result in fines and/or criminal sanctions against us, our officers, or our employees. In addition, the Chinese government continues to play a significant role in regulating industry development by imposing industrial policies. The Chinese government also exercises significant control over China's economic growth by allocating resources, controlling payment of foreign currency-denominated obligations, setting monetary policy and providing preferential treatment to particular industries or companies.

While the Chinese economy has experienced significant growth over the past decades, growth has been uneven, both geographically and among various sectors of the economy. The Chinese government has implemented various measures to encourage economic growth and guide the allocation of resources. Some of these measures may benefit the overall Chinese economy, but may have a negative effect on us. For example, our financial condition and results of operations may be adversely affected by government control over capital investments or changes in tax regulations. The growth rate of the Chinese economy has gradually slowed since 2010, and COVID-19 has had a severe and negative impact on the Chinese economy, which may continue. Any prolonged slowdown in the Chinese economy may reduce the demand for our solutions and services and materially and adversely affect our business and results of operations.

Our business activities are subject to the FCPA and similar anti-bribery and anti-corruption laws.

Anti-corruption and anti-bribery laws have been enforced aggressively in recent years. Our business activities are subject to the FCPA and similar anti-bribery and anti-corruption laws, regulations, or rules of other countries in which we operate, including the U.K. Bribery Act. These laws are interpreted broadly and prohibit companies, their employees, and third-party intermediaries from authorizing, promising, offering, or providing, either directly or indirectly, improper payments or anything else of value to recipients in the public or private sector. The FCPA also requires public companies to maintain accurate books and records and to devise and maintain an adequate system of internal accounting controls. While only representing a de minimis proportion of our total revenue, we count among our customers a number of government entities. We may have direct or indirect dealings with those deemed by anti-corruption laws to be government officials, which also include interactions in countries known to experience corruption, including China. Activities in such countries create the risk of unauthorized payments or offers of payments by one of our employees, consultants, partners, or third-party intermediaries that could be in violation of various anti-corruption laws. We have policies and controls intended to prevent these practices—e.g., a standalone Global Anti-Bribery Policy, Code of Ethics, mandatory anti-corruption trainings, financial controls, and a whistleblowing hotline, among others. While there is no certainty that all of our employees, consultants, partners, or third-party intermediaries will comply with all applicable laws and regulations, particularly given the high level of complexity of these laws, our policies and controls aim to satisfy our obligation to comply with them. Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers, or our employees, and liability for the actions of corrupt or other illegal activities of such third-party intermediaries, their employees, representatives, contractors, partners, and agents, even if we do not explicitly authorize such activities.

We are subject to increasing global trade laws and regulations.

We are subject to U.S. trade laws and regulations, including economic sanctions, export controls, and import laws, as well as similar trade laws and regulations in other countries in which we operate. Failure to comply with global trade laws and regulations can result in penalties and/or reputational harm. Our international sales efforts expose us to increased risk under these laws and regulations, and increasing and evolving global trade laws could impact our business.

We may experience fluctuations in foreign currency exchange rates that could adversely impact our results of operations.

As we expand our business and operations internationally, our international sales may be denominated in foreign currencies, and this revenue could be materially affected by currency fluctuations. The volatility of exchange rates depends on many factors that we cannot forecast with reliable accuracy. We typically collect revenue and incur costs in the currency of the location in which we provide our solutions and services, but our contracts with our customers are long-term in nature so it is difficult to predict if our operating activities will provide a natural hedge in the future or as we expand internationally. Our results of operations may also be impacted by transaction gains or losses related to revaluing certain current asset and liability balances that are denominated in currencies other than the functional currency of the entities in which they are recorded. Moreover, significant and unforeseen changes in foreign currency exchange rates may cause us to fail to achieve our stated projections for revenue and operating income, which could have an adverse effect on our stock price. As we expand internationally, we will continue to experience fluctuations in foreign currency exchange rates, which, if material, may harm our revenue or results of operations.

We rely on data, technology, and intellectual property of third parties and our solutions rely on information generated by third parties and any interruption of our access to such information, technology, and intellectual property could materially harm our operating results.

We use data, technology, and intellectual property licensed from unaffiliated third parties in certain of our solutions, and we may license additional third-party data, technology, and intellectual property in the future. Any errors or defects in this third-party data, technology, and intellectual property could result in errors that could adversely impact our brand and business. In addition, licensed data, technology, and intellectual property may not continue to be available on commercially reasonable terms, or at all. The loss of the right to license and distribute this third-party data, technology, and intellectual property could limit the functionality of, or require us to redesign, our solutions. Our success depends significantly

on our ability to provide our customers access to data from many different sources, including, for example, parts-related data for purposes of repair estimation. We obtain much of our data about vehicle parts and components and collision repair labor and costs through license agreements with third parties who may be sole-source suppliers of that data.

If one or more of our licenses are terminated, if our licenses are subject to material price increases, if we are unable to renew one or more of these licenses on favorable terms or at all, or if one or more licensor becomes subject to allegations of breach of third-party intellectual property rights with respect to the materials licensed by us, we may be unable to access the licensed materials without incurring additional costs or, for instance in the case of materials licensed from sole-service suppliers, unable to access alternative sources that would provide comparable materials. While we do not believe that our access to many of the individual sources of data is material to our operations, prolonged industry-wide price increases or reductions in data availability could make receiving certain data more difficult and could result in significant cost increases, which would materially harm our operating results.

Failure to protect our intellectual property could adversely impact our business and results of operations.

Our success depends in part on our ability to enforce and defend our intellectual property rights. We rely upon a combination of trademark, trade secret, copyright, patent and unfair competition laws, as well as license agreements and other contractual provisions, to do so.

In the future we may file patent applications related to certain of our innovations. We do not know whether those patent applications will result in the issuance of a patent or whether the examination process will require us to narrow our claims. In addition, we may not receive competitive advantages from the rights granted under our patents and other intellectual property. Our existing patents and any patents granted to us or that we otherwise acquire in the future, may be contested, circumvented or invalidated, and we may not be able to prevent third parties from infringing these patents. The validity, enforceability, scope and effective term of patents can be highly uncertain and often involve complex legal and factual questions and proceedings that vary based on the local law of the relevant jurisdiction. Our ability to enforce our patents also depends on the laws of individual countries and each country's practice with respect to enforcement of intellectual property rights. Patent protection must be obtained on a jurisdiction-by-jurisdiction basis, and we only pursue patent protection in countries where we think it makes commercial sense for the given solution. In addition, if we are unable to maintain our existing license agreements or other agreements pursuant to which third parties grant us rights to intellectual property, including because such agreements terminate, our financial condition and results of operations could be materially adversely affected. Therefore, the extent of the protection afforded by these patents cannot be predicted with certainty. In addition, given the costs, effort, risks and downside of obtaining patent protection, including the requirement to ultimately disclose the invention to the public, we may choose not to seek patent protection for certain innovations; however, such patent protection could later prove to be important to our business.

Patent law reform in the U.S. and other countries may also weaken our ability to enforce our patent rights, or make such enforcement financially unattractive. For instance, in September 2011, the U.S. enacted the America Invents Act, which permits enhanced third-party actions for challenging patents and implements a first-to-file system. Further, the U.S. Supreme Court's 2014 decision in *Alice v. CLS Bank* made it easier to invalidate software patents, leading to us to scale back our patent prosecution strategy. These legal changes could result in increased costs to protect our intellectual property or limit our ability to obtain and maintain patent protection for our solutions in these jurisdictions.

We also rely on several registered and unregistered trademarks to protect our brand. We have pursued and will pursue the registration of trademarks, logos and service marks in the U.S. and internationally; however, enforcing rights against those who knowingly or unknowingly dilute or infringe our brands can be difficult. There can be no assurance that the steps we have taken and will take to protect our proprietary rights in our brands and trademarks will be adequate or that third parties will not infringe, dilute or misappropriate our brands, trademarks, trade dress or other similar proprietary rights. Competitors may adopt service names similar to ours, or use confusingly similar terms as keywords in Internet search engine advertising programs, thereby impeding our ability to build brand identity and possibly creating confusion in the marketplace. In addition, trade name or trademark infringement claims could be brought against us by owners of other registered trademarks or trademarks that incorporate variations of our trademarks. Any claims or customer confusion related to our trademarks could damage our reputation and brand and adversely impact our business and results of operations.

We attempt to protect our intellectual property, technology and confidential information by generally requiring our employees, contractors, and consultants to enter into confidentiality and assignment of inventions agreements and third parties to enter into nondisclosure agreements, all of which offer only limited protection. These agreements may not effectively prevent, or provide an adequate remedy in the event of unauthorized use or disclosure of our confidential information, intellectual property or technology. Despite our efforts to protect our confidential information, intellectual property, and technology, unauthorized third parties may gain access to our confidential proprietary information, develop and market solutions similar to ours, or use trademarks similar to ours, any of which could materially impact our business and results of operations. In addition, others may independently discover our trade secrets and confidential information, and in such cases, we could not assert any trade secret rights against such parties. Existing U.S. federal, state and international intellectual property laws offer only limited protection. The laws of some foreign countries do not protect our intellectual property rights to as great an extent as the laws of the U.S., and many foreign countries do not enforce these laws as diligently as governmental agencies and private parties in the U.S. More broadly, enforcing intellectual property protections outside the U.S., including in some countries we operate in, can be more challenging than enforcement in the U.S. The Company takes certain actions when operating in countries where protection of IP, technology and confidential information, is not as well protected, including steps such as preventing placing sensitive IP in such countries, as an example. Moreover, policing our intellectual property rights is difficult, costly and may not always be effective.

From time to time, legal action by us may be necessary to enforce our patents and other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the intellectual property rights of others or to defend against claims of infringement or invalidity. Even if we are successful in defending our claims, litigation could result in substantial costs and diversion of resources and could negatively affect our business, reputation, results of operations and financial condition. To the extent that we seek to enforce our rights, we could be subject to claims that an intellectual property right is invalid, otherwise not enforceable, or is licensed to the party against whom we are pursuing a claim. In addition, our assertion of intellectual property rights may result in the other party seeking to assert alleged intellectual property rights or assert other claims against us, which could adversely impact our business. If we are not successful in defending such claims in litigation, we may not be able to sell or license a particular solution due to an injunction, or we may have to pay damages that could, in turn, adversely impact our results of operations. In addition,

governments may adopt regulations, or courts may render decisions, requiring compulsory licensing of intellectual property to others, or governments may require that products meet specified standards that serve to favor local companies. Our inability to enforce our intellectual property rights under these circumstances may adversely impact our competitive position and our business. If we are unable to protect our technology and to adequately maintain and protect our intellectual property rights, we may find ourselves at a competitive disadvantage to others who need not incur the additional expense, time and effort required to create the innovative solutions that have enabled us to be successful to date.

We may enter into joint ventures, collaborations or sponsored developments for intellectual property and, as a result, some of our intellectual property may, in the future, be jointly-owned by third parties.

Engagement in any type of intellectual property collaboration agreement requires diligent management of intellectual property rights. Other than in specific, limited circumstances, we do not currently engage in joint ventures, collaborations or sponsored development agreements. Should we enter into such agreements in future, the development of joint intellectual property would create additional administrative and financial burdens, and may place us at heightened risk of disputes or litigation regarding ownership, maintenance or enforcement of such joint intellectual property.

Assertions by third parties of infringement or other violation by us of their intellectual property rights could result in significant costs and substantially harm our business and results of operations.

The software industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patents and other intellectual property rights. In particular, leading companies in the software industry own large numbers of patents, copyrights, trademarks and trade secrets, which they may use to assert claims against us. From time to time, third parties holding such intellectual property rights, including companies, competitors, patent holding companies, customers and/or non-practicing entities, may assert patent, copyright, trademark or other intellectual property claims against us, our customers and partners, and those from whom we license technology and intellectual property.

Although we believe that our solutions do not infringe upon the intellectual property rights of third parties, any such assertions may require us to enter into royalty arrangements or result in costly litigation, or result in us being unable to use certain intellectual property. Infringement assertions by third parties may involve patent holding companies or other patent owners who have no relevant product revenue, and therefore our own issued and pending patents may provide little or no deterrence to these patent owners in bringing intellectual property rights claims against us.

If we are forced to defend against any infringement or misappropriation claims, whether they are with or without merit, are settled out of court, or are determined in our favor, we may be required to expend significant time and financial resources on the defense of such claims. Regardless of the merits or eventual outcome, such a claim could adversely impact our brand and business. Furthermore, an adverse outcome of a dispute may require us to pay damages, potentially including treble damages and attorneys' fees, if we are found to have willfully infringed a party's intellectual property; cease making, licensing or using our solutions that are alleged to infringe or misappropriate the intellectual property of others; expend additional development resources to redesign our solutions; enter into potentially unfavorable royalty or license agreements in order to obtain the right to use necessary technologies or works; and to indemnify our partners, customers and other third parties. Any of these events could adversely impact our business, results of operations and financial condition.

Our solutions or our third-party cloud providers have experienced in the past, and could experience in the future, data security breaches, which could adversely impact our reputation, business, and ongoing operations.

As a software business, we face risks of cyber-attacks, including ransomware and phishing attacks, social engineering attacks, computer break-ins, theft, fraud, misappropriation, misuse, denial-of-service attacks, and other improper activity that could jeopardize the performance of our platform and solutions and expose us to financial and reputational impact and legal liability, especially with regards to regulators such as the Federal Trade Commission, which has become increasingly aggressive in prosecuting alleged failure to secure personal data as unfair and deceptive acts or practices under the Federal Trade Commission Act. Furthermore, such adverse impact could be in the form of theft of our or our customers' confidential information, the inability of our customers to access our systems, or the improper re-routing of customer funds through fraudulent transactions or other frauds perpetrated to obtain inappropriate payments and may result from accidental events (such as human error) or deliberate attacks. To protect the information we collect and our systems, we have implemented and maintain commercially reasonable security measures and information security policies and procedures informed by requirements under applicable law and recommended practices, in each case, as applicable to the data collected, but we cannot be sure that such security measures will be sufficient. In some cases, we must rely on the safeguards put in place by third parties to protect against security threats. These third parties, including vendors that provide products and services for our operations, could also be a source of security risk to us in the event of a failure of their own security systems and infrastructure. Our network of business application providers could also be a source of vulnerability to the extent their business applications interface with ours, whether unintentionally or through a malicious backdoor. We cannot, in all instances, review the software code included in third-party integrations. Although we vet and oversee such vendors, we cannot be sure such vetting and oversight will be sufficient. We also exercise limited control over these vendors, which increases our vulnerability to problems with services they provide. Any errors, failures, interruptions or delays experienced in connection with these vendor technologies and information services or our own systems could negatively impact our relationships with partners and adversely affect our business and could expose us to liabilities. Because the techniques used to obtain unauthorized access, or to sabotage systems, change frequently and generally are not recognized until launched against a target, and may be difficult to detect for long periods of time, we or these third parties may be unable to anticipate these techniques or to implement adequate preventative measures. With the increasing frequency of cyber-related frauds to obtain inappropriate payments, we need to ensure our internal controls related to authorizing the transfer of funds are adequate. We may also be required to expend resources to remediate cyber-related incidents or to enhance and strengthen our cyber security. Any of these occurrences could create liability for us, put our reputation in jeopardy, and adversely impact our business.

Our customers provide us with information that our solutions store, some of which is sensitive or confidential information about them or their financial transactions. In addition, we store personal information about our employees and, to a lesser extent, those who purchase products or services from our customers. We have security systems and information technology infrastructure designed to protect against unauthorized access to and disclosure of such information. The security systems and infrastructure we maintain may not be successful in protecting against all security breaches and cyber-attacks, including ransomware and phishing attacks, social-engineering attacks, computer break-ins, theft, fraud, misappropriation, misuse, denial-of-service attacks and other improper activity. Threats to our information technology security can take various

forms, including viruses, worms, and other malicious software programs that attempt to attack our solutions or platform or to gain access to the data of our customers or their customers. Non-technical means, for example, actions or omissions by an employee or trespasser, can also result in a security breach. Any significant violations of data privacy could result in the loss of business, litigation, regulatory fines or investigations, loss of customers, and penalties that could damage our reputation and adversely affect the growth of our business. In addition, we maintain liability insurance coverage, including coverage for cyber-liability. It is possible, however, that claims could be denied or exceed the amount of our applicable insurance coverage, if any, or that this coverage may not continue to be available on acceptable terms or in sufficient amounts. Even if these claims do not result in liability to us, investigating and defending against them could be expensive and time consuming and could divert management's attention away from our operations. In addition, negative publicity caused by these events may negatively impact our customer relationships, market acceptance of our solutions, including unrelated solutions, or our reputation and business.

Real or perceived failures in our solutions, an inability to meet contractual service levels, or unsatisfactory performance of our solutions, could adversely affect our business, results of operations and financial condition.

Because we offer solutions that operate in complex environments, undetected errors or failures may exist or occur, especially when solutions are first introduced or when new versions are released, implemented or integrated into other systems. Our solutions are often used in large-scale computing environments with different operating systems, system management software and equipment and networking configurations, which may cause errors or failures in our solutions or may expose undetected errors, failures or bugs in our solutions. Despite testing by us, we may not identify all errors, failures or bugs in new solutions or releases until after commencement of commercial sales or installation. In the past, we have discovered errors, failures and bugs in some of our solutions after their introduction. We may not be able to fix errors, failures and bugs without incurring significant costs or an adverse impact to our business. The occurrence of errors in our solutions or the detection of bugs by our customers may damage our reputation in the market and our relationships with our existing customers, and as a result, we may be unable to attract or retain customers. We believe that our reputation and name recognition are critical factors in our ability to compete and generate additional sales. Promotion and enhancement of our name will depend largely on our success in continuing to provide effective solutions and services. The failure to do so may result in the loss of, or delay in, market acceptance of our solutions and services, which could adversely impact our sales, results of operations and financial condition.

The license and support of our software creates the risk of significant liability claims against us. Our SaaS arrangements and licenses with our customers contain provisions designed to limit our exposure to potential liability claims. It is possible, however, that the limitation of liability provisions contained in such agreements may not be enforced as a result of international, federal, state and local laws or ordinances or unfavorable judicial decisions. Breach of warranty or damage liability, or injunctive relief resulting from such claims, could adversely impact our results of operations and financial condition.

Some of our services and technologies use "open source" software, which may restrict how we use or distribute our services or require that we release the source code of certain solutions subject to those licenses.

Some of our services and technologies incorporate software licensed under so-called "open source" licenses. In addition to risks related to license requirements, usage of open source software can lead to greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or controls on origin of the software. Additionally, some open source licenses require that source code subject to the license be made available to the public and that any modifications or derivative works to open source software continue to be licensed under open source licenses. These open source licenses typically mandate that proprietary software, when combined in specific ways with open source software, become subject to the open source license. If we combine our proprietary software with open source software, we could be required to release the source code of our proprietary software.

We take steps to ensure that our proprietary software is not combined with, and does not incorporate, open source software in ways that would require our proprietary software to be subject to many of the restrictions in an open source license. However, few courts have interpreted open source licenses, and the manner in which these licenses may be interpreted and enforced is therefore subject to some uncertainty. Additionally, we rely on hundreds of software programmers to design our proprietary technologies, and although we take steps to prevent our programmers from including objectionable open source software in the technologies and software code that they design, write and modify, we do not exercise complete control over the development efforts of our programmers and we cannot be certain that our programmers have not incorporated such open source software into our proprietary solutions and technologies or that they will not do so in the future. In the event that portions of our proprietary technology are determined to be subject to an open source license, we could be required to publicly release the affected portions of our source code, re-engineer all or a portion of our technologies, or otherwise be limited in the licensing of our technologies, each of which could reduce or eliminate the value of our services and technologies and materially and adversely affect our business, results of operations, and prospects.

In the past, companies that have incorporated open source software into their products have faced claims challenging the ownership of open source software or compliance with open source license terms. Accordingly, we could be subject to suits by parties claiming ownership of what we believe to be open source software or claiming noncompliance with open source licensing terms.

Any disruption of our, our third-party service providers' or our customers' Internet connections could affect the success of our SaaS solutions.

Any system failure, including network, software or hardware failure, that causes an interruption in our or our third-party service providers' network or a decrease in the responsiveness of our website or our SaaS solutions could result in reduced user traffic, reduced revenue and potential breaches of our SaaS arrangements. Continued growth in Internet usage could cause a decrease in the quality of Internet connection services. Websites have experienced service interruptions as a result of outages and other delays occurring throughout the worldwide Internet network infrastructure. In addition, there have been several incidents in which individuals have intentionally caused service disruptions of major e-commerce websites. If these outages, delays or service disruptions occur frequently in the future, usage of our web-based services could grow more slowly than anticipated or decline and we may lose customers and revenue. In addition, our users depend on Internet service providers, online service providers and other website operators for access to our website. These providers could experience outages, delays and other difficulties due to system failures unrelated to our systems. Any of these events could adversely impact our business, results of operations and financial condition.

There may be adverse tax and/or employment law consequences if the independent contractor status of our consultants or the exempt status of our employees is successfully challenged.

We rely on independent third parties to provide certain services to us. We structure our relationships with these outside service providers in a manner that we believe results in an independent contractor relationship, not an employee relationship. Although we believe that we have properly classified these outside service providers as independent contractors, there is nevertheless a risk that the Internal Revenue Service (“IRS”) or another federal, state, or foreign authority will take a different view. Furthermore, the tests governing the determination of whether an individual is considered to be an independent contractor or an employee are typically fact sensitive and vary from jurisdiction to jurisdiction. Laws and regulations that govern the status and misclassification of independent contractors are subject to change or interpretation by various authorities, and it is possible that additional federal or state legislation on worker classification may be passed in the future. If a federal, state or foreign authority or court enacts legislation or adopts regulations that change the manner in which employees and independent contractors are classified or makes any adverse determination with respect to some or all of our independent contractors, we could incur significant costs under such laws and regulations, including in respect of wages, tax withholding, social security taxes or payments, workers’ compensation and unemployment contributions, and recordkeeping for both prior and future periods, or we may be required to modify our business model, any of which could materially affect our business, financial condition and results of operations. There is also a risk that we may be subject to significant monetary liabilities arising from fines or judgments as a result of any actual or alleged non-compliance with federal, state or foreign laws. Further, if it were determined that any of our independent contractors should be treated as employees, we could incur additional liabilities under our applicable employee benefit plans. In addition, we have classified many of our U.S. employees as “exempt” under the Fair Labor Standards Act (“FLSA”) and corresponding state laws. If it were determined that any of our U.S. employees who we have classified as “exempt” should be classified as “non-exempt” under the FLSA or similar state law, we may incur costs and liabilities for back wages, unpaid overtime, fines or penalties and be subject to employee litigation. We have in the past, and may in the future, face claims alleging that employees and/or former employees are or were misclassified as exempt from the overtime pay requirements of the FLSA and therefore entitled to unpaid overtime pay for hours worked in excess of forty (40) hours per week.

We may acquire or invest in companies, or pursue business partnerships, which may divert our management’s attention or result in dilution to our stockholders, and we may be unable to integrate acquired businesses and technologies successfully or achieve the expected benefits of such acquisitions, investments or partnerships.

We expect to continue to grow, in part, by making targeted acquisitions in addition to our organic growth strategy. Our business strategy includes the potential acquisition of shares or assets of companies with software, technologies or businesses complementary to ours, both domestically and globally. Our strategy also includes alliances with such companies. Acquisitions and alliances may result in unforeseen operating difficulties and expenditures and may not result in the benefits anticipated by such corporate activity.

In particular, we may fail to assimilate or integrate the businesses, technologies, services, solutions, personnel or operations of the acquired companies, retain key personnel necessary to favorably execute the combined companies’ business plan, or retain existing customers or sell acquired solutions to new customers. Additionally, the assumptions we use to evaluate acquisition opportunities may not prove to be accurate, and intended benefits may not be realized. Our due diligence investigations may fail to identify all of the problems, liabilities or other challenges associated with an acquired business which could result in increased risk of unanticipated or unknown issues or liabilities, including with respect to environmental, competition and other regulatory matters, and our mitigation strategies for such risks that are identified may not be effective. As a result, we may overpay for, or otherwise not achieve some or any of the benefits, including anticipated synergies or accretion to earnings, that we expect to achieve in connection with our acquisitions, we may not accurately anticipate the fixed and other costs associated with such acquisitions, or the business may not achieve the performance we anticipated, any of which may materially adversely affect our business, prospects, financial condition, results of operations, cash flows, as well as our stock price. Further, if we fail to achieve the expected synergies from our acquisitions and alliances, we may experience impairment charges with respect to goodwill, intangible assets or other items, particularly if business performance declines or expected growth is not realized. Any future impairment of our goodwill or other intangible assets could have an adverse effect on our financial condition and results of operations.

Acquisitions and alliances may also disrupt our ongoing business, divert our resources and require significant management attention that would otherwise be available for ongoing development of our current business. In addition, we may be required to make additional capital investments or undertake remediation efforts to ensure the success of our acquisitions, which may reduce the benefits of such acquisitions. We also may be required to use a substantial amount of our cash or issue debt or equity securities to complete an acquisition or realize the potential of an alliance, which could deplete our cash reserves and/or dilute our existing stockholders and newly-issued securities may have rights, preferences or privileges senior to those of existing stockholders. Following an acquisition or the establishment of an alliance offering new solutions, we may be required to defer the recognition of revenue that we receive from the sale of solutions that we acquired or that result from the alliance, or from the sale of a bundle of solutions that includes such new solutions. In addition, our ability to maintain favorable pricing of new solutions may be challenging if we bundle such solutions with sales of existing solutions. A delay in the recognition of revenue from sales of acquired or alliance solutions, or reduced pricing due to bundled sales, may cause fluctuations in our quarterly financial results, may adversely affect our operating margins and may reduce the benefits of such acquisitions or alliances.

Additionally, competition within the software industry for acquisitions of businesses, technologies and assets has been, and is expected to continue to be, intense. Acquisitions could become the target of regulatory reviews, which could lead to increased legal costs, or could potentially jeopardize the consummation of the acquisition. As such, even if we are able to identify an acquisition that we would like to pursue, the target may be acquired by another strategic buyer or financial buyer such as a private equity firm, or we may otherwise not be able to complete the acquisition on commercially reasonable terms, if at all.

Corporate responsibility, specifically related to environmental, social and governance matters, may impose additional costs and expose us to new risks.

Public ESG and sustainability reporting is becoming more broadly expected by investors, shareholders and other third parties. Certain organizations that provide corporate governance and other corporate risk information to investors and shareholders have developed, and others may in the future develop, scores and ratings to evaluate companies and investment funds based upon ESG or “sustainability” metrics. Many investment

funds focus on positive ESG business practices and sustainability scores when making investments and may consider a company's ESG or sustainability scores as a reputational or other factor in making an investment decision. In addition, investors, particularly institutional investors, use these scores to benchmark companies against their peers and if a company is perceived as lagging, these investors may engage with such company to improve ESG disclosure or performance and may also make voting decisions, or take other actions, to hold these corporations and their boards of directors accountable. Additionally, credit rating agencies may use these scores, or their own scores and ratings, as a consideration in their evaluation of our credit risk. If our credit rating is downgraded on the basis of ESG or "sustainability" metrics, we may face increased costs of capital. We may face reputational damage in the event our corporate responsibility initiatives or objectives, including with respect to diversity and inclusion, do not meet the standards set by our investors, shareholders, lawmakers, listing exchanges, credit rating agencies or other constituencies, or if we are unable to achieve an acceptable ESG or sustainability rating from third-party rating services. A low ESG or sustainability rating by a third-party rating service could also result in the exclusion of our ordinary shares from consideration by certain investors who may elect to invest with our competition instead. Ongoing focus on corporate responsibility matters by investors and other parties as described above may impose additional costs or expose us to new risks.

We evaluate our capital structure from time to time and may seek to repurchase our securities, refinance our indebtedness or raise debt or equity to finance our operations. However, we may not be able to do so when desired on favorable terms, if at all, or without dilution to our stockholders and we may not realize the anticipated benefits of these transactions.

We may seek to repurchase our securities, refinance our indebtedness or may need to obtain additional financing to execute on our current or future business strategies, including to develop new or enhance existing solutions, acquire businesses and technologies or otherwise respond to competitive pressures. We may not be successful in managing our capital structure through these scenarios, or they may have an adverse impact on our financial position or the price of our common stock. Our ability to raise capital in the future may be limited, and if we fail to raise capital when needed, we could be prevented from growing and executing our business strategy.

If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership of our stockholders could be significantly diluted. If we accumulate additional funds through debt financing, a substantial portion of our operating cash flow may be dedicated to the payment of principal and interest on such indebtedness, thus limiting funds available for our business activities. We cannot assure stockholders that additional financing will be available on terms favorable to us, or at all. If adequate funds are not available or are not available on acceptable terms, when we desire them, our ability to fund our operations, take advantage of unanticipated opportunities, develop or enhance our solutions, invest in future growth opportunities or otherwise respond to competitive pressures would be significantly limited. Any of these factors could adversely impact our results of operations.

We rely on information systems in managing our operations and any system failure or deficiencies of such systems may have an adverse impact on our business.

We rely on our financial, accounting, compliance and other data processing systems, and those of our third-party vendors or service providers who support these functions. Any failure or interruption of these systems, whether caused by fire, other natural disaster, power or telecommunications failure, act of terrorism or war, system modification or upgrade, or otherwise, could materially adversely affect our business. Although back-up systems are in place, our back-up procedures and capabilities in the event of a failure or interruption may not be adequate.

We are engaged in an implementation of a new billing system. Such an implementation is a major undertaking from a financial, management, and personnel perspective. The implementation of the billing system may prove to be more difficult, costly, or time consuming than expected, and there can be no assurance that this system will continue to be beneficial to the extent anticipated. Any disruptions, delays or deficiencies in the design and implementation of our new billing system could adversely affect our ability to process orders, send invoices, produce financial reports, or otherwise operate our business. If we are unable to implement the billing system smoothly or successfully, or we otherwise do not capture anticipated benefits, our business, results of operations and financial condition for future periods could be adversely impacted.

Regulatory Risk Factors

Failure to comply with the CCPA, CPRA, GDPR, FCRA or other data privacy legislation could subject us to fines, sanctions or litigation, and could potentially damage our brand and reputation and adversely impact our business, results of operations or financial condition.

Data privacy legislation, enforcement and policy activity are rapidly expanding around the world and creating a complex data privacy compliance environment that poses greater compliance risks and costs, as well as the potential for high profile negative publicity in the event of any data breach. The vast majority of our customers are subject to many privacy and data protection laws and regulations in the U.S. and around the world, and we have also agreed in our contracts with certain of our customers to additional data privacy compliance obligations related to data privacy laws and regulations that may be applicable to them. Some of these privacy and data protection laws and regulations place restrictions on our ability to process personal information across our business.

For example, the California Consumer Privacy Act ("CCPA"), which went into effect on January 1, 2020, imposes a number of privacy and security obligations on companies who collect, use, disclose, or otherwise process personal information of California residents. The CCPA created an expanded definition of personal information, established certain new data privacy rights for California residents and created a new and potentially severe statutory damages framework and private rights of action for violations of the CCPA, including for failing to implement reasonable security procedures and practices to prevent data breaches. In November 2020, California voters passed the California Privacy Rights Act (the "CPRA"). The CPRA, which took effect on January 1, 2023, significantly expands the CCPA, including by introducing additional data protection obligations such as data minimization and storage limitations, granting additional rights to consumers such as correction of personal information and additional opt-out rights, and creating a new entity to implement and enforce the CPRA. While we do not yet know the extent of the impact the CPRA will have on our business or operations, such laws will require us to modify our data processing practices and policies in certain respects. The uncertainty and evolving legal requirements in California and other jurisdictions may increase the cost of compliance, restrict our ability to offer services in certain locations or subject us to sanctions by federal, regional, state, local and international data protection regulators, all of which could adversely impact our business, results of operations or financial condition.

In addition, the GDPR took direct effect across the EU member states on May 25, 2018. The GDPR seeks to harmonize national data protection laws across the EU, while at the same time, modernizing the law to address new technological developments. Compared to the previous EU data protection laws, the GDPR notably has a greater extra-territorial reach and has a significant impact on data controllers and data processors which either have an establishment in the EU, or offer goods or services to EU data subjects or monitor EU data subjects' behavior within the EU. The regime imposes more stringent operational requirements on both data controllers and data processors, and introduces significant penalties for non-compliance with fines of up to 4% of total annual worldwide turnover or €20 million (whichever is higher), depending on the type and severity of the breach. Although our presence in Europe is currently in the early stages of expansion, and we have taken and will continue to take steps to comply with the EU data privacy legislation, there are a significant number of obligations under the GDPR, many of which are operational, and compliance is an ongoing exercise which is never complete. We are aware that we need to monitor the latest legal and regulatory developments, which may involve compliance costs to address any changes required. We may also experience hesitancy, reluctance, refusal or other challenges engaging with European or multi-national customers due to the potential risk exposure, cost, or difficulty in demonstrating to our customers that the Company is in compliance with various regulatory requirements.

Furthermore, the Fair Credit Reporting Act ("FCRA") may one day limit how we use consumer information. The federal law was passed in 1970 to provide consumers with protections relating to the consumer information held by credit reporting agencies. Although we do not believe we are currently subject to the FCRA, we may be in the future, depending on changes to our solutions and services or on additional legislative or regulatory efforts that could further regulate credit reporting agencies and the collection, use, communication, access, accuracy, obsolescence, sharing, correction and security of such personal information. Similar initiatives are underway in other countries.

Although we take reasonable efforts to comply with all applicable laws and regulations and have invested and continue to invest human and technology resources into data privacy compliance efforts, there can be no assurance that we will not be subject to regulatory action, including fines, audits or investigations by government agencies relating to our compliance with these laws and regulations. An adverse outcome under any such investigation or audit could result in fines, penalties, other liability, adverse publicity, or a loss of reputation, and could adversely affect our business. Moreover, we or our third-party service providers could be adversely affected if legislation or regulations are expanded to require changes in our or our third-party service providers' business practices or if governing jurisdictions interpret or implement their legislation or regulations in a manner that is adverse to our business, such as by expanding data privacy-related liability into areas to which we and our third-party service providers currently do not and previously did not have exposure, consequently increasing the compliance-related costs borne by us and our third-party service providers.

The current data protection landscape may subject us and our third-party service providers to greater risk of potential inquiries and/or enforcement actions. For example, we may find it necessary to establish alternative systems to collect, use, share, retain and safeguard personal information originating from the European Economic Area and caught by the extra-territorial reach of the GDPR, which may involve substantial expense and may cause us to divert resources from other aspects of our business, all of which may adversely affect our results from operations. Further, any inability to adequately address privacy concerns in connection with our SaaS solutions, or comply with applicable privacy or data protection laws, regulations and policies, could result in additional cost and liability to us, and adversely affect our ability to offer SaaS solutions.

Further changes to data privacy legislation may substantially increase the penalties to which we could be subject in the event of any non-compliance. We may incur substantial expense in complying with the new obligations to be imposed by new regulations and we may be required to make significant changes to our solutions and expanding business operations, all of which may adversely affect our business, results of operations or financial condition.

The enactment of new data privacy legislation and evolution of current privacy legislation could cause us to incur incremental cost and liability, adversely affecting our business operations and ability to deliver our financial plans.

As we continue to focus on our SaaS solutions, the amount of personal information we or our third-party cloud providers collect, use, disclose, or otherwise process will likely continue to increase significantly. In addition, a limited number of our solutions collect, use, disclose, or otherwise process transaction-level data aggregated across our customers. We anticipate that over time we will expand our use and collection of personal information as greater amounts of such personal information may be transferred from our customers to us. We recognize that personal privacy has become a significant issue in the U.S., and other jurisdictions where we operate. Many federal, regional, state, local and international legislatures and government agencies have imposed or are considering imposing restrictions and requirements regarding the collection, use, disclosure, and processing of personal data, including the CPRA.

Changes to laws or regulations affecting privacy could impose additional costs and liabilities, including fines, sanctions or other penalties on us and our third-party service providers, which could materially and adversely affect results of operations, business and reputation and could limit our ability to use such information to add value for customers. If we are required to change our business activities or revise or eliminate services, or to implement burdensome compliance measures, our business and results of operations could be adversely impacted. Such changes are a possibility, especially given that consumer advocates, media and elected officials, among others, have increasingly publicly criticized data-focused companies and industries regarding their collection, storage and use of personal data. Additionally, in the case of information from our websites and web-based services that is stored with third-party cloud providers that we do not control, our third-party cloud providers may not adequately implement compliance measures concerning the privacy and/or security of any stored personal information. We may be subject to fines, penalties and potential litigation if we or our third-party cloud providers fail to comply with applicable privacy and/or data security laws, regulations, standards and other requirements and the costs of compliance with and other burdens imposed by privacy-related laws, regulations and standards may limit the use and adoption of our solutions and reduce their overall demand for our solutions. Furthermore, any determination by a court or agency that our data practices, solutions or services violate, or cause our customers to violate, applicable laws, regulations or other requirements could subject us or our customers to civil or criminal penalties. Such a determination also could require us to modify or terminate portions of our business, disqualify us from serving certain customers or cause us to refund some or all of our fees or otherwise compensate our customers, or alter our business practices, potentially at great expense.

