Yes □ No 🗵

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549

		FORM 10-K			
	—————————————————————————————————————	SECTION 13 OR 15(d) OF THE SEC	CURITIES EXCHANGE ACT OF 1934		
	For t	he fiscal year ended December 31, 2	021		
		OR			
	☐ TRANSITION REPORT PURSUANT T	O SECTION 13 OR 15(d) OF THE S	ECURITIES EXCHANGE ACT OF 1934		
	For th	ne transition period from to			
	C	ommission File Number: 001-38685			
		id Dynamics Holdings, In me of Registrant as Specified in its (
Delaware 83-0632724					
(State or other jurisdiction of incorporation or organization)			(I.R.S. Employer Identification No.)		
		5000 Executive Parkway, Suite 520 San Ramon, CA			
		94583			
	(Address of principal executive off	ices)	(Zip Code)		
	Registrant's telep	phone number, including area code:	(650) 523-5000		
	Securities registered pursuant to Section	12(b) of the Act:			
	Title of each class	Trading Symbol(s)	Name of each exchange on which registered		
Comn	non Stock, par value \$0.0001 per share	GDYN	The NASDAQ Stock Market LLC		
	Securities registered pursuant to Section	12(g) of the Act: None			
Yes □	Indicate by check mark if the registrar No ⊠	nt is a well-known seasoned issuer,	as defined in Rule 405 of the Securities Act.		
	Indicate by check mark if the registrant	t is not required to file reports pursu	ant to Section 13 or Section 15(d) of the Act.		

Indicate by check mark	whether the registrant (1) has f	iled all reports required to be f	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 □						
	ing growth company. See the d	efinitions of "large accelerated	er, a non-accelerated filer, a smaller filer," "accelerated filer," "smaller			
Large accelerated filer		Accelerated filer	X			
Non-accelerated filer		Smaller reporting company				
Emerging growth company						
for complying with any new or re-	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. \Box					
	ol over financial reporting under S	Section 404(b) of the Sarbanes-O	ts management's assessment of the xley Act (15 U.S.C. 7262(b)) by the			
Indicate by check mark v	whether the registrant is a shell co	mpany (as defined in Rule 12b-2	? of the Exchange Act). Yes □ No			
The aggregate market value of the common stock held by non-affiliates of the registrant as of June 30, 2021 (the last business day of the registrant's most recently completed second fiscal quarter) was approximately \$448.9 million based on the closing price of the registrant's common stock on June 30, 2021 of \$15.03 per share, as reported by the NASDAQ Capital Market (the "NASDAQ"). Shares of the registrant's common stock held by each executive officer and director and by each other person who may be deemed to be an affiliate of the registrant have been excluded from this computation. This calculation does not reflect a determination that certain persons are affiliates of the registrant for any other purpose.						
As of February 28, 2022,	, there were 66,954,362 shares of	the registrant's common stock or	utstanding.			
	DOCUMENTS INCORPO	DRATED BY REFERENCE				
	nual Report on Form 10-K wher	e indicated. Such Definitive Pro	of Stockholders are incorporated by xy Statement will be filed with the ded December 31, 2021.			

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the federal securities laws, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. Forward-looking statements include all statements that are not historical facts and can be identified by terms such as "anticipates," "believes," "could," "seeks," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "will," "would," or similar expressions and the negatives of those terms. Forward-looking statements contained in this Annual Report on Form 10-K include, but are not limited to, statements about:

- the evolution of the digital engineering and information technology services landscape facing our customers and prospects;
- our ability to educate the market regarding the advantages of our digital transformation products;
- our ability to maintain an adequate rate of revenue growth;
- our future financial and operating results;
- our business plan and our ability to effectively manage our growth and associated investments;
- beliefs and objectives for future operations;
- our ability to expand a leadership position in enterprise-level digital transformation;
- our ability to attract and retain customers;
- our ability to further penetrate our existing customer base;
- · our ability to maintain our competitive technological advantages against new entrants in our industry;
- our ability to timely and effectively scale and adapt our existing technology;
- our ability to innovate new products and services and bring them to market in a timely manner;
- our ability to maintain, protect, and enhance our brand and intellectual property;
- · our ability to capitalize on changing market conditions;
- our ability to develop strategic partnerships;
- benefits associated with the use of our services;
- our ability to expand internationally;
- our ability to raise financing in the future;
- operating expenses, including changes in research and development, sales and marketing, and general administrative expenses;
- the effects of seasonal trends on our results of operations;
- our ability to grow and manage growth profitably and retain our key employees;
- the expected benefits and effects of strategic acquisitions of business, products or technologies;
- our ability to maintain the listing of our shares of common stock on the NASDAQ;
- costs related to being a public company;
- changes in applicable laws or regulations;
- the possibility that we have been and may continue to be adversely affected by other economic, business, and/or competitive factors, including the effects of the global COVID-19 pandemic;
- the military action launched by Russian forces in Ukraine, the actions that have been and could be taken by other countries, including new and stricter sanctions and actions taken in response to such sanctions, and the effect of these developments on our business and results of operations; and
- other risks and uncertainties indicated in this Annual Report on Form 10-K, including those set forth in Item 1A, "Risk Factors."

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We caution you that the foregoing list may not contain all of the forward-looking statements made in this Annual Report on Form 10-K.

You should not rely upon forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this Annual Report on Form 10-K primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, results of operations, and prospects. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties, and other factors, including those described in in Item 1A, "Risk Factors" and elsewhere in this Annual Report on Form 10-K. Moreover, new risks and uncertainties emerge from time to time and it is not possible for us to predict all risks and uncertainties that could have an impact on any forward-looking statements contained in this Annual Report on Form 10-K. We cannot assure you that the results, events, and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events, or circumstances could differ materially from those described in such forward-looking statements.

Neither we nor any other person assumes responsibility for the accuracy and completeness of any of these forward-looking statements. Moreover, the forward-looking statements made in this Annual Report on Form 10-K relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this Annual Report on Form 10-K to reflect events or circumstances after the date of this Annual Report on Form 10-K or to reflect new information or the occurrence of unanticipated events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, restructurings, joint ventures, partnerships, or investments we may make.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Annual Report on Form 10-K, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

PART I

ITEM 1. BUSINESS

Business Combination

On March 5, 2020, a wholly-owned subsidiary ("Merger Sub 1") of ChaSerg Technology Acquisition Corp., a Delaware corporation ("ChaSerg"), merged with and into Grid Dynamics International, Inc., a California corporation ("GDI"), with GDI surviving the merger (the "Initial Merger"). Immediately following the Initial Merger, GDI merged with and into another wholly-owned subsidiary of ChaSerg ("Merger Sub 2") with Merger Sub 2 surviving; Merger Sub 2 was then renamed "Grid Dynamics International, LLC," and ChaSerg was then renamed "Grid Dynamics Holdings, Inc." (the "Business Combination"). As of the open of trading on March 6, 2020, the common stock and warrants of Grid Dynamics Holdings, Inc. ("Grid Dynamics," "GDH," the "Company," "we," "us," or "our"), formerly those of ChaSerg, began trading on the NASDAQ as "GDYN" and "GDYNW," respectively.

Business Overview

Grid Dynamics is an emerging leader in enterprise-level digital transformations in Fortune 1000 companies. For enterprises that create innovative digital products and experiences, Grid Dynamics offers close collaboration to provide digital transformation initiatives that span strategy consulting, development of early prototypes and enterprise-scale delivery of new digital platforms. Since its inception in 2006 in Menlo Park, California, as a grid and cloud consultancy firm, Grid Dynamics has been on the forefront of digital transformation. Our specialty is working on big ideas like cloud migrations, DevOps, microservices, big data and artificial intelligence ("AI"). Grid Dynamics quickly established itself as a provider of choice for technology and digital enterprise companies.

As a leading global digital engineering and information technology ("IT") services provider with its headquarters in Silicon Valley and engineering centers in the United States, Mexico and multiple European countries, Grid Dynamics' core business is to deliver focused and complex technical consulting, software design, development, testing and internet service operations. Grid Dynamics also helps organizations become more agile and create innovative digital products and experiences through its deep expertise in emerging technology, such as AI, data science, cloud computing, big data and DevOps, lean software development practices and a high-performance product culture.

Grid Dynamics believes that the key to its success is a business culture that puts products over projects, client success over contract terms and real business results over pure technical innovation. By leveraging Grid Dynamics' proprietary processes optimized for innovation, emphasis on talent development and technical expertise, Grid Dynamics has been able to achieve significant growth. In December of 2020 and May of 2021 Grid Dynamics acquired Daxx Web Industries B.V. ("Daxx") and Tacit Knowledge Inc. ("Tacit"), respectively. These two acquisitions diversified our geographical presence, client base, and industry vertical presence.

Industry Background and Market Opportunity

Digital transformation is a rapidly expanding market which is still in its early stages. Enterprises strive to compete in the digital world, facing the need to transform to survive attacks from the nimbler and more technologically advanced newcomers. Traditional approaches to managing information technology as a mix of vendor solutions and outsourced services often break down in the face of the imperative to innovate through technology.

Increasingly, business executives are looking at use of technology as a competitive advantage rather than a way to cut costs. The rise of AI signifies a shift from automation of business process to automation of decision making itself. In an effort to differentiate, corporations are directing investments towards building digital new products and experiences, instead of buying off-the-shelf software products. This drives demand for highly technical software development, creating an opportunity for pure-play software development service providers such as Grid Dynamics.

As the demand for technical software development talent continues to grow, the shortage of this talent in the United States and Europe, as well as the inability of non-technology-based companies to attract and retain such talent, encourages organizations to look to third parties, such as Grid Dynamics, to satisfy the demand.

Further, the growing acceptance of the offshore delivery model, beyond the traditional India-based IT services provider, has created significant opportunities for software development service providers delivering from Central and Eastern Europe ("CEE") as well as Mexico. CEE-based service providers now compete against the largest global IT service providers and are capable of providing complex technology services. Grid Dynamics believes that CEE is increasingly known for the quality of its software development talent, enabled in part by decades of focus on fundamental STEM disciplines in higher education.

CEE-based teams and individuals are frequent winners of programming contests such as the ones held by the Association for Computing Machinery, or ACM, TopCoder and Kaggle.

Grid Dynamics believes that this disparity between the supply and demand for technical talent can be a significant opportunity for Grid Dynamics.

Strategies and Strengths

Grid Dynamics' objective is to become a global leader in enabling digital transformation at Fortune 1000 companies. Grid Dynamics' strategy to achieve such objective is based on leveraging the following core strengths.

Proprietary Processes Optimized for Innovation

Grid Dynamics recognizes the changing dynamics of IT outsourcing. Increasingly, corporations expect their service providers to participate and help shape innovation programs, which are not addressed well by the traditional service models used by outsourcing providers. Grid Dynamics melds technical consulting, engineering and analytics competencies into unified, cross-functional digital teams which are designed to respond and adapt to the change in the client's business. The effectiveness of such teams is further increased by a close collaboration with the client's technology leadership teams and active inquiry into client's business priorities on all levels.

Culture-First Approach to Talent Development

The ever-increasing role of digital transformation leads to the emergence of a new kind of business leader that combines a vision of business transformation with deep understanding of information technology. Earning the trust of these leaders is one of the pillars of Grid Dynamics' success. Grid Dynamics selects, trains and promotes its technical leadership based on the following cultural principles.

- Global integration. Demands of modern businesses transcend cultural, political and language boundaries. Grid Dynamics builds teams which are transparently distributed across countries, time zones and reporting lines. Decisions on hiring, staffing and promotion are all managed centrally from Grid Dynamics' U.S. offices, allowing Grid Dynamics to optimize for quality rather than convenience.
- Partnership with client. Grid Dynamics demands accountability and ownership of the client's success, whether or not such success is a contractual matter. Understanding Grid Dynamics clients' goals and ability to manage such goals across reporting lines is a must for any leadership role within Grid Dynamics.
- Technological innovation. Understanding digital transformation and successfully delivering IT programs is impossible without a strong understanding of emerging technology. Deep knowledge of how new technology, such as cloud, big data and AI, transforms the way corporations develop their businesses is a pre-requisite for leadership roles in Grid Dynamics.
- Education. Grid Dynamics believes that technology changes rapidly, and it is critical for Grid Dynamics' employees to adapt even more rapidly. Grid Dynamics offers many formal and informal training programs, such as Grid University, an online education platform with thousands of hours of training videos, to ensure that professionals can expand and enhance their capabilities.