Furthermore, concerns regarding data privacy and/or security may cause our customers and end-users to resist providing the data and information necessary to use our solutions effectively. Even the perception that the privacy and/or security of personal information is not

satisfactorily managed, or does not meet applicable legal, regulatory and other requirements, could inhibit sales or adoption of our solutions, or could give rise to private class action, or claims by regulators, in each case potentially resulting in a negative impact on our sales and results from operations.

Changes in tax laws or adverse outcomes resulting from examination of our income tax returns could adversely affect our results of operations.

We are subject to federal, state and local income taxes in the U.S. and in foreign jurisdictions. Our future effective tax rates and the value of our deferred tax assets could be adversely affected by changes in tax laws, including impacts of the Tax Cuts and Jobs Act (the "Tax Act") enacted in December 2017, the Coronavirus Aid, Relief, and Economic Security Act (also known as the "CARES Act") of 2020 and the Inflation Reduction Act of 2022 (the "Inflation Reduction Act"). The Inflation Reduction Act introduces a 15% minimum tax for corporations whose average annual adjusted financial statement income for any consecutive three-tax-year period preceding the tax year exceeds \$1 billion and a 1% excise tax on the fair market value of stock repurchased by certain corporations after December 31, 2022. We do not currently expect that the Inflation Reduction Act will have a material impact on our tax liabilities for 2022 or 2023; however, we will continue to evaluate their impact as further information becomes available. The U.S. Treasury Department and the IRS are expected to continue to interpret or issue guidance on how provisions of the Tax Act, the CARES Act and the Inflation Reduction Act will be applied or otherwise administered. As guidance is issued, we may make adjustments to amounts that we have previously recorded that may materially impact our financial statements in the period in which the adjustments are made, and the amount of taxes that we may be required to pay could significantly increase.

Further, we are subject to the examination of our income tax returns by the IRS and other taxing authorities. We regularly assess the likelihood of adverse outcomes resulting from such examinations to determine the adequacy of our provision for income taxes. Although we believe we have made appropriate provisions for taxes in the jurisdictions in which we operate, changes in the tax laws or challenges from taxing authorities under existing tax laws could adversely affect our business, financial condition and results of operations.

Future government regulation of the Internet could create incremental costs or business disruption, harming our results of operations.

The future success of our business depends upon the continued use of the Internet as a primary medium for commerce, communication and business services. Because of the Internet's popularity and increasing use, federal, state or foreign government bodies or agencies have adopted, and may in the future adopt, laws or regulations affecting the use of the Internet as a commercial medium. These laws and regulations cover issues such as the collection and use of data from website visitors and related privacy issues; pricing; taxation; telecommunications over the Internet; content; copyrights; distribution; and domain name piracy. The enactment of any additional laws or regulations of the Internet, including international laws and regulations, could impede the growth of subscription revenue and place additional financial burdens on our business.

Changes to financial accounting standards may affect our results of operations and could cause us to change our business practices. The nature of our business requires the application of accounting guidance that requires management to make estimates and assumptions. Additionally, changes in accounting guidance may cause us to experience greater volatility in our quarterly and annual results. If we are unsuccessful in adapting to the requirements of new guidance, or in clearly explaining to stockholders how new guidance affects reporting of our results of operations, our stock price may decline.

We prepare our consolidated financial statements to conform to U.S. Generally Accepted Accounting Principles ("GAAP"). These accounting principles are subject to interpretation by the Securities and Exchange Commission ("SEC"), Financial Accounting Standards Board ("FASB"), and various bodies formed to interpret and create accounting rules and regulations. Recent accounting standards, such as Accounting Standards Codification ("ASC") 842, Leases ("ASC 842"), which we adopted in fiscal year 2021, or the guidance relating to interpretation and adoption of standards could have a significant effect on our financial results and could affect our business. Additionally, the FASB and the SEC are focused on the integrity of financial reporting, and our accounting policies are subject to scrutiny by regulators and the public.

We cannot predict the impact of future changes to accounting principles or our accounting policies on our financial statements going forward. If we are not able to successfully adopt to new accounting requirements, or if changes to our go-to-market strategy create new risks, then we may experience greater volatility in our quarterly and annual results, which may cause our stock price to decline.

In addition, GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue, and expenses that are not readily apparent from other sources.

Further, some accounting standards require significant judgment and estimates that impact our results of operations. The use of judgment and estimates can potentially result in differences between forecast figures and subsequently reported actual amounts, which may cause volatility in our stock price.

Litigation Risk Factors

We are currently, and have been in the past, a party to litigation, which could result in damage to our reputation and harm our future results of operations.

From time to time, we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. Litigation might result in substantial costs and may divert management's attention and resources, which might harm our business, financial condition, and results of operations. For example, we have been named as co-defendants or as the primary defendant in several putative class action lawsuits, which generally allege that the total loss vehicle valuation generated by the Company's total loss valuation solution undervalues the actual total loss incurred by the insured and improper adjustment of claims by insurance carriers. While we believe that we can partially mitigate the risk and severity of exposure from these lawsuits through contractual provisions in certain of our agreements with insurance carriers, and carrying our own insurance that we believe is adequate to cover adverse claims arising from these lawsuits or similar lawsuits that may be brought against us, we may not have

adequate contractual protection in all of our contracts and defending these and similar litigation is costly, diverts management from day-to-day operations, and could harm our brand and reputation. As a result, we may ultimately be subject to a damages judgment, which could be significant and exceed our insurance policy limits or otherwise be excluded from coverage.

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, harm to our reputation, and other factors. See "Item 3 —Legal Proceedings."

Reliance on Third Parties and Key Personnel Risk Factors

If we are unable to retain our personnel and hire and integrate additional skilled personnel, we may be unable to achieve our goals and our business may suffer.

Our future success depends upon our ability to continue to attract, train, integrate and retain highly skilled employees, particularly those on our management team, and our sales and marketing personnel, SaaS operations personnel, professional services personnel and software engineers. Additionally, our stakeholders increasingly expect us to have a culture that embraces diversity and inclusion in the workplace. Our inability to attract and retain diverse and qualified personnel, or delays in hiring required personnel, including attrition, retention and delay issues due to macroeconomic and other factors beyond our control, may adversely impact our business, results of operations and financial condition. If U.S. immigration policy related to skilled foreign workers were materially adjusted, such a change could hamper our efforts to hire highly skilled foreign employees, including highly specialized engineers, which would adversely impact our business.

Our executive officers and other key employees are generally employed on an at-will basis, which means that these personnel could terminate their relationship with us at any time. The loss of any member of our senior management team could significantly delay or prevent us from achieving our business and/or development objectives and could materially impact our business.

We face competition for qualified individuals from numerous software and other technology companies. Further, significant amounts of time and resources are required to train technical, sales, services and other personnel. We may incur significant costs to attract, train and retain such personnel, and we may lose new employees to our competitors or other technology companies before we realize the benefit of our investment after recruiting and training them.

To the extent that we hire personnel from competitors, we may be subject to allegations that such personnel are restricted from working for us because of their non-competition or non-solicitation obligations to these competitors, have been improperly solicited or have divulged proprietary or other confidential information. In addition, we have a limited number of salespeople and the loss of several salespeople within a short period of time could have a negative impact on our sales efforts. We may be unable to attract and retain suitably qualified individuals who are capable of meeting our growing technical, operational and managerial requirements, or we may be required to pay increased compensation in order to do so. The Federal Trade Commission has recently proposed new rules that would ban employers from imposing noncompete clauses in employment agreements. If such rules are implemented, our profitability could be harmed if our employees leave to work for our competitors and we may also face increased allegations by third-parties that our employees have disclosed to us, or improperly used for our benefit, proprietary or confidential information of third parties, and may need to expend additional resources to protect our own proprietary and other confidential information.

Our ability to expand geographically depends, in large part, on our ability to attract, retain and integrate managers to lead the local business and employees with the appropriate skills. Similarly, our profitability depends on our ability to effectively utilize personnel with the right mix of skills and experience to perform services for our customers, including our ability to transition employees to new assignments on a timely basis. If we are unable to effectively deploy our employees on a timely basis to fulfill the needs of our customers, our reputation could suffer and our ability to attract new customers may be adversely impacted.

Because of the technical nature of our solutions and the dynamic market in which we compete, any failure to attract, integrate and retain qualified sales and product development personnel, as well as our contract workers, could adversely impact our ability to generate sales or successfully develop new solutions and enhancements of existing solutions.

We rely on third-party service providers, including third-party cloud providers, to host and deliver our websites, web-based solutions, and other information technology systems and any interruptions or delays in these services could negatively impact our business.

We currently serve our customers from third-party data center and cloud hosting facilities. Our operations depend in part on these third-party providers' ability to protect these facilities against damage or interruption from natural disasters, power or telecommunications failures, criminal acts, and similar events. In the event that our arrangements with these third-party providers are terminated, or if there are any lapses of service or damage to a provider's facilities, we would likely experience significant interruptions in our cloud-based applications or other business operations as well as delays and additional expenses in making new arrangements to restore services. Any interruptions or delays in our service, whether as a result of third-party error, our own error, fire, floods, earthquakes, acts of terrorism, power loss, telecommunications failures, break-ins and similar events, or security breaches, whether accidental or willful, could impair our ability to deliver our solutions to our customers, resulting in customer dissatisfaction, damage to our reputation, loss of customers and adverse impact to our operations and our business and could cause our revenue to decrease and/or our expenses to increase. Also, in the event of damage or interruption, our insurance policies may not adequately compensate us for any losses that we may incur.

The controls implemented by our current or future third-party service providers may not prevent or timely detect system failures and we do not control the operations of third-party service providers that we use. Any changes in service levels by our current or future third-party service providers could result in loss or damage to our customers' stored information and any service interruptions at these third-party service providers could hurt our reputation, cause us to lose customers, adversely impact our ability to attract new customers or subject us to potential liability. Our current or future third-party service providers could decide to close their facilities without adequate notice. In addition, financial difficulties, such as bankruptcy, faced by our current or future third-party service providers, or any of the service providers with whom we or they contract, may have negative effects on our business. If our current or future third-party service providers are unable to keep up with our growing needs for capacity or any spikes in customer demand, it could have an adverse effect on our business. Our property and business interruption insurance coverage may not

be adequate to fully compensate us for losses that may occur. Additionally, systems redundancies and disaster recovery and business continuity plans may not be sufficient to overcome the failures of third-party service providers hosting our SaaS solutions. In addition, the infrastructure that connects our networks to each other, or to the internet and other external networks, may become insufficient, including with respect to latency, capacity, reliability and connectivity.

In the ordinary course of business, our information technology systems will continue to require modification and refinements to address growth and changing business requirements, including technological advancement that could result in our solutions being run less expensively on a different platform or could accelerate obsolescence of our existing systems and infrastructure. If it should be needed, a change in service provider for our data center housing or other third-party solutions would be costly and time-consuming to implement, which could negatively impact the operating results of CCC. In addition to the financial impacts, a transition of this type would be a complex effort, which could result in errors or service interruptions for customers and this type could require considerable staff and management's attention being dedicated to the effort, potentially limiting CCC's capacity for undertaking other project efforts. If we are not able to adapt to changing technologies or meet customer demands for new processes or technologies in a timely and cost-effective manner, or if our existing information technology systems and infrastructure becomes, or is perceived as being, outdated or less sophisticated than our competitors', we may not be able to retain existing customers and attract new customers necessary to sustain and grow our business.

We are currently in the process of migrating certain core information technology systems and customer-facing applications to third-party cloud providers. If we do not complete the transition or fail to administer these new environments in a well-managed, secure and effective manner, if the platform(s) we migrate to become unavailable or do not meet their service level agreements for any reason, if our solutions do not perform as we expect them to within these new environments or are unable to integrate efficiently with other environments, or if we are unable to appropriately balance the introduction of new capabilities and systems with the management of existing systems, we may experience unplanned service disruption or unforeseen costs which could result in material harm to our business and results of operations. Our third-party cloud providers, or other service providers, could experience system breakdowns or failures, outages, downtime, cyber-attacks, adverse changes to financial condition, bankruptcy, or other adverse conditions, which could have a material adverse effect on our business and reputation.

Indebtedness

Our financial leverage could adversely affect our ability to raise additional capital to fund our operations, limit our ability to react to changes in the economy or our market, expose us to interest rate risk, and prevent us from timely satisfying our obligations.

As of December 31, 2022, our total debt outstanding under the 2021 Credit Agreement (as defined below) was \$792 million under our Term B Loan (as defined below) and we had additional unused borrowing capacity under our 2021 Revolving Credit Facility (as defined below) of \$249.3 million. For a description of our 2021 Credit Facilities (as defined below) see "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Debt." If we cannot generate sufficient cash flow from operations to service the 2021 Credit Facilities, we may need to refinance the 2021 Credit Facilities, dispose of assets, or issue equity to obtain necessary funds; we do not know whether we will be able to take any such actions on a timely basis or on terms satisfactory to us or at all.

Our leverage and the covenant restrictions under the 2021 Credit Agreement could have important consequences, including, without limitation:

- making it more difficult for us to make payments on outstanding principal and interest owed under the 2021 Credit Agreement;
- increasing our vulnerability to general economic and market conditions and to changes in the industries in which we compete;
- requiring a substantial portion of cash flow from operations to be dedicated to the payment of principal and interest owed under the Credit Agreement, thereby reducing our ability to use our cash flow to fund our operations, future working capital, capital expenditures, investments or acquisitions, future strategic business opportunities, or other general corporate requirements;
- restricting us from making acquisitions or causing us to make divestitures or similar transactions;
- limiting our ability to obtain additional financing for the purpose of funding working capital, capital expenditures, debt service requirements, investments, acquisitions, and general corporate purposes;
- limiting our ability to adjust to changing market conditions and placing us at a competitive disadvantage compared to our competitors who are less highly leveraged; and
- increasing our cost of borrowing.

Borrowings under the 2021 Credit Facilities bear interest at rates based on the ratio of the Company's and its subsidiaries' consolidated first lien net indebtedness to the Company's and its subsidiaries' consolidated EBITDA for applicable periods specified in the 2021 Credit Facilities.

If interest rates increase, our debt service obligations may increase even though the amount borrowed remains the same, and our net income and cash flows, including cash available for servicing our indebtedness, will correspondingly decrease.

Restrictions imposed by the covenants in the 2021 Credit Agreement, and any covenants in any future credit facilities documentation, limit our ability to operate our business and to finance our future operations or capital needs or our ability to engage in acquisitions or other business activities necessary to achieve growth.

The 2021 Credit Agreement restrict us from engaging in certain activities. Such covenants, which are generally customary and generally reflect market terms, restrict our ability to, among other things:

- incur additional indebtedness;
- create or incur liens;

- pay dividends and distributions on, or purchase, redeem, decrease, or otherwise acquire or retire for value, our capital stock;
- make repayments or repurchases of debt that is contractually subordinated with respect to right of payment and/or security;
- create negative pledges with respect to the Credit Facilities or restrictions on the payment of dividends or payment of other amounts owed from subsidiaries;
- make acquisitions, investments, loans (including guarantees), advance or capital contributions;
- engage in consolidations, amalgamations, mergers, liquidations, dissolutions, dispositions and/or sell, transfer, or otherwise dispose of assets, including capital stock of subsidiaries;
- enter into certain sale and leaseback transactions;
- engage in certain transactions with affiliates;
- change our material lines of business;
- modify certain documents governing certain debt that is subordinated with respect to right of payment;
- change our fiscal year; and
- conduct material operations at Holdings.

The 2021 Credit Agreement contains representations and warranties, and affirmative and negative covenants, customary for a financing of the type. With respect to the 2021 Revolving Credit Facility, beginning with the fiscal quarter ending March 31, 2022, the Company is subject to a springing first lien leverage test, tested each fiscal quarter, only if a minimum of 35.0% of the 2021 Revolving Credit Facility is (subject to certain exclusions set forth in the 2021 Credit Agreement) drawn at the end of such fiscal quarter. The Company was not subject to the first lien leverage test as of December 31, 2022.

We cannot guarantee that we will be able to maintain compliance with these covenants or, if we fail to do so, that we will be able to obtain waivers from the Administrative Agent and/or the required lenders and/or amend the covenants. Even if we comply with all of the applicable covenants, the restrictions on the conduct of our business could adversely affect our business by, among other things, limiting our ability to take advantage of financings, mergers, acquisitions, investments, and other corporate opportunities that may be beneficial to our business. Even if the 2021 Credit Agreement is terminated, any additional debt that we incur in the future could subject us to similar or additional covenants. A breach of any of the covenants in the 2021 Credit Agreement could result in an event of default, which, if not cured or waived, could trigger acceleration of our indebtedness and an increase in the interest rates applicable to such indebtedness, and may result in the acceleration of or default under any other debt we may incur in the future to which a cross-acceleration or cross-default provision applies. The acceleration of the indebtedness under the 2021 Credit Agreement or under any other indebtedness incurred by the Company and/or its subsidiaries in the future could have a material adverse effect on our business, results of operations, and financial condition. In the event of any event of default under the 2021 Credit Agreement or any additional future credit facilities, the applicable lenders could elect to terminate borrowing commitments and declare all borrowings and loans outstanding, together with accrued and unpaid interest and any fees and other obligations, to be due and payable. In addition, we have granted a security interest in a significant portion of our assets to secure our obligations under the 2021 Credit Agreement. During the existence of an event of default under the 2021 Credit Agreement, if not cured or waived, the Administrative Agent and Collateral Agent, acting on behalf of the relevant lenders, could exercise their rights and remedies thereunder, including by way of initiating foreclosure proceedings against any assets constituting collateral for our obligations under the 2021 Credit Agreement.

We may be unable to generate sufficient cash flow to satisfy our significant debt service obligations, which could have a material adverse effect on our business, financial condition, results of operations, and cash flows.

Our ability to make scheduled payments on or to refinance our debt obligations depends on our financial condition and operating performance, which are subject to prevailing economic and competitive conditions and to certain financial, business, legislative, regulatory, and other factors beyond our control. We may not be able to maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and/or interest on our indebtedness. If our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to reduce or delay investments, acquisitions, capital expenditures, and payments on account of other obligations, seek additional capital, restructure or refinance our indebtedness, or sell assets. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition at such time. Any refinancing of our debt could be at higher interest rates and could require us to comply with more onerous covenants, which could further restrict our business operations. In addition, we cannot assure you that we will be able to refinance any of our indebtedness on commercially reasonable terms, or at all.

If we are at any point unable to repay or otherwise refinance our indebtedness when due, or if any other event of default is not cured or waived, the applicable lenders could accelerate our outstanding obligations or proceed against the collateral granted to them to secure that indebtedness, which could force us into bankruptcy or liquidation. In the event the applicable lenders accelerate the repayment of our borrowings, we and our subsidiaries may not have sufficient assets to repay that indebtedness. Any acceleration of amounts due under the 2021 Credit Agreement or the exercise by the applicable lenders of their rights under the security documents would likely have a material adverse effect on our business.

We may be adversely affected by the phase-out of, or changes in the method of determining, the London Interbank Offered Rate (“LIBOR”), or the replacement of LIBOR with different reference rates.

LIBOR is the basic rate of interest used in lending between banks on the London interbank market and is widely used as a reference for setting the interest rate on U.S. dollar-denominated loans globally. Our 2021 Credit Facilities use LIBOR as reference rates such that the interest due to our creditors under the 2021 Credit Facilities, if elected, is calculated using LIBOR.

On July 27, 2017, the U.K.'s Financial Conduct Authority (the authority that administers LIBOR) announced that it intends to phase out LIBOR by June 30, 2023. It is unclear whether new methods of calculating LIBOR will be established such that either continues to exist after 2021 or if alternative rates or benchmarks will be adopted. Changes in the method of calculating LIBOR, or the replacement of LIBOR with an alternative rate or benchmark, may adversely affect interest rates and result in higher borrowing costs. This could materially and adversely affect our results of operations, cash flows, and liquidity. We cannot predict the effect of the potential changes to LIBOR or the establishment and use of alternative rates or benchmarks. We may need to renegotiate our 2021 Credit Facilities or incur other indebtedness, and changes in the method of calculating LIBOR or the use of any alternative rate or benchmark, may negatively impact the terms of such renegotiated Credit Facilities or such other indebtedness. If changes are made to the method of calculating either LIBOR or LIBOR ceases to exist, we may need to amend certain contracts and cannot predict what alternative rate or benchmark would be negotiated. This may result in an increase to our interest expense.

Additionally, the discontinuation, reform or replacement of LIBOR or any other benchmark rates may have an unpredictable impact on contractual mechanics in the credit markets or cause disruption to the broader financial markets. Uncertainty as to the nature of such potential discontinuation, reform or replacement could have a significant impact on the overall interest rate environment.

Risks Relating to Ownership of Our Common Stock

If the ownership of our common stock continues to be highly concentrated, it may prevent minority stockholders from influencing significant corporate decisions and may result in conflicts of interest.

Cypress Investor Holdings, L.P., GPE VIII CCC Co-Investment (Delaware) Limited Partnership and Advent International GPE VIII-C Limited Partnership (collectively, the "Advent Investor") owns approximately 56.8% of our common stock based on the number of shares outstanding as of February 24, 2023. Under the Shareholder Rights Agreement, the Advent Investor has the authority to fill six (6) of the nine (9) seats on our board of directors, a majority of our board. The Advent Investor will maintain this majority until its ownership falls below 50% of our issued and outstanding stock, at which point they will still be entitled to fill four (4) of the nine (9) seats on our board of directors, with three (3) directors required to be independent. As a result, the Advent Investor currently controls us and for as long as the Advent Investor continues to beneficially own a substantial percentage of the voting power of our outstanding common stock, it will continue to have significant influence over us. This concentration of ownership may delay, deter or prevent acts that would be favored by our other stockholders. The interests of the Advent Investor may not always coincide with our interests or the interests of our other stockholders. For example, for so long as the Advent Investor continues to own a majority of the voting power of our capital stock, the Advent Investor could, acting alone, approve all matters requiring a stockholder vote, including, without limitation: the election of directors; mergers, consolidations and acquisitions; the sale of all or substantially all of our assets and other decisions affecting our capital structure; the amendment of our certificate of incorporation and our bylaws; and our winding up and dissolution. This concentration of ownership may also have the effect of delaying, preventing or deterring a change in control of the Company, could deprive our stockholders an opportunity to receive a premium for their common stock as part of a sale of the Company and might ultimately affect the market price of our common stock. Other than our Chief Executive Officer, members of our Board of Directors who are affiliated with the Advent Investor, the OH Cypress Aggregator, L.P. (the "OH Investor"), or the TCV IX, L.P., TCV IX (A), L.P., TCV IX (B), L.P. or TCV Member Fund, L.P. (collectively, the "TCV Investor"), by the terms of our certificate of incorporation, will not be required to offer us any corporate opportunity of which they become aware and can take any such corporate opportunity for themselves or offer it to other companies in which they have an investment. We, by the terms of our certificate of incorporation, will expressly renounce any interest or expectancy in any such corporate opportunity to the extent permitted under applicable law, even if the opportunity is one that we or our subsidiaries might reasonably have pursued or had the ability or desire to pursue if granted the opportunity to do so. The Advent Investor is in the business of making investments in companies and may from time to time acquire and hold interests in businesses that compete directly or indirectly with us. In addition, the Advent Investor may seek to cause us to take courses of action that, in its judgment, could enhance its investment in us, but which might involve risks to our other stockholders or adversely affect us or our other stockholders. As a result, the market price of our common stock could decline, or stockholders might not receive a premium over the then-current market price of our common stock upon a change in control. In addition, this concentration of share ownership may adversely affect the trading price of our common stock because investors may perceive disadvantages in owning shares in a company with significant stockholders.

We incur and will continue to incur increased costs as a result of operating as a public company, and our management is required to devote substantial time to compliance initiatives and corporate governance practices. We may fail to comply with the rules that apply to public companies, including Section 404 of the Sarbanes-Oxley Act, which could result in sanctions or other penalties that would adversely impact our business.

As a public company we will continue to incur significant legal, accounting, and other expenses that we did not incur as a private company, including costs resulting from public company reporting obligations under the Securities Act, or the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and regulations regarding corporate governance practices. The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the rules of the SEC, the listing requirements of The Nasdaq Stock Market LLC ("Nasdaq"), and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. We have hired, and may continue to hire, additional accounting, finance, and other personnel in connection with our becoming, and our efforts to comply with the requirements of being, a public company, and our management and other personnel devote a substantial amount of time towards maintaining compliance with these requirements. These requirements have increased our legal and financial compliance costs and have made and will make some activities more time-consuming and costly. We continuously evaluate the rules and regulations applicable to us as a public company and cannot predict or estimate the amount of additional costs we may incur or the timing of such costs. These rules and regulations are often 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 cannot predict or estimate the amount of additional costs we will incur as a result of compliance, disclosure and governance matters or the timing of such costs. These reporting requirements, rules and regulations, coupled with the increase in potential litigation exposure associated with being a public company, could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors or board committees or to serve as executive officers, or to obtain certain types of insurance, including directors' and officers' insurance, on acceptable terms.

As a public company, we will be required to provide management’s attestation on internal controls in the future pursuant to Sarbanes-Oxley Act Section 404. To achieve compliance with Sarbanes-Oxley Act Section 404 within the prescribed period, we have begun and will continue to engage in a process to enhance our documentation and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants, adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented, and implement a continuous reporting and improvement process for internal control over financial reporting. Despite our efforts, there is a risk that we will not be able to conclude, within the prescribed timeframe or at all, that our internal control over financial reporting is effective as required by Sarbanes-Oxley Act Section 404. As of and for the year ended December 31, 2022, we did not identify any material weaknesses in our internal control over financial reporting. If we identify one or more material weaknesses in the future, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

The Shareholder Rights Agreement provides that the doctrine of corporate opportunity does not apply with respect to certain of our stockholders, certain of our directors or officers who are not our or our subsidiaries’ employees, and certain affiliates of the foregoing.

Our certificate of incorporation and the Shareholder Rights Agreement provide that the doctrine of corporate opportunity does not apply with respect to certain of our stockholders, certain of our directors or officers who are not our or our subsidiaries’ employees, and certain affiliates of the foregoing. The doctrine of corporate opportunity generally provides that a corporate fiduciary may not develop an opportunity using corporate resources or information obtained in their corporate capacity for their personal advantage, acquire an interest adverse to that of the corporation or acquire property that is reasonably incident to the present or prospective business of the corporation or in which the corporation has a present or expectancy interest, unless that opportunity is first presented to the corporation and the corporation chooses not to pursue that opportunity. The doctrine of corporate opportunity is intended to preclude directors, officers and other fiduciaries from personally benefiting from opportunities that belong to the corporation.

Pursuant to our certificate of incorporation, to the fullest extent permitted by law, the doctrine of corporate opportunity will not apply to any of our directors who is not an employee of us or any affiliate of such non-employee director (including any entity of which such non-employee director serves as a director, manager, officer, employee, agent or other representative, and any direct or indirect partner, stockholder, member, manager or other representative of, or investment vehicle or other entity controlling, controlled by or under common control with, such an entity), and pursuant to the Shareholder Rights Agreement, to the fullest extent permitted by law, the doctrine of corporate opportunity and any analogous doctrine will not apply to (i) Dragoneer Growth Opportunities Holdings, a Cayman Islands limited liability company (“Sponsor”), the Advent Investor, the OH Investor or the TCV Investor, (ii) any of our directors or officers who is not our or our subsidiaries’ full-time employee or (iii) any affiliate, partner, advisory board member, director, officer, manager, member or shareholder of Sponsor, the Advent Investor, the OH Investor or the TCV Investor who is not our or our subsidiaries’ full-time employee (any such person described in the foregoing sentence being referred to herein as an “External Party”). Therefore, we renounced any interest or expectancy in, or being offered an opportunity to participate in, business opportunities that are from time to time presented to any External Party.

As a result, the External Parties are not prohibited from operating or investing in competing businesses. We therefore may find ourselves in competition with the External Parties, and we may not have knowledge of, or be able to pursue, transactions that could potentially be beneficial to us. Accordingly, we may lose a corporate opportunity or suffer competitive harm, which could negatively impact our business or prospects.

As a “controlled company” within the meaning of Nasdaq rules, we qualify for exemptions from certain corporate governance requirements. We have the opportunity to elect any of the exemptions afforded a controlled company.

Because the Advent Investor controls more than a majority of the total voting power of our common stock, we are a “controlled company” within the meaning of Nasdaq rules. Under Nasdaq rules, a company of which more than 50% of the voting power is held by another person or group of persons acting together is a “controlled company” and may elect not to comply with the following Nasdaq rules regarding corporate governance:

- the requirement that a majority of its board of directors consist of independent directors;
- the requirement that the board have a nominating and governance committee composed entirely of independent directors with a written charter addressing the committee’s purpose and responsibilities; and
- the requirement that the board have a compensation committee composed entirely of independent directors with a written charter addressing the committee’s purpose and responsibilities.

The majority of our eight (8) directors are independent directors, and our Board has an independent compensation committee (in addition to an independent audit committee). We utilize the exception to the requirement that our nominating and governance committee be composed entirely of independent directors. For as long as the “controlled company” exemption is available, our Board in the future may not consist of a majority of independent directors and may not have an independent compensation committee or an independent nominating and governance committee. As a result, you may not have the same protections afforded to stockholders of companies that are subject to all Nasdaq rules regarding corporate governance.

The share price of our common stock may be volatile.

The share price of our common stock may fluctuate due to a variety of factors, including, without limitation:

- changes in the industries in which we and our customers operate;
- variations in our operating performance and the performance of our competitors in general;
- material and adverse impact of the COVID-19 pandemic on the markets and the broader global economy;

- actual or anticipated fluctuations in our quarterly or annual operating results;
- publication of research reports by securities analysts about us or our competitors or industry;
- the public's reaction to our press releases, other public announcements and filings with the SEC;
- our failure or the failure of our competitors to meet analysts' projections or guidance that we or our competitors may give to the market;
- additions and departures of key personnel;
- changes in laws and regulations affecting our business;
- commencement of, or involvement in, litigation;
- changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- the volume of our shares of common stock available for public sale; and
- general economic and political conditions such as recessions, interest rates, inflation, fuel prices, foreign currency fluctuations, international tariffs, social, political and economic risks and acts of war or terrorism.

These market and industry factors may materially reduce the market price of our common stock regardless of our operating performance.

A significant portion of our total outstanding shares may be sold into the market in the near future. This could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock.

The Advent Investor and each other shareholder party to the Shareholder Rights Agreement may sell their shares and we have filed, and may in the future file or amend, registration statements to provide for the resale of such shares from time to time. If any of these shareholders or another large institutional shareholder were to sell a substantial number of shares of our common stock at once or in large blocks, or are perceived by the market as intending to sell them, the market price of our common stock could decline.

Reports published by analysts, including projections in those reports that differ from our actual results, could adversely affect the price and trading volume of our common stock.

Securities research analysts may establish and publish their own periodic projections with respect to us and our operations. These projections may vary widely and may not accurately predict the results we actually achieve. Our share price may decline if our actual results do not match the projections of these securities research analysts. Similarly, if one or more of the analysts who write reports on us downgrades our stock or publishes inaccurate or unfavorable research about our business, our share price could decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, our share price or trading volume could decline.

Delaware law and our governing documents contain certain provisions, including anti-takeover provisions, that limit the ability of stockholders to take certain actions and could delay or discourage takeover attempts that stockholders may consider favorable.

Our governing documents and the Delaware General Corporation Law (the "DGCL") contain provisions that could have the effect of rendering more difficult, delaying, or preventing an acquisition deemed undesirable by our board of directors and therefore depress the trading price of our common stock. These provisions could also make it difficult for stockholders to take certain actions, including electing directors who are not nominated by the current members of our board of directors or taking other corporate actions, including effecting changes in our management. Among other things, our governing documents include provisions regarding:

- the ability of our board of directors to issue shares of preferred stock, including "blank check" preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;
- the limitation of the liability of, and the indemnification of, our directors and officers;
- removal of the ability of our stockholders to take action by written consent in lieu of a meeting unless investment fund(s) affiliated with or managed by Advent International Corp. or any of its affiliates, or any successor, transferee or affiliate thereof, beneficially own a majority of the voting power of all of the then-outstanding shares of our capital stock entitled to vote on such action, or such action has been recommended or approved pursuant to a resolution approved by the affirmative vote of all of the directors then in office;
- the requirement that a special meeting of stockholders may be called only by a majority of our entire board of directors, which could delay the ability of stockholders to force consideration of a proposal or to take action, including the removal of directors;
- controlling the procedures for the conduct and scheduling of board of directors and stockholder meetings;
- the ability of our board of directors to amend our bylaws, which may allow our board of directors to take additional actions to prevent an unsolicited takeover and inhibit the ability of an acquirer to amend the bylaws to facilitate an unsolicited takeover attempt; and
- advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which could preclude stockholders from bringing matters before annual or special meetings of stockholders and delay changes in our board of directors, and also may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our board of directors or management.

In addition, our certificate of incorporation includes a provision substantially similar to Section 203 of the DGCL, which may prohibit certain stockholders holding 15% or more of our outstanding capital stock from engaging in certain business combinations with us for a specified period of time.

Our Certificate of Incorporation designates the Delaware Court of Chancery or the United States federal district courts as the sole and exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, stockholders, employees or agents.

Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for state law claims for (i) any derivative action or proceeding brought on behalf of us; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers, employees, agents or stockholders to us or our stockholders, or any claim for aiding or abetting such an alleged breach; (iii) any action asserting a claim arising pursuant to any provision of the DGCL or our certificate of incorporation or bylaws, or to interpret, apply, enforce or determine the validity of our certificate of incorporation or bylaws; (iv) any action asserting a claim against us or any of our current or former directors, officers, employees, agents or stockholders, whether arising under the DGCL, our certificate of incorporation or our bylaws, or such actions as to which the DGCL confer jurisdiction on the Delaware Court of Chancery; or (v) any action asserting a claim against us or any of our current or former directors, officers, employees, agents or stockholders governed by the internal affairs doctrine. The foregoing provisions will not apply to any claims as to which the Delaware Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of such court, which is rested in the exclusive jurisdiction of a court or forum other than such court (including claims arising under the Exchange Act), or for which such court does not have subject matter jurisdiction, or to any claims arising under the Securities Act and, unless we consent in writing to the selection of an alternative forum, the United States District Court for the District of Delaware will be the sole and exclusive forum for resolving any action asserting a claim arising under the Securities Act.

Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules or regulations thereunder. Accordingly, both state and federal courts have jurisdiction to entertain such Securities Act claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, United States District Court for the District of Delaware shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. There is uncertainty as to whether a court would enforce the forum provision with respect to claims under the federal securities laws.

This choice of forum provision in our certificate of incorporation may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, or other employees, which may discourage lawsuits with respect to such claims. There is uncertainty as to whether a court would enforce such provisions, and the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings. It is possible that a court could find these types of provisions to be inapplicable or unenforceable, and if a court were to find the choice of forum provision contained in our 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, results of operations and financial condition. Furthermore, investors cannot waive compliance with the federal securities laws and rules and regulations thereunder.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties.

Our corporate headquarters are located at 167 N. Green Street, Chicago, Illinois, where we occupy approximately 141,000 square feet of office space pursuant to a lease that expires in 2037. We maintain additional leased office spaces in various locations in the United States and China pursuant to leases that expire between 2023 and 2029. We own a commercial office building in Sioux Falls, South Dakota. We believe that our current facilities are adequate for our present needs and suitable additional facilities will be available to us on commercially reasonable terms if and when needed.

Item 3. Legal Proceedings.

In the ordinary course of business, we are (or may become) parties to litigation involving property, personal injury, contract, intellectual property and other claims, as well as stockholder derivative actions, class action lawsuits and other matters. The amounts that may be recovered in such matters may be subject to insurance coverage. Although the results of legal proceedings and claims cannot be predicted with certainty, we are not currently a party to any legal proceedings the outcome of which, we believe, if determined adversely to us, would individually or in the aggregate have a material adverse effect on our business, financial condition, or results of operations. See Note 24 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information.

Item 4. Mine Safety Disclosures.

Not applicable.

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

On December 6, 2022, acting pursuant to authorization from our board of directors, we voluntarily withdrew the principal listing of our common stock from The New York Stock Exchange (“NYSE”) and transferred the listing to Nasdaq. Our common stock is listed on Nasdaq under the symbol “CCCS”.

As of February 24, 2023, we had 58 holders of record of our common stock. The actual number of stockholders is greater than this number of record holders, and includes stockholders who are beneficial owners, but whose shares are held in street name by brokers and other nominees. This number of holders of record also does not include stockholders whose shares may be held in trust by other entities.

Dividends

We have no current plans to pay cash dividends. The declaration, amount and payment of any future dividends on shares of our common stock will be at the sole discretion of our board of directors. Our board of directors may take into account general and economic conditions, our financial condition and results of operations, our available cash and current and anticipated cash needs, capital requirements, contractual, legal, tax and regulatory restrictions and implications on the payment of dividends by us to our shareholders or by our subsidiaries to us and such other factors as our board of directors may deem relevant. In addition, our ability to pay dividends is limited by our 2021 Credit Agreement and may be limited by covenants contained in agreement governing other indebtedness we or our subsidiaries incur in the future.

Recent Sales of Unregistered Securities

We had no sales of unregistered equity securities during the period covered by this Annual Report on Form 10-K.

Purchases of Equity Securities by the Issuer

None.

Stock Performance Graph

This performance graph shall not be deemed “soliciting material” or to be “filed” with the SEC for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities under that Section, and shall not be deemed to be incorporated by reference into any of our filings under the Securities Act of 1933 or the Exchange Act.

The following graph shows a comparison of the cumulative total return for our common stock, the NASDAQ Composite Index, and the Standard & Poor’s (S&P) 500 Index for the period from October 6, 2020, the first day Dragoneer’s Class A ordinary shares were traded on a stand-alone basis following its initial public offering through December 31, 2022. For the period between October 6, 2020 through July 30, 2021 the figures relate to Dragoneer’s Class A ordinary shares, and for the period between July 30, 2021 through December 31, 2022, the figures relate to CCC’s common stock. The graph assumes an initial investment of \$100 in Dragoneer’s Class A ordinary shares at the market close on October 6,

2020. Such returns are based on historical results and are not intended to suggest future performance. Data for the NASDAQ Composite Index and S&P 500 Index assume reinvestment of dividends.



Item 6. Reserved.

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

The following discussion and analysis of our financial condition and results of operations should be read together with our audited consolidated financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from the forward-looking statements included herein. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in the section titled "Cautionary Note Regarding Forward-Looking Statements and Risk Factors" and "Risk Factors" as set forth elsewhere in this Annual Report on Form 10-K.

Unless otherwise indicated or the context otherwise requires, references to "CCC," "we," "us," "our" and other similar terms refer to Cypress Holdings Inc. and its consolidated subsidiaries prior to the Business Combination and to CCC Intelligent Solutions Holdings Inc. and its consolidated subsidiaries after giving effect to the Business Combination.

Business Overview

Founded in 1980, CCC is a leading provider of innovative cloud, mobile, AI, telematics, hyperscale technologies and applications for the P&C insurance economy. Our SaaS platform connects trading partners, facilitates commerce, and supports mission-critical, AI-enabled digital workflows. Leveraging decades of deep domain experience, our industry-leading platform processes more than \$100 billion in annual transaction value across this ecosystem, digitizing workflows and connecting more than 30,000 companies across the P&C insurance economy, including insurance carriers, collision repairers, parts suppliers, automotive manufacturers, financial institutions and others.

Our business has been built upon two foundational pillars: automotive insurance claims and automotive collision repair. For decades we have delivered leading software solutions to both the insurance and repair industries, including pioneering DRP in the U.S. beginning in 1992. Direct Repair Programs connect auto insurers and collision repair shops to create business value for both parties, and require digital tools to facilitate interactions and manage partner programs. Insurer-to-shop DRP connections have created a strong network effect for CCC's platform, as insurers and repairers both benefit by joining the largest network to maximize opportunities. This has led to a virtuous cycle in which more insurers on the platform drives more value for the collision shops on the platform, and vice versa.

We believe we have become a leading insurance and repair SaaS provider in the U.S. by increasing the depth and breadth of our SaaS offerings over many years. Our insurance solutions help insurance carriers manage mission-critical workflows across the claims lifecycle, while building smart, dynamic experiences for their own customers. Our software integrates seamlessly with both legacy and modern systems alike and enables insurers to rapidly innovate on our platform. Our repair solutions help collision repair facilities achieve better performance throughout the collision repair cycle by digitizing processes to drive business growth, streamline operations, and improve repair quality. We have more than 300 insurers on our network, connecting with over 28,000 repair facilities through our multi-tenant cloud platform. We believe our software is the architectural backbone of insurance DRP programs and is the primary driver of material revenue for our collision shop customers and a source of material efficiencies for our insurance carrier customers.

Our platform is designed to solve the "many-to-many" problem faced by the insurance economy. There are numerous internally and externally developed insurance software solutions in the market today, with the vast majority of applications focused on insurance-only use cases and not on serving the broader insurance ecosystem. We have prioritized building a leading network around our automotive insurance and collision repair pillars to further digitize interactions and maximize value for our customers. We have tens of thousands of companies on our platform that participate in the insurance economy, including insurers, repairers, parts suppliers, automotive manufacturers, and financial institutions. Our solutions create value for each of these parties by enabling them to connect to our vast network to collaborate with other companies, streamline operations, and reduce processing costs and dollars lost through claims management inefficiencies, or claims leakage. Expanding our platform has added new layers of network effects, further accelerating the adoption of our software solutions.

We have processed more than \$1 trillion of historical data across our network, allowing us to build proprietary data assets that leverage insurance claims, vehicle repair, automotive parts and other vehicle-specific information. We believe we are uniquely positioned to provide data-driven insights, analytics, and AI-enhanced workflows that strengthen our solutions and improve business outcomes for our customers. Our Smart Suite of AI solutions increases automation across existing insurance and repair processes including vehicle damage detection, claim triage, repair estimating, and intelligent claims review. We deliver real-world AI with more than 100 U.S. auto insurers actively using AI-powered solutions in production environments. We have processed more than 14 million unique claims using CCC deep learning AI as of December 31, 2022, an increase of more than 50% over December 31, 2021.

One of the primary obstacles facing the P&C insurance economy is increasing complexity. Complexity in the P&C insurance economy is driven by technological advancements, Internet of Things ("IoT") data, new business models, supply chain disruption and changing consumer expectations. We believe digitization plays a critical role in managing this growing complexity while meeting consumer expectations. Our technology investments are focused on digitizing complex processes and interactions across our ecosystem, and we believe we are well positioned to power the P&C insurance economy of the future with our data, network, and platform.

While our position in the P&C insurance economy is grounded in the automotive insurance sector, the largest insurance sector in the U.S. representing nearly half of DWP, we believe our integrations and cloud platform are capable of driving innovation across the entire P&C insurance economy. Our customers are increasingly looking for CCC to expand its solutions to other parts of their business where they can benefit from our technology, service, and partnership. In response, we are investing in new solutions that we believe will enable us to digitize the entire automotive claims lifecycle, and over time expand into adjacencies including other insurance lines. For example, CCC's acquisition of Safekeep on February 9, 2022 added subrogation solutions that can span insurance lines including automotive, property, and worker's compensation.

We have strong customer relationships in the end-markets we serve, and these relationships are a key component of our success given the long-term nature of our contracts and the interconnectedness of our network. We have customer agreements with more than 300 insurers (including carriers, self-insurers and other entities processing insurance claims), including 18 of the top 20 automotive insurance carriers in the U.S. based on DWP, and hundreds of regional carriers. We have more than 30,000 total customers, including over 28,000 automotive collision repair facilities (including repairers and other entities that estimate damaged vehicles), thousands of automotive dealers, 13 of the top 15 automotive manufacturers based on new vehicle sales, and numerous other companies that participate in the P&C insurance economy.

We generate revenue through the sale of SaaS subscriptions and other revenue, primarily from professional services. We generated \$782.4 million of revenue for the year ended December 31, 2022, an increase of 13.7% from the prior year. Net income for the year ended December 31, 2022 was \$38.4 million, compared to a net loss for the year ended December 31, 2021 of \$248.9 million, mainly due to \$209.9 million of stock-based compensation expense recognized in conjunction with the Business Combination in the prior year. Adjusted EBITDA increased 16.8% year-over-year to \$305.4 million. See our reconciliation of net income to EBITDA and Adjusted EBITDA within the section titled “Non-GAAP Financial Measures.”

Basis of Presentation

The Company’s consolidated financial statements and accompanying notes included elsewhere in this Annual Report on Form 10-K include the accounts of the Company and its consolidated subsidiaries and were prepared in accordance with GAAP. Intercompany transactions and balances are eliminated in consolidation. The consolidated financial statements include 100% of the accounts of wholly-owned and majority-owned subsidiaries and the ownership interest of the minority investor is recorded as a non-controlling interest in a subsidiary.

The Company operates in one operating segment. The chief operating decision maker for the Company is the chief executive officer. The chief executive officer reviews financial information presented on a consolidated basis, accompanied by information about revenue by type of service and geographic region, for purposes of allocating resources and evaluating financial performance.

Effective January 1, 2021, the Company’s lease accounting policy follows the guidance from Accounting Standards Codification (“ASC”) 842, Leases, which requires companies to recognize on the balance sheet the assets and liabilities for the rights and obligations created by the leased asset. The Company adopted this standard using the modified retrospective approach for all leases entered into before the effective date. Prior to the adoption of ASC 842, the Company’s lease accounting recognition policy followed guidance from ASC 840, Leases. Due to the adoption of this guidance, the Company recognized operating right-of-use assets and operating lease liabilities of \$47.1 million and \$53.0 million, respectively, as of the date of adoption. The difference between the right-of-use assets and lease liabilities on the accompanying consolidated balance sheet is primarily due to the accrual for lease payments as a result of straight-line lease expense and unamortized tenant incentive liability balances. See Note 2 and Note 11 to our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Key Performance Measures and Operating Metrics

In addition to our GAAP and non-GAAP financial measures, we rely on Software Net Dollar Retention Rate (“Software NDR”) and Software Gross Dollar Retention Rate (“Software GDR”) to measure and evaluate our business to make strategic decisions. Software NDR and Software GDR may not be comparable to or calculated in the same way as other similarly titled measures used by other companies.

Software NDR

We believe that Software NDR provides our management and our investors with insight into our ability to retain and grow revenue from our existing customers, as well as their potential long-term value to us. We also believe the results shown by this metric reflect the stability of our revenue base, which is one of our core competitive strengths. We calculate Software NDR by dividing (a) annualized software revenue recorded in the last month of the measurement period, for example, December for a quarter ending December 31, for unique billing accounts that generated revenue during the corresponding month of the prior year by (b) annualized software revenue as of the corresponding month of the prior year. The calculation includes changes for these billing accounts, such as change in the solutions purchased, changes in pricing and transaction volume, but does not reflect revenue for new customers added. The calculation excludes: (a) changes in estimates related to the timing of one-time revenue and other revenue, including professional services, and (b) annualized software revenue for smaller customers with annualized software revenue below the threshold of \$100,000 for carriers and \$4,000 for shops. The customers that do not meet the revenue threshold are small carriers and shops that tend to have different buying behaviors, with a narrower solution focus, and different tenure compared to our core customers (excluded small carriers and shops represent less than 5% of total revenue within these sales channels). Our Software NDR includes carriers and shops who subscribe to our auto physical damage solutions, which account for most of the Company’s revenue, and excludes revenue from smaller emerging solutions with international subsidiaries or other ecosystem solutions, such as parts suppliers, diagnostic providers, and other automotive manufacturers, and also excludes CCC Casualty which are largely usage and professional service based solutions.

	Quarter Ending	2022	2021	2020
Software NDR	March 31	114%	106%	105%
	June 30	111%	110%	103%
	September 30	110%	113%	103%
	December 31	106%	115%	103%

Software GDR

We believe that Software GDR provides our management and our investors with insight into the value our solutions provide to our customers as represented by our ability to retain our existing customer base. We believe the results shown by this metric reflect the strength and stability of our revenue base, which is one of our core competitive strengths. We calculate Software GDR by dividing (a) annualized software

revenue recorded in the last month of the measurement period in the prior year, reduced by annualized software revenue for unique billing accounts that are no longer customers as of the current period end by (b) annualized software revenue as of the corresponding month of the prior year. The calculation reflects only customer losses and does not reflect customer expansion or contraction for these billing accounts and does not reflect revenue for new customer billing accounts added. Our Software GDR calculation represents our annualized software revenue that is retained from the prior year and demonstrates that the vast majority of our customers continue to use our solutions and renew their subscriptions. The calculation excludes: (a) changes in estimates related to the timing of one-time revenue and other revenue, including professional services, and (b) annualized software revenue for smaller customers with annualized software revenue below the threshold of \$100,000 for carriers and \$4,000 for shops. The customers that do not meet the revenue threshold are small carriers and shops that tend to have different buying behaviors, with a narrower solution focus, and different tenure compared to our core customers (excluded small carriers and shops which represent less than 5% of total revenue within these sales channels). Our Software GDR includes carriers and shops who subscribe to our auto physical damage solutions, which account for most of the Company's revenue, and excludes revenue from smaller emerging solutions with international subsidiaries or other ecosystem solutions, such as parts suppliers, diagnostic providers, and other automotive manufacturers, and excludes CCC Casualty which are largely usage and professional service based solutions.

Software GDR	Quarter Ending	2022	2021	2020
	March 31	99%	98%	98%
June 30	99%	98%	98%	
September 30	99%	98%	98%	
December 31	99%	98%	98%	

Key Factors Affecting Operating Results

The following are key factors affecting our operating results in the years ending December 31, 2022, 2021 and 2020:

- Conversion and implementation of new customers:** We focus significant resources on attracting and onboarding new customers across the various segments of the P&C insurance economy we serve. We have a strong track record of new customer conversion across all our markets. On average, customer implementations take less than three months to complete. A significant portion of our sales force is focused on converting new customer accounts across our industry, and this will continue to be a focus of our business for the foreseeable future.
- Long-term customer relationships:** We have strong customer relationships in the end-markets we serve, and these relationships are a key component of our success given the long-term nature of our contracts and the interconnectedness of our network. We generate revenue through the sale of SaaS subscriptions and our average contract is approximately three to five years in duration. In 2022, our national carrier customers included 18 of the top 20 automotive insurers based on DWP, with average customer relationships spanning more than 10 years, as evidenced by our historical GDR of 98%-99%, and numerous exclusive arrangements.
- Expansion of solution adoption from existing customers:** A central part of our strategy is expanding solution adoption across our existing customer base. We have developed long-term relationships with our customers and have a proven track record of successfully cross-selling product offerings. We have the opportunity to realize incremental value by selling additional functionality to customers that do not currently utilize our full solution portfolio. As we innovate and bring new technology and solutions to market, we also have the opportunity to realize incremental value by selling new software solutions to our existing customer base. Capitalizing on this opportunity has been a significant driver of our revenue growth and net dollar retention in recent years and will remain a central go-to-market priority.
- Investment in R&D:** We have a strong track record of innovation and new solution delivery with our customers. We remain committed to delivering market-leading technology including AI solutions for the P&C insurance economy. We believe that maintaining our software solution leadership is imperative to our growth plan. As a result, we intend to continue making significant investments in research and development to improve and expand our software solutions. Our research and development expenses totaled \$157.0 million, \$166.0 million and \$109.5 million in the years ended December 31, 2022, 2021 and 2020, respectively. In 2022, the decrease in our R&D was primarily due to a reduction in stock-based compensation related to the Business Combination. We expect that research and development will remain a key investment area for the foreseeable future.
- Investment in Platform, Privacy, and Security:** Our technology platform is imperative to our strategy as it enables successful customer implementations, new software delivery, and ongoing performance and delivery. In addition to our investments in R&D, we invest in platform infrastructure, maintenance, privacy, and security protocols to enable performance across our technology platform. We expect investment in these areas to continue to increase in absolute dollars for the foreseeable future.
- Investment in Sales and Marketing:** Our sales and marketing efforts are a key component of our growth strategy. Our investments in this area have enabled us to build and sustain our customer base while creating long-term customer relationships. We plan to continue to invest in our sales and marketing efforts, including adding sales personnel and expanding marketing activities, to support our business growth. Our sales and marketing expenses totaled \$119.6 million, \$148.9 million and \$74.7 million, in the years ended December 31, 2022, 2021 and 2020, respectively. In 2022, the decrease in our sales and marketing was primarily due to a reduction in stock-based compensation related to the Business Combination. As the business continues to grow, we expect sales and marketing expenses to increase in absolute dollars for the foreseeable future.

Components of Results of Operations

Revenue

Revenue is derived from the sale of SaaS subscriptions and other revenue, primarily professional services. Software subscription revenues are comprised of fees from customers for the right to use the hosted software over the contract period without taking possession of the software. These revenues are billed on either a subscription or transactional basis with subscription revenue recognized ratably over the contract period and transactional revenue recognized when the transaction for the related service occurs. We generally invoice software subscription agreements monthly either in advance or in arrears, over the subscription period. Software subscription revenue accounted for \$752.5 million, \$662.3 million and \$573.6 million or 96%, 96% and 91% of total revenue during the years ended December 31, 2022, 2021 and 2020, respectively. We continue to expect software subscription revenue to be a high percentage of total revenue as software subscription revenue continues to be a key strategic priority.

Revenues from professional services include fees from customers for the Company's First Party Clinical Services and other non-software services. Revenues from professional services is recognized in the period the service is performed.

In December 2020, we sold our First Party Clinical Services to a third-party buyer. First Party Clinical Services revenue for the year ended December 31, 2020 was \$34.7 million.

Costs and Expenses

Cost of Revenue

Cost of Revenue, Exclusive of Amortization of Acquired Technologies

These costs include costs of software subscription and professional services revenue. Our cost of software subscription revenue is primarily comprised of cloud infrastructure costs, information technology ("IT") security costs, license and royalty fees paid to third parties and personnel-related expenses, including salaries, other direct personnel-related costs and stock-based compensation, and depreciation expense, including capitalized development costs. We expect cost of revenue, exclusive of amortization of acquired technologies, to increase in absolute dollars as we continue to hire personnel, require additional cloud infrastructure and incur royalty fees in support of our revenue growth.

In December 2020, we sold our First Party Clinical Services to a third-party buyer. First Party Clinical Services cost of revenue for the year ended December 31, 2020 was \$31.3 million.

Amortization of Acquired Technologies

We amortize to cost of revenue the capitalized costs of technologies acquired in connection with business acquisitions.

Operating expenses

Operating expenses are categorized as follows:

Research and Development

Our research and development expenses consist primarily of personnel-related costs, including stock-based compensation, and costs of external development resources involved in the engineering, design and development of new solutions, as well as expenses associated with significant ongoing improvements to existing solutions. Research and development expenses also include costs for certain IT expenses.

Research and development costs, other than software development costs qualifying for capitalization, are expensed as incurred. Capitalized software development costs consist primarily of personnel-related costs.

We expect research and development expenses, excluding stock-based compensation, to increase in absolute dollars as we continue to dedicate substantial resources to develop, improve and expand the functionality of our solutions. We also expect an increase in the rate of capitalization of our investments in research and development for the foreseeable future.

Selling and Marketing

Our selling and marketing expenses consist primarily of personnel-related costs for our sales and marketing functions, including sales commissions and stock-based compensation. Additionally, selling and marketing expenses include advertising costs, marketing costs and event costs, including the Company's annual industry conference.

We expect our selling and marketing expenses, excluding stock-based compensation, to increase on an absolute dollar basis as we continue to increase investments to support the growth of our business.

General and Administrative

Our general and administrative expenses consist primarily of personnel-related costs, including stock-based compensation, for our executive management and administrative employees, including finance and accounting, human resources, information technology, facilities and legal functions. Additionally, general and administrative expenses include professional service fees, insurance premiums, and other corporate expenses that are not allocated to the above expense categories.

We expect our general and administrative expenses, excluding stock-based compensation, to increase in absolute dollars as we continue to expand our operations, hire additional personnel, and incur costs as a public company.

Amortization of Intangible Assets

Our amortization of intangible assets consists of the capitalized costs of customer relationships and favorable lease terms in connection with business acquisitions.

Non-operating income (expense)

Non-operating income (expense) is categorized as follows:

Interest Expense

Interest expense comprises interest expense accrued or paid on our indebtedness. We expect interest expense to vary each reporting period depending on the amount of outstanding indebtedness and prevailing interest rates.

Interest Income

Interest income comprises interest earned on our cash balances. We expect interest income to vary each reporting period depending on the amount of our cash balances in interest bearing accounts and prevailing interest rates.

Change in Fair Value of Derivative Instruments

Change in fair value of derivative instruments comprises the fair value adjustments of our interest rate cap and interest rate swap agreements during each reporting period. We expect the change in fair value of derivative instruments to vary each reporting period depending on the prevailing market factors.

Change in Fair Value of Warrant Liabilities

Change in fair value of warrant liabilities comprises fair value adjustments of the Public Warrants and Private Warrants assumed in connection with the Business Combination. In December 2021, we redeemed all of our outstanding Public Warrants and as of December 31, 2022 and 2021, the Company no longer has Public Warrants outstanding subject to fair value adjustments. We expect the change in fair value of warrant liabilities to vary each reporting period depending on the fair value adjustments and number of exercises and redemptions of our outstanding Private Warrants during each reporting period.

Gain on Sale of Cost Method Investment

Gain on sale of cost method investment is comprised of proceeds of the sale of the Company's equity interest in an investee in excess of our cost.

Loss on Early Extinguishment of Debt

Loss on early extinguishment of debt comprises the write-off of deferred financing fees and original issue discount associated with the Company's long-term debt at the time of extinguishment.

Other Income-Net

Other income-net consists primarily of foreign currency transaction gains and losses related to the impact of transactions denominated in a foreign currency.

Income Tax (Provision) Benefit

Income tax (provision) benefit consists of U.S. federal and state income taxes and income taxes in certain foreign jurisdictions in which we conduct business. Earnings from our non-U.S. activities are subject to local country income tax and may be subject to current U.S. income tax. Due to cumulative losses, we maintain a full valuation allowance for deferred tax assets in foreign jurisdictions. We expect to maintain this full valuation allowance for the foreseeable future.

Results of Operations

Comparison of Fiscal Year Ended December 31, 2022 to Fiscal Year Ended December 31, 2021

(dollar amounts in thousands, except share and per share data)	Year Ended December 31,		Change	
	2022	2021	\$	%
Revenue	\$ 782,448	\$ 688,288	\$ 94,160	13.7%
Cost of revenue, exclusive of amortization of acquired technologies	187,001	169,335	17,666	10.4%
Amortization of acquired technologies	26,938	26,320	618	2.3%
Cost of revenue ⁽¹⁾	213,939	195,655	18,284	9.3%
Gross profit	568,509	492,633	75,876	15.4%
Operating expenses:				
Research and development ⁽¹⁾	156,957	165,991	(9,034)	-5.4%
Selling and marketing ⁽¹⁾	119,594	148,861	(29,267)	-19.7%
General and administrative ⁽¹⁾	167,758	250,098	(82,340)	-32.9%
Amortization of intangible assets	72,278	72,358	(80)	-0.1%
Total operating expenses	516,587	637,308	(120,721)	-18.9%
Operating income (loss)	51,922	(144,675)	196,597	NM
Other income (expense), net:				
Interest expense	(38,990)	(58,990)	20,000	33.9%
Interest income	908	—	—	NM
Change in fair value of derivative instruments	5,663	8,373	(2,710)	-32.4%
Change in fair value of warrant liabilities	26,073	(64,501)	90,574	NM
Gain on sale of cost method investment	3,587	—	3,587	NM
Loss on early extinguishment of debt	—	(15,240)	15,240	100.0%
Other income, net	699	114	585	513.2%
Total other (expense) income, net	(2,060)	(130,244)	128,184	98.4%
Pretax income (loss)	49,862	(274,919)	324,781	NM
Income tax (provision) benefit	(11,456)	26,000	(37,456)	NM
Net income (loss)	\$ 38,406	\$ (248,919)	\$ 287,325	NM
Net income (loss) per share attributable to common stockholders:				
Basic	\$ 0.06	\$ (0.46)		
Diluted	\$ 0.06	\$ (0.46)		
Weighted-average shares used in computing net income (loss) per share attributable to common stockholders:				
Basic	607,760,886	543,558,222		
Diluted	642,841,596	543,558,222		

NM—Not Meaningful

(1) Includes stock-based compensation expense as follows (in thousands):

	Year Ended December 31,	
	2022	2021
Cost of revenues	\$ 5,812	\$ 13,644
Research and development	19,536	40,681
Sales and marketing	25,309	65,045
General and administrative	58,840	142,625
Total stock-based compensation expense	\$ 109,497	\$ 261,995

Revenues

Revenue increased by \$94.2 million to \$782.4 million, or 13.7%, for the year ended December 31, 2022, compared to the year ended December 31, 2021. The increase in revenue was primarily a result of an 11% growth from existing customer upgrades and expanding solution offerings to these existing customers as well as 3% growth from new customers.

Cost of Revenue

Cost of revenue increased by \$18.3 million to \$213.9 million, or 9.3%, for the year ended December 31, 2022, compared to the year ended December 31, 2021.

Cost of Revenue, Exclusive of Amortization of Acquired Technologies

Cost of revenue, exclusive of amortization of acquired technologies, increased \$17.7 million to \$187.0 million, or 10.4%, for the year ended December 31, 2022, compared to the year ended December 31, 2021. The increase was due to a \$5.8 million increase in depreciation expense mainly due to capitalized time for development projects related to investments in new solutions, and platform and infrastructure enhancements, a \$5.7 million increase in personnel-related costs, a \$5.4 million increase in third party license and royalty fees, a \$3.8 million increase in consulting and other professional service costs, a \$3.2 million contract termination fee, and a \$2.4 million increase in IT related costs, partially offset by a \$7.8 million reduction in stock-based compensation, mainly from the vesting term modification completed in conjunction with the Business Combination in the prior year.

Amortization of Acquired Technologies

Amortization of acquired technologies was \$26.9 million and \$26.3 million for the years ended December 31, 2022 and 2021, respectively.

Gross Profit

Gross profit increased by \$75.9 million to \$568.5 million, or 15.4%, for the year ended December 31, 2022, compared to the year ended December 31, 2021. Our gross profit margin increased to 72.7% for the year ended December 31, 2022 compared to 71.6% for the year ended December 31, 2021. The increase in both gross profit and gross profit margin was primarily due to increased software subscription revenues and economies of scale resulting from fixed cost arrangements.

Research and Development

Research and development expense decreased by \$9.0 million to \$157.0 million, or 5.4%, for the year ended December 31, 2022, compared to the year ended December 31, 2021. The decrease was due to a \$21.1 million reduction in stock-based compensation, mainly from the vesting term modification completed in conjunction with the Business Combination in the prior year and a \$14.4 million increase in the amount of capitalized time on development projects, partially offset by a \$16.1 million increase in resource costs, an \$8.2 million increase in consulting and other professional service costs and a \$3.4 million increase in IT related costs.

Selling and Marketing

Selling and marketing expense decreased by \$29.3 million to \$119.6 million, or 19.7%, for the year ended December 31, 2022, compared to the year ended December 31, 2021. The decrease was primarily due to a \$39.7 million reduction in stock-based compensation, mainly from the vesting term modification completed in conjunction with the Business Combination in the prior year, partially offset by a \$9.1 million increase in personnel-related costs, including sales incentives and travel expenses.

General and Administrative

General and administrative expense decreased by \$82.3 million to \$167.8 million, or 32.9%, for the year ended December 31, 2022, compared to the year ended December 31, 2021. The decrease was primarily due to a \$83.8 million reduction in stock-based compensation, mainly from the vesting term modification completed in conjunction with the Business Combination in the prior year and a \$5.0 million decrease in consulting and other professional service costs, partially offset by a \$3.4 million increase in insurance costs and a \$2.7 million increase due to loss on disposal of property and equipment associated with the closure of corporate office facilities.

Amortization of Intangible Assets

Amortization of intangible assets was \$72.3 million and \$72.4 million during the years ended December 31, 2022 and 2021, respectively.

Interest Expense

Interest expense decreased by \$20.0 million to \$39.0 million, or 33.9%, for the year ended December 31, 2022, compared to the year ended December 31, 2021. The decrease was primarily due to less outstanding long-term debt during the year ended December 31, 2022 as a result of the Business Combination.

Interest Income

Interest income was \$0.9 million for the year ended December 31, 2022. The interest income was due to interest earned on our cash balances. We did not recognize any interest income for the year ended December 31, 2021.

Change in Fair Value of Derivative Instruments

Change in fair value of derivative instruments was \$5.7 million for the year ended December 31, 2022, compared to \$8.4 million for the year ended December 31, 2021. The change in fair value recognized for the year ended December 31, 2022 was related to the interest rate cap agreement the Company entered into in August 2022 and driven by the changes in forward yield curve. The \$8.4 million change in fair value of derivative instruments in the prior year was related to the interest rate swap agreements prior to their extinguishment in September 2021.

Change in Fair Value of Warrant Liabilities

Change in fair value of warrant liabilities was \$26.1 million for the year ended December 31, 2022. The income from the change in fair value was due to the decrease in the estimated fair value of the Private Warrants, primarily from the lower price of the Company's common stock as of December 31, 2022, compared to December 31, 2021. The expense for the year ended December 31, 2021 was due to the initial recognition of an increase in the estimated fair value of the Public Warrants and Private Warrants.

Gain on Sale for Cost Method Investment

Gain on sale of cost method investment was \$3.6 million for the year ended December 31, 2022. The gain recognized was due to the \$3.9 million payment received in exchange for its equity interest in an investee as a result of the acquisition of the investee. The Company did not recognize any gain or loss on sale for cost method investment during the year ended December 31, 2021.

Loss on Early Extinguishment of Debt

There was no loss on early extinguishment of debt during the year ended December 31, 2022. Loss on early extinguishment of debt during the year ended December 31, 2021 was \$15.2 million due to the early repayments of the total balance outstanding including the refinancing of the Company's First Lien Term Loan (as defined below).

Income Tax (Provision) Benefit

Income tax provision was \$11.5 million for the year ended December 31, 2022, compared to an income tax benefit of \$26.0 million for the year ended December 31, 2021. The income tax provision for the year ended December 31, 2022 was due to the Company's pretax income while the income tax benefit for the year ended December 31, 2021 was due to the Company's pretax loss.

Comparison of Fiscal Year Ended December 31, 2021 to Fiscal Year Ended December 31, 2020

Refer to Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations located in our Annual Report on Form 10-K for the year ended December 31, 2021, filed on March 1, 2022, for the discussion of the comparison of the year ended December 31, 2021 to the year ended December 31, 2020, the earliest of the three fiscal years presented in the consolidated financial statements.

Non-GAAP Financial Measures

In addition to our results determined in accordance with GAAP, we believe that Adjusted Gross Profit, Adjusted Operating Expenses, Adjusted Operating Income, Adjusted EBITDA, Adjusted Net Income and Adjusted Earnings Per Share, and Free Cash Flow, which are each non-GAAP measures, are useful in evaluating our operational performance. We use this non-GAAP financial information to evaluate our ongoing operations and for internal planning, budgeting and forecasting purposes and setting management bonus programs. We believe that non-GAAP financial information, when taken collectively with GAAP measures, may be helpful to investors in assessing our operating performance and comparing our performance with competitors and other comparable companies, which may present similar non-GAAP financial measures to investors. Our computation of these non-GAAP measures may not be comparable to other similarly titled measures computed by other companies, because all companies may not calculate these measures in the same fashion. We endeavor to compensate for the limitation of the non-GAAP measure presented by also providing the most directly comparable GAAP measure and a description of the reconciling items and adjustments to derive the non-GAAP measure. These non-GAAP measures should be considered in addition to results prepared in accordance with GAAP, but should not be considered in isolation or as a substitute for performance measures calculated in accordance with GAAP. We compensate for these limitations by relying primarily on our GAAP results and using non-GAAP measures on a supplemental basis.

Adjusted Gross Profit

Adjusted Gross Profit is defined as gross profit adjusted for amortization of acquired technologies, stock-based compensation and related employer payroll tax, contract termination costs, Business Combination transaction costs and the gross profit associated with First Party Clinical Services which was divested as of December 31, 2020, which are not indicative of our core business operating results. The Adjusted Gross Margin is defined as Adjusted Gross Profit divided by Revenue, less First Party Clinical Services divested revenue of \$34,742 for the year ended December 31, 2020.

The following table reconciles Gross Profit to Adjusted Gross Profit for the years ended December 31, 2022, 2021 and 2020:

(amounts in thousands, except percentages)	Year ended December 31,		
	2022	2021	2020
Gross Profit	\$ 568,509	\$ 492,633	\$ 424,346
Amortization of acquired technologies	26,938	26,320	26,303
Stock-based compensation and related employer payroll tax	6,090	13,644	494
Contract termination costs	3,248	—	—
Business combination transaction costs	—	905	—
First Party Clinical Services—Gross Profit	—	—	(3,429)
Adjusted Gross Profit	\$ 604,785	\$ 533,502	\$ 447,714
Gross Profit Margin	73 %	72 %	67 %
Adjusted Gross Profit Margin	77 %	78 %	75 %

Adjusted Operating Expenses

Adjusted Operating Expenses is defined as operating expenses adjusted for amortization of intangible assets, stock-based compensation expense and related employer payroll tax, lease abandonment charges, contract termination costs, merger and acquisition ("M&A") and integration costs, lease overlap costs for the incremental expenses associated with the Company's new corporate headquarters prior to termination of its then existing headquarters' lease, Business Combination transaction costs, litigation costs in legal matters in which the Company is the plaintiff, change in fair value of contingent consideration and net income (costs) related to divestiture.

The following table reconciles operating expenses to Adjusted Operating Expenses for the years ended December 31, 2022, 2021 and 2020:

(dollar amounts in thousands)	Year ended December 31,		
	2022	2021	2020
Operating expenses	\$ 516,587	\$ 637,308	\$ 347,366
Amortization of intangible assets	(72,278)	(72,358)	(72,310)
Stock-based compensation expense and related employer payroll tax	(105,775)	(248,351)	(10,842)
Lease abandonment	(6,137)	(2,582)	—
Contract termination costs	(3,248)	—	—
M&A and integration costs	(1,772)	—	—
Lease overlap costs	(1,338)	(3,697)	—
Business combination transaction and related costs	(1,330)	(11,480)	(1,188)
Plaintiff litigation costs	(894)	—	—
Change in fair value of contingent consideration	100	—	—
Income (costs) related to divestiture, net	877	(2,177)	(35)
Adjusted operating expenses	<u>\$ 324,792</u>	<u>\$ 296,663</u>	<u>\$ 262,991</u>

Adjusted Operating Income

Adjusted Operating Income is defined as operating income (loss) adjusted for amortization, stock-based compensation expense and related employer payroll tax, lease abandonment charges, contract termination costs, M&A and integration costs, lease overlap costs for the incremental expenses associated with the Company's new corporate headquarters prior to termination of its then existing headquarters' lease, Business Combination transaction and related costs, litigation costs in legal matters in which the Company is the plaintiff, change in fair value of contingent consideration and net (income) costs related to divestiture.

The following table reconciles operating income (loss) to Adjusted Operating Income for the years ended December 31, 2022, 2021 and 2020::

(dollar amounts in thousands)	Year ended December 31,		
	2022	2021	2020
Operating income (loss)	\$ 51,922	\$ (144,675)	\$ 76,980
Amortization of intangible assets	72,278	72,358	72,310
Amortization of acquired technologies—Cost of revenue	26,938	26,320	26,303
Stock-based compensation expense and related employer payroll tax	111,865	261,995	11,336
Lease abandonment	6,137	2,582	—
Contract termination costs	3,248	—	—
M&A and integration costs	1,772	—	—
Lease overlap costs	1,338	3,697	—
Business combination transaction and related costs	1,330	12,385	1,188
Plaintiff litigation costs	894	—	—
Change in fair value of contingent consideration	(100)	—	—
(Income) costs related to divestiture, net	(877)	2,177	35
Adjusted operating income	<u>\$ 276,745</u>	<u>\$ 236,839</u>	<u>\$ 188,152</u>

Adjusted EBITDA

Adjusted EBITDA is defined as net income (loss) adjusted for interest, taxes, depreciation, amortization, stock-based compensation expense and related employer payroll tax, lease abandonment charges, contract termination costs, M&A and integration costs, lease overlap costs for the incremental expenses associated with the Company's new corporate headquarters prior to termination of its then existing headquarters' lease, Business Combination transaction and related costs, litigation costs in legal matters in which the Company is the plaintiff, change in fair value of contingent consideration, net (income) costs related to divestiture, gain on sale of cost method investment, change in fair value of derivative instruments, change in fair value of warrant liabilities, loss on early extinguishment of debt, less revenue and related cost of revenue associated with First Party Clinical Services, which was divested as of December 31, 2020. Adjusted EBITDA Margin is defined as Adjusted EBITDA divided by Revenue.