Technical Expertise and Scalable Engineering

Grid Dynamics believes in strong infrastructure underpinning mission-critical services. From its inception, Grid Dynamics has been focusing on developing and using its expertise in the latest technologies, such as AI and conversational systems, cloud engineering solutions, data platform, data science and analytical data platforms, DevOps, MLOps, microservices, mobile, QA automation, search and user interfaces. By making such emerging technologies accessible to clients through the use of proprietary skill development programs, industry experience and solution accelerators, Grid Dynamics seeks to strengthen its position as a technical leader with its established clients and attract new clients.

Services and Solutions

In the rapidly evolving market of engineering and IT services, customers are increasingly looking for service providers that can be a coinnovation partner rather than a cost saving measure. Grid Dynamics addresses this need by focusing on high value, high impact services. The key service and solutions offerings are the following:

Technical Consulting

Grid Dynamics provides technical consulting services to help executives in charge of digital transformation define an ambitious, yet achievable roadmap, quantify business value attained through new technology, select the right technology stack, develop reference architecture and guide the transformational journey every step of the way.

Lean Prototypes

Grid Dynamics helps enterprises prototype and test new ideas. This includes both proof-of-concept implementations, which can be rapidly put in front of the end users to verify business assumptions, as well as sophisticated, long-running labs that cross organizational walls to establish feasibility and de-risk large transformational programs. Self-sufficient teams move quickly, use the latest technologies and aim to solve the business use case to demonstrate measurable value to the business stakeholders.

Digital Intelligence

Grid Dynamics helps corporations transform from automation of business processes to automation of decision making. To this end, Grid Dynamics deploys data science approaches to analyze client challenges and arrive at a strategy which produces measurable outcomes. This continuous "analyze-assess-decide-measure" cycle becomes the foundation of AI programs, leveraging the latest technologies to constantly react to real-time changes in consumer behavior.

Scalable Engineering

Grid Dynamics believes in strong infrastructure underpinning mission-critical services. From inception, Grid Dynamics' engineers pushed the boundaries of IT performance, developing a strong expertise in distributed systems. Grid Dynamics' experience in cloud, NoSQL, big data, grid computing and performance engineering helps its clients go beyond the capabilities provided by off-the-shelf products.

Development Culture

Grid Dynamics helps clients to contain and rearchitect legacy platforms as a part of the digital transformation journey. A significant factor in the success of legacy transformation is the robustness of the process of breaking down and reassembling monolithic systems into smaller, more manageable pieces. Grid Dynamics has a deep expertise in building agile teams, which are adept at realizing incremental value through a cycle of continuous delivery enabled by automated quality and security assurance. Grid Dynamics offers its clients services that help enable continuous integration, continuous delivery and DevOps at enterprise scale.

Experience Design

Grid Dynamics helps clients achieve higher rates of conversion and end user satisfaction by improving the service experience across engagement channels. This includes transformation of the web user interfaces to a responsive/adaptive model, design and development of next-gen mobile applications as well as leveraging new channels of engagement such as conversational interfaces.

Verticals

Grid Dynamics has strong vertical-specific domain knowledge backed by extensive experience. By merging technology with business processes, Grid Dynamics delivers tailored solutions in several key industry verticals: Tech, Media and Telecom, Retail, Finance and Consumer Packaged goods (CPG)/manufacturing.

Tech, Media and Telecom

Grid Dynamics has a strong presence in the digital technology sector, particularly among analytics, SaaS and platform vendors which are driven by a constant need for innovation. Grid Dynamics' long-lasting expertise in complex open-source technology and in building massively scalable distributed systems, the company-wide culture of agile co-creation as well as a deep understanding of digital commerce have enabled Grid Dynamics to build strong business relationships with the leading players in this sector. For example, Grid Dynamics has been providing software engineering, continuous delivery and deployment automation, machine learning, internal tool development and quality engineering services to one of the largest cloud services providers, becoming one of their key technological services partners.

Retail

By utilizing Grid Dynamics' deep expertise in the digital retail space and providing a mix of consulting and engineering services, Grid Dynamics enables its clients to win market share, shorten time to market and reduce costs of digital operations. For example, Grid Dynamics has worked closely with a large U.S. retail company over a span of many years to develop a strategic omnichannel transformation program and became a key contributor to the development of a new omnichannel platform including consumer experience, product discovery, analytics and inventory optimization.

CPG/Manufacturing

Grid Dynamics helps its manufacturing customers to harness digital transformation by applying novel approaches to engage the consumers directly and optimize the back-end supply chain. For example, Grid Dynamics accelerated digital transformation in a global CPG company by building direct-to-consumer capabilities, modernizing an omnichannel pricing engine, and optimizing operational efficiency with modern data analytics and AI.

Finance

In the early days of Grid Dynamics, the financial sector recognized it for the ability to tackle high-end technology programs, such as moving from the batch to real-time fraud detection. Today, Grid Dynamics has evolved from a niche provider to a proven partner able to enable agility and time to market in the most challenging regulatory environments. For example, a major commercial bank chose Grid Dynamics to solve the challenge of evolving its security frameworks to realize benefits from cloud and DevOps.

The following table presents our revenues by vertical and revenues as a percentage of total revenues by vertical for the periods indicated:

For the year ended December 31,

	<u></u>	20)21		202	20	20)19
		(in thousands, except % of revenue)						
Tech, Media and Telecom	\$	67,689	32.0 %	\$	45,362	40.8 %	\$ 32,337	27.3 %
Retail		61,717	29.2 %		33,975	30.5 %	67,367	56.9 %
Finance		17,515	8.3 %		13,589	12.2 %	12,479	10.6 %
CPG/Manufacturing		43,461	20.6 %		14,202	12.8 %	4,850	4.1 %
Other		20,898	9.9 %		4,155	3.7 %	1,293	1.1 %
Total	\$	211,280	100.0 %	\$	111,283	100.0 %	\$ 118,326	100.0 %

Delivery Model and Operating Structure

Our service delivery model involves using an efficient mix of on-site, off-site and offshore staffing. We believe that the combination of our delivery model optimized for co-innovation and the placement of our technology leaders at clients' premises creates a key competitive advantage that enables us to better understand and meet a client's diverse needs.

The majority of Grid Dynamics' engineering personnel is located within Grid Dynamics' engineering centers in the United States and CEE. As of December 31, 2021, Grid Dynamics had 3,274 full-time and part-time personnel and delivered services from engineering centers located in the following countries:

- United States;
- Mexico;
- Moldova;
- Netherlands;
- Poland;
- Russia;
- Serbia;
- Ukraine;
- United Kingdom.

Grid Dynamics also places its IT professionals at client premises and promotes temporary assignments at client locations.

Quality and Process Management

Grid Dynamics enforces stringent security standards and has maintained a continuous ISO 27001:2013 certification since August 2014. All key company locations, departments and teams are within the scope of the deployed information security management system.

Grid Dynamics policies, standards and procedures are reviewed annually during both internal and external certification audits. Grid Dynamics has successfully passed seven ISO 27001:2013 audits, as well as over a dozen exhaustive audits from top financial services customers.

Sales and Marketing

Grid Dynamics' sales and marketing strategy focuses on increasing revenues from new and existing clients through a "land and expand" strategy. Grid Dynamics' technology leaders deployed at clients' premises play an integral role in identifying, developing and expanding potential business opportunities. This strategy has been effective both in deepening relationships with existing clients and increasing the number of Grid Dynamics' clients.

Grid Dynamics also maintains a dedicated sales force as well as a marketing team, which coordinates corporate-level branding efforts that range from sponsorship of programming competitions to participation in and hosting of industry conferences and events.

Customers

Grid Dynamics' client base primarily consists of Fortune 1000 corporations based in North America. With the acquisition of Daxx in December 2020 and Tacit in May 2021, we have gained customers in U.K., North America, as well as Continental Europe and Asia.

Grid Dynamics has a high level of revenue concentration with certain clients. In the years ended December 31, 2021 and 2020 Grid Dynamics top two customers each accounted for 10% or more of Grid Dynamics revenue. In the year ended December 31, 2019 Grid Dynamics top three customers each accounted for 10% or more of Grid Dynamics' revenue.

Grid Dynamics typically enters into a master services agreement with its clients, which provides a framework for services that is then supplemented by statements of work, which specify the particulars of each individual engagement.

Competition

Grid Dynamics faces competition from both global IT services providers as well as those based in CEE. Grid Dynamics believes that the principal competitive factors in its business include technical expertise and industry knowledge, culture, reputation and track record for high-quality and on-time delivery of work, effective employee recruiting, training and retention, responsiveness to clients' business needs and financial stability.

Grid Dynamics faces competition primarily from:

- emerging mid-cap digital services companies, such as Globant and Endava;
- large global consulting and outsourcing firms, such as Accenture plc, Atos Origin, Capgemini SE, DXC and IBM, and EPAM Systems.
- India-based technology outsourcing IT services providers, such as Cognizant Technology Solutions Corporation, GlobalLogic, HCL Technologies, Infosys Technologies, Mindtree, Sapient, Symphony Technology Group, Tata Consultancy Services Limited, and Wipro;
- in-house IT departments of Grid Dynamics' clients and potential clients.

Given Grid Dynamics' focus on complex digital transformation programs, technical employee base and the development and continuous improvement in new software technology, Grid Dynamics believes that it is well positioned to compete effectively in the future.

Human Capital and Employees

People are critical to the success of Grid Dynamics. Accordingly, attracting and retaining personnel is a key factor in Grid Dynamics' ability to grow revenues and meet its clients' needs. As of December 31, 2021, Grid Dynamics had 3,274 personnel across nine countries (the U.S., Mexico, the Netherlands, U.K., Poland, Serbia, Moldova, Russia and Ukraine).

Recruitment and Retention

Grid Dynamics hires both for technical skills and cultural fit. The reality of the changing technological landscape demands that our engineering personnel are able to continuously acquire new proficiencies and skills.

Grid Dynamics' hiring program is driven by demand within current and projected clients. Projections of client demand are constantly reviewed to ensure that we maintain a proper recruiting and training pipeline. The geographical spread helps Grid Dynamics to shorten the time to identify and recruit top technical talent. Grid Dynamics targets the top of technical talent from top technical universities. Majority of Grid Dynamics' engineering personnel have bachelor or advanced degrees in computer science.

To attract, retain and motivate IT professionals, Grid Dynamics seeks to provide an environment and culture that rewards entrepreneurial initiative and performance. In addition, Grid Dynamics offers a challenging work environment, ongoing skills development initiatives and attractive career advancement and promotion opportunities.

Grid Dynamics believes that it maintains a good working relationship with its employees and has not experienced any labor disputes. Grid Dynamics' employees have not entered into any collective bargaining agreements.

Training and Development

Grid Dynamics dedicates significant resources to the training and development of its technical leaders. The company believes in the importance of supporting educational initiatives and sponsors employees' participation in internal and external training and certifications.

Every year Grid Dynamics delivers hundreds of courses in emerging technologies to its engineers using the Grid University online education platform. Employees can also take advantage of educational and certification programs offered by the technology leaders both in open-source as well as in proprietary spaces.

Furthermore, through Grid Dynamics, deep relationships with top local universities, forged over years of collaboration, and specialized recruiting programs, Grid Dynamics can scale the hiring and staffing of new engineering teams to support complex technical programs.

Grid Dynamics also provides ongoing English language training at all of its delivery centers to maintain and enhance the English language skills of its IT professionals.

Management Training Programs

Grid Dynamics offers support, training and mentoring programs to managers through the Grid Dynamics Manager Training School. Various courses in project management and leadership skills help managers build strong teams through positive work environment, group inspiration and individual motivation.

Internships

Grid Dynamics has a long-standing tradition of running internship programs for students and junior engineers. The company opens its doors to young, promising engineers who are ready for a life-changing career of working on complex projects in big data, machine learning, AI and other emerging technologies.

Each intern works with a mentor who helps them adapt, shares knowledge and supports them in developing the necessary skills.

Intellectual Property

Protection of intellectual property rights is paramount to Grid Dynamics and its clients. Grid Dynamics relies on a combination of trade secret, patent, copyright and trademark laws as well as confidentiality procedures and contractual provisions to protect its intellectual property. Grid Dynamics requires its employees, independent contractors, vendors and clients to enter into written confidentiality agreements upon the commencement of their relationships with Grid Dynamics. These agreements generally provide that any confidential or proprietary information disclosed or otherwise made available by Grid Dynamics must be kept confidential.

Grid Dynamics customarily enters into non-disclosure agreements with its clients with respect to the use of their software systems and platforms. Grid Dynamics' clients usually own the intellectual property in the software or systems Grid Dynamics develops for them. Furthermore, Grid Dynamics usually grants a perpetual, worldwide, royalty-free, nonexclusive, transferable

and non-revocable license to its clients to use its preexisting intellectual property to the extent necessary in order to use the software or systems Grid Dynamics developed for them.

Grid Dynamics and its clients often use open-source software to improve quality and reduce time-to-market. Grid Dynamics works with the compliance departments of its clients to comply with the client's open-source licensing policies.

Regulations

Due to the industry and geographic diversity of Grid Dynamics' operations and services, Grid Dynamics' operations are subject to a variety of laws and regulations in the United States, Mexico, Russia, Ukraine and other European countries. See Item 1A, "Risk Factors—Risks Related to Government Regulations".

Available Information

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and, accordingly, file Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, with the Securities and Exchange Commission (the "SEC"). In addition, the SEC maintains a website (http://www.sec.gov) that contains material regarding issuers that file electronically, such as ourselves, with the SEC.

We maintain a website at www.griddynamics.com, to which we regularly post copies of our press releases as well as additional information about us. Our filings with the SEC will be available free of charge through the website as soon as reasonably practicable after being electronically filed with or furnished to the SEC. Information contained in our website is not a part of, nor incorporated by reference into, this Report or our other filings with the SEC, and should not be relied upon.

ITEM 1A. RISK FACTORS

This Annual Report on Form 10-K contains forward-looking statements that are subject to risks and uncertainties that could cause actual results to differ materially from those projected. These risks and uncertainties include, but are not limited to, the risk factors set forth below. The risks and uncertainties described in this Annual Report on Form 10-K are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently believe are immaterial may also affect our business. See the section titled "Special Note Regarding Forward-Looking Statements" of this Annual Report on Form 10-K for a discussion of the forward-looking statements that are qualified by these risk factors. If any of these known or unknown risks or uncertainties actually occurs and have a material adverse effect on us, our business, financial condition and results of operations could be seriously harmed.

Summary of Risk Factors

Our business is subject to numerous risks and uncertainties that you should consider before investing in our company, as fully described below. The principal factors and uncertainties that make investing in our company risky include, among others:

- We have a relatively short operating history and operate in a rapidly evolving industry, which makes it difficult to evaluate our future prospects and may increase the risk that we will not continue to be successful and may adversely impact our stock price.
- We may be unable to effectively manage our growth or achieve anticipated growth, which could place significant strain on our management personnel, systems and resources.
- Our revenues have historically been highly dependent on a limited number of clients and industries that are affected by seasonal trends, and any decrease in demand for outsourced services in these industries may reduce our revenues and adversely affect our business, financial condition and results of operations.
- The impact of the military action in Ukraine has affected and may continue to affect our business.
- The impact of the COVID-19 pandemic (and its variants) has and may continue to affect our overall financial performance, business operations, and stock price.
- Our revenues are highly dependent on clients primarily located in the U.S. Any economic downturn in the U.S. or in other
 parts of the world, including Europe, or disruptions in the credit markets may have a material adverse effect on our business,
 financial condition and results of operations.
- We face intense competition.

•	Damage to our reputation may adversely impact our ability to generate and retain business.

- Our failure to successfully attract, hire, develop, motivate and retain highly skilled personnel could have a significant adverse effect on our business, financial condition, and results of operations.
- Our business operations may be severely disrupted if we lose the services of our senior executives and key employees.
- Failure to adapt to changing technologies, methodologies, and evolving industry standards may have a material adverse effect on our business, financial condition, and results of operations.
- Security breaches and incidents, system failures or errors, and other disruptions to our networks and systems, could result in
 unauthorized access to, or disclosure or other processing of, confidential information and expose us to liability, which would
 cause our business and reputation to suffer.
- Undetected software design defects, errors or failures may result in loss of business or in liabilities that could have a material adverse effect on our reputation, business and results of operations.
- War, terrorism, other acts of violence, or natural or manmade disasters may affect the markets in which we operate, our clients and our service delivery.
- Acquisitions, strategic investments, partnerships or alliances could be difficult to identify and integrate, divert the attention of
 management, disrupt our business, dilute stockholder value and adversely affect our financial condition and results of
 operations, we may not achieve the financial and strategic goals that were contemplated at the time of a transaction, and we
 may be exposed to claims, liabilities and disputes as a result of the transaction that may adversely impact our business,
 operating results and financial condition.

Risks Related to Our Business, Operations and Industry

We have a relatively short operating history and operate in a rapidly evolving industry, which makes it difficult to evaluate future prospects and may increase the risk that we will not continue to be successful and may adversely impact our stock price.

We were founded in 2006 and have a relatively short operating history in the technology services industry, which is competitive and continuously evolving, subject to rapidly changing demands and constant technological developments. As a result, success and performance metrics are difficult to predict and measure. Since services and technologies are rapidly evolving and each company within the industry can vary greatly in terms of the services it provides, its business model and its results of operations, it can be difficult to predict how any company's services, including ours, will be received in the market.

While many Fortune 1000 enterprises, including our clients, have been willing to devote significant resources to incorporate emerging technologies and related market trends into their business models, they may not continue to spend any significant portion of their budgets on services like those provided by us in the future. Neither our past financial performance nor the past financial performance of any other company in the technology services industry is indicative of how we will fare financially in the future. Our future profits may vary substantially from those of other companies and our past profits, making an investment in us risky and speculative. If clients' demand for our services declines as a result of economic conditions, market factors or shifts in the technology industry, our business, financial condition and results of operations would be adversely affected.

Our stock performance is highly dependent on our ability to successfully execute and grow the business. Consequently, our stock price may be adversely impacted by our inability to execute to our plan, our inability to meet or exceed forward looking financial forecasts, and our inability to achieve our stated short-term and long-term goals.

We may be unable to effectively manage our growth or achieve anticipated growth, which could place significant strain on our management personnel, systems and resources.

Continued growth and expansion may increase challenges we face in recruiting, training and retaining sufficiently skilled professionals and management personnel, maintaining effective oversight of personnel and delivery centers, developing financial and management controls, coordinating effectively across geographies and business units, and preserving our culture and values. Failure to manage growth effectively could have a material adverse effect on the quality of the execution of our engagements, our ability to attract and retain IT professionals, as well as our business, financial condition and results of operations.

In addition, as we increase the size and complexity of projects that we undertake with clients, add new delivery sites, introduce new services or enter into new markets, we may face new market, technological, operational, compliance and administrative risks and challenges, including risks and challenges unfamiliar to us. We may not be able to mitigate these risks and challenges to achieve our anticipated growth or successfully execute large and complex projects, which could materially adversely affect our business, prospects, financial condition and results of operations.

Our revenues have historically been highly dependent on a limited number of clients and industries and any decrease in demand for outsourced services in these industries may reduce our revenues and adversely affect our business, financial condition and results of operations.

Our revenues have historically been highly dependent on a limited number of clients. In 2021, we generated a significant portion of our revenues from our largest clients. For example, we generated approximately 60.4%, 78.4% and 86.7% of our revenue from our 10 largest clients during the years ended December 31, 2021, 2020 and 2019, respectively. Our top two clients each accounted for 10% or more of our revenue during the years ended December 31, 2021 and 2020, respectively. In the year ended December 31, 2019 our top three customers each accounted for 10% or more of Grid Dynamics' revenue. Since a substantial portion of our revenue is derived through time and materials contracts, which are mostly short-term in nature, a major client in one year may not provide the same level of revenues for us in any subsequent year. In addition, a significant portion of our revenues is concentrated in our top three industry verticals: technology, retail and manufacturing. Our growth largely depends on our ability to diversify the industries in which we serve, continued demand for our services from clients in these industry verticals and other industries that we may target in the future, as well as on trends in these industries to outsource the type of services we provide.

Our business is also subject to seasonal trends that impact our revenues and profitability between quarters, driven by the timing of holidays in the countries in which we operate and the U.S. retail cycle, which drives the behavior of several of our retail clients. Excluding the impact of growth in our book of business, we have historically recorded higher revenue and gross profit in the second and third quarters of each year compared to the first and fourth quarters of each year. The Christmas holiday season in Russia and Ukraine, for example, falls in the first quarter of the calendar year, resulting in reduced activity and billable hours of our engineering personnel. In addition, many of our retail sector clients tend to slow their discretionary spending during the holiday sale season, which typically lasts from late November (before Thanksgiving) through late December (after Christmas). Such seasonal trends may cause reductions in our profitability and profit margins during periods affected.

A reduction in demand for our services and solutions caused by seasonal trends, downturns in any of our targeted industries, a slowdown or reversal of the trend to outsource IT services in any of these industries or the introduction of regulations that restrict or discourage companies from outsourcing may result in a decrease in the demand for our services and could have a material adverse effect on our business, financial condition and results of operations.

The impact of the military action in Ukraine has affected and may continue to affect our business.

On February 24, 2022, Russian forces launched significant military action against Ukraine, and sustained conflict and disruption in the region is possible. The impact to Ukraine as well as actions taken by other countries, including new and stricter sanctions imposed by Canada, the United Kingdom, the European Union, the U.S. and other countries and companies and organizations against officials, individuals, regions, and industries in Russia and Ukraine, and actions taken by Russia in response to such sanctions, and each country's potential response to such sanctions, tensions, and military actions could have a material adverse effect on our operations. For example, in response to increased sanctions, Russia could attempt to take control of assets in Russia or Ukraine of companies registered in the United States, such as Grid Dynamics. Any such material adverse effect from the conflict and enhanced sanctions activity may disrupt our delivery of services, impair our ability to complete financial or banking transactions, cause us to shift all or portions of our work occurring in the region to other countries, and may restrict our ability to engage in certain projects in the region or involving certain customers in the region.

We have a significant number of personnel in Ukraine and Russia. We are actively monitoring the security of our personnel and the stability of our infrastructure, including communications and internet availability. We are also executing our business continuity plan and adapting to developments as they occur to protect the safety of our people and handle potential impacts to our delivery infrastructure, including reallocating work to other geographies within our global footprint. We are actively working with our personnel and with our customers to meet their needs and to mitigate delivery challenges.

We have no way to predict the progress or outcome of the situation, as the conflict and government reactions are rapidly developing and beyond our control. Prolonged unrest, military activities, or broad-based sanctions, should they be implemented, could have a material adverse effect on our operations and business outlook. We have accelerated hiring in locations outside of the region as part of our business continuity planning and in order to support client demand. In addition, we have implemented plans to move some of our existing personnel to other countries in order to keep them safe and mitigate impacts on our delivery of services to our customers.

The information contained in this section is accurate as of the date hereof, but may become outdated due to changing circumstances beyond our present awareness or control.

The impact of the COVID-19 pandemic (and its variants) has and may continue to affect our overall financial performance, business operations, and stock price.