The following table reconciles net income (loss) to Adjusted EBITDA for the years ended December 31, 2022, 2021 and 2020:

(dollar amounts in thousands)	Year ended December 31,		
	2022	2021	2020
Net income (loss)	\$ 38,406	\$ (248,919)	\$ (16,876)
Interest expense	38,990	58,990	77,003
Interest income	(908)	—	—
Income tax provision (benefit)	11,456	(26,000)	(4,679)
Amortization of intangible assets	72,278	72,358	72,310
Amortization of acquired technologies—Cost of revenue	26,938	26,320	26,303
Depreciation and amortization related to software, equipment and property	27,933	24,451	17,749
EBITDA	215,093	(92,800)	171,810
Stock-based compensation expense and related employer payroll tax	111,865	261,995	11,336
Lease abandonment	6,137	2,582	—
Contract termination costs	3,248	—	—
M&A and integration costs	1,772	—	—
Lease overlap costs	1,338	3,697	—
Business combination transaction and related costs	1,330	12,385	1,188
Plaintiff litigation costs	894	—	—
Change in fair value of contingent consideration	(100)	—	—
(Income) costs related to divestiture, net	(877)	2,177	35
Gain on sale of cost method investment	(3,587)	—	—
Change in fair value of derivative instruments	(5,663)	(8,373)	13,249
Change in fair value of warrant liabilities	(26,073)	64,501	—
Loss on early extinguishment of debt	—	15,240	8,615
First Party Clinical Services—Revenue	—	—	(34,742)
First Party Clinical Services—Cost of revenue	—	—	31,313
Adjusted EBITDA	\$ 305,377	\$ 261,404	\$ 202,804
Adjusted EBITDA Margin	39%	38%	32%

Adjusted Net Income and Adjusted Earnings Per Share

Adjusted Net Income is defined as net income (loss) adjusted for the after-tax effects of amortization, stock-based compensation expense and related employer payroll tax, lease abandonment charges, contract termination costs, M&A and integration costs, lease overlap costs for the incremental expenses associated with the Company's new corporate headquarters prior to termination of its then existing headquarters' lease, Business Combination transaction and related costs, litigation costs in legal matters in which the Company is the plaintiff, change in fair value of contingent consideration, net (income) costs related to divestiture, gain on sale of cost method investment, change in fair value of derivative instruments, change in fair value of warrant liabilities, loss on early extinguishment of debt, less revenue and related cost of revenue associated with First Party Clinical Services, which was divested as of December 31, 2020.

The following table reconciles net income (loss) to Adjusted Net Income and Adjusted Earnings per Share for the years ended December 31, 2022, 2021 and 2020.

(dollar amounts in thousands)	Year ended December 31,		
	2022	2021	2020
Net income (loss)	\$ 38,406	\$ (248,919)	\$ (16,876)
Amortization of intangible assets	72,278	72,358	72,310
Amortization of acquired technologies—Cost of revenue	26,938	26,320	26,303
Stock-based compensation expense and related employer payroll tax	111,865	261,995	11,336
Lease abandonment	6,137	2,582	—
Contract termination costs	3,248	—	—
M&A and integration costs	1,772	—	—
Lease overlap costs	1,338	3,697	—
Business combination transaction and related costs	1,330	12,385	1,188
Plaintiff litigation costs	894	—	—
Change in fair value of contingent consideration	(100)	—	—
(Income) costs related to divestiture, net	(877)	2,177	35
Gain on sale of cost method investment	(3,587)	—	—
Change in fair value of derivative instruments	(5,663)	(8,373)	13,249
Change in fair value of warrant liabilities	(26,073)	64,501	—
Loss on early extinguishment of debt	—	15,240	8,615
First Party Clinical Services—Revenue	—	—	(34,742)
First Party Clinical Services—Cost of revenue	—	—	31,313
Tax effect of adjustments	(51,495)	(73,684)	(33,389)
Adjusted net income	\$ 176,411	\$ 130,279	\$ 79,342
Adjusted net income per share attributable to common stockholders			
Basic	\$ 0.29	\$ 0.24	\$ 0.16
Diluted	\$ 0.27	\$ 0.23	\$ 0.15
Weighted average shares outstanding			
Basic	607,760,886	543,558,222	504,115,839
Diluted	642,841,596	575,619,243	519,748,819

Free Cash Flow

Free Cash Flow is defined as net cash provided by operating activities less cash used for the purchases of software, equipment and property, and purchase of intangible assets.

The following table reconciles net cash provided by operating activities to Free Cash Flow for the years ended December 31, 2022, 2021 and 2020:

(dollar amounts in thousands)	Year ended December 31,		
	2022	2021	2020
Net cash provided by operating activities	\$ 199,907	\$ 127,335	\$ 103,943
Less: Purchases of software, equipment, and property	(47,951)	(38,321)	(30,107)
Less: Purchase of intangible assets	-	(49)	(560)
Free Cash Flow	\$ 151,956	\$ 88,965	\$ 73,276

Liquidity and Capital Resources

We have financed our operations with cash flows from operations. The company generated \$199.9 million of cash flows from operating activities for the year-ended December 31, 2022. As of December 31, 2022, the Company had cash and cash equivalents of \$323.8 million and a working capital surplus of \$327.5 million. As of December 31, 2022, the Company had an accumulated deficit totaling \$707.9 million and \$792.0 million aggregate principal amount outstanding on term loans.

We believe that our existing cash and cash equivalents, our cash flows from operating activities and our borrowing capacity under our 2021 Revolving Credit Facility will be sufficient to fund our operations, fund required long-term debt repayments and meet our commitments for capital expenditures for at least the next twelve months.

We are not currently a party to any material definitive agreement regarding potential investments in, or acquisitions of, complementary business, applications or technologies. However, we may enter into these types of arrangements, which could reduce our cash and cash equivalents or require us to seek additional equity or debt financing. Additional funds from financing arrangements may not be available on terms favorable to us or at all. We may require additional borrowings under our credit arrangements and alternative forms of financings or investments to achieve our longer-term strategic plans.

Debt

On September 21, 2021, CCC Intelligent Solutions Inc., an indirect wholly owned subsidiary of the Company, together with certain of the Company's subsidiaries acting as guarantors entered into a credit agreement (the "2021 Credit Agreement").

The 2021 Credit Agreement replaced the Company's 2017 First Lien Credit Agreement (the "First Lien Credit Agreement"), dated as of April 27, 2017, as amended as of February 14, 2020.

The proceeds of the 2021 Credit Agreement were used to repay all outstanding borrowings under the First Lien Credit Agreement.

2021 Credit Agreement—The 2021 Credit Agreement consists of the \$800.0 million term loan (the "Term B Loan") and a revolving credit facility for an aggregate principal amount of \$250.0 million (the "2021 Revolving Credit Facility" and together with the Term B Loan, the "2021 Credit Facilities"). The 2021 Revolving Credit Facility has a sublimit of \$75.0 million for letters of credit. The Company received proceeds of \$798.0 million, net of debt discount of \$2.0 million, related to the Term B Loan.

Beginning with the quarter ending March 31, 2022, the Term B Loan requires quarterly principal payments of \$2.0 million until June 30, 2028, with the remaining outstanding principal amount required to be paid on the maturity date, September 21, 2028.

Beginning with the year ending December 31, 2022, the Term B Loan requires a prepayment of principal, subject to certain exceptions, in connection with the receipt of proceeds from certain asset sales, casualty events, and debt issuances by the Company, and up to 50% of annual excess cash flow, as defined in and as further set forth in the 2021 Credit Agreement. When a principal prepayment is required, the prepayment offsets the future quarterly principal payments of the same amount. For the year ended December 31, 2022, the annual excess cash flow calculation did not require the Company to make a prepayment of principal. The Company was not subject to the annual excess cash flow calculation in fiscal year 2021 and no such principal prepayments are required.

As of December 31, 2022 and 2021, the amount outstanding under the Term B Loan was \$792.0 million and \$800 million, respectively, of which, \$8.0 million is classified as current.

Borrowings under the 2021 Credit Facilities bear interest at rates based on the ratio of the Company's and its subsidiaries' consolidated first lien net indebtedness to the Company's and its subsidiaries' consolidated EBITDA for applicable periods specified in the 2021 Credit Agreement. The interest rate per annum applicable to the loans under the 2021 Credit Facilities are based on a fluctuating rate of interest equal to the sum of an applicable rate and, at the Company's election from time to time, either:

- (1) a base rate determined by reference to the highest of (a) the rate last quoted by the Wall Street Journal as the "prime rate," (b) the federal funds effective rate plus 0.50%, (c) one-month LIBOR plus 1.00% and (d) with respect to the Term B Loan, 1.50% and with respect to the 2021 Revolving Credit Facility, 1.00%, or
- (2) a Eurocurrency rate determined by reference to LIBOR (other than with respect to Euros, Euribor and with respect to British Pounds Sterling, SONIA) with a term as selected by the Company, of one, three or six months (subject to (x) in the case of term loans, a 0.50% per annum floor and (y) in the case of revolving loans, a 0.00% per annum floor).

A quarterly commitment fee of up to 0.50% is payable on the unused portion of the 2021 Revolving Credit Facility.

During the year ended December 31, 2022 and 2021, the weighted-average interest rate on the outstanding borrowings under the Term B Loan was 4.2% and 3.0%, respectively. The Company made interest payments of \$33.5 million and \$6.7 million during the year ended December 31, 2022 and 2021.

The Company has an outstanding standby letter of credit for \$0.7 million which reduces the amount available to be borrowed under the 2021 Revolving Credit Facility. As of December 31, 2022, \$249.3 million was available to be borrowed under the 2021 Revolving Credit Facility.

In addition, beginning with the three months ended March 31, 2022, the terms of the 2021 Credit Agreement include a financial covenant which requires that, at the end of each fiscal quarter, if the aggregate amount of borrowings under the 2021 Revolving Credit Facility exceeds 35% of the aggregate commitments, the Company's leverage ratio cannot exceed 6.25 to 1.00. Borrowings under the 2021 Revolving Credit Facility did not exceed 35% of the aggregate commitments and the Company was not subject to the leverage test during the year ended December 31, 2022.

First Lien Credit Agreement—In April 2017, the Company entered into the First Lien Credit Agreement.

The First Lien Credit Agreement initially consisted of a \$1.0 billion term loan and revolving credit facilities for an aggregate principal amount of \$100.0 million, with a sublimit of \$30.0 million for letters of credit under the First Lien Revolvers.

In February 2020, the Company refinanced its long-term debt and entered into the First Amendment to the First Lien Credit Agreement (the "First Lien Amendment"). The First Lien Amendment provided an incremental term loan, amended the amount of commitments and the maturity dates of the First Lien Credit Agreement's revolving credit facilities.

The First Lien Amendment provided an incremental term loan in the amount of \$375.0 million and reduced the amount of commitments under the First Lien Revolvers to an aggregate principal amount of \$91.3 million. The First Lien Revolvers continued to have a sublimit of \$30.0 million for letters of credit.

The First Lien Term Loan required (after giving effect to the First Lien Amendment) quarterly principal payments of approximately \$3.5 million until March 31, 2024, with the remaining outstanding principal amount required to be paid on the maturity date, April 27, 2024. The First Lien Term Loan required a prepayment of principal, subject to certain exceptions, in connection with the receipt of proceeds from certain asset

sales, casualty events, and debt issuances by the Company, and up to 50% of annual excess cash flow, as defined in and as further set forth in the First Lien Credit Agreement. When a principal prepayment was required, the prepayment offset the future quarterly principal payments of the same amount. As of December 31, 2020, subject to the request of the lenders of the First Lien Term Loan, a principal prepayment of up to \$21.9 million was required. In April 2021, the Company made a principal prepayment of \$1.5 million to those lenders who made such a request.

The Company made a principal prepayment of \$525.0 million on July 30, 2021. Subsequently, in September 2021, using the proceeds from the Term B Loan provided in the 2021 Credit Agreement and cash on hand, the Company fully repaid the remaining \$804.2 million of outstanding borrowings on the First Lien Term Loan.

Amounts outstanding under the First Lien Credit Agreement bore interest at a variable rate of LIBOR, plus up to 3.00% per annum based upon the Company's leverage ratio, as defined in the First Lien Credit Agreement. A quarterly commitment fee of up to 0.50% was payable on the unused portion of the First Lien Revolvers.

During the years ended December 31, 2021 and 2020, the weighted-average interest rate on the outstanding borrowings under the First Lien Term Loan was 4.1% and 4.2% , respectively. The Company made interest payments of \$36.1 million and \$53.6 million during the years ended December 31, 2021 and 2020, respectively.

Interest Rate Cap—In August 2022, the Company entered into an interest rate cap agreement to reduce its exposure to increases in interest rates applicable to its floating rate long-term debt. The aggregate notional value of the interest rate cap agreements is \$600.0 million with a cap rate of 4.0% and an expiration date of July 31, 2025.

Interest Rate Swaps—In June 2017, the Company entered into three floating to fixed interest rate swap agreements to reduce its exposure to the variability from future cash flows resulting from interest rate risk related to its floating rate long-term debt. In September 2021, the Company made an aggregate payment of \$10.0 million to extinguish the Swap Agreements which were scheduled to expire in June 2022.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations and other commitments as of December 31, 2022, and the years in which these obligations are due:

(dollar amounts in thousands)	Total	2023	2024-2025	2026-2027	Subsequent to 2027
Long-term debt obligations(1)	\$ 792,000	\$ 8,000	\$ 16,000	\$ 16,000	\$ 752,000
Scheduled interest payments(1)	265,080	47,280	93,120	91,200	33,480
Operating lease obligations(2)	90,143	5,737	14,234	12,681	57,491
Purchase obligations(3)	121,542	25,510	32,525	23,907	39,600
Licensing agreement(4)	44,261	4,918	9,836	9,836	19,671
Total	<u>\$ 1,313,026</u>	<u>\$ 91,445</u>	<u>\$ 165,715</u>	<u>\$ 153,624</u>	<u>\$ 902,242</u>

- (1) Includes scheduled principal and interest payments at existing rates at December 31, 2022 and assumes no non-mandatory prepayments. Obligations that are repayable prior to maturity at our option are reflected at their contractual maturity date. The scheduled interest payments are determined based on the interest rate in effect at December 31, 2022 and do not consider the effect of the interest rate cap agreements. See Note 16 to our consolidated financial statements for additional information.
- (2) Includes leases of facilities that expire at various dates through 2037. Rent expense for leased facilities of \$11.7 million, \$13.7 million and \$9.7 million was recognized during the years ended December 31, 2022, 2021 and 2020, respectively. See Note 11 to our consolidated financial statements for additional information.
- (3) Includes long-term agreements with suppliers and other parties related to licensing data used in our services, outsourced data center, disaster recovery, and SaaS offerings. See Note 23 to our consolidated financial for additional information.
- (4) A licensing agreement with a third party to obtain a perpetual software license ("Licensing Agreement") for a database structure, tools, and historical claims data used within the Company's software. Payments include principal and imputed interest through the contract termination date in December 2031. See Note 17 to our consolidated financial statements for additional information.

Cash Flows

The following table provides a summary of cash flow data for the years ended December 31, 2022, 2021 and 2020:

(dollar amounts in thousands)	Year ended December 31,		
	2022	2021	2020
Net cash provided by operating activities	\$ 199,907	\$ 127,335	\$ 103,943
Net cash used in investing activities	(76,292)	(48,598)	(30,667)
Net cash provided by (used in) financing activities	17,875	(58,440)	(4,421)
Net effect of exchange rate change	(246)	129	62
Change in cash and cash equivalents	<u>\$ 141,244</u>	<u>\$ 20,426</u>	<u>\$ 68,917</u>

Net cash provided by operating activities was \$199.9 million for the year ended December 31, 2022. Net cash provided by operating activities consists of net income of \$38.4 million, adjusted for \$175.4 million of non-cash items, \$2.7 million for changes in working capital and (\$16.7) million for the effect of changes in other operating assets and liabilities. Non-cash adjustments include stock-based compensation expense of \$109.4 million, depreciation and amortization of \$127.1 million, non-cash lease expense of \$3.7 million, amortization of deferred financing fees and debt discount of \$2.1 million, change in fair value of warrant liabilities of (\$26.1) million, deferred income tax benefits of (\$34.6) million and a change in fair value of derivative instruments of (\$5.7) million. The change in working capital was primarily a result of an increase in accounts payable of \$15.5 million due to timing of payments, a decrease in other current assets of \$9.8 million due to timing of payments for prepaid and other deferred costs, an increase in accrued expenses of \$4.8 million and an increase in deferred revenue of \$4.2 million due to revenue growth and timing of customer payments, partially offset by an increase in accounts receivable of \$19.8 million due to revenue growth and timing of receipt of customer payments and a change in income taxes of \$10.0 million due to timing of payments. The change in other operating assets and liabilities was a result of an increase in non-current other assets of \$14.5 million due to timing of payments for prepaid and other deferred costs, including the \$6.3 million interest rate cap premium payment.

Net cash used in investing activities was (\$76.3) million for the year ended December 31, 2022. Net cash used in investing activities was due to \$48.0 million of purchases of software, equipment and property, including capitalized internally developed software projects and \$32.2 million for a business acquisition, partially offset by \$3.9 million of proceeds from the sale of a cost method investment.

Net cash provided by financing activities was \$17.9 million for the year ended December 31, 2022. Net cash provided by financing activities was due to \$27.7 million of proceeds from stock option exercises and \$3.2 million of proceeds from shares purchased through the Company's Employee Stock Purchase Plan, partially offset by \$8.0 million of principal payments of long-term debt and \$5.0 million of tax payments related to the net share settlement of employee equity awards.

2021

Net cash provided by operating activities was \$127.3 million for the year ended December 31, 2021. Net cash provided by operating activities consists of net loss of \$248.9 million, adjusted for \$420.1 million of non-cash items, (\$4.5) million for changes in working capital and (\$39.4) million for the effect of changes in other operating assets and liabilities. Non-cash adjustments include stock-based compensation expense of \$262.0 million, depreciation and amortization of \$123.1 million, change in fair value of warrant liabilities of \$64.5 million, a loss on early extinguishment of debt of \$15.2 million, \$6.3 million in non-cash lease expense, amortization of deferred financing fees and debt discount of \$4.3 million, deferred income tax benefits of (\$46.9) million and a change in fair value of interest rate swaps of (\$8.4) million. The change in working capital was primarily a result of an increase in other current assets of \$12.3 million due to timing of payments for prepaid and other deferred costs, an increase in accounts receivable of \$4.7 million due to revenue growth and an increase in the current portion of deferred contract costs of \$3.1 million due to higher employee sales incentives, partially offset by an increase in accrued expenses of \$8.3 million due to timing of payments, an increase in deferred revenue of \$4.5 million due to revenue growth and timing of customer payments and an increase in income taxes of \$3.8 million due to timing of payments. The change in other operating assets and liabilities was primarily a result of an increase in non-current other assets of \$7.8 million due to timing of payments and other deferred costs, an increase in non-current deferred contract costs of \$7.7 million due to higher employee sales incentives, a \$10.2 million cash settlement of vested phantom stock, and a \$10.0 million payment for the early extinguishment of the Company's interest rate swap agreements.

Net cash used in investing activities was \$48.6 million for the year ended December 31, 2021. Net cash used in investing activities is primarily related to capitalized time on internally developed software projects and purchases of software, equipment and property of \$38.3 million and an investment in a limited partnership of \$10.2 million.

Net cash used in financing activities was \$58.4 million for the year ended December 31, 2021. Net cash used in financing activities was primarily related to principal payments of long-term debt of \$1,336.2 million, dividends to shareholders prior to the Business Combination of \$269.2 million and a deemed distribution to CCCIS option holders of \$9.0 million, partially offset by borrowings from the Term B Loan, net of fees paid to the lender, of \$789.9 million, and net proceeds from the Business Combination of \$763.3 million.

2020

Net cash provided by operating activities was \$103.9 million for the year ended December 31, 2020. Net cash provided by operating activities consists of net loss of \$16.9 million, adjusted for non-cash items and the effect of changes in working capital. Non-cash adjustments include stock-based compensation expense of \$11.3 million, depreciation and amortization of \$116.4 million, deferred income tax benefits of (\$11.1) million, amortization of deferred financing fees of \$4.6 million, loss on early extinguishment of debt of \$8.6 million, change in fair value of interest rate swaps of \$13.2 million and a gain on divestiture of (\$3.8) million. The change in net operating assets and liabilities was primarily a result of an increase in deferred contract costs of \$3.0 million due to the payment of employee sales incentives, an increase in accounts receivable of \$10.6 million due to timing of receipts of payments from customers, and an increase in prepayments and other assets of \$15.7 million due to non-trade receivables and timing of payments for prepaid and other deferred costs, partially offset by an increase in income taxes of \$6.7 million due to timing of tax payments. Net changes in working capital used cash of (\$12.1) million.

Net cash used in investing activities was \$30.7 million for the year ended December 31, 2020.

Net cash used in investing activities is primarily related to capitalized time on internally developed software projects and purchases of software, equipment and property of \$30.1 million.

Recent Accounting Pronouncements

See Note 2 to our audited consolidated financial statements for more information about recent accounting pronouncements, the timing of their adoption, and our assessment, to the extent we have made one, of their potential impact on our financial condition and our results of operations.

Critical Accounting Estimates

Our consolidated financial statements are prepared in accordance with GAAP. The preparation of these financial statements requires our management to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenue, costs, and expenses and related disclosures. Our estimates are based on our historical experience, trends and various other assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these judgments and estimates under different assumptions or conditions and any such differences may be material.

For information on our significant accounting policies, see Note 2 to our audited consolidated financial statements.

We believe the following critical accounting policies affect our most significant judgments and estimates used in preparation of our consolidated financial statements:

- Revenue Recognition
- Valuation of Goodwill and Intangible Assets
- Stock-based Compensation
- Valuation of Warrant Liabilities
- Fair Value of Contingent Consideration

Revenue Recognition

Revenue recognition requires judgment and the use of estimates. The Company generates revenue from subscription-based contracts that are billed either on a subscription or transactional basis. Revenue is derived from the sale of SaaS subscriptions, and other revenue, primarily professional services.

The estimates and assumptions requiring significant judgment under our revenue recognition policy in accordance with ASC 606 are as follows:

Determine the transaction price

The transaction price is determined based on the consideration to which we expect to be entitled in exchange for services to the customer. Variable consideration is included in the transaction price if, in our judgment, it is probable that no significant future reversal of cumulative revenue under the contract will occur. The sale of our SaaS subscriptions may include variable consideration related to usage-based contracts and provisions for additional fees when the volume of a customer's transactions exceeds agreed upon maximums within defined reporting periods. We estimate variable consideration based on the most likely amount, to the extent that a significant revenue reversal is not probable to occur.

The Company may occasionally recognize an adjustment in revenue in the current period for performance obligations partially or fully satisfied in the previous periods resulting from changes in estimates for the transaction price, including any changes to the Company's assessment of whether an estimate of variable consideration is constrained. For the years ended December 31, 2022, 2021 and 2020, the impact on revenue recognized in the respective period, from performance obligations partially or fully satisfied in the previous period, was not significant.

Determine the amortizable life of contract assets

Sales commissions earned by our sales force are considered incremental and recoverable costs of obtaining a contract with a customer. Sales commissions for initial contracts are deferred and then amortized on a straight-line basis over a period of benefit that we have determined to generally be between three and five years. We determined the period of benefit by taking into consideration our customer contracts, our technology, and other factors. Most often with larger customers, a new contract or amended master agreement will not include a renewal period that requires assessment of whether the new business and renewal business commissions are commensurate. This is because the solutions and services offered as part of the new contract or amended agreement will be different from the original due to changes in technology and offerings. While the renewal period may be reached, most often a new multi-year agreement is signed that includes new services and features which will pay out a commission on the new services and features at the new business percentage and the renewal services and features at the renewal commission percentage. In situations when the renewal period is triggered, it is typically with smaller customers where the sales commission paid is insignificant. Thus, sales commissions are amortized on a systematic basis over three to five years which corresponds to the period and pattern in which revenue is recognized. Sales commissions for renewal contracts are deferred and then amortized on a straight-line basis over the related contractual renewal period. Amortization expense is included in selling and marketing expenses on the consolidated statements of operations and comprehensive income (loss).

Valuation of Goodwill and Intangible Assets

We perform an annual assessment for impairment of goodwill and indefinite-lived intangible assets each fiscal year, or whenever events occur or circumstances indicate that it is more likely than not that the fair value of a reporting unit or indefinite-lived intangible asset is below its carrying value.

The Company historically has performed its annual impairment assessment of goodwill and indefinite life intangible assets as of September 30 of each year. During 2022, the Company changed the date of its annual impairment assessment to November 30 to align with its annual business planning and budgeting process and to allow the Company to maximize the time and resources required to perform the impairment analysis. This change does not result in a delay, acceleration, or avoidance of an impairment charge. This change has been applied prospectively as retrospective application is deemed impracticable due to the inability to objectively determine the assumptions and significant estimates used in earlier periods without the benefit of hindsight. Accordingly, the annual impairment assessment was performed as of September 30, 2022 and updated as of November 30, 2022.

For the years ended December 31, 2022, 2021 and 2020, our annual impairment analysis performed indicated no impairments of goodwill or changes in carrying values due to impairment.

The quantitative goodwill impairment tests performed as of September 30, 2022 and updated as of November 30, 2022 primarily use an income approach based on a number of key estimates and assumptions, including revenue and expense growth factors along with applying a discount rate to the estimated cash flows. The discount rates are based on the estimated weighted average cost of capital for each reporting unit and may change from year to year. Weighted average cost of capital includes certain assumptions such as market capital structures, market betas, risk-free rates of return and estimated costs of borrowing.

The process of evaluating the potential impairment of goodwill is subjective and requires significant judgment. In estimating the fair value of a reporting unit for the purposes of our annual or periodic impairment analyses, we make estimates and significant judgments about the future cash flows of that reporting unit. Our cash flow forecasts are based on assumptions that represent the highest and best use for our reporting units. Changes in judgment on these assumptions and estimates could result in goodwill impairment charges. We believe that the assumptions and estimates utilized are appropriate based on the information available to management.

We have two reporting units, Domestic and China, for purposes of analyzing goodwill. The most recent annual impairment assessment performed as of November 30, 2022 indicated no impairment for our China reporting unit. The quantitative assessment for the China reporting unit had an estimated fair value that exceeded its carrying value of \$76.6 million by approximately 5%. Key financial assumptions utilized to determine the fair value of the reporting unit included revenue growth levels that reflect the rollout of new services and solutions, improving profit margins and a 14% discount rate. The reporting unit's fair value would approximate its carrying value with a 40 basis point increase in the discount rate.

As noted above, a considerable amount of management judgment and assumptions are required in performing the annual goodwill impairment assessment. While we believe our judgments and assumptions are reasonable, different assumptions could change the estimated fair values. A number of factors, many of which we have no ability to control, could cause actual results to differ from the estimates and assumptions we employed. These factors include:

- continued negative impact from the COVID-19 pandemic;
- a prolonged global or regional economic downturn;
- a significant decrease in the demand for our services and solutions;
- the inability to develop new and enhanced services and solutions in a timely manner;
- a significant adverse change in legal factors or in the business climate;
- an adverse action or assessment by a regulator;
- successful efforts by our competitors to gain market share in our markets;
- disruptions to the Company's business;
- unexpected or unplanned changes in the use of assets or entity structure; and
- business divestitures

If management's estimates of future operating results change or if there are changes to other assumptions due to these factors, the estimate of the fair value may change significantly. Such change could result in impairment charges in future periods, which could have a significant impact on our operating results and financial condition.

Intangible assets with finite lives and software, equipment and property are amortized or depreciated over their estimated useful life on a straight-line basis. We monitor conditions related to these assets to determine whether events and circumstances warrant a revision to the remaining amortization or depreciation period. We test these assets for potential impairment whenever our management concludes events or changes in circumstances indicate that the carrying amount may not be recoverable. The original estimate of an asset's useful life and the impact of an event or circumstance on either an asset's useful life or carrying value involve significant judgment regarding estimates of the future cash flows associated with each asset.

There was no impairment charge recorded during the years ended December 31, 2022, 2021 and 2020.

Stock-based Compensation

The Company accounts for stock-based compensation plans in accordance with ASC 718, Compensation—Stock Compensation, which requires the recognition of expense measured based on the grant date fair value of the stock-based compensation awards. Our stock-based awards

include stock options, restricted stock units (“RSUs”) and phantom shares. Stock-based payment awards that are settled in cash are accounted for as liabilities. Our stock-based awards have vesting terms that are service-based, performance-based or performance-based with a market condition.

The grant date fair value of our service-based awards, excluding RSUs, is determined using the Black-Scholes option-pricing model. The fair value of each service-based and performance-based RSU is determined using the fair value of the underlying common stock on the date of grant. The fair value of each award with performance-based with a market condition vesting is determined using a Monte Carlo simulation model.

For stock-based awards with only service conditions, we recognize stock-based compensation expense on a straight-line basis over the requisite service period only for the portion of awards expected to vest, based on an estimated forfeiture rate. For stock-based awards with only performance conditions, we recognize stock-based compensation expense on a straight-line basis over the explicit performance period when the performance targets are probable of being achieved. We recognize stock-based compensation expense on awards that are subject to performance-based vesting with a market condition when the performance targets are considered probable of being achieved. The determination of the grant date fair value for these awards is affected by assumptions regarding a number of complex and subjective variables, including expected stock price volatility over the expected term of the award, the risk-free interest rate for the expected term of the award and expected dividends. The market condition of these awards impacts the fair value at grant date and is the reason the Monte Carlo simulation is utilized to determine fair value.

Key assumptions used in the Black-Scholes option pricing model and Monte Carlo simulation method include:

- *Fair Value of Common Stock*—Prior to the Business Combination, there was no public market for our common stock. For those periods included in our consolidated financial statements, fair values of the shares of common stock underlying our stock-based awards were estimated on each grant date by our board of directors. Our board of directors, with input from management considered, among other things, valuations of our common stock, which were prepared in accordance with the guidance provided by the American Institute of Certified Public Accountants 2013 Practice Aid, Valuation of Privately-Held-Company Equity Securities Issued as Compensation as well as the most recent acquisition of the Company for grants in 2017.
- *Expected Term*—The expected term represents the period that stock-based awards are expected to be outstanding and, for time-based awards, is determined using the simplified method that uses the weighted average of the time-to-vesting and the contractual life of the awards.
- *Expected Volatility*—As we have limited trading history for our common stock, the expected volatility was estimated based on the average volatility for comparable publicly traded companies over a period equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, stage in the life cycle or area of specialty.
- *Risk-Free Interest Rate*—The risk-free interest rate is based on the U.S. Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of awards.
- *Expected Dividend Yield*—Historically, we have not paid regular dividends on our common stock and have no plans to pay dividends on our common stock on a regular basis. We do not have a dividend policy. Therefore, we used an expected dividend yield of zero.

See Note 21 to our consolidated financial statements for more information concerning certain of the specific assumptions we used in applying the Black-Scholes and Monte Carlo option pricing models to determine the estimated fair value of our stock-based awards with service vesting and performance vesting. Some of these assumptions involve inherent uncertainties and the application of significant judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our stock-based compensation could be materially different.

Valuation of Warrant Liabilities

We account for our Private Warrants in accordance with the guidance contained in ASC 815-40. The warrants do not meet the criteria for equity treatment, thus we classify the warrants as liabilities at their fair value and adjust the warrants to fair value at each reporting period. This liability is subject to re-measurement at each balance sheet date until the warrants are exercised or redeemed. Any change in fair value is recognized in our consolidated statements of operations and comprehensive income (loss). The fair value of the Private Warrants was determined using the Black-Scholes option pricing model.

See Note 6 to our consolidated financial statements for more information concerning certain of the specific assumptions we used in applying the Black-Scholes option pricing model to determine the fair value of our Private Warrants. Some of these assumptions involve inherent uncertainties and the application of significant judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our warrant liabilities could be materially different.

Fair Value of Contingent Consideration

Earnout liabilities arising from business acquisitions represent contingent consideration that may be payable in cash and recorded as a liability at fair value upon acquisition and re-measured at fair value in each subsequent reporting period. Changes in fair value are recorded in the consolidated statements of operations.

Determining the fair value of contingent consideration requires us to make assumptions and judgments. We estimate the fair value of contingent consideration using a Monte Carlo simulation model. These estimates involve inherent uncertainties and if different assumptions had been used, including but not limited to forecast inputs and discount rates, the fair value of contingent consideration could have been materially different from the amounts recorded. We have estimated the fair value of the contingent consideration associated with the acquisition of Safekeep as of the acquisition date and reassess our estimate each reporting period. During the year ended December 31, 2022, the Company recorded a gain on the change in fair value of contingent consideration of \$0.1 million.

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

We are exposed to a variety of market and other risks, including the effects of changes in interest rates, and inflation, as well as risks to the availability of funding sources, hazard events, and specific asset risks.

Interest Rate Risk

We are exposed to market risk related to changes in interest rates on \$792.0 million of borrowings at December 31, 2022 that are floating rate obligations. These market risks result primarily from changes in LIBOR or prime rates and may be impacted by other reference rates upon the discontinuation of LIBOR in June 2023.

Interest rate fluctuations can affect the fair value of our floating rate debt, as well as earnings and cash flows. If market interest rates rise, our earnings and cash flows could be adversely affected by an increase in interest expense. In contrast, lower interest rates may reduce our borrowing costs and improve our operational results. We continuously monitor our interest rate exposure and have elected to use derivative instruments to manage interest rate risk associated with floating rate debt.

In August 2022, we entered into two interest rate cap agreements to reduce our exposure to increases in interest rates applicable to its floating rate long-term debt. The aggregate notional value of the interest rate cap agreements is \$600.0 million with a cap rate of 4.0% and an expiration date of July 31, 2025.

As of December 31, 2022, a 100-basis point increase in interest rates would increase annual interest expense by \$1.9 million after considering the effect of this hypothetical change on our floating rate debt and interest rate cap agreements.

Foreign Currency Risk

Our reporting currency is the U.S. dollar, however for operations located in China, the functional currency is the local currency. Although we have experienced and will continue to experience fluctuations in our net income (loss) as a result of transaction gains (losses) related to transactions denominated in currencies other than the U.S. dollar, we believe that a 10% change in foreign exchange rates would not have a material impact on our results of operations.

Item 8. Financial Statements and Supplementary Data.

Index to Consolidated Financial Statements

	Page
<u>Report of Independent Registered Public Accounting Firm (PCAOB ID No. 34)</u>	
<u>Consolidated Balance Sheets</u>	59
<u>Consolidated Statements of Operations and Comprehensive Income (Loss)</u>	60
<u>Consolidated Statements of Mezzanine Equity and Stockholders' Equity</u>	61
<u>Consolidated Statements of Cash Flows</u>	62
<u>Notes to Consolidated Financial Statements</u>	64

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of CCC Intelligent Solutions Holdings Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of CCC Intelligent Solutions Holdings Inc. and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of operations and comprehensive income (loss), mezzanine equity and stockholders' equity, and cash flows, for each of the three years in the period ended December 31, 2022, 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, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 1, 2023, expressed an unqualified opinion on the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 11 to the financial statements, the Company has changed its method of accounting for leases effective January 1, 2021 due to the adoption of FASB ASC Topic 842, Leases, using the modified retrospective approach.

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 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. 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.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Revenue Recognition - Refer to Notes 2 and 5 to the financial statements

Critical Audit Matter Description

The Company generates revenue from contracts that are generally billed either on a monthly subscription or transactional basis. Revenue is made up of a significant volume of transactions and sourced from systems and applications across different business markets. The processing of transactions and recording of revenue involves a combination of manual data input and automation, including migrating, formatting, and combining significant volumes of data across systems and interfaces. Management applies significant effort and judgment in evaluating contracts with customers in accordance with Accounting Standards Codification ("ASC") 606, Contracts with Customers.

We identified revenue recognition as a critical audit matter given the increased extent of effort, including the need for us to involve professionals with expertise in information technology (IT), to identify, test, and evaluate the Company's systems, applications, and automated controls. High level of auditor judgement was necessary to determine the nature, timing and extent of audit procedures with respect to the auditing of revenue in accordance with ASC 606.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the Company's recording of revenue included the following, among others:

- With the assistance of our IT specialists, we:
 - o Identified the significant systems used to process revenue transactions and tested the general IT controls over each of these systems, including testing of user access controls, change management controls, and IT operations controls.
 - o Tested system interface controls and automated controls within the relevant revenue streams, as well as the controls designed to ensure the accuracy and completeness of revenue.
- We tested controls within the relevant revenue business processes, including those in place to record revenue.
- We selected a sample of contracts and evaluated the terms of the arrangement to assess whether revenue was appropriately recorded in accordance with ASC 606.
- For a sample of revenue transactions, we tested the selected transactions by agreeing the amount of revenue recognized to source documents and tested the mathematical accuracy of the recorded revenue.