In December 2019, a novel coronavirus COVID-19 was reported in China, and in March 2020, the World Health Organization declared it a pandemic. This contagious disease pandemic has continued to spread across the globe and is impacting worldwide economic activity and financial markets, significantly increasing economic volatility and uncertainty. In response to this global pandemic, local, state, and federal governments have been prompted to take unprecedented steps that include, but are not limited to, travel restrictions, closure of businesses, social distancing, and quarantines.

In March 2020 we started witnessing the impacts of the COVID-19 pandemic to our revenues, largely as a consequence of the effect of the pandemic on the business conditions at some of our customers' operations. The impacts varied across our business with it being more pronounced at our retail vertical while the impact at other verticals of our business was largely determined by customer specific dynamics. Since witnessing a low-point in our revenues in the three months ended June 30, 2020, we have consistently grown our quarterly revenues and are generating quarterly revenues higher than our pre-Covid levels. That said, the ongoing COVID-19 pandemic may pose risks in the future to our business as it impacts some of our customers. Examples of the COVID-19 pandemic's impact to our business have included a temporary scale back to our personnel on projects, our customers placing projects and SOWs on temporary hold, and request for longer payment terms. Additionally, because more of our personnel are working remotely, we face increased cyber threats that may affect our systems and networks or those of our clients and contractors, and we anticipate the potential for increased costs to maintain and help secure our infrastructure and data.

Although vaccine rollouts have improved the outlook of the global economy generally, renewed waves and new variants still pose concerns. Growth and investor confidence may be weakened by a variety of factors, including but not limited to, difficulties in containing the virus and related variants, limited availability of effective vaccines and other medical treatments, and stringent social distancing or lockdowns efforts. In the broader economy, supply chain disruption and resulting inflationary pressures, a global labor shortage, and the ebb and flow of COVID, including in specific geographies, are currently impacting the pace of global economic recovery and outlook, which could adversely affect our business. We are now facing challenges from COVID-19 such as employee retention and shortage of talent on the job market. We continue to take precautionary measures intended to minimize the risk of the virus to our employees, our customers, and the communities in which we operate that include suspension of all non-essential travel. All of our facilities have been opened for employees to work following local government guidelines. That said, the COVID-19 pandemic has placed restrictions in movement, and the majority of our employees continue to work remotely. Additionally, we have been successful in transitioning the majority of our workforce to work remotely and this has resulted in minimal disruption in our ability to deliver services to our customers.

Our revenues are highly dependent on clients primarily located in the U.S. Any economic downturn in the U.S. or in other parts of the world, including Europe, or disruptions in the credit markets may have a material adverse effect on our business, financial condition and results of operations.

The IT services industry is particularly sensitive to the economic environment and tends to decline during general economic downturns. We derive the majority of our revenues from clients in the U.S. In the event of an economic downturn in the U.S. or in other parts of the world, including Europe (where we have gained customers in the Netherlands, Germany and the U.K. through our acquisition of Daxx in December 2020, as well as through our acquisition of Tacit in May 2021, our existing and prospective clients may reduce or postpone their technology spending significantly, which may in turn lower the demand for our services and may have a material adverse effect on our business, financial condition and results of operations. In addition, if a disruption in the credit markets were to occur, it could pose a risk to our business if clients or vendors are unable to obtain financing to meet payment or delivery obligations to us or if we are unable to obtain necessary financing. The COVID-19 pandemic has had adverse effects on economics and financial markets globally, which have particularly impacted many small, medium as well as large-sized businesses. Although the U.S. government and others throughout the world have or have taken steps to provide monetary and fiscal assistance to individuals and businesses affected by the pandemic, it is unclear whether these government actions will be sufficient to successfully avert or mitigate any economic downturn. Any economic downturn resulting from the COVID-19 pandemic and preventative measures taken by governments and private business worldwide could decrease technology spending and negatively affect demand for our offerings, which could materially adversely affect our business, prospects, financial condition and results of operations.

We face intense competition.

The market for technology and IT services is highly competitive and subject to rapid change and evolving industry standards and we expect competition to persist and intensify. We face competition from offshore IT services providers in other outsourcing destinations with low wage costs such as India, China, CEE countries and Latin America, as well as competition from large, global consulting and outsourcing firms and in-house IT departments of large corporations. Industry clients tend to

engage multiple IT services providers instead of using an exclusive IT services provider, which could reduce our revenues to the extent that our clients obtain services from competing companies. Industry clients may prefer IT services providers that have more locations or that are based in countries that are more cost-competitive, stable and/or secure than some of the emerging markets in which we operate.

Our primary competitors include global consulting and traditional IT service providers such as Accenture plc, Capgemini SE, Cognizant Technology Solutions Corporation, Infosys Technologies, Wipro, and digital transformation providers such as EPAM Systems, Inc., Globant S.A., Endava plc, Ciklum, and Andersen Lab. Many of our present and potential competitors have substantially greater financial, marketing and technical resources, and name recognition than we do. Therefore, they may be able to compete more aggressively on pricing or devote greater resources to the development and promotion of technology and IT services and we may be unable to retain our clients while competing against such competitors. Increased competition as well as our inability to compete successfully may have a material adverse effect on our business, prospects, financial condition and results of operations.

Damage to our reputation may adversely impact our ability to generate and retain business.

Since our business involves providing tailored services and solutions to clients, we believe that our corporate reputation is a significant factor when an existing or prospective client is evaluating whether to engage our services as opposed to those of our competitors. In addition, we believe that our brand name and reputation also play an important role in recruiting, hiring and retaining highly skilled personnel.

However, our brand name and reputation is potentially susceptible to damage by factors beyond our control, including actions or statements made by current or former clients and employees, competitors, vendors, adversaries in legal proceedings, government regulators and the media. There is a risk that negative information about us, even if untrue, could adversely affect our business. Any damage to our reputation could be challenging to repair, could make potential or existing clients reluctant to select us for new engagements, could adversely affect our recruitment and retention efforts, and could also reduce investor confidence.

Our failure to successfully attract, hire, develop, motivate and retain highly skilled personnel could have a significant adverse effect on our business, financial condition, and results of operations.

Our continued growth and success and operational efficiency is dependent on our ability to attract, hire, develop, motivate and retain highly skilled personnel, including IT engineers and other technical personnel, in the geographically diverse locations in which we operate. In the current environment, competition for highly skilled IT professionals is particularly intense and as a consequence, we are witnessing increasing challenges around employee retention, talent shortages, and attrition rates. While our management targets a voluntary attrition rate (expressed as a percentage) no higher than in the low-twenties, the significant market demand for highly skilled IT personnel and competitors' activities may induce our qualified personnel to leave and make it more difficult for us to recruit new employees with suitable knowledge, experience and professional qualifications. High attrition rates of IT personnel would increase our operating costs, including hiring and training costs, and could have an adverse effect on our ability to complete existing contracts in a timely manner, meet client objectives and expand our business. Failure to attract, hire, develop, motivate and retain personnel with the skills necessary to serve our clients could decrease our ability to meet and develop ongoing and future business and could materially adversely affect our business, financial condition and results of operations.

Our business operations may be severely disrupted if we lose the services of our senior executives and key employees.

Our success depends substantially upon the continued services of our senior executives and other key employees. If we lose the services of one or more of such senior executives or key employees, our business operations can be disrupted, and we may not be able to replace them easily or at all. In addition, competition for senior executives and key personnel in our industry is intense, and we may be unable to retain such personnel or attract and retain such personnel in the future, in which case our business may be severely disrupted.

Failure to adapt to changing technologies, methodologies, and evolving industry standards may have a material adverse effect on our business, financial condition, and results of operations.

We operate in an industry characterized by rapidly changing technologies, methodologies and evolving industry standards. Our future success depends in part upon our ability to anticipate developments in our industry, enhance our existing services and to develop and introduce new services to keep pace with such changes and developments and to meet changing client needs.

Development and introduction of new services and products is expected to become increasingly complex and expensive, involve a significant commitment of time and resources, and subject to a number of risks and challenges, including:

- difficulty or cost in updating services, applications, tools and software and in developing new services quickly enough to meet clients' needs;
- difficulty or cost in making some features of software work effectively and securely over the Internet or with new or changed operating systems;
- difficulty or cost in updating software and services to keep pace with evolving industry standards, methodologies, regulatory and other developments in the industries where our clients operate; and
- difficulty or cost in maintaining a high level of quality and reliability as we implement new technologies and methodologies.

We may not be successful in anticipating or responding to these developments in a timely manner, and even if we do so, the services, technologies or methodologies we develop or implement may not be successful in the marketplace. Furthermore, services, technologies or methodologies that are developed by competitors may render our services non-competitive or obsolete. Our failure to adapt and enhance our existing services and to develop and introduce new services to promptly address the needs of our clients may have a material adverse effect on our business, financial condition and results of operations.

Security breaches and incidents, system failures or errors, and other disruptions to our networks and systems could result in unauthorized access to, or disclosure or other processing of, confidential information and expose us to liability, which would cause our business and reputation to suffer.

We often have access to, or are required to collect, process, transmit, store, or otherwise process, sensitive or confidential client and customer data, including intellectual property, proprietary business information of Grid Dynamics and our clients, and personal information of our clients, customers, employees, contractors, service providers, and others. We use our data centers and networks, and certain networks and other facilities and equipment of our contractors and service providers, for these purposes. Despite our detailed, company-wide, industry standard and best practices-conformant security measures, our information technology and infrastructure may be vulnerable to attacks and disruptions by hackers or other third parties, the introduction of ransomware or other malicious code, or otherwise may be breached or otherwise subject to security incidents or compromises due to human error, phishing attacks, social engineering, zero-day vulnerabilities, malfeasance or other disruptions. During the COVID-19 pandemic, because more of our personnel are working remotely, we face increased risks of such attacks and disruptions that may affect our systems and networks or those of our clients and contractors. Increased risks of such attacks and disruptions also exist because of the significant military action against Ukraine launched by Russia. Any such breach, incident or disruption could compromise our data centers, networks and other equipment and the information stored or processed there could be accessed, disclosed, altered, misappropriated, lost, stolen, rendered unavailable, or otherwise processed without authorization. In addition, any failure or security breach or incident in a client's system relating to the services we provide could also result in loss or misappropriation of, or unauthorized access, alteration, use, acquisition, disclosure, or other processing of sensitive or confidential information, and may result in a perception that we or our contractors or service providers caused such an incident, even if Grid Dynamics' and our contractors' networks and other facilities and equipment were not compromised.

Our contractors and service providers face similar risks with respect to their facilities and networks used by us, and they also may suffer outages, disruptions, and security incidents and breaches. We cannot guarantee that our or our third-party vendors and service providers' systems and networks have not been breached or otherwise compromised or that they do not contain any exploitable vulnerabilities, defects or bugs that could result in a breach of or disruption to our systems and networks or the systems and networks of third parties that support us and our services. Breaches and security incidents suffered by us and our contractors and service providers may remain undetected for an extended period. Any such breach, disruption or other circumstance leading to loss, alteration, misappropriation, or unauthorized use, access, acquisition, disclosure, or other processing of sensitive or confidential client or customer data suffered by us or our contractors or service providers, or the perception that any may have occurred, could expose us to claims, litigation, and liability, regulatory investigations and proceedings, cause us to lose clients and revenue, disrupt our operations and the services provided to clients, damage our reputation, cause a loss of confidence in our products and services, require us to expend significant resources designed to protect against further breaches and incidents and to rectify problems caused by these events, and result in significant financial and other potential losses.

Our errors and omissions insurance covering certain damages and expenses may not be sufficient to compensate for all liability. Although we maintain insurance for liabilities incurred as a result of certain security-related damages, we cannot be certain that

our coverage will be adequate for liabilities actually incurred, that insurance will continue to be available to us on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceeds available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, including our financial condition, results of operations, and reputation.

Undetected software design defects, errors or failures may result in loss of business or in liabilities that could have a material adverse effect on our reputation, business and results of operations.