Goodwill — China Reporting Unit — Refer to Notes 2 and 12 to the financial statements

Critical Audit Matter Description

The Company's evaluation of goodwill for impairment involves the comparison of the fair value of each reporting unit to its carrying value. The Company determines the fair value of its reporting units primarily using the income approach. The determination of fair value using the income approach requires management to make significant estimates and assumptions, which include assumptions related to revenue growth rates, profit margins and discount rates. Changes in these assumptions could have a significant impact on either the fair value, the amount of goodwill impairment charge, or both. The Company's goodwill balance was \$1,495 million as of December 31, 2022, of which \$77.4 million is related to the China reporting unit. The fair value of the China reporting unit exceeded its carrying value as of the November 30, 2022 measurement date by approximately 5% and, therefore, no impairment was recognized.

We identified goodwill for China reporting unit as a critical audit matter because of the significant estimates and assumptions management makes to estimate the fair value of the reporting unit and the sensitivity to changes in the macroeconomic environment, industry or market conditions. This required a high degree of auditor judgment and an increased extent of effort, including the need to involve professionals in our firm having expertise in valuation, when performing audit procedures to evaluate the reasonableness of management's estimates and assumptions related to revenue growth rates, profit margins and the selection of the discount rate.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the Company's forecasts of revenue growth rates, profit margins ("forecasts"), and the Company's selection of the discount rate included the following, among others:

- We tested the effectiveness of internal controls over management's goodwill impairment evaluation, including those over the determination of the fair value, such as controls related to management's forecasts and selection of the discount rate.
- We evaluated management's ability to accurately forecast by comparing actual results to management's historical forecasts.
- We evaluated the reasonableness of management's forecasts by comparing the forecasts to: (1) historical results, (2) internal communications to management and the Board of Directors, and (3) forecasted information included in industry reports.

With the assistance of our fair value specialists, we evaluated the discount rate, including testing the underlying source information and the mathematical accuracy of the calculations, and developed a range of independent estimates and compared those to the discount rate selected by management.

/s/ Deloitte & Touche LLP

Chicago, IL

March 1, 2023

We have served as the Company's auditor since 2006.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of CCC Intelligent Solutions Holdings Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of CCC Intelligent Solutions Holdings Inc. and subsidiaries (the “Company”) as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2022, of the Company and our report dated March 1, 2023, expressed an unqualified opinion on those financial statements and included an explanatory paragraph regarding the Company’s adoption of a new accounting standard in 2021.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management’s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed 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. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s 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 risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Deloitte & Touche LLP
Chicago, IL
March 1, 2023

CCC INTELLIGENT SOLUTIONS HOLDINGS INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS
AS OF DECEMBER 31, 2022 AND 2021
(In thousands, except share data)

	December 31, 2022	December 31, 2021
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 323,788	\$ 182,544
Accounts receivable—Net of allowances of \$5,339 and \$3,791 as of December 31, 2022 and 2021, respectively	98,353	78,793
Income taxes receivable	4,015	318
Deferred contract costs	16,556	15,069
Other current assets	36,358	46,181
Total current assets	479,070	322,905
SOFTWARE, EQUIPMENT, AND PROPERTY—Net	146,443	135,845
OPERATING LEASE ASSETS	32,874	37,234
INTANGIBLE ASSETS—Net	1,118,819	1,213,249
GOODWILL	1,495,129	1,466,884
DEFERRED FINANCING FEES, REVOLVER—Net	2,286	2,899
DEFERRED CONTRACT COSTS	20,161	22,117
EQUITY METHOD INVESTMENT	10,228	10,228
OTHER ASSETS	45,911	26,165
TOTAL	\$ 3,350,921	\$ 3,237,526
LIABILITIES, MEZZANINE EQUITY AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$ 27,599	\$ 12,918
Accrued expenses	71,445	66,691
Income taxes payable	922	7,243
Current portion of long-term debt	8,000	8,000
Current portion of long-term licensing agreement—Net	2,876	2,703
Operating lease liabilities	5,484	8,052
Deferred revenues	35,239	31,042
Total current liabilities	151,565	136,649
LONG-TERM DEBT—Net	774,132	780,610
DEFERRED INCOME TAXES—Net	241,698	275,745
LONG-TERM LICENSING AGREEMENT—Net	30,752	33,629
OPERATING LEASE LIABILITIES	54,245	56,133
WARRANT LIABILITIES	36,405	62,478
OTHER LIABILITIES	2,658	5,785
Total liabilities	1,291,455	1,351,029
COMMITMENTS AND CONTINGENCIES (Notes 23 and 24)		
MEZZANINE EQUITY:		
Redeemable non-controlling interest	14,179	14,179
STOCKHOLDERS' EQUITY:		
Preferred stock—\$0.0001 par; 100,000,000 shares authorized; no shares issued or outstanding	—	—
Common stock—\$0.0001 par; 5,000,000,000 shares authorized; 622,072,905 and 609,768,296 shares issued and outstanding at December 31, 2022 and 2021, respectively	62	61
Additional paid-in capital	2,754,055	2,618,924
Accumulated deficit	(707,946)	(746,352)
Accumulated other comprehensive loss	(884)	(315)
Total stockholders' equity	2,045,287	1,872,318
TOTAL	\$ 3,350,921	\$ 3,237,526

See notes to consolidated financial statements.

CCC INTELLIGENT SOLUTIONS HOLDINGS INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)
FOR THE YEARS ENDED DECEMBER 31, 2022, 2021 AND 2020
(In thousands, except share and per share data)

	2022	2021	2020
REVENUES	\$782,448	\$688,288	\$633,063
COST OF REVENUES			
Cost of revenues, exclusive of amortization of acquired technologies	187,001	169,335	182,414
Amortization of acquired technologies	26,938	26,320	26,303
Total cost of revenues	213,939	195,655	208,717
GROSS PROFIT	568,509	492,633	424,346
OPERATING EXPENSES:			
Research and development	156,957	165,991	109,508
Selling and marketing	119,594	148,861	74,710
General and administrative	167,758	250,098	90,838
Amortization of intangible assets	72,278	72,358	72,310
Total operating expenses	516,587	637,308	347,366
OPERATING INCOME (LOSS)	51,922	(144,675)	76,980
INTEREST EXPENSE	(38,990)	(58,990)	(77,003)
INTEREST INCOME	908	—	—
CHANGE IN FAIR VALUE OF DERIVATIVE INSTRUMENTS	5,663	8,373	(13,249)
CHANGE IN FAIR VALUE OF WARRANT LIABILITIES	26,073	(64,501)	—
GAIN ON SALE OF COST METHOD INVESTMENT	3,587	—	—
LOSS ON EARLY EXTINGUISHMENT OF DEBT	—	(15,240)	(8,615)
OTHER INCOME—Net	699	114	332
PRETAX INCOME (LOSS)	49,862	(274,919)	(21,555)
INCOME TAX (PROVISION) BENEFIT	(11,456)	26,000	4,679
NET INCOME (LOSS) INCLUDING NON-CONTROLLING INTEREST	38,406	(248,919)	(16,876)
Less: net income (loss) attributable to non-controlling interest	—	—	—
NET INCOME (LOSS) ATTRIBUTABLE TO CCC INTELLIGENT SOLUTIONS HOLDINGS INC.	\$38,406	\$(248,919)	\$(16,876)
Net income (loss) per share attributable to common stockholders:			
Basic	\$0.06	\$(0.46)	\$(0.03)
Diluted	\$0.06	\$(0.46)	\$(0.03)
Weighted-average shares used in computing net income (loss) per share attributable to common stockholders:			
Basic	607,760,886	543,558,222	504,115,839
Diluted	642,841,596	543,558,222	504,115,839
COMPREHENSIVE INCOME (LOSS):			
Net income (loss) including non-controlling interest	38,406	(248,919)	(16,876)
Other comprehensive (loss) income—Foreign currency translation adjustment	(569)	(44)	126
COMPREHENSIVE INCOME (LOSS) INCLUDING NON-CONTROLLING INTEREST	37,837	(248,963)	(16,750)
Less: comprehensive income (loss) attributable to non-controlling interest	—	—	—
COMPREHENSIVE INCOME (LOSS) ATTRIBUTABLE TO CCC INTELLIGENT SOLUTIONS HOLDINGS INC.	\$37,837	\$(248,963)	\$(16,750)

See notes to consolidated financial statements.

CCC INTELLIGENT SOLUTIONS HOLDINGS INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF MEZZANINE EQUITY AND STOCKHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2022, 2021 AND 2020
(In thousands, except number of shares)

	Redeemable Non- Controlling Interest	Preferred Stock— Issued and Outstanding		Common Stock— Issued and Outstanding		Additional Paid-In Capital	Accumulate d Deficit	Accumulated Other Comprehensi ve Loss	Total Stockholders' Equity
		Number of Shares	Par Value	Number of Shares	Par Value				
BALANCE—December 31, 2019	\$—	—	\$—	503,655,768	\$50	\$1,491,704	\$(112,494)	\$(397)	\$1,378,863
Issuance of non-controlling interest in subsidiary	14,179	—	—	—	—	—	—	—	—
Issuance of common stock	—	—	—	340,551	—	1,560	—	—	1,560
Stock-based compensation expense	—	—	—	—	—	7,486	—	—	7,486
Exercise of stock options—net of tax	—	—	—	330,675	—	692	—	—	692
Repurchase and cancellation of common stock	—	—	—	(52,104)	—	(236)	—	—	(236)
Foreign currency translation adjustment	—	—	—	—	—	—	—	126	126
Net loss	—	—	—	—	—	—	(16,876)	—	(16,876)
BALANCE—December 31, 2020	14,179	—	—	504,274,890	50	1,501,206	(129,370)	(271)	1,371,615
Issuance of common stock	—	—	—	110,679	—	1,007	—	—	1,007
Stock-based compensation expense	—	—	—	883,729	—	254,965	—	—	254,965
Net equity infusion from the Business Combination	—	—	—	97,740,002	10	704,831	—	—	704,841
Exercise of stock options—net of tax	—	—	—	1,922,019	—	5,180	—	—	5,180
Exercise of warrants — Net	—	—	—	4,836,977	1	60,461	—	—	60,462
Dividends to CCCIS stockholders	—	—	—	—	—	—	(269,178)	—	(269,178)
Deemed distribution to CCCIS option holders	—	—	—	—	—	(9,006)	—	—	(9,006)
Company Vesting Shares granted to CCCIS stockholders	—	—	—	—	—	98,885	(98,885)	—	—
Tax effect of Business Combination transaction costs	—	—	—	—	—	1,395	—	—	1,395
Foreign currency translation adjustment	—	—	—	—	—	—	—	(44)	(44)
Net loss	—	—	—	—	—	—	(248,919)	—	(248,919)
BALANCE—December 31, 2021	14,179	—	—	609,768,296	61	2,618,924	(746,352)	(315)	1,872,318
Stock-based compensation expense	—	—	—	—	—	109,387	—	—	109,387
Exercise of stock options—net of tax	—	—	—	10,074,354	1	27,562	—	—	27,563
Exercise of warrants—Net	—	—	—	1,246	—	—	—	—	—
Issuance of common stock under employee stock purchase plan	—	—	—	408,879	—	3,197	—	—	3,197
Issuance of common stock upon vesting of RSUs—net of tax	—	—	—	1,820,130	—	(5,015)	—	—	(5,015)
Foreign currency translation adjustment	—	—	—	—	—	—	—	(569)	(569)
Net income	—	—	—	—	—	—	38,406	—	38,406
BALANCE—December 31, 2022	\$14,179	—	\$—	622,072,905	\$62	\$2,754,055	\$(707,946)	\$(884)	\$2,045,287

See notes to consolidated financial statements.

CCC INTELLIGENT SOLUTIONS HOLDINGS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED December 31, 2022, 2021 AND 2020
(In thousands)

	2022	2021	2020
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net income (loss)	\$ 38,406	\$ (248,919)	\$ (16,876)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization of software, equipment, and property	27,933	24,451	17,749
Amortization of intangible assets	99,216	98,678	98,613
Deferred income taxes	(34,401)	(46,883)	(11,124)
Stock-based compensation	109,497	261,995	11,336
Amortization of deferred financing fees	1,878	3,682	4,630
Amortization of discount on debt	257	604	738
Change in fair value of derivative instruments	(5,663)	(8,373)	13,249
Change in fair value of warrant liabilities	(26,073)	64,501	—
Change in fair value of estimated contingent consideration	(100)	—	—
Loss on early extinguishment of debt	—	15,240	8,615
Non-cash lease expense	3,697	6,279	—
Gain on divestiture	—	(600)	(3,800)
Gain on sale of cost method investment	(3,587)	—	—
Loss on disposal of software, equipment and property	2,651	—	—
Other	104	541	114
Changes in:			
Accounts receivable—Net	(19,844)	(4,725)	(10,558)
Deferred contract costs	(1,487)	(3,152)	(1,110)
Other current assets	9,792	(12,273)	(6,483)
Deferred contract costs—Non-current	1,956	(7,728)	(1,926)
Other assets	(14,501)	(7,838)	(9,187)
Operating lease assets	3,448	6,354	—
Income taxes	(10,018)	3,833	6,724
Accounts payable	15,516	(1,052)	(2,256)
Accrued expenses	4,592	8,347	165
Operating lease liabilities	(7,241)	(8,398)	—
Deferred revenues	4,196	4,513	1,376
Extinguishment of interest rate swap liability	—	(9,987)	—
Other liabilities	(317)	(11,755)	3,954
Net cash provided by operating activities	<u>199,907</u>	<u>127,335</u>	<u>103,943</u>
CASH FLOWS FROM INVESTING ACTIVITIES:			
Proceeds from sale of cost method investment	3,901	—	—
Acquisition of Safekeep, Inc., net of cash	(32,242)	—	—
Purchases of software, equipment, and property	(47,951)	(38,321)	(30,107)
Purchase of equity method investment	—	(10,228)	—
Purchase of intangible asset	—	(49)	(560)
Net cash used in investing activities	<u>(76,292)</u>	<u>(48,598)</u>	<u>(30,667)</u>
CASH FLOWS FROM FINANCING ACTIVITIES:			
Proceeds from exercise of stock options	27,693	5,085	(236)
Proceeds from employee stock purchase plan	3,197	—	—
Payments for employee taxes withheld upon vesting of equity awards	(5,015)	—	—
Principal payments on long-term debt	(8,000)	(1,336,153)	(388,846)
Proceeds from issuance of long-term debt, net of fees paid to lender	—	789,927	369,792
Net proceeds from equity infusion from the Business Combination	—	763,300	—
Payment of fees associated with early extinguishment of long-term debt	—	(4,821)	(29)
Proceeds from borrowings on revolving lines of credit	—	—	65,000
Repayment of borrowings on revolving lines of credit	—	—	(65,000)
Dividends to CCCIS stockholders	—	(269,174)	—
Deemed distribution to CCCIS option holders	—	(9,006)	—
Proceeds from issuance of common stock	—	1,007	719
Proceeds from issuance of non-controlling interest in subsidiary	—	—	14,179
Tax effect of Business Combination transaction costs	—	1,395	—
Net cash provided by (used in) financing activities	<u>17,875</u>	<u>(58,440)</u>	<u>(4,421)</u>
NET EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	(246)	129	62
NET CHANGE IN CASH AND CASH EQUIVALENTS	141,244	20,426	68,917
CASH AND CASH EQUIVALENTS:			
Beginning of period	182,544	162,118	93,201
End of period	<u>\$ 323,788</u>	<u>\$ 182,544</u>	<u>\$ 162,118</u>
NONCASH INVESTING AND FINANCING ACTIVITIES:			
Unpaid liability related to software, equipment, and property	\$ 100	\$ 8,035	\$ 239
Leasehold improvements acquired by tenant improvement allowance	\$ —	\$ 16,924	\$ —
Fair value of assumed Public Warrants exercised	\$ —	\$ 60,481	\$ —
Contingent consideration related to business acquisition	\$ 200	\$ —	\$ —
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:			
Cash paid for interest	\$ 36,636	\$ 54,980	\$ 71,649
Cash (paid) received for income taxes—Net	\$ (55,697)	\$ (15,233)	\$ 917

See notes to consolidated financial statements.

1. ORGANIZATION AND NATURE OF OPERATIONS

CCC Intelligent Solutions Holdings Inc., a Delaware corporation, is a leading provider of innovative cloud, mobile, telematics, hyperscale technologies, and applications for the property and casualty ("P&C") insurance economy. Our cloud-based software as a service ("SaaS") platform connects trading partners, facilitates commerce, and supports mission-critical, artificial intelligence ("AI") enabled digital workflows. Our platform digitizes workflows and connects companies across the P&C insurance economy, including insurance carriers, collision repairers, parts suppliers, automotive manufacturers, financial institutions, and others.

The Company is headquartered in Chicago, Illinois. The Company's primary operations are in the United States ("US") and it also has operations in China.

The Company was originally incorporated as a Cayman Islands exempted company on July 3, 2020 as a special purpose acquisition company under the name Dragoneer Growth Opportunities Corp ("Dragoneer"). On February 2, 2021, Cypress Holdings Inc., ("CCCIS") entered into the Business Combination Agreement (the "Business Combination Agreement") with Dragoneer. In connection with the closing of the business combination ("Business Combination") (see Note 3), Dragoneer changed its jurisdiction of incorporation by deregistering as an exempted company in the Cayman Islands and continuing and domesticating as a Delaware corporation on July 30, 2021, upon which Dragoneer changed its name to CCC Intelligent Solutions Holdings Inc.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation—The consolidated balance sheets as of December 31, 2022 and 2021, the consolidated statements of operations and comprehensive income (loss), the consolidated statements of mezzanine equity and stockholders' equity and the consolidated statements of cash flows for the years ended December 31, 2022, 2021 and 2020, have been prepared in conformity with accounting principles generally accepted in the United States ("GAAP").

The Business Combination (see Note 3) was accounted for as a reverse recapitalization in accordance with GAAP, with Dragoneer treated as the acquired company and CCCIS treated as the acquirer.

The consolidated assets, liabilities, and results of operations prior to the reverse recapitalization are those of CCCIS. The shares and corresponding capital amounts and losses per share, prior to the reverse recapitalization, have been retroactively restated based on shares reflecting the exchange ratio of 1:340.5507 (the "Exchange Ratio") established in the Business Combination.

Basis of Accounting—The accompanying consolidated financial statements are prepared in accordance with GAAP and include the accounts of the Company and its wholly-owned subsidiaries and majority-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation. The consolidated financial statements include 100% of the accounts of wholly-owned and majority-owned subsidiaries and the ownership interest of the minority investor is recorded as a non-controlling interest in a subsidiary.

Use of Estimates—The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts, and the disclosures of contingent amounts in the Company's consolidated financial statements and the accompanying notes. The Company bases its estimates on historical experience and various other assumptions that it believes to be reasonable under the circumstances. Although the Company regularly assesses its estimates, actual results could differ from management's estimates if past experience or other assumptions are not substantially accurate. Changes in estimates are recorded in the period in which they become known. Significant estimates in these consolidated financial statements include the estimation of contract transaction prices, the determination of the amortization period for contract assets, the valuation of goodwill and intangible assets, the estimates and assumptions associated with the valuation of the warrant liabilities, the estimates and assumptions associated with stock incentive plans, including the fair value of common stock prior to the Business Combination, and the measurement of expected contingent consideration in connection with a business acquisition.

Cash and Cash Equivalents—The Company considers all highly liquid investments purchased with an original maturity of three months or less at the date of purchase to be cash and cash equivalents. Cash and cash equivalents are carried at cost, which approximates fair value. The Company believes it is not exposed to any significant credit risk on cash and cash equivalents. While the Company has deposits that exceed federally insured limits at financial institutions, the Company places its cash and cash equivalents in highly rated institutions. The Company has never experienced any losses related to these balances.

Foreign Currency—The Company's functional currency is the US dollar, however, for operations located in China, the functional currency is the local currency. Assets and liabilities of the foreign operations are translated to US dollars at exchange rates in effect at the consolidated balance sheet date, while statement of operations accounts are translated to US dollars at the average exchange rates for the period. Translation gains and losses are recorded and remain as a component of accumulated other comprehensive income (loss) in stockholders' equity until transactions are settled or the foreign entity is sold or liquidated. Gains and losses resulting from transactions that are denominated in a currency that is not the functional currency are recorded to other income—net, in the consolidated statements of operations and comprehensive income (loss).

Significant Customers and Concentration of Credit Risks—The Company is potentially subject to concentration of credit risk primarily through its accounts receivable. The Company performs ongoing credit evaluations of its customers and maintains allowances for potential

credit losses which, when realized, have been within the range of management's expectations. The Company generally does not require collateral. Credit risk on accounts receivables is minimized as a result of the large and diverse nature of the Company's customer base.

During the years ended December 31, 2022 and 2021, no single customer represented more than 10% of revenue. During the year ended December 31, 2020, one customer accounted for 10% of revenue.

As of December 31, 2022, one customer had an account receivable of 11% of accounts receivable. As of December 31, 2021, no single customer accounted for at least 10% of accounts receivable.

Revenue Recognition—The Company's revenue recognition policy follows guidance from Accounting Standards Codification ("ASC") 606, *Revenue from Contracts with Customers*.

The Company generates revenue from contracts that are generally billed either on a monthly subscription or transactional basis. Other revenue primarily consists of professional services revenue that is generally transaction-based (where a fee per transaction is charged). Revenues are recognized as control of these services is transferred to customers, in an amount that reflects the consideration the Company expects to be entitled to in exchange for those services.

The Company determines revenue recognition based on the application of the following steps:

- *Identification of the contract, or contracts, with a customer*
- *Identification of the performance obligation(s) in the contract*
- *Determination of the transaction price*
- *Allocation of the transaction price to the performance obligation(s) in the contract*
- *Recognition of revenue when, or as a performance obligation is satisfied*

Software Subscription Revenues—Software services are hosted and provide customers with the right to use the hosted software over the contract period without taking possession of the software and are generally billed on either a monthly subscription or transactional basis. Revenues related to services billed on a subscription basis are recognized ratably over the contract period as this is the time period over which services are transferred to the customer, generally between three and five years.

Revenues from subscription services represent a stand-ready obligation to provide access to the Company's platform. As each day of providing services is substantially the same and the customer simultaneously receives and consumes the benefits as access is provided, subscription arrangements include a series of distinct services. The Company may provide certain of its customers with implementation activities such as basic setup, installation and initial training that the Company must undertake to fulfill the contract. These are considered fulfillment activities that do not transfer the service to the customer.

For contracts with fixed and variable consideration, to the extent that customers' usage exceeds the committed contracted amounts under their subscriptions, they are charged for their incremental usage. For such overage fees, the Company includes an estimate of the amount it expects to receive for the total transaction price if it is probable that a significant reversal of cumulative revenue recognized will not occur. Revenue recognized from overage fees was not material during the years ended December 31, 2022, 2021 and 2020. When customers' usage falls below the committed contracted amounts, the customer does not receive any credits or refunds for the shortfall.

For contracts where fees are solely based on transaction volume, the amount invoiced corresponds directly with the value provided to the customer, and revenue is recognized when invoiced using the as-invoiced practical expedient.

Other Revenue—Other revenues consist of professional services and other non-software services, including the Company's First Party Clinical Services which was divested in December 2020 (see Note 28) and are recognized over time as the services are performed. Other revenues are generally invoiced monthly in arrears.

Revenues related to such services that are billed on a transactional basis are recognized when the transaction for the related service occurs. Transaction revenue is primarily comprised of fees for professional services applied to the volume of transactions. These are typically based on a per-unit rate and are invoiced for the same period in which the transactions were processed and as the performance obligation is satisfied. For contracts with transaction fees, the amount invoiced corresponds directly with the value provided to the customer, and revenue is recognized when invoiced using the as-invoiced practical expedient.

Contracts with Multiple Performance Obligations—The Company's contracts with customers can include access to different software applications such as CCC workflow, estimating, valuation and analytics, each of which is its own performance obligation. These additional services are either sold on a standalone basis or could be used on their own with readily available resources. For these contracts, the Company accounts for individual performance obligations separately, if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. The standalone selling price for distinct performance obligations is generally based on directly observable pricing. In instances where standalone selling price is not directly observable, the Company determines standalone selling price based on overall pricing objectives, which take into consideration observable data, market conditions and entity-specific factors.

The Company may occasionally recognize an adjustment in revenue in the current period for performance obligations partially or fully satisfied in the previous periods resulting from changes in estimates for the transaction price, including any changes to the Company's assessment of whether an estimate of variable consideration is constrained. For the years ended December 31, 2022, 2021 and 2020, the impact on revenue recognized in the current period, from performance obligations partially or fully satisfied in the previous period, was not significant.

Contract Liabilities—Contract liabilities consist of deferred revenue and include customer billings in advance of revenues being recognized from subscription contracts and professional services. Deferred revenue that is expected to be recognized during the succeeding twelve-month period is recorded as current, and the remaining portion is recorded as noncurrent and included within other liabilities on the consolidated balance sheets.

Costs to Obtain and Fulfill the Contract—The Company defers costs that are considered to be incremental and recoverable costs of obtaining a contract with a customer, including sales commissions. Costs to fulfill contracts are capitalized when such costs are direct and related to implementation activities for hosted software solutions. Capitalized costs to obtain a contract and costs to fulfill a contract are generally amortized over a period between three and five years, which represents the expected period of benefit of these costs and corresponds to the contract period.

In instances where the contract term is significantly less than three years, costs to fulfill are amortized over the contract term which the Company believes best reflects the period of benefit of these costs.

Cost of Revenues—Cost of revenues is primarily composed of personnel costs, including share-based compensation, and costs of external resources used in the delivery of services to customers, including software configuration, integration services, customer support activities, third party costs related to hosting the Company's software for its customers, internal support of production infrastructure, IT security costs, depreciation expense, cost of software production, and license and royalty fees paid to third parties. Cost of revenues also includes amortization of internal use software, including capitalized development costs, and amortization of acquired technologies.

Research and Development—Research and development expenses consist primarily of personnel-related costs, including share-based compensation, and costs of external development resources involved in the engineering, design and development of new solutions, as well as expenses associated with significant ongoing improvements to existing solutions. Research and development expenses also include costs for certain information technology expenses. Research and development costs, other than software development costs qualifying for capitalization, are expensed as incurred.

Selling and Marketing—Selling and marketing expenses consist primarily of personnel-related costs for our sales and marketing functions, including sales commissions and share-based compensation. Additional expenses include advertising costs, marketing costs and event costs, including the Company's annual industry conference.

The Company expenses advertising and other promotional expenditures as incurred. Advertising expenses were \$1.1 million, \$1.1 million and \$1.6 million for the years ended December 31, 2022, 2021 and 2020, respectively.

General and Administrative—General and administrative expenses consist primarily of personnel-related costs, including share-based compensation, for our executive management and administrative employees, including finance and accounting, human resources, information technology, facilities and legal functions. Additional expenses include professional service fees, insurance premiums, and other corporate expenses that are not allocated to the above expense categories.

Amortization of Intangible Assets—Amortization of intangible assets consists of the capitalized costs of intangible assets. These intangible assets are amortized on a straight-line basis over their estimated useful lives (see Note 12).

Stock-Based Compensation—The Company's stock-based compensation plans are described in Note 21. The Company accounts for stock-based payment awards based on the grant date fair value. The incremental fair value of modifications to stock-based payment awards is estimated at the date of modification. Stock-based payment awards that are settled in cash are accounted for as liabilities. The Company recognizes stock-based compensation expense for only the portion of awards expected to vest, based on an estimated forfeiture rate.

The Company recognizes stock-based compensation expense for time-based awards on a straight-line basis over the requisite service period, which is generally the vesting period of the respective awards. Stock-based compensation expense for performance-based awards with a market condition is recognized over the estimated service period, regardless of whether the market condition is satisfied. Stock-based compensation expense for performance-based awards with a market condition, when the market condition is a liquidity event or change in control, is not recognized until the performance condition is probable of occurring.

The fair value of restricted stock units ("RSUs") with only a time-based vesting component or a performance-based vesting component is determined using the quoted price of our common stock on the date of grant.

The fair value of the Company's stock options with only a time-based component is estimated using the Black-Scholes option pricing model.

The fair value of the Company's performance-based awards with a market condition is estimated using a Monte Carlo simulation model. The assumptions utilized under these methods require judgments and estimates.

Stock-based compensation expense related to purchase rights issued under the CCC Intelligent Solutions Holdings Inc. 2021 Employee Stock Purchase Plan ("ESPP") is based on the Black-Scholes option pricing model's fair value of the estimated number of awards as of the beginning of the applicable offering period. Stock-based compensation expense is recognized using the straight-line method over the applicable offering period.

Changes in the inputs and assumptions could affect the measurement of the estimated fair value of the related compensation expense of these stock-based payment awards.

Accounts Receivable—Net—Accounts receivable, as presented in the consolidated balance sheets, are net of customer sales allowances and doubtful accounts. The Company determines allowances for its sales reserves and doubtful accounts based on specific identification of customer accounts and historical experience to the remaining accounts receivable balance. The Company's assessment of doubtful accounts

includes estimating its expected credit losses based on historical information and adjusted for current conditions and forecasts for the probability of collection from customers. Doubtful accounts are charged to general and administrative expenses in the consolidated statements of operations and comprehensive income (loss).

Software, Equipment, and Property—Net—Software, equipment, and property are stated at cost, net of accumulated depreciation and amortization. Depreciation and amortization are computed on a straight-line basis over the asset’s estimated useful lives, which are as follows:

<u>Software, equipment, and property</u>	<u>Estimated Useful Life</u>
Software and licenses	2-5 years
Computer equipment	3 years
Furniture and other equipment	5 years
Database	25 years
Building	39 years
Leasehold improvements	Lesser of the estimated useful life or life of lease
Land	Indefinite

Maintenance and repairs are expensed as incurred. Major betterments are capitalized.

Internal Use Software—The Company capitalizes the direct costs incurred in developing or obtaining internal use software, including platform development, infrastructure and tools, as well as certain payroll and payroll-related costs of employees who are directly associated with internal use computer software projects. The amount of capitalized payroll costs with respect to these employees is limited to the time directly spent on such projects. The costs associated with preliminary project stage activities, training, maintenance, and all other post-implementation activities are expensed as incurred. Additionally, the Company expenses internal costs related to minor upgrades and enhancements as it is impractical to separate these costs from normal maintenance activities. Capitalized internal use software costs are recorded within software, equipment, and property on the Company’s consolidated balance sheets.

Goodwill and Intangible Assets—Goodwill and intangible assets deemed to have indefinite lives are not amortized, but are subject to an annual impairment test, or more frequently if events or changes in circumstances indicate that the carrying value may not be recoverable. The Company historically has performed its annual impairment assessment of goodwill and indefinite life intangible assets as of September 30 of each year. During 2022, the Company changed the date of its annual impairment assessment to November 30 to align with its annual business planning and budgeting process and to allow the Company to maximize the time and resources required to perform the impairment analysis (see Note 12).

Testing goodwill and intangible assets for impairment involves comparing the fair value of the reporting unit or intangible asset to its carrying value. If the carrying amount of a reporting unit or intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to the excess, up to the carrying value of the goodwill or intangible asset.

The Company performed the impairment tests for its goodwill and indefinite lived intangible assets for the years ended December 31, 2022, 2021 and 2020 and determined no impairment existed.

Long-Lived Assets—Long-lived assets, other than goodwill, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets might not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of the asset or asset group to estimated undiscounted future cash flows expected to be generated by such assets. If the carrying amount of the assets exceeds their estimated future cash flows, an impairment charge is recognized equal to the amount by which the carrying amount of the assets exceeds their fair value. There were no events or changes in circumstances that indicated the carrying value may not be recoverable and no impairment charges were recognized during the years ended December 31, 2022, 2021 and 2020.

Equity Method Investment—The Company accounts for its 7% investment in a limited partnership using the equity method of accounting. Under the equity method of accounting, the investee’s accounts are not reflected within the Company’s consolidated balance sheets and consolidated statements of operations and comprehensive income (loss). The Company’s investment is initially recognized at cost and adjusted thereafter for the post acquisition changes in the Company’s share of the investee’s earnings.

The Company’s share of the investee’s earnings is reported within other income-net in the Company’s consolidated statements of operations and comprehensive income (loss).

Deferred Financing Costs—Deferred financing costs are capitalized and amortized over the life of the underlying financing agreement (see Note 16).

Business Combinations—The Company allocates the purchase consideration of acquired companies to tangible and intangible assets acquired and liabilities assumed based on their estimated fair values at the acquisition date, with the excess recorded to goodwill. These estimates are inherently uncertain and subject to refinement. During the measurement period, which may be up to one year from the acquisition date, adjustments may be recorded to the fair value of these tangible and intangible assets acquired and liabilities assumed, including uncertain tax positions and tax-related valuation allowances, with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the fair value of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the consolidated statements of operations and comprehensive income (loss).

The Company estimates the fair value of contingent consideration related to business combinations on the date of acquisition (see Note 4). The fair value of the contingent consideration is remeasured each reporting period, with any change in the fair value recorded within the consolidated statements of operations and comprehensive income (loss).

Fair Value of Financial Instruments and Fair Value Measurements—Fair value is defined 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. To increase the comparability of fair value measures, the following hierarchy prioritizes the inputs to valuation methodologies used to measure fair value.

Level 1—Valuations based on quoted prices for identical assets and liabilities in active markets.

Level 2—Valuations based on observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data.

Level 3—Valuations based on unobservable inputs reflecting the Company’s own assumptions, consistent with reasonably available assumptions made by other market participants. These valuations require significant judgment.

Warrant Liability—The Company assumed publicly-traded warrants (“Public Warrants”) and warrants sold in a private placement (“Private Warrants”) upon consummation of the Business Combination.

The Company accounts for its Public Warrants and Private Warrants under ASC 815-40, *Derivatives and Hedging-Contracts in Entity’s Own Equity*, in conjunction with the SEC Division of Corporation Finance’s April 12, 2021 Public Statement, *Staff Statement on Accounting and Reporting Considerations for Warrants Issued by Special Purpose Acquisition Companies (“SPACs”)*. The terms of the warrants provide for potential changes to the settlement amounts dependent upon the characteristics of the warrant holder, and preclude the warrants from being classified in equity and thus the warrants are classified as a liability. Accordingly, the Company recorded the warrants as long-term liabilities on its consolidated balance sheet at fair value upon the closing of the Business Combination (see Note 3), with subsequent changes in the fair value of the warrants recognized in the consolidated statements of operations and comprehensive income (loss) at each reporting date.

In November 2021, the Company announced that it had elected to redeem its outstanding Public Warrants and as of December 31, 2021, there were no Public Warrants outstanding (see Note 22). Prior to redemption, the Public Warrants were publicly traded and thus had an observable market price in an active market and were valued at their trading price as of each reporting date.

The Private Warrants are valued using the Black-Scholes option pricing model. The assumptions utilized under the Black-Scholes option pricing model require judgments and estimates. Changes in these inputs and assumptions could affect the measurement of the estimated fair value of the related fair value of the Private Warrants.

Income Taxes—Deferred income tax assets and liabilities are recognized for the expected future tax effects of temporary differences between the financial and income tax reporting basis of assets and liabilities using tax rates in effect for the years in which the differences are expected to reverse. Deferred income taxes relate to the timing of recognition of certain revenue and expense items, and the timing of the deductibility of certain reserves and accruals for income tax purposes that differs from the timing for financial reporting purposes. The Company establishes a tax valuation allowance to the extent that it is more likely than not that a deferred tax asset will not be realizable against future taxable income.

A tax benefit from an uncertain tax position may be recognized when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation process, based on its technical merits. Income tax positions must meet a more-likely-than-not recognition threshold to be recognized. The Company recognizes interest and penalties related to unrecognized tax benefits in income tax expense.

Accrual for Self-Insurance Costs—The Company maintains a self-insured group medical program. The program contains stop loss thresholds with amounts in excess of the self-insured levels fully insured by third-party insurers. Liabilities associated with this program are estimated in part by considering historical claims experience and medical cost trends.

Leases—Effective January 1, 2021, the Company adopted Accounting Standards Update (“ASU”) 2016-02 which created a new topic, ASC 842, *Leases*.