Our services involve developing software solutions for our clients and we may be required to make certain representations and warranties to our clients regarding the quality and functionality of our software. Given that our software solutions have a high degree of technological complexity, they could contain design defects or errors that are difficult to detect or correct. We cannot provide assurances that, despite testing by us, errors or defects will not be found in our software solutions. Any such errors or defects could result in litigation, other claims for damages against us, the loss of current clients and loss of, or delay in, revenues, loss of market share, a failure to attract new clients or achieve market acceptance, diversion of development resources, increased support or service costs, as well as reputational harm and thus could have a material adverse effect on our reputation, business, prospects, financial condition and results of operations.

We do not have long-term commitments from our clients, and our clients may terminate contracts before completion or choose not to renew contracts.

Our clients are generally not obligated for any long-term commitments to us. Although a substantial majority of our revenues are generated from repeated business, which we define as revenues from a client who also contributed to our revenues during the prior year, our engagements with our clients are typically for projects that are singular in nature. In addition, our clients can terminate many of our master services agreements and work orders with or without cause, and in most cases without any cancellation charge. Therefore, we must seek to obtain new engagements when our current engagements are successfully completed or are terminated as well as maintain relationships with existing clients and secure new clients to expand our business.

There are a number of factors relating to our clients that are outside of our control which might lead them to terminate a contract or project with us, including:

- financial difficulties for the client;
- a change in strategic priorities, resulting in elimination of the impetus for the project or a reduced level of technology spending;
- a change in outsourcing strategy resulting in moving more work to the client's in-house technology departments or to our competitors;
- the replacement by our clients of existing software with packaged software supported by licensors; and
- mergers and acquisitions or significant corporate restructurings.

Failure to perform or observe any contractual obligations could result in cancellation or non-renewal of a contract, which could cause us to experience a higher than expected number of unassigned employees and an increase in our cost of revenues as a percentage of revenues, until we are able to reduce or reallocate our headcount. The ability of our clients to terminate agreements makes our future revenues uncertain. We may not be able to replace any client that elects to terminate or not renew its contract with us, which could materially adversely affect our revenues and thus our results of operations.

In addition, some of our agreements specify that if a change of control of our company occurs during the term of the agreement, the client has the right to terminate the agreement. If any future event triggers any change-of- control provision in our client contracts, these master services agreements may be terminated, which would result in loss of revenues.

Failure to successfully deliver contracted services or causing disruptions to clients' businesses may have a material adverse effect on our reputation, business, financial condition, and results of operations.

Our business is dependent on our ability to successfully deliver contracted services in a timely manner. Any partial or complete failure of our equipment or systems, or any major disruption to basic infrastructure like power and telecommunications in the locations in which we operate, could impede our ability to provide contracted services to our clients. In addition, if our professionals make errors in

the course of delivering services to our clients or fail to consistently meet the service requirements of a client, these errors or failures could disrupt the client's business. Any failure to successfully deliver contracted services or

causing disruptions to a client's business, including the occurrence of any failure in a client's system or breach of security relating to the services provided by us, may expose us to substantial liabilities and have a material adverse effect on our reputation, business, financial condition and results of operations.

Additionally, our clients may perform audits or require us to perform audits and provide audit reports with respect to the IT and financial controls and procedures that we use in the performance of services for our clients. Our ability to acquire new clients and retain existing clients may be adversely affected and our reputation could be harmed if we receive a qualified opinion, or if we cannot obtain an unqualified opinion in a timely manner, with respect to our controls and procedures in connection with any such audit. We could also incur liability if our controls and procedures, or the controls and procedures we manage for a client, were to result in an internal control failure or impair our client's ability to comply with its own internal control requirements. If we or our partners fail to meet our contractual obligations or otherwise breach obligations to our clients, we could be subject to legal liability, which may have a material and adverse effect on our reputation, business, financial condition, and results of operations.

We rely on software, hardware and SaaS technologies from third parties that may be difficult to replace or that may cause errors or defects in, or failures of, our services or solutions.

We rely on software and hardware from various third parties as well as hosted Software as a Service ("SaaS") applications from third parties to deliver our services and solutions. If any of these software, hardware or SaaS applications become unavailable due to loss of license, extended outages, interruptions, or because they are no longer available on commercially reasonable terms, there may be delays in the provisioning of our services until equivalent technology is either developed by us, or, if available, is identified, obtained and integrated, which could increase our expenses or otherwise harm our business. Furthermore, any errors or defects in or failures of third-party software, hardware or SaaS applications could result in errors or defects in or failures of our services and solutions, which could be costly to correct and have an adverse effect on our reputation, business, financial condition and results of operations.

Existing insurance coverage and limitation of liability provisions in service contracts may be inadequate to protect us against losses.

We maintain certain insurance coverage, including professional liability insurance, director and officer insurance, property insurance for certain of our facilities and equipment, and business interruption insurance for certain of our operations. However, we do not insure for all risks in our operations and if any claims for injury are brought against us, or if we experience any business disruption, litigation or natural disaster, we might incur substantial costs and diversion of resources.

Most of the agreements we have entered into with our clients require us to purchase and maintain specified insurance coverage during the terms of the agreements, including commercial general insurance or public liability insurance, umbrella insurance, product liability insurance, and workers' compensation insurance. Some of these types of insurance are not available on reasonable terms or at all in some countries in which we operate.

Our liability for breach of our obligations is in some cases limited under client contracts. Such limitations may be unenforceable or otherwise may not protect us from liability for damages. In addition, our existing contracts may not limit certain liabilities, such as claims of third parties for which we may be required to indemnify our clients. The successful assertion of one or more large claims against us in amounts greater than those covered by our current insurance policies could materially adversely affect our business, financial condition and results of operations. Even if such assertions against us are unsuccessful, we may incur reputational harm and substantial legal fees.

If we are not able to maintain an effective system of internal control over financial reporting, current and potential investors could lose confidence in our financial reporting, which could harm our business and have an adverse effect on our stock price. We cannot provide assurances that material weaknesses, or significant deficiencies, will not occur in the future.

Any failure to maintain effective internal controls over our financial reporting could materially and adversely affect us. Section 404 of the Sarbanes-Oxley Act requires us to include in our annual reports on Form 10-K an assessment by management of the effectiveness of our internal controls over financial reporting. In addition, we will be required to have our independent public accounting firm attest to and report on management's assessment of the effectiveness of our internal control over financial reporting when we cease qualifying as an "emerging growth company" pursuant to the Jumpstart Our Business Startups Act (the "JOBS Act"). We are currently undergoing the expensive and time-consuming work necessary to enable our independent public accounting firm to make such an attestation. If we are unable to conclude that we have effective internal control over financial reporting or, if our independent auditors are unable to provide us with an attestation and an unqualified report as to the effectiveness of our internal control over financial reporting, investors could lose confidence in the reliability of our financial statements, which could result in a decrease in the value of our securities.

If material weaknesses or significant deficiencies in internal controls are discovered in the future, they may adversely affect our ability to record, process, summarize and report financial information in a timely and accurate manner and, as a result, our financial statements may contain material misstatements or omissions.

Our global business, especially in CIS and CEE countries, exposes us to significant legal, economic, tax and political risks.

We have significant operations in certain emerging market economies, which creates legal, economic, tax and political risks. Risks inherent in conducting international operations include:

- less established legal systems and legal ambiguities, inconsistencies and anomalies;
- changes in laws and regulations;
- application and imposition of protective legislation and regulations relating to import or export, including tariffs, quotas and other trade protection measures;
- difficulties in enforcing intellectual property and/or contractual rights;
- bureaucratic obstacles and corruption;
- compliance with a wide variety of foreign laws, including those relating to privacy and data protection;
- restrictions on the repatriation of dividends or profits;
- · expropriation or nationalization of property;
- restrictions on currency convertibility and exchange controls;
- fluctuations in currency exchange rates;
- potentially adverse tax consequences;
- competition from companies with more experience in a particular country or with international operations;
- civil strife;
- unstable political and military situations; and
- overall foreign policy and variability of foreign economic conditions, including the effects of the COVID-19 pandemic.

The legal systems of Russia, Ukraine, Poland, Serbia and Moldova are often beset by legal ambiguities as well as inconsistencies and anomalies due to the relatively recent enactment of many laws that may not always coincide with market developments. Furthermore, legal and bureaucratic obstacles and corruption exist to varying degrees in each of these countries. In such environments, our competitors may receive preferential treatment from governments, potentially giving them a competitive advantage. Governments may also revise existing contract rules and regulations or adopt new ones at any time and for any reason, and government officials may apply contradictory or ambiguous laws or regulations in ways that could materially adversely affect our business and operations in such countries. Any of these changes could impair our ability to obtain new contracts or renew or enforce contracts under which we currently provide services or to which we are a party. Any new contracting methods could be costly or administratively difficult for us to implement, which could materially adversely affect our business and operations. We cannot guarantee that regulators, judicial authorities or third parties in Russia, Ukraine, Poland, Serbia and Moldova will not challenge our (including our subsidiaries') compliance with applicable laws, decrees and regulations. In addition to the foregoing, selective or arbitrary government actions may include withdrawal of licenses, sudden and unexpected tax audits, criminal prosecutions and civil actions, all of which could have a material adverse effect on our business, financial condition and results of operations.

The banking and other financial systems in certain Commonwealth of Independent States ("CIS") and CEE countries where we operate remain subject to periodic instability and generally do not meet the banking standards of more developed markets. Armed conflict, or the threat of armed conflict, including the significant military action against Ukraine launched by Russia, as well as sanctions targeting banks in the region in response to such military action, could contribute to banking challenges or a banking crisis in these countries. Such events, or a financial crisis or the bankruptcy or insolvency of banks through which we receive, or with which we hold, funds may result in the loss of our deposits or adversely affect our ability to complete banking transactions in that region, which could materially adversely affect our business and financial condition.

Furthermore, existing tensions and the emergence of new or escalated tensions in CIS and CEE countries, including the significant military action against Ukraine launched by Russia, has exacerbated and could further exacerbate tensions between

such countries and the U.S. Such tensions, concerns regarding information security, and actual and potential imposition of additional sanctions by the U.S. and other countries, or responses by Russia to such additional sanctions, may discourage existing or prospective clients to engage our services, have a negative effect on our ability to develop or maintain our operations in the countries where we currently operate, and disrupt our ability to attract, hire and retain employees. The occurrence of any such event may have a material adverse effect on our business, financial condition and results of operations.

As a result of our acquisition of Tacit in May 2021, we have acquired operations in Guadalajara, Mexico. The laws and regulations in Mexico to which we have become subject thereby, and interpretations thereof, may change, sometimes substantially, as a result of a variety of factors beyond our control, including political, economic, regulatory or social events. As a result of amendments in May 2019 to the Mexican Federal Labor Law (Ley Federal del Trabajo) and other related regulations, among other things, new labor authorities and courts were created, new bargaining procedures were implemented and provisions related to employees' freedom of association and organization, collective bargaining agreements, and rules against labor discrimination were issued or amended. We cannot assure you that these changes will not lead to an increase in litigation, labor activism or increasingly contentious labor relations, which in turn may adversely affect our business, financial condition, results of operations and prospects, particularly in Mexico. These and any other policies, laws and regulations which are further adopted could result in a deterioration of investment sentiment, political and economic uncertainty, and increased costs for our business, which may in turn have a material adverse effect on our business, financial condition, liquidity and results of operations.

The extent to which the COVID-19 pandemic continues to impact our results will depend on future developments, which are highly uncertain and cannot be predicted, including the duration of the pandemic, travel restrictions and social distancing in the CIS and CEE countries, the U.S. and other countries, business closures or business disruptions and the effectiveness of actions taken by governments and private businesses to attempt to contain and treat the disease. Any prolonged shut down of a significant portion of global economic activity or downturn in the global economy, along with any adverse effects on industries in which our customers operate, could materially and adversely impact our business, results of operations and financial condition.

Our results of operations and financial condition could be materially affected by the enactment of legislation implementing changes in the U.S. taxation of international business activities or the adoption of other tax reform policies.