In accordance with ASC 842, the Company, at the inception of the contract, determines whether a contract is or contains a lease. For leases with terms greater than 12 months, the Company records the related operating or finance right of use asset and lease liability at the present value of lease payments over the lease term. The Company is generally not able to readily determine the implicit rate in the lease and therefore uses the determined incremental borrowing rate at lease commencement to determine the present value of lease payments. The incremental borrowing rate represents an estimate of the market interest rate the Company would incur at lease commencement to borrow an amount equal to the lease payments on a collateralized basis over the term of a lease. Renewal options are not included in the measurement of the right of use assets and lease liabilities unless the Company is reasonably certain to exercise the optional renewal periods. Some leases also include early termination options, which can be exercised under specific conditions. Additionally, certain leases contain incentives, such as construction allowances from landlords. These incentives reduce the right-of-use asset related to the lease.

Some of the Company’s leases contain rent escalations over the lease term. The Company recognizes expense for operating leases on a straight-line basis over the lease term. The Company has elected the practical expedient to combine lease and non-lease components for all asset categories. Therefore, the lease payments used to measure the lease liability for these leases include fixed minimum rentals along with fixed non-lease component charges. Lease related costs, which are variable rather than fixed, are expensed in the period incurred. The Company does not have significant residual value guarantees or restrictive covenants in the lease portfolio.

For periods prior to the adoption of ASC 842, the Company recorded rent expense on a straight-line basis over the term of the related lease. The difference between the straight-line rent expense and the payments made in accordance with the operating lease agreements were recognized as a deferred rent liability within other liabilities on the accompanying consolidated balance sheets.

Recently Adopted Accounting Pronouncements—Effective January 1, 2022, the Company adopted ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*. This ASU is intended to reduce the complexity of accounting for income taxes. Changes include treatment of hybrid tax regimes, tax basis step-up in goodwill obtained in a transaction that is not a business combination, separate financial statements of legal entities not subject to tax, intra period tax allocation, ownership changes in investments, interim-period accounting for enacted changes in tax law, and year-to-date loss limitation in interim-period tax accounting. The adoption of ASU 2019-12 did not have a material impact on the Company's consolidated financial statements.

Effective January 1, 2022, the Company adopted ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments*, and subsequent amendments to the initial guidance: ASU 2018-19, ASU 2019-04, ASU 2019-05, and ASU 2020-03. This new guidance replaces the existing incurred loss impairment model with an expected credit loss model and requires a financial asset measured at amortized cost to be presented at the net amount expected to be collected. The adoption of ASU 2016-13 did not have a material impact on the Company's consolidated financial statements.

Recently Issued Accounting Pronouncements—In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*, and in January 2021 subsequently issued ASU 2021-01, which refines the scope of Topic 848. These ASUs provide optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions, subject to meeting certain criteria, that reference the London Interbank Offered Rate ("LIBOR"), or another rate that is expected to be discontinued. ASU 2020-04 was effective upon issuance. In December 2022, the FASB issued ASU 2022-06 that defers the sunset date for applying the reference rate reform relief in ASC 848 to December 31, 2024. While there has been no material effect to our consolidated financial statements, the guidance will potentially be applicable when we modify the current reference rate of LIBOR to another reference rate in our First Lien Credit Agreement and related interest rate cap (see Note 16).

3. BUSINESS COMBINATION

On July 30, 2021 ("Closing Date"), the Company consummated the Business Combination pursuant to the terms of the Business Combination Agreement, dated as of February 2, 2021, as amended, by and among Dragoneer, Chariot Opportunity Merger Sub, Inc. ("Chariot Merger Sub"), a Delaware corporation, and CCCIS, a Delaware corporation.

Immediately upon the consummation of the Business Combination and the other transactions contemplated by the Business Combination Agreement (collectively, the "Transactions"), Chariot Merger Sub, a wholly-owned direct subsidiary of Dragoneer, merged with and into CCCIS, with CCCIS surviving the Business Combination as a wholly-owned direct subsidiary of Dragoneer (the "Merger"). In connection with the Transactions, Dragoneer changed its name to "CCC Intelligent Solutions Holdings Inc."

The Merger was accounted for as a reverse recapitalization in accordance with GAAP. Under this method of accounting, Dragoneer was treated as the acquired company for accounting purposes and the Business Combination was treated as the equivalent of CCCIS issuing stock for the net assets of Dragoneer, accompanied by a recapitalization.

CCCIS was determined to be the accounting acquirer based on the following predominant factors among others:

- the pre-Closing CCCIS stockholders continue to control the Company following the Closing of the Business Combination;
- the board of directors and management of the Company following the Business Combination are composed of individuals associated with CCCIS;
- CCCIS was the larger entity based on historical operating activity, assets, revenues, and employee base at the time of the Closing of the Transactions; and
- the ongoing operations of the Company following the Business Combination comprise those of CCCIS.

The net assets of Dragoneer are stated at historical cost, with no goodwill or other intangible assets recorded. Reported shares and earnings per share available to holders of CCCIS's capital stock and equity awards prior to the Business Combination have been retroactively restated reflecting the Exchange Ratio.

Pursuant to the Merger, at the Effective Time of the Merger (the "Effective Time"):

- each share of CCCIS common stock that was issued and outstanding immediately prior to the Effective Time was automatically canceled and converted into the right to receive shares of the Company's common stock based on the Exchange Ratio, rounded down to the nearest whole number of shares;
- each option to purchase shares of CCCIS common stock, whether vested or unvested, that was outstanding and unexercised as of immediately prior to the Effective Time was assumed by the Company and became an option (vested or unvested, as applicable) to purchase a number of shares of the Company's common stock equal to the number of shares of CCCIS common stock subject to such option immediately prior to the Effective Time multiplied by the Exchange Ratio, rounded down to the nearest whole number of shares, at an exercise price equal to the exercise price per share of such option immediately prior to the Effective Time divided by the Exchange Ratio and rounded up to the nearest whole cent;
- each of Dragoneer's redeemable Class A ordinary shares and Class B ordinary shares that were issued and outstanding immediately prior to the Effective Time were exchanged for an equal number of shares of the Company's common stock.

Concurrently with the execution of the Business Combination Agreement, the Company entered into subscription agreements with certain institutional investors (the "PIPE Investors"), pursuant to which the PIPE Investors purchased, immediately prior to the Closing, an aggregate of 15,000,000 shares of the Company's common stock at a purchase price of \$10.00 per share.

Prior to the Closing, the Company entered into forward purchase agreements with Dragoneer Funding LLC and Willett Advisors LLC, pursuant to which the Company issued an aggregate of 17,500,000 forward purchase units, each consisting of one common share and one-fifth of one Public Warrant to purchase one common share for \$11.50 per share, for a purchase price of \$10.00 per unit. The Public Warrants were redeemed in December 2021 (see Note 22).

Effective upon Closing, 8,625,000 shares issued and held by Dragoneer Growth Opportunities Holdings (the “Sponsor Vesting Shares”) became non-transferable and subject to forfeiture on the tenth anniversary of Closing if neither of the following triggering events has occurred: (a) the share price of the Company’s common stock has been greater than or equal to \$13.00 per share for any twenty trading days within any thirty consecutive trading day period beginning after Closing, or (b) a change in control as defined in the Business Combination Agreement. The Sponsor Vesting Shares do not meet the criteria to be classified as a liability and are presented within stockholders’ equity.

As part of the Business Combination, 15.0 million shares of the Company’s common stock (the “Company Earnout Shares”) shall be issued to CCCIS shareholders existing as of immediately prior to Closing and holders of vested and unvested equity awards of CCCIS as of the date of the Business Combination Agreement (subject to continued employment), following a triggering event (“CCC Triggering Event”). A CCC Triggering Event is defined as the earlier of (a) the first date on which the shares of the Company’s common stock have traded for greater than or equal to \$15.00 per share for any twenty trading days within any thirty consecutive trading day period commencing after the Closing or (b) a change in control as defined in the Business Combination Agreement. If a CCC Triggering Event does not occur within ten years after Closing, the CCC Earnout Shares will be forfeited.

Of the 15.0 million Company Earnout Shares, 13.5 million shares are reserved for issuance to CCCIS shareholders. The Company Earnout Shares do not meet the criteria to be classified as a liability and the fair value of the shares reserved for shareholders of \$98.9 million was charged to additional paid-in capital during the year ended December 31, 2021. The remaining 1.5 million Company Earnout Shares are reserved for issuance to CCCIS option holders (see Note 21).

The Company Earnout Shares are not issued shares and are excluded from the table of common stock outstanding below.

The total number of shares of the Company’s common stock outstanding immediately following the Closing was 603,170,380, comprised as follows:

Shares issued to Dragoneer public shareholders and Sponsor	56,615,002
Sponsor Vesting Shares	8,625,000
Shares issued to Legacy CCC shareholders	505,430,378
Shares issued to Forward Purchasers	17,500,000
Shares issued to PIPE Investors	15,000,000
Total shares of common stock outstanding immediately following the Business Combination	<u>603,170,380</u>

In connection with the Business Combination, the Company incurred underwriting fees and other costs considered direct and incremental to the transaction totaling \$11.1 million (before tax), consisting of legal, accounting, financial advisory and other professional fees. These amounts were treated as a reduction of the cash proceeds and were deducted from the Company’s additional paid-in capital.

The following table reconciles the elements of the Business Combination to the consolidated statement of cash flows and the consolidated statement of mezzanine equity and stockholders’ equity for the year ended December 31, 2021 (in thousands).

Cash - Dragoneer trust and cash	\$	449,441
Cash - PIPE Financing		150,000
Cash - Forward Purchase Agreements		175,000
Less: transaction costs and advisory fees		(11,141)
Net cash contributions from Business Combination		<u>763,300</u>
Less: non-cash fair value of Public Warrants and Private Warrants		(58,459)
Net equity infusion from Business Combination	\$	<u>704,841</u>

4. BUSINESS ACQUISITION

On February 8, 2022, the Company completed its acquisition of Safekeep, Inc. (“Safekeep”), a privately held company that leverages AI to streamline and improve subrogation management across auto, property, workers’ compensation and other insurance lines of business. Leveraging Safekeep’s AI-enabled subrogation solutions, the acquisition will broaden the Company’s portfolio of cloud-based solutions available to its insurance customers.

In exchange for all the outstanding shares of Safekeep, the Company paid total cash consideration of \$32.3 million upon closing. In accordance with the acquisition agreement, the Company placed \$6.0 million in escrow for a general indemnity holdback to be paid to the sellers within 15 months of closing subject to reduction for certain indemnifications and other potential obligations of the selling shareholders.

As additional consideration for the shares, the acquisition agreement includes a contingent earnout for additional cash consideration. The potential amount of the earnout is calculated as a multiple of revenue, above a defined floor, during the 12-month measurement period ending December 31, 2024 and is not to exceed \$90.0 million. The fair value of the contingent consideration as of the acquisition date of \$0.2 million was estimated using a Monte Carlo simulation model that relies on unobservable inputs, including management estimates and assumptions. Thus, the contingent earnout is a Level 3 measurement.

The acquisition date fair value of the consideration transferred was \$32.5 million, which consisted of the following (in thousands):

Cash paid through closing	\$	32,300
Fair value of contingent earnout consideration		200
Total acquisition date fair value of the consideration transferred	\$	32,500

The acquisition was accounted for as a business combination and reflects the application of acquisition accounting in accordance with ASC 805, *Business Combinations*. The total purchase consideration was allocated to the assets acquired and liabilities assumed based on their fair values as of the acquisition date with the excess purchase price assigned to goodwill. The goodwill was primarily attributable to the expected synergies from the combined service offerings and the value of the acquired workforce. The goodwill is not deductible for tax purposes.

The Company’s estimates of the fair values of the assets acquired, liabilities assumed and contingent consideration are based on information that was available at the date of the acquisition. During the measurement period, which may be up to one year from the acquisition date, adjustments may be recorded to the fair value of these tangible and intangible assets acquired and liabilities assumed, including uncertain tax positions and tax-related valuation allowances, with the corresponding offset to goodwill. The Company recorded a measurement period adjustment to reflect the facts and circumstances in existence at the acquisition date in December 2022. The adjustment relates to the valuation of the deferred tax liabilities for \$0.9 million, with a corresponding increase in goodwill. There were no other significant changes to the preliminary purchase price allocation.

The purchase price allocation of estimated fair values was finalized as of December 31, 2022. The following table summarizes the final allocation of the consideration to the fair values of the assets acquired and liabilities assumed at the acquisition date (in thousands):

Assets acquired:		
Current assets	\$	150
Intangible asset - acquired technology		4,800
Total assets acquired		4,950
Liabilities assumed:		
Current liabilities		147
Deferred tax liabilities		548
Total liabilities assumed		695
Net assets acquired		4,255
Goodwill		28,245
Total purchase price	\$	32,500

The acquired technology intangible asset has an estimated useful life of seven years and is being amortized on a straight-line basis.

The fair value of the acquired technology intangible asset was determined by a valuation model based on estimates of future operating projections as well as judgments on the discount rate and other variables. This fair value measurement is based on significant unobservable inputs, including management estimates and assumptions and thus represents a Level 3 measurement.

The transaction costs associated with the acquisition were \$1.2 million and are included in general and administrative expenses within the consolidated statements of operations and comprehensive income (loss) for the year ended December 31, 2022.

5. REVENUE

Disaggregation of Revenue—The Company provides disaggregation of revenue based on type of service as it believes these categories best depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

The following table summarizes revenue by type of service for the years ended December 31 (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Software subscriptions	\$ 752,505	\$ 662,300	\$ 573,608
Other	29,943	25,988	59,455
Total revenues	\$ 782,448	\$ 688,288	\$ 633,063

Contract Assets and Liabilities—The balances of the Company's receivables, contract assets and contract liabilities from contracts with customers are as follows (in thousands):

	December 31,	December 31,	December 31,
	2022	2021	2020
Accounts receivables-Net of allowances	\$ 98,353	\$ 78,793	\$ 74,107
Deferred contract costs	16,556	15,069	11,917
Long-term deferred contract costs	20,161	22,117	14,389
Other assets (accounts receivable, non-current)	16,437	8,622	—
Deferred revenues	35,239	31,042	26,514
Other liabilities (deferred revenues, non-current)	1,240	1,574	2,001

Deferred Contract Costs—A summary of the activity impacting the deferred contract costs during the years ended December 31, 2022, 2021 and 2020 is presented below (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Balance at beginning of period	\$ 37,186	\$ 26,306	\$ 23,270
Costs amortized	(17,986)	(15,384)	(12,446)
Additional amounts deferred	17,517	26,264	15,482
Balance at end of period	<u>\$ 36,717</u>	<u>\$ 37,186</u>	<u>\$ 26,306</u>
Classified as:			
Current	\$ 16,556	\$ 15,069	\$ 11,917
Non-current	20,161	22,117	14,389
Total deferred contract costs	<u>\$ 36,717</u>	<u>\$ 37,186</u>	<u>\$ 26,306</u>

Deferred Revenue—A summary of the activity impacting deferred revenue balances during the years ended December 31, 2022, 2021 and 2020, is presented below (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Balance at beginning of period	\$ 32,616	\$ 28,515	\$ 26,256
Revenue recognized ¹	(380,977)	(334,524)	(305,812)
Additional amounts deferred ¹	384,840	338,625	308,071
Balance at end of period	<u>\$ 36,479</u>	<u>\$ 32,616</u>	<u>\$ 28,515</u>
Classified as:			
Current	\$ 35,239	\$ 31,042	\$ 26,514
Non-current	1,240	1,574	2,001
Total deferred revenue	<u>\$ 36,479</u>	<u>\$ 32,616</u>	<u>\$ 28,515</u>

¹ Amounts include total revenue deferred and recognized during each respective period.

During the years ended December 31, 2022, 2021 and 2020, \$31.0 million, \$26.5 million and \$25.1 million, respectively, that was included in the deferred revenue balance at the beginning of each period was recognized as revenue.

Transaction Price Allocated to the Remaining Performance Obligations—Remaining performance obligations represent contracted revenue that has not yet been recognized, which includes deferred revenue and amounts that will be invoiced and recognized as revenue in future periods. As of December 31, 2022, approximately \$1,365 million of revenue is expected to be recognized from remaining performance obligations with approximately \$541 million impacting the next twelve months, and approximately \$824 million thereafter. The estimated revenues do not include unexercised contract renewals. The remaining performance obligations exclude future transaction revenue where revenue is recognized as the services are rendered and in the amount to which the Company has the right to invoice.

6. FAIR VALUE MEASUREMENTS

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Private Warrants—As of December 31, 2022 and 2021, the Company's Private Warrants are recognized as liabilities and measured at fair value on a recurring basis.

The Private Warrants are valued using Level 1 and Level 2 inputs within the Black-Scholes option pricing model. The assumptions utilized under the Black-Scholes option pricing model require judgments and estimates. Changes in these inputs and assumptions could affect the measurement of the estimated fair value of the Private Warrants. Accordingly, the Private Warrants are classified within Level 2 of the fair value hierarchy.

The valuation of the Private Warrants as of December 31, 2022 and December 31, 2021 was determined using the Black-Scholes option pricing model using the following assumptions:

	December 31, 2022	December 31, 2021
Expected term (in years)	3.6	4.6
Expected volatility	38 %	35 %
Expected dividend yield	0 %	0 %
Risk-free interest rate	4.15 %	1.20 %

The estimated fair value of each Private Warrant using the Company's stock price on the valuation date and the above assumptions was \$2.05 and \$3.51 as of December 31, 2022 and 2021, respectively.

Contingent Consideration Liability—The contingent consideration liability related to the acquisition of Safekeep (see Note 4), recognized within other liabilities on the consolidated balance sheet, is adjusted each reporting period for changes in fair value, which can result from changes in anticipated payments and changes in the assumed discount rate. These inputs are unobservable in the market and therefore categorized as Level 3 inputs.

The estimated fair value of the contingent consideration at the date of acquisition was determined using probability-weighted discounted cash flows and a Monte Carlo simulation model. The discount rate used to estimate fair value is based on the Company's estimated cost of debt and was 10% as of December 31, 2022.

During the year ended December 31, 2022, the Company recognized a \$0.1 million gain from the change in the estimated fair value of the contingent consideration liability within general and administrative expenses on the consolidated statement of operations and comprehensive income (loss).

Interest Rate Cap—In August 2022, the Company entered into two interest rate cap agreements to reduce its exposure to increases in interest rates applicable to its floating rate long-term debt (See Note 16). The fair value of the interest rate cap agreements was estimated using inputs that were observable or that could be corroborated by observable market data and therefore, was classified within Level 2 of the fair value hierarchy as of December 31, 2022.

The Company did not designate its interest rate cap agreements as hedging instruments and records the changes in fair value within earnings. As of December 31, 2022, the interest rate cap agreements had a fair value of \$12.0 million, classified within other assets in the accompanying consolidated balance sheet.

The following table presents the fair value of the assets and liabilities measured at fair value on a recurring basis at December 31, 2022 (in thousands):

	Fair Value	Level 1	Level 2	Level 3
Assets				
Interest rate cap	\$ 11,951	\$ —	\$ 11,951	\$ —
Total Assets	\$ 11,951	\$ —	\$ 11,951	\$ —
Liabilities				
Contingent consideration related to business acquisition	\$ 100	\$ —	\$ —	\$ 100
Private warrants	36,405	—	36,405	—
Total Liabilities	\$ 36,505	\$ —	\$ 36,405	\$ 100

The following table presents the fair value of the assets and liabilities measured at fair value on a recurring basis at December 31, 2021 (in thousands):

	Fair Value	Level 1	Level 2	Level 3
Liabilities				
Private warrants	\$ 62,478	\$ —	\$ 62,478	\$ —
Total	\$ 62,478	—	\$ 62,478	—

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis—The Company has assets that under certain conditions are subject to measurement at fair value on a nonrecurring basis. These assets include those associated with acquired businesses, including goodwill and other intangible assets. For these assets, measurement at fair value in periods subsequent to their initial recognition is applicable

if one or more is determined to be impaired. During the years ended December 31, 2022, 2021 and 2020 the Company recognized no impairment related to these assets.

Fair Value of Other Financial Instruments—The following table presents the carrying amounts, net of debt discount, and estimated fair values of the Company’s financial instruments that are not recorded at fair value on the consolidated balance sheets (in thousands):

Description	December 31, 2022		December 31, 2021	
	Carrying Amount	Estimated Fair Value	Carrying Amount	Estimated Fair Value
Term B Loan, including current portion	\$ 790,331	\$ 766,260	\$ 798,073	\$ 799,000

The fair value of the Company’s long-term debt, including current maturities, was estimated based on the quoted market prices for the same or similar instruments and fluctuates with changes in applicable interest rates among other factors. The fair value of long-term debt is classified as a Level 2 measurement in the fair value hierarchy and is established based on observable inputs in less active markets.

7. INCOME TAXES

The components of pretax income (loss) attributable to domestic and foreign operations are as follows (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Domestic	\$ 54,799	\$ (261,900)	\$ (15,117)
Foreign	(4,937)	(13,019)	(6,438)
Pretax income (loss)	\$ 49,862	\$ (274,919)	\$ (21,555)

On March 27, 2020, the Coronavirus Aid, Relief and Economic Security Act (“CARES Act”) was signed into law. The CARES Act includes provisions relating to refundable payroll tax credits, deferment of the employer portion of certain payroll taxes, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property.

Under ASC 740, *Income Taxes*, the effects of the new legislation are recognized in the period of enactment. Therefore, the effects of the CARES Act are recognized during the year ended December 31, 2020. The modification to the net interest deduction limitation resulted in a benefit of \$16.8 million during the year ended December 31, 2020. The other provisions of the CARES Act did not result in a material impact on the Company’s provision for income taxes for the year ended December 31, 2020.

	Year Ended December 31,		
	2022	2021	2020
Current provision:			
Federal	\$ 37,470	\$ 15,263	\$ 1,539
State	8,387	5,620	4,906
Total current provision	45,857	20,883	6,445
Deferred provision (benefit):			
Federal	(26,570)	(35,284)	(7,536)
State	(7,831)	(11,599)	(3,588)
Foreign	1,054	(2,080)	(1,710)
Change in valuation allowance	(1,054)	2,080	1,710
Total deferred benefit	(34,401)	(46,883)	(11,124)
Total income tax provision (benefit)	\$ 11,456	\$ (26,000)	\$ (4,679)

The Company's effective income tax rate differs from the federal statutory rate as follows (in thousands, except percentages):

	Year Ended December 31,					
	2022		2021		2020	
Federal income tax benefit at statutory rate	\$ 10,471	21.0 %	\$ (57,733)	21.0 %	\$ (4,527)	21.0 %
Executive compensation	12,508	25.0	25,362	(9.2)	—	—
Fair value of warrants	(5,475)	(11.0)	13,545	(4.9)	—	—
Stock-based compensation	(4,074)	(8.1)	(3,647)	1.3	(42)	0.2
Research and experimental credit	(3,510)	(7.0)	(2,914)	1.1	(3,058)	14.2
Impact of foreign operations	2,807	5.6	261	(0.1)	122	(0.6)
Valuation allowance	(1,054)	(2.1)	2,080	(0.8)	1,572	(7.3)
State and local taxes-net of federal income tax effect	439	0.9	(4,723)	1.7	288	(1.3)
Other nondeductible expenses	344	0.7	756	(0.3)	854	(4.0)
Uncertain tax positions	(303)	(0.6)	594	(0.2)	589	(2.7)
Foreign rate difference	(182)	(0.4)	(493)	0.2	(227)	1.1
Other—net	(515)	(1.0)	912	(0.3)	(250)	1.1
Income tax provision (benefit)	\$ 11,456	23.0 %	\$ (26,000)	9.5 %	\$ (4,679)	21.7 %

The Company made income tax payments of \$55.7 million, \$15.2 million and \$9.5 million for the years ended December 31, 2022, 2021 and 2020, respectively. The Company received refunds from the Internal Revenue Service and various states totaling \$89 thousand, \$16 thousand and \$10.4 million, for the years ended December 31, 2022, 2021 and 2020, respectively.

The approximate income tax effect of each type of temporary difference giving rise to deferred income tax assets and liabilities as of December 31, 2022 and 2021 was as follows (in thousands):

	Year Ended December 31,	
	2022	2021
Deferred income tax assets:		
Stock-based compensation	\$ 37,156	\$ 39,135
Operating lease liabilities	14,339	16,301
Accrued compensation	10,962	9,743
Net operating losses—foreign	10,373	11,427
Capitalized R&E—net of amortization	10,221	—
Sales allowances and doubtful accounts	1,339	959
Interest expense limitation	673	1,553
Net operating losses—domestic (state)	506	733
Research and experimental credit	386	1,250
Other	826	1,443
Total deferred income tax assets	86,781	82,544
Valuation allowance for deferred tax asset	(10,373)	(11,427)
Net deferred income tax assets	76,408	71,117
Deferred income tax liabilities:		
Intangible asset amortization	282,032	307,654
Software, equipment and property depreciation and amortization	17,628	20,313
Deferred contract costs	9,235	9,456
Operating lease assets	7,604	9,439
Interest rate cap	1,607	—
Total deferred income tax liabilities	318,106	346,862
Net deferred income tax liabilities	\$ 241,698	\$ 275,745

Valuation Allowance—The Company has accumulated net operating losses related to its foreign subsidiaries of \$10.4 million and \$11.4 million at December 31, 2022 and 2021, respectively. A valuation allowance equal to 100% of the related tax benefit has been established as of December 31, 2022 and 2021. The valuation allowance decreased \$1.0 million during the year ended December 31, 2022 due to net operating loss expirations of the foreign subsidiaries exceeding the current year net operating losses of the foreign subsidiaries. The valuation allowance increased \$2.0 million and \$1.7 million during the years ended December 31, 2021 and 2020, respectively, due to the net operating losses of the foreign subsidiaries. No amounts were released during the years ended December 31, 2022, 2021 and 2020. The net operating losses are set to expire in 2023 through 2027 as China allows for a five-year carryforward.

The state net operating losses of \$0.5 million are expected to be more likely than not fully utilized. Most states allow for a 20-year carryforward of net operating losses. All losses will expire in 2035-2041 if not fully utilized.

The change in unrecognized tax benefits excluding interest and penalties for the years ended December 31, 2022 and 2021 was as follows (in thousands):

	2022	2021
Balance at beginning of year	\$ 3,722	\$ 3,045
Additions based on tax positions related to the current year	797	663
Additions based on adjustments to tax positions related to prior years	105	32
Reductions for tax positions of prior years	(901)	(18)
Balance at end of year	<u>\$ 3,723</u>	<u>\$ 3,722</u>

The Company believes its liability for unrecognized tax benefits, excluding interest and penalties, will not significantly change over the following twelve months. However, due to the open statute of limitations within the various jurisdictions in which the Company files tax returns, the amount of any change cannot be reasonably estimated and it is possible there could be significant changes in the amount of unrecognized tax benefits over the following twelve months.

The Company recognizes interest and penalties related to unrecognized tax benefits in income tax expense. As of December 31, 2022 and 2021, the amount accrued for interest and penalties was not material. The Company reflects the liability for unrecognized tax benefits as current income tax liabilities in its consolidated balance sheets. The amounts included in “reductions for tax positions of prior years” represent expirations of statutes of limitation and decreases in the unrecognized tax benefits relating to settlements reached with taxing authorities during each year shown.

With few US State exceptions, the major jurisdictions subject to examination by the relevant taxing authorities and open tax years, stated as the Company’s fiscal years, are as follows:

Jurisdiction	Open Tax Years
US Federal	2019 - 2021
US States	2019 - 2021
China	2019 - 2021
Canada	2019 - 2021

8. ACCOUNTS RECEIVABLE

Accounts receivable–Net as of December 31, 2022 and 2021, consists of the following (in thousands):

	December 31,	
	2022	2021
Accounts receivable	\$ 103,692	\$ 82,584
Allowance for doubtful accounts and sales reserves	(5,339)	(3,791)
Accounts receivable–Net	<u>\$ 98,353</u>	<u>\$ 78,793</u>

Changes to the allowance for doubtful accounts and sales reserves during the years ended December 31, 2022, 2021 and 2020, consists of the following (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Balance at beginning of period	\$ 3,791	\$ 4,224	\$ 3,970
Charges to bad debt and sales reserves	4,262	3,634	3,814
Write-offs, net	(2,714)	(4,067)	(3,560)
Balance at end of period	<u>\$ 5,339</u>	<u>\$ 3,791</u>	<u>\$ 4,224</u>

9. OTHER CURRENT ASSETS

Other current assets as of December 31, 2022 and 2021, consists of the following (in thousands):

	December 31,	
	2022	2021
Prepaid software and equipment maintenance	\$ 7,638	\$ 7,593
Prepaid SaaS costs	7,423	5,909
Prepaid service fees	5,268	8,623
Prepaid insurance	4,062	4,416
Non-trade receivables	690	8,321
Other	11,277	11,319
Total	<u>\$ 36,358</u>	<u>\$ 46,181</u>

10. SOFTWARE, EQUIPMENT, AND PROPERTY

Software, equipment, and property as of December 31, 2022 and 2021, consists of the following (in thousands):

	December 31,	
	2022	2021
Software, licenses and database	\$ 175,616	\$ 140,692
Computer equipment	33,043	31,635
Leasehold improvements	30,430	34,880
Building and land	4,910	4,910
Furniture and other equipment	1,478	5,343
Total software, equipment, and property	245,477	217,460
Less accumulated depreciation and amortization	(99,034)	(81,615)
Net software, equipment, and property	\$ 146,443	\$ 135,845

Depreciation and amortization expense related to software, equipment, and property was \$27.9 million, \$24.5 million and \$17.7 million for the years ended December 31, 2022, 2021 and 2020, respectively.

11. LEASES

The Company adopted ASC 842 on January 1, 2021 using the modified retrospective transition method. Due to the adoption of ASC 842, the Company recognized operating right-of-use assets and operating lease liabilities of \$47.1 million and \$53.0 million, respectively, as of the date of adoption. Results for reporting periods prior to adoption are presented under ASC 840 as it was the accounting standard in effect for such periods.

The Company leases real estate in the form of office space and data center facilities. Generally, at the inception of the contract, the term for real estate leases ranges from 1 to 17 years and the term for equipment leases is 1 to 3 years. Some real estate leases include options to renew that can extend the original term by 3 to 5 years.

Operating lease costs are included within cost of revenues, exclusive of amortization of acquired technologies, research and development and general and administrative expenses on the consolidated statements of operations and comprehensive income (loss). The Company does not have any finance leases.

In December 2022, the Company terminated a corporate office lease which otherwise would have expired in March 2026. In connection with the lease termination, the Company agreed to a termination fee in the amount of \$3.8 million, which released the Company from all future minimum lease payments and variable lease costs related to this facility. As of the termination date, the Company derecognized the operating lease asset and operating lease liability and recognized a loss on lease termination of \$3.1 million, included within general and administrative expenses in the consolidated statement of operations and comprehensive income (loss).

The components of lease expense for the years ended December 31, 2022 and 2021 were as follows (in thousands):

	December 31,	
	2022	2021
Operating lease costs	\$ 12,390	\$ 16,386
Variable lease costs	2,319	2,110
Total lease costs	\$ 14,709	\$ 18,496

The \$3.1 million loss on lease termination is included in operating lease costs for the year ended December 31, 2022.

Under ASC 840, rent expense was \$9.7 million during the year ended December 31, 2020.

The lease term and discount rate consisted of the following as of December 31, 2022 and 2021:

	December 31,	
	2022	2021
Weighted-average remaining lease term (years)	13.6	12.9
Weighted-average discount rate	6.4%	6.3%

Supplemental cash flow and other information related to leases for the years ended December 31, 2022 and 2021 were as follows (in thousands):

	December 31,	
	2022	2021
Cash payments for operating leases	\$ 11,933	\$ 11,403
Operating lease assets obtained in exchange for lease liabilities	2,825	2,876

The \$3.8 million lease termination fee is included in the cash payments for operating leases for the year ended December 31, 2022.

The table below reconciles the undiscounted future minimum lease payments (in thousands) under noncancelable operating leases with terms of more than one year to the total operating lease liabilities recognized on the consolidated balance sheet as of December 31, 2022.

Years Ending December 31:

2023	\$	5,737
2024		7,030
2025		7,204
2026		7,243
2027		5,438
Thereafter		57,491
Total lease payments		90,143
Less: Interest		(30,414)
Total	\$	<u>59,729</u>

12. GOODWILL AND INTANGIBLE ASSETS

Goodwill and intangible assets are primarily the result of business acquisitions.

The Company historically has performed its annual impairment assessment of goodwill and indefinite life intangible assets as of September 30 of each year. During 2022, the Company changed the date of its annual impairment assessment to November 30 to align with its annual business planning and budgeting process and to allow the Company to maximize the time and resources required to perform the impairment analysis. This change does not result in a delay, acceleration, or avoidance of an impairment charge. This change has been applied prospectively as retrospective application is deemed impracticable due to the inability to objectively determine the assumptions and significant estimates used in earlier periods without the benefit of hindsight. Accordingly, the annual impairment assessment was performed as of September 30, 2022 and November 30, 2022.

For the years ended December 31, 2022, 2021 and 2020 the annual impairment assessment indicated no impairment and there was no change to the carrying amount of goodwill or indefinite life intangible assets due to impairment.

Based on the impairment assessments performed during the year ended December 31, 2022, the Company determined that its China reporting unit had an estimated fair value that was not significantly in excess of its carrying value. While it was concluded that the goodwill assigned to the China reporting unit was not impaired, it could be at risk of future impairment if the China reporting unit's long-term financial objectives are not achieved or if there are changes to estimates and assumptions from a number of factors, many of which are outside the Company's control. As a result of the assessment, the Company did not recognize an impairment charge related to the China reporting unit.

The following table presents the gross amount, accumulated impairment loss, and carrying amount of goodwill as of December 31, 2022 and 2021 (in thousands):

	Gross Amount	Accumulated Impairment Loss	Carrying Carrying Amount
Balance as of December 31, 2022	\$ 1,520,926	\$ (25,797)	\$ 1,495,129
Balance as of December 31, 2021	1,492,681	(25,797)	1,466,884

The accumulated impairment loss was recognized during the year ended December 31, 2019.

Changes in the carrying amount of goodwill were as follows during the year ended December 31, 2022 (in thousands):

	Carrying Amount
Balance as of December 31, 2021	\$ 1,466,884
Acquisition of Safekeep, Inc.	28,245
Balance as of December 30, 2022	<u>\$ 1,495,129</u>

There was no change to the carrying amount of goodwill during the years ended December 31, 2021 and 2020.

During February 2022, the Company recorded \$4.8 million of acquired technology intangible assets as a result of the acquisition of Safekeep (see Note 4).

The intangible assets balance as of December 31, 2022, is reflected below (in thousands):

	Estimated Useful Life (Years)	Weighted- Average Remaining Useful Life (Years)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intangible assets:					
Customer relationships	16–18	12.3	\$ 1,299,750	\$ (410,095)	\$ 889,655
Acquired technologies	3–7	1.8	187,950	(149,256)	38,694
Subtotal			1,487,700	(559,351)	928,349
Trademarks—indefinite life			190,470	—	190,470
Total intangible assets			<u>\$ 1,678,170</u>	<u>\$ (559,351)</u>	<u>\$ 1,118,819</u>

The intangible assets balance as of December 31, 2021, is reflected below (in thousands):

	Estimated Useful Life (Years)	Weighted- Average Remaining Useful Life (Years)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intangible assets:					
Customer relationships	16–18	13.3	\$ 1,299,750	\$ (337,831)	\$ 961,919
Acquired technologies	3–7	2.3	183,164	(122,318)	60,846
Favorable lease terms	6	0.3	280	(266)	14
Subtotal			1,483,194	(460,415)	1,022,779
Trademarks—indefinite life			190,470	—	190,470
Total intangible assets			\$ 1,673,664	\$ (460,415)	\$ 1,213,249

Amortization expense for intangible assets was \$99.2 million, \$98.7 million and \$98.6 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Future amortization expense for each of the next five years and thereafter for intangible assets as of December 31, 2022, is as follows (in thousands):

Years Ending December 31:

2023	\$ 99,003
2024	81,417
2025	72,949
2026	72,949
2027	72,949
Thereafter	529,082
Total	\$ 928,349

13. EQUITY METHOD INVESTMENT

In June 2021, the Company completed an investment in a limited partnership (the “Investee”), which is affiliated with one of the Company’s principal equity owners. The Company invested \$10.2 million, including related fees and expenses, for an approximate 7% interest of the Investee.