In November 2021, the U.S. House of Representatives passed the legislation commonly known as the Build Back Better Act (the "BBBA") that proposed several significant modifications to key provisions, as well as introduced new provisions, to the U.S. internal revenue code. Although it is uncertain if some or all of the identified provisions will be enacted, a change in U.S. tax law may materially and adversely impact our income tax liability, provision for income taxes, and effective tax rate.

Our effective tax rate could be adversely affected by several factors.

We conduct business globally and file income tax returns in multiple jurisdictions. Our effective tax rate could be materially adversely affected by several factors, including changes in the amount of income taxed by, or allocated to, the various jurisdictions in which we operate that have differing statutory tax rates; changing tax laws, regulations and interpretations of such tax laws in multiple jurisdictions; and the resolution of issues arising from tax audits or examinations and any related interest or penalties. In particular, there have been significant changes to the taxation systems in CEE countries in recent years as the authorities have gradually replaced or introduced new legislation regulating the application of major taxes such as corporate income tax, value-added tax, corporate property tax, personal income taxes and payroll taxes. Furthermore, any significant changes to the Tax Cuts and Jobs Act ("U.S. Tax Act") enacted in 2017, or to regulatory guidance associated with the U.S. Tax Act, could materially adversely affect our effective tax rate. Adoption of the BBBA could also materially affect our effective tax rate.

The determination of our provision for income taxes and other tax liabilities requires estimation, judgment and calculations where the ultimate tax determination may not be certain. Our determination of tax liability is always subject to review or examination by authorities in various jurisdictions. If a tax authority in any jurisdiction reviews any of our tax returns and proposes an adjustment, including a determination that the transfer prices and terms we have applied are not appropriate, such an adjustment could have an adverse effect on our business, financial condition and results of operations.

We are unable to predict what tax reforms may be proposed or enacted in the future or what effect such changes would have on our business, but such changes, to the extent they are brought into tax legislation, regulations, policies or practices in jurisdictions in which we operate, could increase the estimated tax liability that we have expensed to date and paid or accrued on our balance sheets, and otherwise affect our financial position, future results of operations, cash flows in a particular period and overall or effective tax rates in the future in countries where we have operations, reduce post-tax returns to our stockholders and increase the complexity, burden and cost of tax compliance.

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

Certain of our personnel are retained as independent contractors. The criteria to determine whether an individual is considered an independent contractor or an employee are typically fact intensive and vary by jurisdiction, as can the interpretation of the applicable laws. If a government authority or court makes any adverse determination with respect to some or all of our independent contractors, we could incur significant costs, including for prior periods, in respect of tax withholding, social security taxes or payments, workers' compensation and unemployment contributions, and recordkeeping, or we may be required to modify our business model, any of which could materially adversely affect our business, financial condition and results of operations.

Global mobility of employees may potentially create additional tax liabilities for us in different jurisdictions.

In performing services to clients, our employees may be required to travel to various locations. Depending on the length of the required travel and the nature of employees' activities the tax implications of travel arrangements vary, with generally more extensive tax consequences in cases of longer travel. Such tax consequences mainly include payroll tax liabilities related to employee compensation and, in cases envisaged by international tax legislation, taxation of profits generated by employees during their time of travel.

We have internal procedures, policies and systems, including an internal mobility program, for monitoring our tax liabilities arising in connection with the business travel. However, considering that the tax authorities worldwide are paying closer attention to global mobility issues, our operations may be adversely affected by additional tax charges related to the activity of our mobile employees.

Loss of taxation benefits related to our employment-related taxes that are enjoyed in Russia could have a negative impact on our operating results and profitability.

The Russian government provides qualified Russian IT companies with substantial tax benefits through a reduced social contribution charge rate program. This program resulted in savings for us of approximately \$4.1 million, \$1.8 million and \$2.3 million in the fiscal years ended December 31, 2021, 2020 and 2019, respectively. Until January 1, 2021 the reduced tax rates for social contributions (16% in total) were a temporary measure. On January 1, 2021 a new law came into force that provides additional support to the IT industry, including among others, a fixed social tax rate of 7.6% compared to 14% previously. Companies must meet certain criteria to be eligible for the new provisions. We started to benefit from the program starting from January 1, 2021. If the Russian government were to change its favorable treatment of Russian IT companies by modifying or repealing its current favorable tax measures, or if we become ineligible for such favorable treatment, it would significantly impact our financial condition and results of operations.

Tax authorities may disagree with our positions and conclusions regarding certain tax positions, or may apply existing rules in an arbitrary or unforeseen manner, resulting in unanticipated costs, taxes or non-realization of expected benefits.

A tax authority may disagree with tax positions that we have taken, which could result in increased tax liabilities. For example, a tax authority could challenge our allocation of income by tax jurisdiction and the amounts paid between our affiliated companies pursuant to our intercompany arrangements and transfer pricing policies, including methodologies for valuing developed technology and amounts paid with respect to our intellectual property development.

A tax authority may take the position that material income tax liabilities, interest and penalties are payable by us, where there has been a technical violation of contradictory laws and regulations that are relatively new and have not been subject to extensive review or interpretation, in which case we expect that we might contest such assessment. High-profile companies can be particularly vulnerable to aggressive application of unclear requirements. Many companies must negotiate their tax bills with tax inspectors who may demand higher taxes than applicable law appears to provide. Contesting such an assessment may be lengthy and costly and if we were unsuccessful in disputing the assessment, the implications could increase our anticipated effective tax rate, where applicable.

Our business, financial condition and results of operations may be adversely affected by fluctuations in foreign currency exchange rates.

Grid Dynamics is exposed to foreign currency exchange rate risk and its profit margins are subject to volatility between periods due to changes in foreign currency exchange rates relative to the U.S. dollar. Grid Dynamics' functional currency apart from the U.S. dollar includes EURO, British pounds, Mexican pesos, Polish zloty, Russian rubles and Moldovan Leu. We are exposed to foreign currency exchange transaction risk related to funding our non-U.S. operations and to foreign currency translation risk

related to certain of our subsidiaries' cash balances that are denominated in currencies other than the U.S. dollar as we do not currently hedge our foreign currency exposure. In addition, our profit margins are subject to volatility as a result of changes in foreign exchange rates. In the year ended December 31, 2021, approximately 12.5%, 11.9%, and 6.4% of our \$211.2 million of combined cost of revenue and total operating expenses were denominated in the Ukrainian hryvnia, Russian rouble, and Polish zloty, respectively, compared to approximately 11.7%, 13.8% and 9.6% of our \$126.7 million of combined cost of revenue and total operating expenses denominated in the Ukrainian hryvnia, Russian rouble, and Polish zloty in the year ended December 31, 2020. Any significant fluctuations in currency exchange rates may have a material impact on our business and results of operations. In some countries, we may be subject to regulatory or practical restrictions on the movement of cash and the exchange of foreign currencies, which would limit our ability to use cash across our global operations and increase our exposure to currency fluctuations. This risk could increase as we continue expanding our global operations, which may include entering emerging markets that may be more likely to impose these types of restrictions. Currency exchange volatility caused by political or economic instability or other factors, could also materially impact our results. See Item 7A, "Quantitative and Qualitative Disclosures about Market Risk—Foreign Currency Exchange Rate Risk" for more information about our exposure to foreign currency exchange rates.

We may be exposed to liability for actions taken by our subsidiaries.

In certain cases, we may be jointly and severally liable for losses of our subsidiaries. Irrespective of incurring liability for losses of our subsidiaries, we may also incur secondary liability and, in certain cases, liability to creditors for obligations of our subsidiaries in certain instances involving bankruptcy or insolvency.

In particular, under Article 53, Part 1 of the Russian Civil Code, a "controlling person" of a legal entity may be held directly liable for losses that the entity suffers because of his or her "fault," and any agreement that seeks to limit or waive such liability will not be valid. Generally, a controlling person is anyone who holds the power to determine the entity's actions, including the right to direct the actions of officers or executives. When a controlling person causes losses, officers and executives may all be held jointly and severally liable (a parent entity may also be held jointly liable with a subsidiary for actions directed by the parent or made with its consent). Liability may also apply to stockholders or controlling persons when the company is a foreign legal entity but conducts its business primarily in Russia.

Further, an effective parent is secondarily liable for an effective subsidiary's debts if the effective subsidiary becomes insolvent or bankrupt as a result of the action or inaction of the effective parent. Compensation for the effective subsidiary's losses from the effective parent that caused the effective subsidiary to take action or fail to take action, knowing that such action or failure to take action would result in losses, may be claimed, inter alia, by the other stockholders of the effective subsidiary, the administrators and creditors in an insolvency proceeding. We could be found to be the effective parent of the subsidiaries, in which case we could become liable for their debts, which could have a material adverse effect on our business, financial condition and results of operations or prospects.

Our profitability may suffer if we are unable to maintain our resource utilization and productivity levels.

As most of our client projects are performed and invoiced on a time and materials basis, our management tracks and projects billable hours as an indicator of business volume and corresponding resource needs for IT professionals. To maintain our gross profit margins, we must effectively utilize our IT professionals, which depends on our ability to:

- integrate and train new personnel;
- efficiently transition personnel from completed projects to new assignments;
- · forecast customer demand for services; and
- deploy personnel with appropriate skills and seniority to projects.

If we experience a slowdown or stoppage of work for any client, or on any project for which we have dedicated personnel or facilities, we may be unable to reallocate these personnel or assets to other clients and projects to keep their utilization and productivity levels high. If we are unable to maintain appropriate resource utilization levels, our profitability may suffer.

If we are unable to accurately estimate the cost of service or fail to maintain favorable pricing for our services, our contracts may be unprofitable.

Grid Dynamics expects proportionate revenue from fixed-fee contracts to increase in future periods. In order for our contracts to be profitable, we must be able to accurately estimate our costs to provide the services required by the applicable contract and appropriately

price our contracts. Such estimates and pricing structures used by us for our contracts are highly dependent on internal forecasts, assumptions and predictions about our projects, the marketplace, global economic conditions (including

foreign exchange volatility) and the coordination of operations and personnel in multiple locations with different skill sets and competencies. Due to the inherent uncertainties that are beyond our control, we may underprice our projects, fail to accurately estimate the costs of performing the work or fail to accurately assess the risks associated with potential contracts. In select cases, we also offer volume discounts once a client reaches certain contractual spend thresholds, which may lower the reference price for a client or result in a loss of profits if we do not accurately estimate the amount of discounts to be provided. We may not be able to recognize revenues from fixed-fee contracts in the period in which our services are performed, which may cause our margins to fluctuate. Any increased or unexpected costs, delays or failures to achieve anticipated cost savings, or unexpected risks we encounter in connection with the performance of our contracts, including those caused by factors outside our control, could make these contracts less profitable or unprofitable.

We face risks associated with the long selling and implementation cycle for our services that require significant resource commitments prior to realizing revenues for those services.

We have a long selling cycle for our services, which requires us to expend substantial time and resources to educate clients on the value of our services and our ability to meet their requirements. In certain cases, we may begin work and incur costs prior to executing a contract. Our selling cycle is subject to many risks and delays over which we have little or no control, including clients' decisions to choose alternatives to our services (such as other IT services providers or in-house resources) and the timing of clients' budget cycles and approval processes. Therefore, selling cycles for new clients can be especially unpredictable and we may fail to close sales with prospective clients to whom we have devoted significant time and resources. Any significant failure to generate revenues or delays in recognizing revenues after incurring costs related to sales processes could have a material adverse effect on our business, financial condition and results of operations.

Failure to obtain engagements for and effectively manage increasingly large and complex projects may have an adverse effect on our business, financial condition and results of operations.

Our operating results are dependent on the scale of our projects and the prices we are able to charge for our services. In order to successfully perform larger and more complex projects, we need to establish and maintain effective, close relationships with our clients, continue high levels of client satisfaction and develop a thorough understanding of our clients' needs. We may also face a number of challenges managing larger and more complex projects, including:

- maintaining high quality control and process execution standards;
- maintaining planned resource utilization rates on a consistent basis;
- using an efficient mix of on-site, off-site and offshore staffing;
- maintaining productivity levels;
- implementing necessary process improvements;
- recruiting and retaining sufficient numbers of highly skilled IT personnel; and
- controlling costs.

There is no guarantee that we may be able to overcome such challenges. In addition, large and complex projects may involve multiple engagements or stages, and there is a risk that a client may choose not to retain us for additional stages or may cancel or delay additional planned engagements. Our failure to successfully obtain engagements for and effectively manage large and complex projects may have an adverse effect on our business, financial condition and results of operations.

Increases in compensation expenses, including stock-based compensation expenses, could lower our profitability, and dilute our existing stockholders.

Wages and other compensation costs in the countries in which we maintain significant operations and delivery centers are lower than comparable wage costs in more developed countries. However, wages in the technology industry in these countries may increase at a faster rate than in the past, which may make us less competitive unless we are able to increase the efficiency and productivity of our people. If we increase operations and hiring in more developed economies, our compensation expenses will increase because of the higher wages demanded by technology professionals in those markets. Wage inflation, whether driven by competition for talent or ordinary course pay increases, could increase our cost of services as well as selling, general and administrative expenses and reduce our profitability if we are not able to pass those costs on to our customers or charge premium prices when justified by market demand.

In addition, we have granted certain equity-based awards under our equity incentive plans and expect to continue doing so. For the years ended December 31, 2021 and 2020, we recorded \$33.0 million and \$20.0 million, respectively, of stock-based

compensation expense related to the grant of stock options and awards. If we do not grant equity awards, or if we reduce the value of equity awards we grant, we may not be able to attract, hire and retain key personnel. If we grant more equity awards to attract, hire and retain key personnel, the expenses associated with such additional equity awards could materially adversely affect our results of operations. If the anticipated value of these equity awards does not materialize because of volatility or lack of positive performance in our stock price, we may be unable to retain our key personnel or attract and retain new key employees in the future, in which case our business may be severely disrupted our ability to attract and retain personnel could be adversely affected. The issuance of equity-based compensation may also result in dilution to stockholders.

Failure to collect receivables from, or bill for unbilled services to, clients may have a material adverse effect on our results of operations and cash flows.

Our business depends on our ability to successfully obtain payment from our clients of the amounts they owe for work performed. We usually bill and collect such amounts on relatively short cycles and maintain allowances for doubtful accounts. However, actual losses on client balances could differ from those that we anticipate and, as a result, we might need to adjust our allowances.

There is no guarantee that we will accurately assess the creditworthiness of our clients. If clients suffer financial difficulties, it could cause them to delay payments, request modifications to their payment arrangements that could increase our receivables balance, or default on their payment obligations.

In addition, some of our clients may delay payments due to changes in internal payment procedures driven by rules and regulations to which they are subject. Timely collection of client balances also depends on our ability to complete our contractual commitments and bill and collect contracted revenues. If we are unable to meet our contractual requirements, we may experience delays in collection of or inability to collect accounts receivable. If this occurs, our financial condition, results of operations and cash flows could be materially adversely affected.

We may need additional capital and failure to raise additional capital on terms favorable to us, or at all, could limit our ability to grow our business and develop or enhance our service offerings to respond to market demand or competitive challenges.

We may require additional cash resources due to changed business conditions or other future developments. If existing resources are insufficient to satisfy cash requirements, we may seek to sell additional equity or debt securities or obtain one or more credit facilities. The sale of additional equity securities could result in dilution to stockholders. The incurrence of indebtedness would result in increased debt service obligations and could require us to agree to operating and financing covenants that would restrict our operations. Our ability to obtain additional capital on acceptable terms is subject to a variety of uncertainties, including investors' perception of, and demand for, securities of IT services companies, conditions in the capital markets in which we may seek to raise funds, our future results of operations and financial condition, and general economic and political conditions. Financing may not be available in amounts or on terms acceptable to us, or at all, which could limit our ability to grow our business and develop or enhance our service offerings to respond to market demand or competitive challenges.

War, terrorism, other acts of violence, or natural or manmade disasters may affect the markets in which we operate, our clients and our service delivery.

Our business may be adversely affected by instability, disruption or destruction in a geographic region in which we operate, regardless of cause, including war, terrorism, riot, civil insurrection or social unrest, and natural or manmade disasters, including famine, flood, fire, earthquake, storm or pandemic events and spread of disease, such as the COVID-19 pandemic. For example, the significant military action against Ukraine launched by Russia has affected and will further affect our business. Such events may cause clients to delay their decisions on spending for the services provided by us and give rise to sudden significant changes in regional and global economic conditions and cycles. These events also pose significant risks to our personnel and to physical facilities and operations, which could materially adversely affect our financial results.

Acquisitions could be difficult to identify and integrate, divert the attention of management, disrupt our business, dilute stockholder value and adversely affect our financial condition and results of operations, we may not achieve the financial and strategic goals that were contemplated at the time of a transaction, and we may be exposed to claims, liabilities and disputes as a result of the transaction that may adversely impact our business, operating results and financial condition.

We continuously review and consider strategic acquisitions of businesses, products or technologies. In December 2020 we acquired Daxx, in May 2021 we acquired Tacit, and we may in the future seek to acquire or invest in other businesses, products or technologies that we believe could complement or expand our services, enhance our technical capabilities or otherwise offer

growth opportunities. The pursuit of potential acquisitions may divert the attention of management and cause us to incur various expenses in identifying, investigating and pursuing suitable acquisitions, whether or not the acquisition purchases are completed. Additionally, we may not be able to find and identify desirable acquisition targets or be successful in entering into an agreement with any particular target or obtain adequate financing to complete such acquisitions. If we acquire businesses, we may not be able to successfully integrate the acquired personnel, operations, and technologies, or effectively manage the combined business following the acquisition.

Additionally, we may not be able to find and identify desirable acquisition targets or be successful in entering into an agreement with any particular target or obtain adequate financing to complete such acquisitions. Acquisitions could also result in dilutive issuances of equity securities or the incurrence of debt, which could adversely affect our financial condition, cash flows and results of operations. In addition, if an acquired business fails to meet our expectations, we may not achieve the financial and strategic goals that were contemplated at the time of a transaction, and our business, financial condition and results of operations may be adversely affected. Furthermore, we may acquire businesses that have inferior margins and profitability levels in comparison to our existing business and this may dilute our overall profitability of the company. This, in turn, may result in adverse financial results and dilution to existing stockholders.

Our operating results or financial condition may be adversely impacted by claims or liabilities that we assume from an acquired company or technology or other claims or liabilities otherwise related to an acquisition, including, among others, claims from governmental and regulatory agencies or bodies, terminated employees, current or former customers, current or former stockholders or other third parties, or arising from contingent payments related to the acquisition; pre-existing contractual relationships that we assume from an acquired company that we would not have otherwise entered into, the termination or modification of which may be costly or disruptive to our business; unfavorable revenue recognition or other accounting treatment as a result of an acquired company's practices; and intellectual property claims or disputes. We may fail to identify or assess the magnitude of certain liabilities, shortcomings or other circumstances prior to acquiring a company or technology, which could result in unexpected litigation or regulatory exposure and other adverse effects on our business, operating results and financial condition.

We face risks associated with the transparency, quality, and reliability of financial information of a business we acquire.

Although we perform due diligence on a targeted business that we intend to acquire, we are exposed to risks associated with the quality and reliability of the financial statements of the acquired business. This risk may be higher with smaller businesses and businesses that are operated in jurisdictions and countries with poorer regulatory and compliance requirements. In such situation where we acquire a target with unreliable financial statements, we are exposed to material risks that may impact the reliability of our overall financial statements and may adversely impact our stock price.

We also cannot assure you that the diligence we conduct when evaluating future acquisitions will reveal all material issues that may be present, that it would be possible to uncover all material issues through a customary amount of due diligence, or that factors outside of our control will not later arise. Even if our due diligence successfully identifies certain risks, unexpected risks may arise and previously known risks may materialize in a manner not consistent with our preliminary risk analysis. Further, as a result of a completed acquisition, purchase accounting, and integration of the acquired business, we may be required to take write-offs or write-downs, restructuring and impairment or other charges that could negatively affect our business, assets, liabilities, prospects, outlook, financial condition and results of operations.

Some of the additional risks associated with acquiring a business include, but not limited to the following:

- inability to integrate or benefit from acquired technologies or services;
- product synergies, cost reductions, increases in revenue and economies of scale may not materialize as expected;
- the business culture of the acquired entity may not match well with our culture;
- unforeseen delays, unanticipated costs and liabilities may arise when integrating operations, processes and systems in geographies where we have not conducted business;
- unanticipated costs or liabilities associated with the strategic transactions;
- incurrence of transaction-related costs;
- assumption of the existing obligations or unforeseen liabilities of the acquired business;
- difficulty integrating the accounting systems, security infrastructure, operations, and personnel of the acquired business;

- difficulties and additional expenses associated with supporting legacy products and hosting infrastructure of the acquired business;
- difficulty converting the current and prospective customers of the acquired business onto our platform and contract terms, including disparities in the revenue, licensing, support, or professional services model of the acquired company;
- diversion of management's attention from other business concerns;
- adverse effects to our existing business relationships with business partners and customers as a result of the strategic transactions;
- unexpected costs may arise due to unforeseen changes in tax, payroll, pension, labor, trade, environmental and safety policies in new jurisdictions where the acquired entity operates;
- difficulty in retaining, motivating and integrating key management and other employees of the acquired business;
- use of resources that are needed in other parts of our business;
- dispute over contingent payments; and
- use of substantial portions of our available cash to consummate the strategic transaction.

We are an emerging growth company within the meaning of the Securities Act, and if we take advantage of certain exemptions from disclosure requirements available to emerging growth companies, this could make our securities less attractive to investors and may make it more difficult to compare our performance with other public companies.

We are an "emerging growth company" within the meaning of the Securities Act, as modified by the JOBS Act, and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. As a result, our shareholders may not have access to certain information they may deem important. We could be an emerging growth company for the first five years after the completion of our initial public offering, although circumstances could cause us to lose that status earlier, including if the market value of our ordinary shares held by non-affiliates exceeds \$700 million as of any June 30 before that time, in which case we would no longer be an emerging growth company as of the following December 31. We cannot predict whether investors will find our securities less attractive because we will rely on these exemptions. If some investors find our securities less attractive as a result of our reliance on these exemptions, the market prices of our securities may be lower than they otherwise would be, there may be a less active trading market for our securities and the market prices of our securities may be more volatile.

Further, Section 102(b)(1) of the JOBS Act exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies (that is, those that have not had a Securities Act registration statement declared effective or do not have a class of securities registered under the Exchange Act) are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can elect to opt out of the extended transition period and comply with the requirements that apply to non-emerging growth companies but any such an election to opt out is irrevocable. We have elected not to opt out of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard. This may make comparison of our financial statements with certain other public companies difficult or impossible because of the potential differences in accounting standards used.

Changes in financial accounting standards or practices may cause adverse, unexpected financial reporting fluctuations and affect our reported results of operations.

Generally accepted accounting principles in the U.S. are subject to interpretation by the Financial Accounting Standards Board ("FASB"), the SEC and various bodies formed to promulgate and interpret appropriate accounting principles. A change in accounting standards or practices can have a significant effect on our reported results and may even affect our reporting of transactions completed before the change is effective. New accounting pronouncements and varying interpretations of accounting pronouncements have occurred and may occur in the future. Changes to existing rules or the questioning of current practices may adversely affect our reported financial results or the way we conduct our business.

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 for us. 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 and demand for our shares could decrease.

Risks Related to Government Regulations

Failure to comply with privacy and data protection laws and regulations could lead to government enforcement actions, private litigation and adverse publicity.

We receive, store and process personal information and other data from and about customers in addition to our employees and contractors. Our handling of data is subject to a variety of laws and regulations, including regulation by various government agencies and various state, local and foreign agencies. Our data handling also is subject to contractual obligations and may be deemed to be subject to industry standards, including certain industry standards that we undertake to comply with. The laws and regulations relating to privacy and data security are evolving, can be subject to significant change and may result in ever-increasing regulatory and public scrutiny and escalating levels of enforcement and sanctions.