The change in the carrying value of the investment during the year ended December 31, 2022 and 2021 is summarized below as follows (in thousands):

Equity method investment carrying value at December 31, 2020	\$ —
Cash contributions	10,228
Share of net income (loss) from the Investee	—
Equity method investment carrying value at December 31, 2021	10,228
Share of net income (loss) from the Investee	—
Equity method investment carrying value at December 31, 2022	\$ 10,228

14. ACCRUED EXPENSES

Accrued expenses as of December 31, 2022 and 2021, consist of the following (in thousands):

	December 31,	
	2022	2021
Compensation	\$ 53,530	\$ 49,510
Royalties and licenses	3,832	2,640
Software license agreements	3,243	3,265
Sales tax	2,615	2,296
Employee insurance benefits	2,749	2,443
Professional services	1,877	2,371
Other	3,599	4,166
Total	\$ 71,445	\$ 66,691

15. OTHER LIABILITIES

Other liabilities as of December 31, 2022 and 2021, consist of the following (in thousands):

	December 31,	
	2022	2021
Software license agreements	\$ 1,208	\$ 4,211
Deferred revenue-non-current	1,240	1,574
Contingent consideration	100	—
Other	110	—
Total	\$ 2,658	\$ 5,785

16. LONG-TERM DEBT

On September 21, 2021, CCC Intelligent Solutions Inc., an indirect wholly owned subsidiary of the Company, together with certain of the Company's subsidiaries acting as guarantors entered into a credit agreement (the "2021 Credit Agreement").

The 2021 Credit Agreement replaces the Company's 2017 First Lien Credit Agreement (the "First Lien Credit Agreement"), dated as of April 27, 2017, as amended as of February 14, 2020.

The proceeds of the 2021 Credit Agreement and cash on hand were used to repay all outstanding borrowings under the First Lien Credit Agreement.

The repayment of outstanding borrowings under the First Lien Credit Agreement was determined to be a debt extinguishment and the Company recognized a \$9.2 million loss on early extinguishment of debt in the consolidated statement of operations and comprehensive income (loss) during the year ended December 31, 2021.

2021 Credit Agreement—The 2021 Credit Agreement consists of an \$800.0 million term loan (the "Term B Loan") and a revolving credit facility for an aggregate principal amount of \$250.0 million (the "2021 Revolving Credit Facility" and together with the Term B Loan, the "2021 Credit Facilities"). The 2021 Revolving Credit Facility has a sublimit of \$75.0 million for letters of credit. The Company received proceeds of \$798.0 million, net of debt discount of \$2.0 million, related to the Term B Loan.

The Company incurred \$9.8 million in financing costs related to the Term B Loan, recorded to a contra debt account. The Company incurred \$3.1 million in financing costs related to the 2021 Revolving Credit Facility, recorded as deferred financing fees. The financing costs are being amortized to interest expense over the term of the Term B Loan and 2021 Revolving Credit Facility using the effective interest method.

Beginning with the quarter ended March 31, 2022, the Term B Loan requires quarterly principal payments of \$2.0 million until June 30, 2028, with the remaining outstanding principal amount required to be paid on the maturity date, September 21, 2028. Beginning with fiscal year ended December 31, 2022, if the Company's leverage ratio, as defined in the 2021 Credit Agreement is greater than 3.5, the Term B Loan requires a prepayment of principal, subject to certain exceptions, in connection with the receipt of proceeds from certain asset sales, casualty events, and debt issuances by the Company, and up to 50% of annual excess cash flow, as defined in and as further set forth in the 2021 Credit Agreement. When a principal prepayment is required, the prepayment offsets the future quarterly principal payments of the same amount. As of December 31, 2022, the Company's leverage ratio did not exceed the 3.5 threshold and the Company was not subject to the annual excess cash flow calculation, and as such, not required to make a prepayment of principal. The Company was not subject to the annual excess cash flow calculation as of December 31, 2021.

As of December 31, 2022 and 2021, the amount outstanding on the Term B Loan is \$792.0 million and \$800.0 million, respectively, of which \$8.0 million is classified as current in the accompanying consolidated balance sheets.

Borrowings under the 2021 Credit Facilities bear interest at rates based on the ratio of the Company's and its subsidiaries' consolidated first lien net indebtedness to the Company's and its subsidiaries' consolidated EBITDA for applicable periods specified in the 2021 Credit Agreement. The interest rate per annum applicable to the loans under the 2021 Credit Facilities is based on a fluctuating rate of interest equal to the sum of an applicable rate and, at the Company's election from time to time, either:

- (1) a base rate determined by reference to the highest of (a) the rate last quoted by the Wall Street Journal as the "prime rate," (b) the federal funds effective rate plus 0.50%, (c) one-month LIBOR plus 1.00% and (d) with respect to the Term B Loan, 1.50% and with respect to the 2021 Revolving Credit Facility, 1.00%, or
- (2) a Eurocurrency rate determined by reference to LIBOR (other than with respect to Euros, Euribor and with respect to British Pounds Sterling, SONIA) with a term as selected by the Company, of one, three or six months (subject to (x) in the case of term loans, a 0.50% per annum floor and (y) in the case of revolving loans, a 0.00% per annum floor).

A quarterly commitment fee of up to 0.50% is payable on the unused portion of the 2021 Revolving Credit Facility. The 2021 Revolving Credit Facility matures on September 21, 2026.

During the years ended December 31, 2022 and 2021, the weighted-average interest rate on the outstanding borrowings under the Term B Loan was 4.2% and 3.0%, respectively. The Company made Term B Loan interest payments of \$33.5 million and \$6.7 million during the years ended December 31, 2022 and 2021, respectively.

During the year ended December 31, 2021, the Company issued a standby letter of credit for \$0.7 million which reduces the amount available to be borrowed under the 2021 Revolving Credit Facility and at December 31, 2022 and 2021, \$249.3 million was available to be borrowed.

Borrowings under the 2021 Credit Agreement are guaranteed by Cypress Holdings Intermediate Holdings II, Inc., and certain of its US subsidiaries by a perfected first priority lien on the stock of CCC Intelligent Solutions Inc., and substantially all of its assets, subject to various limitations and exceptions.

The 2021 Credit Agreement contains representations and warranties, and affirmative and negative covenants, that among other things, restrict, subject to certain exceptions, our ability to: incur additional indebtedness, incur liens, engage in mergers, consolidations, liquidations or dissolutions; pay dividends and distributions on, or redeem, repurchase or retire our capital stock; and make certain investments, acquisitions, loans, or advances.

In addition, beginning with the fiscal quarter ended March 31, 2022, the terms of the 2021 Credit Agreement include a financial covenant which requires that, at the end of each fiscal quarter, if the aggregate amount of borrowings under the 2021 Revolving Credit Facility exceeds 35% of the aggregate commitments, the Company's leverage ratio cannot exceed 6.25 to 1.00. Borrowings under the 2021 Revolving Credit Facility did not exceed 35% of the aggregate commitments and the Company was not subject to the leverage test during the year ended December 31, 2022.

First Lien Credit Agreement—In April 2017, the Company entered into the First Lien Credit Agreement. The First Lien Credit Agreement initially consisted of a \$1.0 billion term loan ("First Lien Term Loan"), a \$65.0 million dollar revolving credit facility ("Dollar Revolver"), and a \$35.0 million multicurrency revolving credit facility ("Multicurrency Revolver" and together with the Dollar Revolver, the "First Lien Revolvers"), with a sublimit of \$30.0 million for letters of credit under the First Lien Revolvers. The Company received proceeds of \$997.5 million, net of debt discount of \$2.5 million, related to the First Lien Term Loan.

In February 2020, the Company refinanced its long-term debt ("2020 Refinancing") and entered into the First Amendment to the First Lien Credit Agreement ("First Lien Amendment"). The First Lien Amendment provided an incremental term loan, amended the amount of commitments and the maturity dates of the First Lien Credit Agreement's revolving credit facilities. The proceeds of the incremental term loan were used to repay all outstanding borrowings under the Second Lien Credit Agreement ("Second Lien Credit Agreement").

The repayment of outstanding borrowings under the Second Lien Credit Agreement was determined to be a debt extinguishment and the Company recognized an \$8.6 million loss on early extinguishment of debt in the consolidated statements of operations and comprehensive income (loss) during the year ended December 31, 2020.

The First Lien Amendment provided an incremental term loan in the amount of \$375.0 million. The Company received proceeds from the incremental term loan of \$373.1 million, net of debt discount of \$1.9 million.

In addition, the First Lien Amendment reduced the amount of commitments and extended the maturity dates of the First Lien Credit Agreement's revolving credit facilities. The First Lien Revolvers continued to have a sublimit of \$30.0 million for letters of credit.

The Company incurred \$27.6 million and \$3.4 million in financing costs related to the First Lien Credit Agreement and First Lien Amendment, respectively. These costs were recorded to a contra debt account and were being amortized to interest expense over the term of the First Lien Credit Agreement using the effective interest method. The unamortized costs at the time of extinguishment of the First Lien Credit Agreement were recognized as a loss on early extinguishment of debt in the consolidated statement operations and comprehensive income (loss) during the year ended December 31, 2021.

The First Lien Term Loan required (after giving effect to the First Lien Amendment) quarterly principal payments of approximately \$3.5 million until March 31, 2024, with the remaining outstanding principal amount required to be paid on the maturity date, April 27, 2024. The First Lien Term Loan required a prepayment of principal, subject to certain exceptions, in connection with the receipt of proceeds from certain asset sales, casualty events, and debt issuances by the Company, and up to 50% of annual excess cash flow, as defined in and as further set forth in the First Lien Credit Agreement. When a principal prepayment was required, the prepayment offset the future quarterly principal payments of the same amount. As of December 31, 2020, subject to the request of the lenders of the First Lien Term Loan, a principal prepayment of up to \$21.9 million was required. In April 2021, the Company made a principal prepayment of \$1.5 million to those lenders who made such a request.

Using a portion of the proceeds from the Business Combination, the Company made a principal prepayment of \$525.0 million on July 30, 2021. Subsequently, in September 2021, using the proceeds from the Term B Loan provided in the 2021 Credit Agreement and cash on hand, the Company fully repaid the remaining \$804.2 million of outstanding borrowings on the First Lien Term Loan.

The prepayments of outstanding borrowings under the First Lien Credit Agreement were determined to be debt extinguishments and the Company recognized a loss on early extinguishment of debt of \$15.2 million in the consolidated statement of operations and comprehensive income (loss) during the year ended December 31, 2021.

Amounts outstanding under the First Lien Credit Agreement bore interest at a variable rate of LIBOR, plus up to 3.00% per annum based upon the Company's leverage ratio, as defined in the First Lien Credit Agreement. A quarterly commitment fee of up to 0.50% was payable on the unused portion of the First Lien Revolvers.

During the years ended December 31, 2021 and 2020, the weighted-average interest rate on the outstanding borrowings under the First Lien Term Loan was 4.1% and 4.2%, respectively. The Company made interest payments of \$36.1 million and \$53.6 million during the years ended December 31, 2021 and 2020, respectively.

In March 2020, the Company borrowed \$65.0 million on its First Lien Revolvers. The borrowings were fully repaid in June 2020 and there were no outstanding borrowings on the First Lien Revolvers as of December 31, 2021.

Borrowings under the First Lien Credit Agreement were guaranteed by Cypress Holdings Intermediate Holdings II, Inc., and certain of its US subsidiaries by a perfected first priority lien on the stock of CCC Intelligent Solutions Inc. and substantially all of its assets, subject to various limitations and exceptions.

The First Lien Credit Agreement contained representations and warranties, and affirmative and negative covenants, that among other things, restricted, subject to certain exceptions, our ability to: incur additional indebtedness, incur liens, engage in mergers, consolidations, liquidations or dissolutions; pay dividends and distributions on, or redeem, repurchase or retire our capital stock; and make certain investments, acquisitions, loans, or advances.

In addition, the terms of the First Lien Credit Agreement included a financial covenant which required that, at the end of each fiscal quarter, if the aggregate amount of borrowings under the First Lien Revolvers over the prior four fiscal quarters exceeded 35% of the aggregate commitments under those revolving credit facilities, the Company's leverage ratio could not exceed 8.30 to 1.00. The Company was in compliance with its financial covenant as of the quarter ended March 31, 2020. Borrowings under the First Lien Revolvers did not exceed 35% of the aggregate commitments and the Company was not subject to the leverage test during the year ended December 31, 2021.

Second Lien Credit Agreement—In April 2017, the Company entered into the Second Lien Credit Agreement.

The Second Lien Credit Agreement consisted of a \$375.0 million term loan ("Second Lien Term Loan"). The Company received proceeds of \$372.2 million, net of discount of \$2.8 million. The discount was recorded to a contra debt account and was being amortized to interest expense over the life of the Second Lien Term Loan using the effective interest method. At the time of the 2020 Refinancing, the debt discount was written off to loss on early extinguishment of debt.

The Company incurred \$8.9 million in financing costs related to the Second Lien Credit Agreement. These costs were recorded to a contra debt account and were being amortized to interest expense over the term of the Second Lien Term Loan using the effective interest method. At the time of the 2020 Refinancing, there were \$6.6 million of unamortized financing costs which were written off to loss on early extinguishment of debt.

The Second Lien Term Loan required no principal payments and all outstanding principal was scheduled to be due upon maturity on April 25, 2025.

Amounts outstanding under the Second Lien Term Loan bore interest at a variable rate of LIBOR, plus 6.75%. During the year ended December 31, 2020 the weighted-average interest rate on the Second Lien Term Loan was 8.6%. The Company made interest payments of \$4.0 million during the year ended December 31, 2020.

Long-term debt as December 31, 2022 and 2021, consists of the following (in thousands):

	December 31,	
	2022	2021
Term B Loan	\$ 792,000	\$ 800,000
Term B Loan—discount	(1,669)	(1,926)
Term B Loan—deferred financing fees	(8,199)	(9,464)
Term B Loan—net of discount and fees	782,132	788,610
Less: Current portion	(8,000)	(8,000)
Total long-term debt—net of current portion	<u>\$ 774,132</u>	<u>\$ 780,610</u>

The table below is a roll forward of the Company's contra debt deferred financing fees and discount and deferred financing fees asset balances (in thousands):

	Deferred Financing Fees	Discount— Contra Debt
Balance—December 31, 2020	\$ 16,134	\$ 2,788
Fees written off of due to early extinguishment of debt	(12,982)	(2,258)
Payment of fees and discount	12,893	2,000
Amortization of fees and discount	(3,682)	(604)
Balance—December 31, 2021	12,363	1,926
Amortization of fees and discount	(1,878)	(257)
Balance—December 31, 2022	<u>\$ 10,485</u>	<u>\$ 1,669</u>

As of December 31, 2022 and 2021, the deferred financing fees asset balance included \$2.3 million and \$2.9 million in relation to the 2021 Revolving Credit Facility.

Scheduled Payments for Debt—Principal amounts due in each of the next five years and thereafter, as of December 31, 2022, are as follows (in thousands):

Years Ending December 31:	
2023	\$ 8,000
2024	8,000
2025	8,000
2026	8,000
2027	8,000
Thereafter	752,000
Total	<u>\$ 792,000</u>

Interest Rate Cap—In August 2022, the Company entered into two interest rate cap agreements to reduce its exposure to increases in interest rates applicable to its floating rate long-term debt. The fair value of the interest rate cap agreements was estimated using inputs that were

observable or that could be corroborated by observable market data and therefore, was classified within Level 2 of the fair value hierarchy as of December 31, 2022.

The Company did not designate its interest rate cap agreements as hedging instruments and records the changes in fair value within earnings. As of December 31, 2022, the interest rate cap agreements had a fair value of \$12.0 million, classified within other assets in the accompanying consolidated balance sheet.

Interest Rate Swaps—In June 2017, the Company entered into three floating to fixed interest rate swap agreements (“Swap Agreements”) to reduce its exposure to the variability from future cash flows resulting from interest rate risk related to its floating rate long-term debt. On September 21, 2021, the Company made an aggregate payment of \$10.0 million to extinguish the Swap Agreements that were scheduled to expire in June 2022.

17. LONG-TERM LICENSING AGREEMENT

During 2018, the Company entered into a licensing agreement with a third party to obtain a perpetual software license (“Licensing Agreement”) for a database structure, tools, and historical data used within the Company’s software. The Company has included the present value of the future payments required as a long-term licensing agreement within the accompanying consolidated balance sheets. The present value of the future payments was computed using an effective annual interest rate of 6.25%, and the Licensing Agreement requires the Company to make quarterly principal and interest installment payments of approximately \$1.2 million through December 2031.

The present value of the future cash flows upon execution of the agreement was \$45.6 million, which included an original discount of \$23.2 million. At December 31, 2022, the remaining liability, net of the discount was \$33.6 million, with \$2.9 million classified as current. At December 31, 2021, the remaining liability, net of the discount was \$36.3 million, with \$2.7 million classified as current.

The discount was recorded to a contra liability account and is being amortized to interest expense over the term of the agreement using the effective interest method. During the years ended December 31, 2022, 2021 and 2020, the Company recognized \$2.2 million, \$2.4 million and \$2.5 million, respectively, in interest expense related to the Licensing Agreement. The unamortized discount as of December 31, 2022 and 2021 was \$10.6 million and \$12.8 million, respectively.

Principal amounts due in each of the next five years and thereafter for the Licensing Agreement as of December 31, 2022, are as follows (in thousands):

Years Ending December 31:	
2023	\$ 2,876
2024	3,061
2025	3,257
2026	3,466
2027	3,689
Thereafter	17,279
Total	\$ 33,628

18. REDEEMABLE NON-CONTROLLING INTEREST

On March 12, 2020 (the “Close Date”), the Company closed a stock purchase agreement (the “Stock Purchase Agreement”) with a third-party investor (the “Investor”) for purchase by the Investor of Series A Preferred Stock in CCCIS Cayman Holdings Limited (“CCC Cayman”), the parent of the Company’s China operations. On the Close Date, CCC Cayman, a subsidiary of the Company, issued 1,818 shares of Series A Preferred Stock (the “Preferred Shares”) at \$7,854 per share to the Investor for net proceeds of \$14.2 million. As of the Close Date, on an as-converted basis, the Preferred Shares represented an aggregate 10.7% initial ownership interest of the issued and outstanding capital stock of CCC Cayman, or 9.1% on a fully-diluted basis if all shares reserved for issuance under the Company’s CCC Cayman employee incentive plan were issued and outstanding. As of December 31, 2022, on an as-converted basis, the Preferred Shares represent an aggregate 10.0% initial ownership interest of the issued and outstanding capital stock of CCC Cayman, or 8.6% on a fully-diluted basis.

The Preferred Shares are entitled to non-cumulative dividends at an annual rate of 8.0%, when and if declared.

At the option of the Investor, the Preferred Shares are convertible into ordinary shares of CCC Cayman, initially on a one-for-one basis but subject to potential adjustment, as defined by the Stock Purchase Agreement, at any time, or automatically upon the closing of an initial public offering.

The Preferred Shares are redeemable upon an actual or deemed redemption event as defined in the Stock Purchase Agreement or at the option of the Investor beginning on the five-year anniversary of the Close Date, if an actual or deemed redemption event has not yet occurred. The redemption price, as defined by the Stock Purchase Agreement, is equal to the original issue price of the Preferred Shares, plus 10.0% compound interest per annum on the Preferred Share issue price, plus any declared but unpaid dividends on the Preferred Shares.

The Preferred Shares are entitled to distributions upon the occurrence of a sale or liquidation of CCC Cayman representing an amount that is equal to the original issue price of the Preferred Shares, plus 10.0% compound interest per annum on the Preferred Share issue price, plus any declared but unpaid dividends.

The Preferred Shares do not participate in net income or losses.

As of December 31, 2022 and 2021, the Investor's ownership in CCC Cayman is classified in mezzanine equity as a redeemable non-controlling interest, because it is redeemable on an event that is not solely in the control of the Company. The Investor's non-controlling interest is not remeasured to fair value because it is currently not probable that the non-controlling interest will become redeemable. If the Investor's non-controlling interest becomes probable of being redeemable, the Company will be required to remeasure the non-controlling interest at fair value with changes in the carrying value recognized in additional paid-in capital.

At December 31, 2022 and 2021, the carrying value of the redeemable non-controlling interest was \$14.2 million.

19. CAPITAL STOCK

The consolidated statements of mezzanine equity and stockholders' equity reflect the Business Combination as of the Closing Date (see Note 3). As CCCIS was determined to be the accounting acquirer in the Business Combination, all periods prior to the Closing Date reflect the balances and activity of CCCIS. The balances, share activity and per share amounts prior to the Closing Date were retroactively adjusted, where applicable, using the Exchange Ratio of the Business Combination.

Preferred Stock—The Company is authorized to issue up to 100,000,000 shares of undesignated preferred stock with a par value of \$0.0001 per share with such designations, voting and other rights and preferences as may be determined from time to time by the Company's board of directors. As of December 31, 2022, there were no shares of preferred stock issued or outstanding.

Common Stock—The Company is authorized to issue up to 5,000,000,000 shares of common stock with a par value of \$0.0001 per share. Each holder of common stock is entitled to one (1) vote for each share of common stock held of record by such holder on all matters voted upon by the stockholders, subject to the restrictions set out in the Certificate of Incorporation. Holders of common stock are entitled to receive any dividends as may be declared from time to time by the board of directors. Upon a liquidation event, subject to the rights of the holders of any Preferred Stock issued and outstanding at such time, any distribution shall be made on a pro rata basis to the common stockholders.

There were 622,072,905 and 609,768,296 shares of common stock issued and outstanding as of December 31, 2022 and 2021, respectively.

Capital Stock Activity Prior to the Business Combination

Dividends—In July 2021, the board of directors of CCCIS declared a cash dividend on common stock. The aggregate cash dividend of \$134.6 million was paid on August 3, 2021.

In March 2021, the board of directors of CCCIS declared a cash dividend on common stock. The aggregate cash dividend of \$134.5 million was paid on March 17, 2021.

In connection with the dividends paid in March 2021 and August 2021, certain CCCIS option holders received a strike price reduction of \$66.40 per option to compensate for a reduction in the fair value of the underlying shares. The strike price reduction did not result in any incremental fair value and thus no additional stock-based compensation expense was recognized and the aggregate payment to the option holders of \$9.0 million was recorded as a deemed distribution.

Share Issuances—In February 2021, CCCIS issued 883,729 shares of common stock to an executive and recorded stock-based compensation expense of \$8.0 million, equal to the fair value of the common shares at the time of issuance.

In January 2021, CCCIS issued 110,679 shares of common stock to a board member for aggregate cash proceeds of \$1.0 million, equal to the fair value of the common shares at the time of issuance.

In February 2020, CCCIS issued 340,551 shares of common stock to an executive and recorded stock-based compensation expense of \$1.6 million, equal to the fair value of the common stock at the time of issuance.

20. EMPLOYEE BENEFIT PLANS

The Company sponsors a tax-qualified defined contribution savings and investment plan, CCC 401(k) Retirement Savings and Investment Plan (the "Savings Plan"). Participation in the Savings Plan is voluntary with substantially all domestic employees eligible to participate. Expenses related to the Savings Plan consist primarily of the Company's contributions that are based on percentages of employees' contributions. The defined contribution expense for the years ended December 31, 2022, 2021 and 2020 was \$6.1 million, \$5.3 million and \$4.6 million, respectively.

21. STOCK INCENTIVE PLANS

In connection with the Closing of the Business Combination, the CCC Intelligent Solutions Holdings Inc. 2021 Incentive Equity Plan (the "2021 Plan") was adopted and approved by the Company's board of directors and stockholders.

The purpose of the 2021 Plan is to enable the Company to attract, retain, and motivate employees, consultants, and independent members of the board of directors of the Company and its subsidiaries by allowing them to become owners of common stock enabling them to benefit directly from the growth, development, and financial successes of the Company.

Prior to the Business Combination, the Company maintained its 2017 Stock Option Plan (the "2017 Plan").

Upon the adoption and approval of the 2021 Plan, the 2017 Plan was terminated and each outstanding vested or unvested option, as required under the 2017 Plan, was converted to the 2021 Plan, multiplied by the Exchange Ratio, with the same key terms and vesting requirements. Additionally, the Company maintained a Phantom Stock Plan (the "Phantom Plan"), which provided for the issuance of phantom shares of

CCCIS's common stock ("Phantom Shares") to eligible employees under the 2017 Plan. All stock-based award activity prior to the closing of the Business Combination on July 30, 2021 has been retroactively restated to reflect the Exchange Ratio.

Awards granted under the 2017 Plan and the Phantom Plan either had time-based vesting or performance-based vesting with a market condition. Options expire on the tenth anniversary of the grant date. Awards granted under the Phantom Plan were settled in cash and thus accounted for as liability awards.

During 2021, the board of directors of CCCIS approved a modification that resulted in vesting of the performance-based awards with a market condition and the Phantom Shares upon Closing of the Business Combination. At the time of modification, the Company estimated a new fair value of the modified awards. As such, at the time of such modification, the Company recognized \$203.9 million of stock-based compensation based on the fair value of the performance-based awards with a market condition and \$6.0 million of stock-based compensation based on the fair value of the Phantom Shares.

The total number of shares of common stock that will be reserved and that may be issued under the 2021 Plan will automatically increase on the first day of each fiscal year, beginning with fiscal year 2022, by a number of shares equal to 5.0% of the total number of shares of common stock outstanding on the last day of the prior fiscal year or such lesser amount as determined by the board of directors. For the year ended December 31, 2022, the board of directors elected not to increase the number of shares of common stock reserved under the 2021 Plan.

The following table summarizes the shares of common stock reserved for future issuance under the 2021 Plan as of December 31, 2022 and 2021:

	December 31,	
	2022	2021
Stock options outstanding	45,249,260	55,644,495
Restricted stock units outstanding	31,288,688	18,558,211
Restricted stock units available for future grant	57,946,089	72,175,815
Reserved for ESPP	5,622,825	6,031,704
Common stock reserved for future issuance	<u>140,106,862</u>	<u>152,410,225</u>

Restricted Stock Units—RSUs are convertible into shares of the Company's common stock upon vesting.

The grant date fair value of each RSU with time-based vesting and performance-based vesting is determined using the fair value of the underlying common stock on the date of grant. The grant date fair value of each performance-based RSU with a market condition is estimated on the date of grant using the Monte Carlo simulation model.

Stock-based compensation for RSUs with time-based vesting is recognized on a straight-line basis over the requisite service period for the number of RSUs that are probable of vesting. Stock-based compensation for performance-based RSUs or performance-based RSUs with a market condition is recognized on a straight-line basis over the performance period based on the number of RSUs that are probable of vesting.

The table below summarizes the RSU activity for the years ended December 31, 2022 and 2021:

	Shares	Weighted-Average Fair Value
Non-vested RSUs—December 31, 2020	—	\$ —
Granted	18,677,411	10.74
Canceled	(119,200)	11.59
Non-vested RSUs—December 31, 2021	18,558,211	10.74
Granted	16,426,878	10.07
Vested	(2,324,324)	11.22
Canceled	(1,372,077)	10.93
Non-vested RSUs—December 31, 2022	<u>31,288,688</u>	\$ 10.34

During the year ended December 31, 2022, the Company granted 16,426,878 RSUs, of which 14,859,033 have time-based vesting requirements, 783,949 have performance-based vesting requirements and 783,896 have performance-based with a market condition vesting requirements.

During the year ended December 31, 2021, the Company granted 18,677,411 RSUs, of which 7,730,019 have time-based vesting requirements, 5,473,701 have performance-based vesting requirements and 5,473,691 have performance-based with a market condition vesting requirements.

The valuation of the performance-based RSUs with a market condition granted during the years ended December 31, 2022 and 2021 was determined using a Monte Carlo Simulation model using the following assumptions:

	2022	2021
Expected term (in years)	2.8	2.2
Expected volatility	35%	35%
Expected dividend yield	0%	0%
Risk-free interest rate	2.28%	0.51%

The key assumptions used in the Company's fair value estimates include the following:

Expected Term—The expected term represents the period that the stock-based awards are expected to be outstanding. The Company uses the simplified method to determine the expected term for its option grants. The simplified method calculates the expected term as the average of the time-to-vesting and the contractual life of the stock options. The Company uses the simplified method to determine its expected term because of its limited history of stock option exercise activity.

Expected Volatility—The Company has limited trading history of its common stock and the expected volatility was estimated based on the average volatility for comparable publicly traded companies over a period equal to the expected term of the stock option grants.

Expected Dividend—Historically, the Company has not paid regular dividends on its common stock and has no plans to pay dividends on common stock on a regular basis. The Company does not have a dividend policy. Therefore, the Company used an expected dividend yield of zero.

Risk-Free Interest Rate—The risk-free interest rate is based on the US Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of awards.

The Company used a pre-vesting forfeiture rate to estimate the number of options that are expected to vest that was based on the Company's historical turnover rate.

Stock Options—The table below summarizes the option activity for the years ended December 31, 2022, 2021 and 2020 :

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (in years)	Aggregate Intrinsic Value (in thousands)
Options outstanding—December 31, 2019	52,720,652	\$ 2.91	7.7	\$ 88,271
Granted	4,210,228	4.58		
Exercised	(476,090)	2.85		
Forfeited and canceled	(884,751)	3.02		
Options outstanding—December 31, 2020	55,570,039	3.03	6.9	337,358
Granted	2,822,484	8.58		
Exercised	(1,924,063)	2.70		
Forfeited and canceled	(823,965)	3.66		
Options outstanding—December 31, 2021	55,644,495	2.95	6.0	469,591
Exercised	(10,081,164)	2.74		
Forfeited and canceled	(314,071)	4.46		
Options outstanding—December 31, 2022	45,249,260	\$ 2.99	4.9	\$ 258,470
Options exercisable—December 31, 2022	41,637,338	\$ 2.74	4.7	\$ 248,307
Options vested and expected to vest—December 31, 2022	45,042,410	\$ 2.97	4.9	\$ 257,911

The weighted-average grant-date fair value for time-based options granted during the years ended December 31, 2021 and 2020 was \$3.67 and \$1.83, respectively. The weighted-average grant-date fair value for performance-based options with a market condition granted during the years ended December 31, 2022 and 2021 was \$0.88.

The fair value of the options that vested during the year ended December 31, 2022 was \$8.8 million.

During the year ended December 31, 2022, the Company issued 10,074,354 shares of common stock upon exercise of 10,081,164 stock options. As part of cashless exercises, 6,810 shares were applied to the exercise price and tax obligations of the option holders.

During the year ended December 31, 2021, the Company issued 1,922,019 shares of common stock upon exercise of 1,924,063 stock options. As part of cashless exercises, 2,044 shares were applied to the exercise price and tax obligations of the option holders.

During the year ended December 31, 2021, prior to the Business Combination, the Company granted 2,822,484 stock options, of which 2,754,374 have time-based vesting and 68,110 have performance-based with a market condition vesting. The exercise price of all stock options granted during the year ended December 31, 2021 was equal to the fair value of the underlying shares at the grant date.

During the year ended December 31, 2020, the Company issued 330,675 shares of common stock upon exercise of 476,090 stock options. As part of cashless exercises, 145,415 shares were applied to the exercise price and tax obligations of the option holders.

The valuation of time-based stock options granted during the year ended December 31, 2021 and 2020 was determined using the Black-Scholes option valuation model using the following assumptions:

	2021	2020
Expected term (in years)	6.5	6.5
Expected volatility	40%	40%
Expected dividend yield	0%	0%
Risk-free interest rate	0.62 - 0.67%	0.39 - 0.45%

For performance-based options with a market condition, the market condition is required to be considered when calculating the grant date fair value. In order to reflect the substantive characteristics of the performance-based options with a market condition, a Monte Carlo simulation valuation model was used to calculate the grant date fair value of such stock options. Monte Carlo approaches are a class of computational

algorithms that rely on repeated random sampling to compute their results. This approach allows the calculation of the fair value of such stock options based on a number of possible scenarios. Stock-based compensation expense for the performance-based options with a market condition is not recognized until the performance condition is probable of occurring. The valuation of the performance-based options with a market condition granted during the years ended December 31, 2021 and 2020 was determined through the Monte Carlo simulation model using the following assumptions:

	2021	2020
Expected term (in years)	5.5	5.5
Expected volatility	33%	33%
Expected dividend yield	0%	0%
Risk-free interest rate	0.44%	0.44%

Cayman Equity Incentive Plan—During the year ended December 31, 2022, the Company adopted the CCCIS Cayman Holdings Employees Equity Incentive Plans (“Cayman Incentive Plans”), which provide for the issuance of stock option awards in CCC Cayman (“Cayman Awards”) to eligible employees of the Company’s China subsidiaries.

Pursuant to the Cayman Incentive Plans, the number of Cayman Shares that may be subject to stock incentives is not to exceed 3,000,000 in the aggregate.

Awards under the Cayman Incentive Plans are settled in cash and thus accounted for as liability awards. Awards granted under the Cayman Incentive Plans have time-based vesting and expire on the tenth anniversary of the grant date.

The Company records stock-based compensation expense on a straight-line basis over the vesting period. Time-based awards generally vest ratably over a four-year period based on continued service. Vesting of the time-based awards can be accelerated in certain circumstances, such as an initial public offering, as defined in the Cayman Incentive Plans.

During the year ended December 31, 2022, the Company granted 1,303,000 stock options under the Cayman Incentive Plans. The exercise price of the options granted is equal to the fair value of the underlying shares at the grant date. As of December 31, 2022, 1,303,000 are outstanding, none of which are exercisable.

The Company is recognizing stock-based compensation expense related to the options granted during the year ended December 2022 based on the Black-Scholes option pricing model using the following assumptions:

Expected term (in years)	6.25
Expected volatility	40%
Expected dividend yield	0%
Risk-free interest rate	3.5%

Employee Stock Purchase Plan—In October 2021, the Company’s Board of Directors adopted the ESPP. The ESPP is intended to qualify as an employee stock purchase plan under Section 423 of the Internal Revenue Code of 1986, as amended. Under the ESPP, employee purchases occur at the end of discrete offering periods. The first offering period began on January 1, 2022 and ended on June 30, 2022. Subsequent six-month offering periods begin on July 1 and January 1 (or such other date determined by the board of directors).

Under the ESPP, eligible employees can acquire shares of the Company’s common stock by accumulating funds through payroll deductions. Employees generally are eligible to participate in the ESPP if they are a U.S. employee and are employed for at least 20 hours per week. The Company may impose additional restrictions on eligibility. Eligible employees can select a rate of payroll deduction between 1% and 15% of their compensation. The purchase price for shares of common stock purchased under the ESPP is 85% of the lesser of the fair market value of the Company’s common stock on (i) the first day of the applicable offering period or (ii) the last day of the purchase period in the applicable offering period. An employee’s participation automatically ends upon termination of employment for any reason.

Shares of common stock reserved for sale under the ESPP were 5,622,825 and 6,031,704 as of December 31, 2022, and 2021, respectively. The aggregate number of shares reserved for sale under the ESPP increases on January 1 by the lesser of 1% of the total numbers of shares outstanding or a lesser amount as determined by the Board of Directors. For the year ended December 31, 2022, the board of directors elected not to increase the number of shares of common stock reserved under the ESPP.

As of December 31, 2022, 408,879 shares had been sold under the ESPP.

The fair value of ESPP purchase rights sold during the year ended December 31, 2022 was estimated using the Black-Scholes option pricing model with the following assumptions:

Expected term (in years)	0.5
Expected volatility	47%
Expected dividend yield	0%
Risk-free interest rate	0.2%

Company Earnout Shares—Pursuant to the Business Combination Agreement, CCCIS shareholders and option holders, subject to continued employment, have the right to receive up to an additional 13.5 million shares and 1.5 million shares of common stock, respectively, if, before the tenth anniversary of the Closing, (a) the share price has been greater than or equal to \$15.00 per share for any twenty trading days within any thirty consecutive trading day period beginning after Closing, or (b) there is a change in control, as defined in the Business Combination Agreement.

The fair value of the Company Earnout Shares was estimated on the date of the grant, using the Monte Carlo simulation method. Compensation expense on the shares granted to option holders was recorded ratably over the implied service period of five months beginning on July 30, 2021.

During the year ended December 31, 2021, the Company recognized \$19.5 million of stock-based compensation expense related to the Company Earnout Shares granted to the CCCIS option holders.

Phantom Stock—Phantom Shares vested under the same time-based or performance-based with a market condition as the stock options granted under the 2017 Plan. The valuation of Phantom Shares was measured based on the fair value per share of the Company’s common stock.

Upon consummation of the Business Combination on July 30, 2021, all outstanding Phantom Shares vested and were subsequently settled in cash for \$10.2 million.

During the years ended December 31, 2021 and 2020, the Company recognized stock-based compensation expense of \$7.0 million and \$2.2 million, respectively, related to the Phantom Shares.

Stock-Based Compensation—Stock-based compensation expense has been recorded in the accompanying consolidated statements of operations and comprehensive income (loss) as follows for the years ended December 31, 2022, 2021 and 2020 (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Cost of revenues	\$ 5,812	\$ 13,644	\$ 494
Research and development	19,536	40,681	1,174
Sales and marketing	25,309	65,045	2,024
General and administrative	58,840	142,625	7,644
Total stock-based compensation expense	<u>\$ 109,497</u>	<u>\$ 261,995</u>	<u>\$ 11,336</u>

As of December 31, 2022, there was \$168.5 million of unrecognized stock compensation expense related to non-vested time-based awards which is expected to be recognized over a weighted-average period of 2.8 years. As of December 31, 2022, there was \$71.2 million of unrecognized stock-based compensation expense related to non-vested performance-based awards, which is expected to be recognized over a weighted-average period of 1.4 years.

22. WARRANTS

Upon consummation of the Business Combination (see Note 3), the Company assumed the outstanding Public Warrants and Private Warrants issued by Dragonair.

Public Warrants were only able to be exercised for a whole number of shares of the Company’s common stock. All Public Warrants had an exercise price of \$11.50 per share, subject to adjustment, beginning on August 29, 2021, and were to expire on July 30, 2026 or earlier upon redemption or liquidation.

On November 29, 2021, the Company announced that it had elected to redeem all of the outstanding Public Warrants on December 29, 2021. Each Public Warrant not exercised before 5:00 p.m. Eastern Daylight Time on December 29, 2021 was redeemed by the Company for \$0.10 and the Public Warrants subsequently ceased trading.

Of the 17,299,983 Public Warrants that were outstanding as of the Closing of the Business Combination, 10,638 warrants were exercised for cash proceeds of \$0.1 million and 15,876,341 were exercised on a cashless basis in exchange for an aggregate of 4,826,339 shares of common stock. The Company paid \$0.1 million to redeem the remaining 1,413,004 unexercised Public Warrants. As of December 31, 2021, there were no Public Warrants outstanding.

The Private Warrants are identical to the Public Warrants underlying the shares sold in Dragonair’s initial public offering. Additionally, the Private Warrants are exercisable on a cashless basis 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 Public Warrants.

Private Warrants may only be exercised for a whole number of shares of the Company’s common stock. Each whole Private Warrant entitles the registered holder to purchase one share of the Company’s common stock. All warrants have an exercise price of \$11.50 per share, subject to adjustment, beginning on August 29, 2021, and will expire on July 30, 2026 or earlier upon redemption or liquidation.

There were no exercises or redemptions of the Private Warrants during the year ended December 31, 2022 and 2021. As of December 31, 2022 and 2021, the Company had 17,800,000 Private Warrants outstanding.

The Company recognized income (expense) of \$26.1 million and (\$64.5) million as a change in fair value of warrant liabilities in the consolidated statements of operations and comprehensive income (loss) for year ended December 31, 2022 and 2021, respectively. As of December 31, 2022 and 2021 the Company’s warrant liability was \$36.4 and \$62.5 million, respectively.

23. COMMITMENTS

Purchase Obligations—The Company has long-term agreements with suppliers and other parties related to licensing data used in its solutions and services, outsourced data center, disaster recovery, and software as a service that expire at various dates through 2031. Under

the terms of these agreements with suppliers, the Company has future minimum obligations as of December 31, 2022 as follows (in thousands):

Years Ending December 31:		
2023	\$	25,510
2024		18,426
2025		14,099
2026		12,456
2027		11,451
Thereafter		39,600
Total	\$	<u>121,542</u>

Guarantees—The Company’s services and solutions are typically warranted to perform in a manner consistent with general industry standards that are reasonably applicable and substantially in accordance with the Company’s services and solutions documentation under normal use and circumstances. The Company’s services and solutions are generally warranted to be performed in a professional manner and to materially conform to the specifications set forth in the related customer contract. The Company’s arrangements also include certain provisions for indemnifying customers against liabilities if its services and solutions infringe a third party’s intellectual property rights.

To date, the Company has not incurred any material costs as a result of such indemnifications or commitments and has not accrued any liabilities related to such obligations in the accompanying consolidated financial statements.

Employment Agreements—The Company is a party to employment agreements with key employees that provide for compensation and certain other benefits. These agreements also provide for severance payments and bonus under certain circumstances.

24. LEGAL PROCEEDINGS AND CONTINGENCIES

In the ordinary course of business, the Company is from time to time, involved in various pending or threatened legal actions. The litigation process is inherently uncertain, and it is possible that the resolution of such matters might have a material adverse effect upon the Company’s consolidated financial condition and/or results of operations. The Company’s management believes, based on current information, matters currently pending or threatened are not expected to have a material adverse effect on the Company’s consolidated financial position or results of operations.

25. RELATED PARTIES

The Company has engaged in transactions within the ordinary course of business with entities affiliated with its principal equity owners.

The following table summarizes revenues and expenses with entities affiliated with one of its principal equity owners for the years ended December 31, 2022, 2021 and 2020 (in thousands):

	<u>2022</u>	<u>December 31,</u>	
		<u>2021</u>	<u>2020</u>
Revenues			
Credit card processing	\$ 811	\$ 399	*
Expenses			
Employee health insurance benefits	3,166	3,228	*
Human resources support services	237	242	246
Board of director fees for services, including related travel and out-of-pocket reimbursements	131	204	186
Sales tax processing and license fees for tax information	561	286	*

The following table summarizes amounts receivable and payable to entities affiliated with one of its principal equity owners as of December 31, 2022 and 2021 (in thousands):

	<u>December 31,</u>	
	<u>2022</u>	<u>2021</u>
Receivables		
Credit card processing		*
Payables		
Employee health insurance benefits	\$ 501	\$ 232
Human resources support services		*
Sales tax processing and license fees for tax information		*
Board of director fees for services, including related travel and out-of-pocket reimbursements		*

*Not significant

As of October 2022, the entity which provides sales tax processing and license fees for tax information is no longer affiliated with the principal equity owner and is no longer a related party.

During the year ended December 31, 2021, the Company completed a strategic investment in a limited partnership (the “Investee”) in which the Company invested \$10.0 million, plus \$0.2 million of related fees and expenses, for an approximate 7% interest (see Note 13). The limited

partnership is affiliated with one of the Company's principal equity owners. The limited partnership recognized no income or loss during the years ended December 31, 2022 and 2021.

During the year ended December 31, 2021 the Company issued 110,679 shares of common stock to a board member for aggregate cash proceeds of \$1.0 million, equal to the fair value of the shares at the time of issuance.

26. NET INCOME (LOSS) PER SHARE

The Company calculates basic earnings per share by dividing the net income (loss) by the weighted average number of shares of common stock outstanding for the period. The diluted earnings per share is computed by assuming the exercise, settlement and vesting of all potential dilutive common stock equivalents outstanding for the period using the treasury stock method. We exclude common stock equivalent shares from the calculation if their effect is anti-dilutive. In a period where the Company is in a net loss position, the diluted loss per share is calculated using the basic share count. The 8,625,000 Sponsor Vesting Shares that are issued and outstanding at December 31, 2022 and 2021 are excluded from the weighted average number of shares of common stock outstanding until the vesting requirement is met and the restriction is removed.

The following table sets forth a reconciliation of the numerator and denominator used to compute basic earnings per share of common stock (in thousands, except for share and per share data).

	Year Ended December 31,		
	2022	2021	2020
Numerator			
Net income (loss)	\$ 38,406	\$ (248,919)	\$ (16,876)
Denominator			
Weighted average shares of common stock - basic	607,760,886	543,558,222	504,115,839
Dilutive effect of stock-based awards	35,080,710	—	—
Weighted average shares of common stock - diluted	642,841,596	543,558,222	504,115,839
Net income (loss) per share:			
Basic	\$ 0.06	\$ (0.46)	\$ (0.03)
Diluted	\$ 0.06	\$ (0.46)	\$ (0.03)

Common stock equivalent shares of 8,108,217, 32,061,021, and 15,632,980 were excluded from the computation of diluted per share amounts for the years ended December 31, 2022, 2021 and 2020, respectively, because their effect was anti-dilutive.

27. SEGMENT INFORMATION AND INFORMATION ABOUT GEOGRAPHIC AREAS

The Company operates in one operating segment. The chief operating decision maker for the Company is the chief executive officer. The chief executive officer reviews financial information presented on a consolidated basis, accompanied by information about revenue by type of service and geographic region, for purposes of allocating resources and evaluating financial performance.

Revenues by geographic area presented based upon the location of the customer are as follows (in thousands):

	Year Ended December 31,		
	2022	2021	2020
United States	\$ 774,697	\$ 680,609	\$ 626,101
China	7,751	7,679	6,962
Total revenues	<u>\$ 782,448</u>	<u>\$ 688,288</u>	<u>\$ 633,063</u>

Software, equipment and property, net by geographic area are as follows (in thousands):

	December 31,	
	2022	2021
United States	\$ 146,398	\$ 135,784
China	45	61
Total software, equipment and property-net	<u>\$ 146,443</u>	<u>\$ 135,845</u>

28. DIVESTITURE

On December 31, 2020, the Company closed an Asset Purchase Agreement with a third-party buyer (the "Buyer") to transfer its obligation of providing certain services and related assets and liabilities to the Buyer for total consideration of \$3.8 million, including \$1.8 million of contingent consideration.

The divestiture did not constitute a discontinued operation or the sale of a business.

The Company recognized a gain on disposition of \$3.8 million during the year ended December 31, 2020 within general and administrative expenses in the consolidated statement of operations and comprehensive income (loss). During the year ended December 31, 2021, the Company reassessed the estimated contingent consideration and recognized a gain of \$0.6 million.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosures.

None.

Item 9A. Controls and Procedures.***Evaluation of Disclosure Controls and Procedures***

Our management, with the participation of our CEO and CFO, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of the end of the period covered by this Annual Report on Form 10-K. Based on such evaluation, our CEO and CFO have concluded that as of December 31, 2022, our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the SEC, and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15(d)-15(f) under the Exchange Act). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the guidelines set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control - Integrated Framework (2013). Based on the evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2022. Our management's assessment of the effectiveness of our internal control over financial reporting as of December 31, 2022, has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(d) and 15d-15(d) under the Exchange Act) during the three months ended December 31, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that the Company's disclosure controls and procedures or the Company's internal controls over financial reporting will prevent all errors and all fraud. 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, if any, within the Company have been detected.

Item 9B. Other Information

None.

Item 9C. Disclosures Regarding Foreign Jurisdictions that Prevent Inspection

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 in our Proxy Statement to be filed in connection with our 2023 Annual Meeting of Stockholders within 120 days after the end of the fiscal year ended December 31, 2022.

Item 11. Executive Compensation.

The information required by this item is incorporated by reference to the relevant information in our Proxy Statement to be filed in connection with our 2023 Annual Meeting of Stockholders within 120 days after the end of the fiscal year ended December 31, 2022.

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 in our Proxy Statement to be filed in connection with our 2023 Annual Meeting of Stockholders within 120 days after the end of the fiscal year ended December 31, 2022.

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

The information required by this item is incorporated by reference to the relevant information in our Proxy Statement to be filed in connection with our 2023 Annual Meeting of Stockholders within 120 days after the end of the fiscal year ended December 31, 2022.

Item 14. Principal Accounting Fees and Services.

The information required by this item is incorporated by reference from our Proxy Statement to be filed in connection with our 2023 Annual Meeting of Stockholders within 120 days after the end of the fiscal year ended December 31, 2022.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) The following documents are filed as part of this Annual Report on Form 10-K:

(1) Consolidated Financial Statements

The consolidated financial statements are filed under Part II, Item 8 of this Annual Report on Form 10-K.

(2) Financial Statement Schedules

All financial statement schedules are omitted because the information called for is not required or is shown either in the consolidated financial statements or in the notes thereto.

(3) Exhibits

The exhibits listed in the following Exhibit Index are filed or incorporated by reference as part of this Annual Report on Form 10-K.

EXHIBIT INDEX

Exhibit Number	Description
2.1*	<u>Business Combination Agreement, dated as of February 2, 2021, by and among Dragoneer Growth Opportunities Corp., Chariot Opportunity Merger Sub, Inc., and Cypress Holdings, Inc. (incorporated by reference to Annex A to the Proxy Statement/Prospectus).</u>
2.2	<u>Amendment No. 1 to the Business Combination Agreement, dated as of April 22, 2020, by and among Dragoneer Growth Opportunities Corp., Chariot Opportunity Merger Sub, Inc., and Cypress Holdings, Inc. (incorporated by reference to Annex AA to the Proxy Statement/Prospectus).</u>
2.3	<u>Amendment No. 2 to the Business Combination Agreement, dated July 6, 2021, by and among Dragoneer Growth Opportunities Corp., Chariot Opportunity Merger Sub, Inc., and Cypress Holdings, Inc. (incorporated by reference to Annex AAA to the Proxy Statement/Prospectus).</u>
3.1	<u>Certificate of Incorporation of CCC Intelligent Solutions Holdings Inc. (incorporated by reference to Exhibit 3.2 of the Current Report on Form 8-K filed by the Registrant on August 5, 2021).</u>
3.2	<u>Bylaws of CCC Intelligent Solutions Holdings Inc. (incorporated by reference to Exhibit 3.3 of the Current Report on Form 8-K filed by the Registrant on August 5, 2021).</u>
4.1	<u>Description of Securities (incorporated by reference to Exhibit 4.1 of the Annual Report on Form 10-K filed by the Registrant on March 1, 2022).</u>
4.2	<u>Specimen Warrant Certificate (incorporated by reference to Exhibit 4.3 to the Registration Statement on Form S-1 filed by the Registrant on August 11, 2020).</u>
4.3	<u>Warrant Agreement between Continental Stock Transfer & Trust Company and Dragoneer Growth Opportunities Corp., dated August 13, 2020 (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K filed by the Registrant on August 19, 2020).</u>
10.1	<u>Shareholder Rights Agreement (incorporated by reference to Annex I to the Proxy Statement/Prospectus).</u>
10.2†	<u>CCC 2021 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 of the Registration Statement on Form S-8 filed by the Registrant on October 14, 2021).</u>
10.3	<u>Credit Agreement, dated as of September 21, 2021, by and among CCC Intelligent Solutions Inc., CCC, Bank of America, N.A., as Administrative Agent, Collateral Agent and Swingline Lender, and each lender and issuing bank from time to time party thereto (incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K filed by the Registrant on September 24, 2021).</u>
10.4†	<u>CCC 2021 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.2 of the Registration Statement on Form S-8 filed by the Registrant on October 14, 2021).</u>
10.5**†	<u>Employment Agreement, dated April 27, 2017, by and between CCC Information Services Inc. (as successor by merger to Cypress Intermediate Holdings II, Inc.) and Githesh Ramamurthy (incorporated by reference to Exhibit 10.13 to the Registration Statement on Form S-4 filed by the Registrant on March 29, 2021).</u>
10.6†	<u>Employment Agreement, dated April 27, 2017, by and between CCC Information Services Inc. (as successor by merger to Cypress Intermediate Holdings III, Inc.) and Barrett J. Callaghan (incorporated by reference to Exhibit 10.14 to the Registration Statement on Form S-4 filed by the Registrant on March 29, 2021).</u>
10.7†	<u>Second Amended and Restated Employment Agreement, dated April 25, 2022, by and between CCC Intelligent Solutions Holdings Inc. and Barrett J. Callaghan (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the Registrant on April 29, 2022).</u>

10.8†	<u>Employment Agreement, dated January 8, 2020, by and between CCC Information Services Inc. and Brian Herb (incorporated by reference to Exhibit 10.15 to the Registration Statement on Form S-4 filed by the Registrant on March 29, 2021).</u>
10.9	<u>Form of Indemnification Agreement (incorporated by reference to Exhibit 10.16 of the Current Report on Form 8-K filed by the Registrant on August 5, 2021).</u>
21.1	<u>Subsidiaries of the Registrant.</u>
23.1	<u>Consent of Deloitte & Touche LLP.</u>
31.1	<u>Certification of Chief Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
31.2	<u>Certification of Chief Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.</u>
32.1***	<u>Certification of Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
32.2***	<u>Certification of Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
101.INS	Inline XBRL Instance Document
101.SCH	Inline XBRL Taxonomy Extension Schema Document
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Schedules and exhibits to this Exhibit omitted pursuant to Regulation S-K Item 601(b)(2). The Registrant agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request.

** Schedules and exhibits to this Exhibit omitted pursuant to Regulation S-K Item 601(b)(10). The Registrant agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request.

*** Furnished herewith as Exhibits 32.1 and 32.2.

† Management contract or compensatory plan or arrangement.

Item 16. Form 10-K Summary.

None.

DESCRIPTION OF SECURITIES

The following summary of certain provisions of the Company's securities does not purport to be complete and is subject to the Certificate of Incorporation, the Bylaws and the provisions of applicable law.

Authorized Capitalization**General**

The total amount of our authorized share capital consists of 5,000,000,000 shares of common stock and 100,000,000 shares of preferred stock. The following summary describes all material provisions of our capital stock.

Common Stock

Voting rights. Each holder of common stock is entitled to one (1) vote for each share of common stock held of record by such holder on all matters voted upon by our stockholders, provided, however, that, except as otherwise required in the Certificate of Incorporation or by applicable law, the holders of common stock are not entitled to vote on any amendment to the Certificate of Incorporation that alters or changes the powers, preferences, rights or other terms of one or more outstanding series of preferred stock if the holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to the Certificate of Incorporation (including any certificate of designation relating to any series of preferred stock) or pursuant to the Delaware General Corporation Law (the "DGCL").

Dividend rights. Subject to any other provisions of the Certificate of Incorporation, as it may be amended from time to time, holders of common stock are entitled to receive such dividends and other distributions in cash, stock or property of the Company when, as and if declared thereon by the board, in its discretion, from time to time out of assets or funds of the Company legally available therefor.

Rights upon liquidation. Subject to the rights of holders of preferred stock, in the event of any liquidation, dissolution or winding up of our affairs, whether voluntary or involuntary, after payment or provision for payment of our debts and any other payments required by law and amounts payable upon shares of preferred stock ranking senior to the shares of common stock upon such dissolution, liquidation or winding up, if any, the Company's remaining net assets will be distributed to the holders of common stock and the holders of any other class or series of capital stock ranking equally with the common stock upon such dissolution, liquidation or winding up, equally on a per share basis.

Other rights. No holder of common stock is entitled to preemptive or subscription rights contained in the Certificate of Incorporation or in the Bylaws. There are no redemption or sinking fund provisions applicable to the common stock. The rights, preferences and privileges of holders of the common stock will be subject to those of the holders of the preferred stock that the Company may issue in the future.

Preferred Stock

The board has the authority to issue shares of preferred stock from time to time on terms it may determine, to divide shares of preferred stock into one or more series and to fix the designations, preferences, privileges, and restrictions of preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preference, sinking fund terms and the number of shares constituting any series or the designation of any series to the fullest extent permitted by the DGCL. The issuance of preferred stock could have the effect of decreasing the trading price of common stock, restricting dividends on the capital stock of the Company, diluting the voting power of the common stock, impairing the liquidation rights of the capital stock of the Company, or delaying or preventing a change in control of the Company.

Election of Directors and Vacancies

Subject to the rights of the holders of any series of preferred stock to elect additional directors under specified circumstances and the terms and conditions of the Amended and Restated Registration and Shareholder Rights Agreement, the number of directors of the board shall be fixed solely and exclusively by resolution duly adopted from time to time by the board, but initially consists of nine (9) directors, which are divided into three (3) classes, designated Class I, II and III, respectively, with Class I consisting of three (3) directors, Class II consisting of three (3) directors and Class III consisting of three (3) directors.

Under the Bylaws, at all meetings of stockholders called for the election of directors, a plurality of the votes properly cast will be sufficient to elect such directors to the board.

Except as the DGCL or the Amended and Restated Registration and Shareholder Rights Agreement may otherwise require and subject to the rights, if any, of the holders of any series of preferred stock, in the interim between annual meetings of stockholders or special meetings of stockholders called for the election of directors and/or the removal of one or more directors and the filling of any vacancy in that connection, newly created directorships and any vacancies on the board, including unfilled vacancies resulting from the removal of directors, may be filled only by the affirmative vote of a majority of the remaining directors then in office, although less than a quorum, or by the sole remaining director. All directors will hold office until the expiration of their respective terms of office and until their successors will have been elected and qualified. A director elected or appointed to fill a vacancy resulting from the death, resignation or removal of a director or a newly created directorship will serve for the remainder of the full term of the class of directors in which the new directorship was created or the vacancy occurred and until his or her successor will have been elected and qualified.

Subject to the rights, if any, of the holders of any series of preferred stock, any director may be removed from office only for cause and only by the affirmative vote of the holders of not less than two-thirds of the outstanding voting stock (as defined below) of the Company then entitled to vote generally in the election of directors, voting together as a single class. Any such director proposed to be removed from office is entitled to advance written notice as described in the Certificate of Incorporation. Subject to the terms and conditions of the Amended and Restated Registration and Shareholder Rights Agreement, in case the board or any one or more directors should be so removed, new directors may be elected at the same time for the unexpired portion of the full term of the director or directors so removed.

In addition to the powers and authorities hereinbefore or by statute expressly conferred upon them, the directors are hereby empowered to exercise all such powers and do all such acts and things as may be exercised or done by the Company, subject, nevertheless, to the provisions of the DGCL, the Certificate of Incorporation and to any Bylaws adopted and in effect from time to time; provided, however, that no Bylaw so adopted will invalidate any prior act of the directors which would have been valid if such Bylaw had not been adopted.

Notwithstanding the foregoing provisions, any director elected pursuant to the right, if any, of the holders of preferred stock to elect additional directors under specified circumstances will serve for such term or terms and pursuant to such other provisions as specified in the relevant certificate of designations related to the preferred stock.

Quorum

The holders of a majority of the voting power of the capital stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, will constitute a quorum at all meetings of the stockholders for the transaction of business except as otherwise required by law or provided by the Certificate of Incorporation. If, however, such quorum will not be present or represented at any meeting of the stockholders, the holders of a majority of the voting power present in person or represented by proxy, have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum will be present or represented. At such adjourned meeting at which a quorum will be present or represented, any business may be transacted which might have been transacted at the meeting as originally noticed. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting will be given to each stockholder entitled to vote at such adjourned meeting as of the record date fixed for notice of such adjourned meeting.

Anti-takeover Effects of the Certificate of Incorporation and the Bylaws

The Certificate of Incorporation and the Bylaws contain provisions that may delay, defer or discourage another party from acquiring control of us. We expect that these provisions, which are summarized below, will discourage coercive takeover practices or inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with the board of directors, which we believe may result in an improvement of the terms of any such acquisition in favor of our stockholders. However, they also give the board of directors the power to discourage acquisitions that some stockholders may favor.

Authorized but Unissued Capital Stock

Delaware law does not require stockholder approval for any issuance of authorized shares. However, the Nasdaq listing requirements, which apply so long as the common stock (or units or warrants) remains listed on The Nasdaq Stock Market LLC, require stockholder approval of certain issuances equal to or exceeding 20% of the then outstanding voting power or then outstanding number of shares of common stock. Additional shares that may be issued in the future may be used for a variety of corporate purposes, including future public offerings, to raise additional capital or to facilitate acquisitions.

One of the effects of the existence of unissued and unreserved common stock may be to enable the board to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of the Company by means of a merger, tender offer, proxy contest or otherwise and thereby protect the continuity of management and possibly deprive stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

Special Meeting, Action by Written Consent and Advance Notice Requirements for Stockholder Proposals

Unless otherwise required by law, and subject to the rights, if any, of the holders of any series of preferred stock, special meetings of the stockholders of the Company, for any purpose or purposes, may be called only (i) by a majority of the board or (ii) at any time when no annual meeting has been held for a period of thirteen (13) months after the Company's last annual meeting, a special meeting in lieu thereof may be held, and such special meeting shall have, for the purposes of the Bylaws or otherwise, all the force and effect of an annual meeting. Unless otherwise required by law, written notice of a special meeting of stockholders, stating the time, place and purpose or purposes thereof, shall be given to each stockholder entitled to vote at such meeting, not less than ten (10) or more than sixty (60) days before the date fixed for the meeting. Business transacted at any special meeting of stockholders will be limited to the purposes stated in the notice.

The Bylaws also provide that unless otherwise restricted by the Certificate of Incorporation or the Bylaws, any action required or permitted to be taken at any meeting of the board or of any committee thereof may be taken without a meeting, if all members of the board or of such committee, as the case may be, consent thereto in writing or by electronic transmission, and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the board or committee.

In addition, the Bylaws require advance notice procedures for stockholder proposals to be brought before an annual meeting of the stockholders, including the nomination of directors. Stockholders at an annual meeting may only consider the proposals specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors, or by a stockholder of record on the record date for the

meeting, who is entitled to vote at the meeting and who has delivered a timely written notice in proper form to our secretary, of the stockholder's intention to bring such business before the meeting.

These provisions could have the effect of delaying until the next stockholder meeting any stockholder actions, even if they are favored by the holders of a majority of our outstanding voting securities.

Amendment to Certificate of Incorporation and Bylaws

The DGCL provides generally that the affirmative vote of a majority of the outstanding stock entitled to vote on amendments to a corporation's certificate of incorporation or bylaws is required to approve such amendment, unless a corporation's certificate of incorporation or bylaws, as the case may be, requires a greater percentage.

The Certificate of Incorporation provides that the following provisions therein may be amended, altered, repealed or rescinded only by the affirmative vote of the holders of at least 66-2/3% in voting power of all the then outstanding shares of the Company's stock entitled to vote thereon and the affirmative vote of at least 66-2/3% of the outstanding shares of each class entitled to vote thereon as a class:

- the provisions regarding the size of the board and the election of directors pursuant to the Amended and Restated Registration and Shareholder Rights Agreement;
- the provisions regarding stockholder actions without a meeting;
- the provisions regarding calling special meetings of stockholders;
- the provisions regarding removal of directors;
- the provisions regarding the limited liability of directors of the Company;
- the provisions regarding competition and corporate opportunities; and
- the provisions regarding the election not to be governed by Section 203 of the DGCL.

The Bylaws may be amended or repealed (A) by the affirmative vote of a majority of the entire board then in office, without the assent or vote of any stockholder (subject to any bylaw requiring the affirmative vote of a larger percentage of the members of the board) or (B) without the approval of the board, by the affirmative vote of the holders of a majority of the outstanding voting stock of the Company entitled to vote on such amendment or repeal, voting as a single class, except for the provisions regarding notice of stockholder business and nominations and special meetings of stockholders, which may be amended or repealed by the affirmative vote of the holders of at least 66-2/3% of the outstanding voting stock of the Company, voting as a single class, and the affirmative vote of the holders of at least 66-2/3% of each class of outstanding voting stock of the Company (provided that if the board recommends that stockholders approve such amendment or repeal at such meeting of stockholders, then such amendment or repeal only requires the affirmative vote of the majority of the outstanding shares of capital stock entitled to vote on such amendment or repeal, voting as a single class).

Delaware Anti-Takeover Statute

Section 203 of the DGCL provides that if a person acquires 15% or more of the voting stock of a Delaware corporation, such person becomes an "interested stockholder" and may not engage in certain "business combinations" with the corporation for a period of three years from the time such person acquired 15% or more of the corporation's voting stock, unless:

- the board of directors approves the acquisition of stock or the merger transaction before the time that the person becomes an interested stockholder;
- the interested stockholder owns at least 85% of the outstanding voting stock of the corporation at the time the merger transaction commences (excluding voting stock owned by directors who are also officers and certain employee stock plans); or
- the merger transaction is approved by the board of directors and at a meeting of stockholders, not by written consent, by the affirmative vote of 2/3 of the outstanding voting stock which is not owned by the interested stockholder. A Delaware corporation may elect in its certificate of incorporation or bylaws not to be governed by this particular Delaware law.

Under the Certificate of Incorporation, the Company opted out of Section 203 of the DGCL and therefore is not subject to Section 203. However, the Certificate of Incorporation contains similar provisions providing that the Company may not engage in certain "business combinations" with any "interested stockholder" for a three-year period following the time that the stockholder became an interested stockholder, unless:

- prior to such time, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
 - upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of our voting stock outstanding at the time the transaction commenced, excluding certain shares; or
 - at or subsequent to that time, the business combination is approved by our board of directors and by the affirmative vote of holders of at least 66-2/3% of the outstanding voting stock that is not owned by the interested stockholder.
-

Generally, a “business combination” includes a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. Subject to certain exceptions, an “interested stockholder” is a person who, together with that person’s affiliates and associates, owns, or within the previous three years owned, 15% or more of our voting stock.

Under certain circumstances, this provision will make it more difficult for a person who would be an “interested stockholder” to effect various business combinations with a corporation for a three-year period. This provision may encourage companies interested in acquiring our company to negotiate in advance with our board of directors because the heightened stockholder approval requirement would be avoided if our board of directors approves either the business combination or the transaction which results in the stockholder becoming an interested stockholder. These provisions also may have the effect of preventing changes in our board of directors and may make it more difficult to accomplish transactions which stockholders may otherwise deem to be in their best interests.

The Certificate of Incorporation provides that (1) any investment fund affiliated with or managed by Advent International Corporation or any of its affiliates, or any successor, transferee or affiliate thereof, or (2) any person whose ownership of shares in excess of the 15% limitation set forth therein is the result of any action taken solely by the Company (provided, that such person shall be an “interested stockholder” if thereafter such person acquires additional shares of voting stock of the Company, except as a result of further corporate actions not caused by such person) does not constitute “interested stockholders” for purposes of this provision.

Limitations on Liability and Indemnification of Officers and Directors

The Certificate of Incorporation limits the liability of the directors of the Company to the fullest extent permitted by law, and the Bylaws provide that we will indemnify them to the fullest extent permitted by such law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by our board of directors. Under the terms of such indemnification agreements, we are required to indemnify each of our directors and officers, to the fullest extent permitted by the laws of the State of Delaware and the Certificate of Incorporation, if the basis of the indemnitee’s involvement was by reason of the fact that the indemnitee is or was a director or officer of the Company or any of its subsidiaries or was serving at the Company’s request in an official capacity for another entity. We must indemnify our officers and directors against all reasonable fees, expenses, charges and other costs of any type or nature whatsoever, including any and all expenses and obligations paid or incurred in connection with investigating, defending, being a witness in, participating in (including on appeal), or preparing to defend, be a witness or participate in any completed, actual, pending or threatened action, suit, claim or proceeding, whether civil, criminal, administrative or investigative, or establishing or enforcing a right to indemnification under the indemnification agreement. The indemnification agreements also require us, if so requested, to advance within ten (10) days of such request all reasonable fees, expenses, charges and other costs that any of our directors incurred, provided that such director will return any such advance if it is ultimately determined that such director is not entitled to indemnification by us. Any claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.

Exclusive Forum of Certain Actions

The Certificate of Incorporation requires, to the fullest extent permitted by law, unless the Company consents in writing to the selection of an alternative forum, that derivative actions brought in the name of the Company, actions against current or former directors, officers, employees, agents or stockholders for breach of fiduciary duty, actions arising pursuant to any provision of the DGCL or the Certificate of Incorporation or the Bylaws, actions to interpret, apply, enforce or determine the validity of the Certificate of Incorporation or the Bylaws, actions asserting a claim against the Company or any current or former director, officer, employee, agent or stockholder arising pursuant to any provision of the DGCL or the Certificate of Incorporation or the Bylaws or as to which the DGCL confers jurisdiction on the Delaware Court of Chancery, and actions asserting a claim against the Company or any current or former director, officer, employee, agent or stockholder governed by the internal affairs doctrine of the law of the State of Delaware may be brought only in the Court of Chancery in the State of Delaware (or, if such court lacks subject matter jurisdiction, another state or federal court located within the State of Delaware); provided, however, that the foregoing shall not apply to any claim as to which such court determines that there is an indispensable party not subject to the jurisdiction of such court (and the indispensable party does not consent to the personal jurisdiction of such court within ten (10) days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than such court, or for which such court does not have subject matter jurisdiction, or arising under the Securities Act, as to which the federal district courts of the United States of America shall, to the fullest extent permitted by law, be the sole and exclusive forum unless the Company consents in writing to the selection of an alternative forum. Although we believe this provision benefits the Company by providing increased consistency in the application of Delaware law in the types of lawsuits to which it applies, the provision may have the effect of discouraging lawsuits against our directors and officers.

Conflicts of Interest

Delaware law permits corporations to adopt provisions renouncing any interest or expectancy in certain opportunities that are presented to the corporation or its officers, directors or stockholders. The Certificate of Incorporation, to the fullest extent permitted by law, renounces any interest or expectancy that the Company has in, or right to be offered an opportunity to participate in, specified business opportunities that are from time to time presented to the Company’s directors or their respective affiliates, other than those directors or affiliates who are the Company’s employees. The Certificate of Incorporation provides that, to the fullest extent permitted by law, none of the non-employee directors or their respective affiliates will have any duty to refrain from (i) engaging in a corporate opportunity in the same or similar business activities or lines of business in which the Company or any of its affiliates has historically engaged, now engages or proposes to engage or (ii) otherwise competing with the Company or its affiliates. In addition, to the fullest extent permitted by law, in the event that any non-employee director or his or her affiliates acquires knowledge of a potential transaction or other business opportunity which may be a corporate opportunity for itself, herself or himself and for the Company or its affiliates, such person will have no duty to communicate or offer such transaction or business opportunity to the Company or any

of its affiliates and they may take any such opportunity for themselves or offer it to another person or entity. To the fullest extent permitted by law, no business opportunity will be deemed to be a potential corporate opportunity for the Company unless the Company is financially or legally able or contractually permitted to undertake such opportunity, the opportunity, by its nature, would be in the line of the Company's business or is of some practical advantage to the Company, and the Company has some interest or reasonable expectancy in such opportunity.

Transfer Agent

The transfer agent for the Company's common stock is Continental Stock Transfer & Trust Company.

Subsidiaries of CCC Intelligent Solutions Holdings Inc.

Pursuant to Item 601(b)(21)(ii) of Regulation S-K, certain subsidiaries of the Registrant which, considered in the aggregate as a single subsidiary, would not have constituted a significant subsidiary (as defined in Rule 1-02(w) of Regulation S-X) have been omitted.

Name	State or Other Jurisdiction of Incorporation or Organization
Cypress Intermediate Holdings, Inc., f/k/a Cypress Holdings, Inc.	Delaware
Cypress Intermediate Holdings II, Inc.	Delaware
CCC Intelligent Solutions Inc.	Delaware
Auto Injury Solutions, Inc.	Delaware

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333- 260256 on Form S-8 and No.333-267793 on Form S-3 of our reports dated March 1, 2023, relating to the financial statements of CCC Intelligent Solutions Holdings Inc. and subsidiaries (the “Company”) and the effectiveness of the Company’s internal control over financial reporting, appearing in this Annual Report on Form 10-K for the year ended December 31, 2022.

/s/ Deloitte & Touche LLP
Chicago, IL
March 1, 2023

Certification of Principal Executive Officer Pursuant to Exchange
Act Rule 13a-14(a)/15d-14(a) as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Githesh Ramamurthy, certify that:

1. I have reviewed this Annual Report on Form 10-K of CCC Intelligent Solutions Holdings Inc.;
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 fourth fiscal quarter 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 1, 2023

/s/ Githesh Ramamurthy

Name: Githesh Ramamurthy

Title: Chief Executive Officer

Certification of Principal Financial Officer Pursuant to Exchange Act Rule
13a-14(a)/15d-14(a) as Adopted Pursuant to Section 302 of the Sarbanes-
Oxley Act of 2002

I, Brian Herb, certify that:

1. I have reviewed this Annual Report on Form 10-K of CCC Intelligent Solutions Holdings Inc.;
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 fourth fiscal quarter 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 1, 2023

/s/ Brian Herb

Name: Brian Herb
Title: Executive Vice President, Chief
Financial and Administrative Officer

Certification of Principal Executive Officer Pursuant to 18 U.S.C.
Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes- Oxley Act of 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Githesh Ramamurthy, the Chief Executive Officer of CCC Intelligent Solutions Holdings Inc. (the "Company"), hereby certify, that, to my knowledge:

1. The Annual Report on Form 10-K for the year ended December 31, 2022 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 1, 2023

/s/ Githesh Ramamurthy

Name: Githesh Ramamurthy

Title: Chief Executive Officer

Certification of Principal Financial Officer Pursuant to 18 U.S.C.
Section 1350 as Adopted Pursuant to Section 906 of the Sarbanes- Oxley Act of 2002

Pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, I, Brian Herb, the Executive Vice President, Chief Financial and Administrative Officer of CCC Intelligent Solutions Holdings Inc. (the "Company"), hereby certify, that, to my knowledge:

1. The Annual Report on Form 10-K for the year ended December 31, 2022 (the "Report") of the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 1, 2023

/s/ Brian Herb

Name: Brian Herb

Title: Executive Vice President, Chief
Financial and Administrative Officer