For example, the European Union has implemented the General Data Protection Regulation ("GDPR"), which came into effect on May 25, 2018. The GDPR has a significant impact on how businesses can collect and process the personal data of individuals in the European Economic Area ("EEA"). The regulation includes stringent operational requirements for processors and controllers of personal data and imposes significant penalties for non-compliance of up to the greater of €20 million or 4% of global annual revenues. With regard to transfers to the U.S. of personal data from our employees and European customers and users, we rely upon standard contractual clauses approved by the European Commission (the "SCCs"). The SCCs have been subject to legal challenge and may be modified or invalidated, and we may be unsuccessful in maintaining legitimate means for the transfer and receipt of personal data from the EEA. In the "Schrems II" decision issued by the Court of Justice of the European Union (the "CJEU") on July 16, 2020, the CJEU deemed the SCCs valid, but ruled that transfers made pursuant to the SCCs and other alternative transfer mechanisms must be analyzed on a case-by-case basis to ensure EU standards of data protection are met in the jurisdiction where the data importer is based. Subsequent guidance from EU regulators has stated that in certain cases, the SCCs must be accompanied by the use of supplementary measures. Concerns remain about the potential for the SCCs and other mechanisms to face additional challenges. On June 4, 2021, the European Commission published new SCCs that are required to be implemented. Additionally, the United Kingdom has enacted legislation that substantially implements the GDPR, with a similar penalty structure, and on February 2, 2022, the United Kingdom's Information Commissioner's Office issued new standard contractual clauses to support personal data transfers out of the United Kingdom ("UK SCCs"). If approved by the United Kingdom Parliament, the UK SCCs will become effective March 21, 2022. We may, in addition to other impacts of the Schrems II decision and other developments relating to cross-border transfer, experience additional costs associated with increased compliance burdens, and we and our customers face the potential for regulators in the EEA, Switzerland, or the United Kingdom to apply different standards to the transfer of personal data from those regions to the U.S., and to block, or require ad hoc verification of measures taken with respect to, certain data flows from those regions to the U.S. We also may be required to engage in new contract negotiations with third parties that aid in processing data on our behalf. We may experience reluctance or refusal by current or prospective customers in those regions to use our products, and may find it necessary or desirable to make further changes to our handling of personal data of residents of those regions. The regulatory environment applicable to the handling of personal data of residents of the EEA, Switzerland, and the United Kingdom, and our actions taken in response, may cause us to assume additional liabilities or incur additional costs and obligations and could result in our business, operating results and financial condition being harmed. Additionally, we and our customers may face a risk of enforcement actions by data protection authorities relating to personal data transfers. Any such enforcement actions could result in substantial costs and diversion of resources, distract management and technical personnel and negatively affect our business, operating results and financial condition.

In addition, California has enacted legislation that has been described as the first "GDPR-like" law in the U.S. The California state legislature passed the California Consumer Privacy Act ("CCPA") in 2018 and California voters approved a ballot measure subsequently establishing the California Privacy Rights Act ("CPRA") in 2020, which will modify the CCPA and increase the privacy and security obligations of entities handling certain personal information of California residents, including requiring covered companies to provide new disclosures to California consumers, and afford such consumers new abilities to opt-out of certain sales of personal information. The CCPA came into effect on January 1, 2020, and the California Attorney

General may bring enforcement actions, with penalties for violations of the CCPA. The CPRA will go into effect on January 1, 2023 instilling enforcement authority in a new dedicated regulatory body, the California Privacy Protection Agency, which will begin carrying out enforcement actions as soon as six months after the enactment date. Other states have also proposed, and in certain aspects enacted, legislation similar to the CCPA. Virginia and Colorado both enacted such laws in 2021. While aspects of the CCPA, CPRA, other state laws, and their interpretations remain to be determined in practice, we are committed to comply with their obligations. We cannot yet fully predict the impact of these laws on our business or operations, but developments regarding these and all privacy and data protection laws and regulations around the world may require us to modify our data processing practices and policies and to incur substantial additional costs and expenses in an effort to maintain compliance on an ongoing basis. Other countries and jurisdictions throughout the world are considering or enacting laws and regulations requiring the local storage of data. For example, under Russian law, all data operators collecting personal data of Russian citizens through electronic communications, including the Internet, must comply with Russian laws regulating the local storage of such data in databases located in the territory of Russia. This law applies not only to local data controllers but also to data controllers established outside Russia to the extent they gather personal data relating to Russian nationals through websites aimed at the territory of Russia.

We have been undertaking measures in an effort to comply with the GDPR, CCPA, CPRA and other applicable privacy and data protection laws and regulations, and our efforts to comply with these laws and regulations may require us to incur substantial operational costs and to require its data handling practices. The costs of our measures designed to comply with, and other burdens imposed by, such laws, regulations and policies that are applicable to us may limit the use and adoption of our products and solutions, alter the way we conduct business and/or could otherwise have a material adverse impact on our results of operations. For example, we may find it necessary to establish systems to maintain data originated in certain jurisdictions within those jurisdictions, which may involve substantial expense and distraction from other aspects of our business. Further, the costs of compliance with, and other burdens imposed by, such laws, regulations and policies that are applicable to us, may limit the use and adoption of our products and solutions and could have a material adverse impact on our results of operations.

Any failure or perceived failure (including as a result of deficiencies in our policies, procedures or measures relating to privacy, data protection, data security, marketing or client communications) by us to comply with laws, regulations, policies, legal or contractual obligations, industry standards, or regulatory guidance relating to privacy, data protection or data security may result in governmental investigations and enforcement actions, litigation, fines and penalties or adverse publicity and could cause our clients to lose trust in us, which could have a material adverse effect on our reputation, business, financial condition and results of operations.

We expect that there will continue to be new proposed laws, regulations and industry standards relating to privacy, data protection, data security, marketing, consumer communications and information security in the U.S., the European Union, Russia and other jurisdictions, and we cannot determine the impact such future laws, regulations and standards may have on our business. Future laws, regulations, standards and other obligations or any changed interpretation or enforcement of existing laws or regulations could impair our ability to develop and market new services and maintain and grow our client base and increase revenue.

We are subject to laws and regulations restricting our operations, including export restrictions, economic sanctions and the Foreign Corrupt Practices Act and similar anti-corruption laws. If we are not in compliance with applicable legal requirements, we may be subject to civil or criminal penalties and other remedial measures.

Our operations are subject to laws and regulations restricting our operations, including activities involving restricted countries, organizations, entities and persons that have been identified as unlawful actors or that are subject to U.S. sanctions imposed by the Office of Foreign Assets Control ("OFAC") or other international economic sanctions that prohibit us from engaging in trade or financial transactions with certain countries, businesses, organizations and individuals. We are subject to the Foreign Corrupt Practices Act ("FCPA"), which prohibits U.S. companies and their intermediaries from bribing foreign officials for the purpose of obtaining or keeping business or otherwise obtaining favorable treatment, and other laws concerning our international operations. The FCPA's foreign counterparts contain similar prohibitions, although varying in both scope and jurisdiction. We operate in many parts of the world that have experienced governmental corruption to some degree, and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices.

We are currently in the process of developing and implementing formal controls and procedures to ensure that we are in compliance with the FCPA, OFAC sanctions, and similar sanctions, laws and regulations. The implementation of such procedures may be time consuming and expensive and could result in the discovery of issues or violations with respect to the foregoing by us or our employees, independent contractors, subcontractors or agents of which we were previously unaware.

If we are not completely effective in ensuring our compliance with all such applicable laws, it could result in us being subject to criminal and civil penalties, disgorgement and other sanctions and remedial measures, and legal expenses. Likewise, any

investigation of any potential violations of such laws by the U.S. or other jurisdictions could also have an adverse impact on our reputation, business, financial condition and results of operations.

Changes to the U.S. administration's fiscal, political, regulatory and other policies may adversely affect our business, financial condition and results of operations.

Recent events, including new policy introductions following the 2020 U.S presidential election, may result in substantial regulatory uncertainty regarding international trade and trade policy. U.S. policies have called for substantial changes to trade agreements, have increased tariffs on certain goods imported into the U.S. and have raised the possibility of imposing significant, additional tariff increases. In the past, unilateral tariffs on imported products by the U.S. have triggered retaliatory actions from certain foreign governments, including China and Russia, and may trigger retaliatory actions by other foreign governments, potentially resulting in a "trade war." While we cannot predict the extent to which the U.S. or other countries will impose quotas, duties, tariffs, taxes or other similar restrictions upon the import or export of our products in the future, a "trade war" of this nature or other governmental action related to tariffs or international trade agreements could have an adverse impact on demand for our services, sales and clients and affect the economies of the U.S. and various countries, having an adverse effect on our business, financial condition and results of operations.

In addition, regulatory, judicial or other developments regarding SPACs or companies, such as us, that have merged with a SPAC, could have an adverse effect on us. For example, the SEC has recently issued several statements regarding regulatory matters involving SPACs, and there can be no assurances that future statements or other regulations and legal circumstances unique to SPACs would not have an adverse effect on our business, financial condition and results of operations.

Negative publicity about offshore outsourcing or anti-outsourcing legislation and restriction on immigration may have an adverse effect on our business.

The issue of companies outsourcing services to organizations operating in other countries is a topic of political discussion in many countries, including the U.S., which is our largest source of revenues. Many organizations and public figures in the U.S. and Europe have publicly expressed concern about a perceived association between offshore outsourcing IT services providers and the loss of jobs in their home countries. For example, measures aimed at limiting or restricting outsourcing by U.S. companies are periodically considered in Congress and in numerous state legislatures to address concerns over the perceived association between offshore outsourcing and the loss of jobs in the U.S. A number of U.S. states have passed legislation that restricts state government entities from outsourcing certain work to offshore IT services providers. Given the ongoing debate over this issue, the introduction and consideration of other restrictive legislation is possible. If enacted, such measures may broaden restrictions on outsourcing by federal and state government agencies and on government contracts with firms that outsource services directly or indirectly, impact private industry with measures such as tax disincentives or intellectual property transfer restrictions, and/or restrict the use of certain business visas. In addition, current or prospective clients may be discouraged from transferring services to providers that utilize offshore delivery centers such as us to avoid any negative perceptions that may be associated with using an offshore provider or for data privacy and security concerns. As a result, our ability to service our clients could be impaired and we may not be able to compete effectively with competitors that operate primarily from within the countries in which our clients operate. Any such slowdown or reversal of the existing industry trends toward offshore outsourcing may have a material adverse effect on our business, financial condition and results of operations.

Some of our projects may involve our personnel obtaining visas to travel and work at customer sites outside of our personnel's home countries and often in the United States. Our reliance on visas to staff projects with employees who are not citizens of the country where the work is to be performed makes us vulnerable to legislative and administrative changes in the number of visas to be issued in any particular year and other work permit laws and regulations. The process to obtain the required visas and work permits can be lengthy and difficult and variations due to political forces and economic conditions in the number of permitted applications, as well as application and enforcement processes, may cause delays or rejections when trying to obtain visas. Delays in obtaining visas may result in delays in the ability of our personnel to travel to meet with and provide services to our customers or to continue to provide services on a timely basis. In addition, the availability of a sufficient number of visas without significant additional costs could limit our ability to provide services to our customers on a timely and cost-effective basis or manage our sales and delivery centers as efficiently as we otherwise could. Delays in or the unavailability of visas and work permits could have a material adverse effect on our business, results of operations, financial condition and cash flows.

Our subsidiaries in CEE can be forced into liquidation on the basis of formal noncompliance with certain legal requirements.

We operate in CEE primarily through locally organized subsidiaries. Certain provisions of local laws may allow a court to order liquidation of a locally organized legal entity on the basis of its formal noncompliance with certain requirements during formation, reorganization or during its operations. If a company fails to comply with certain requirements including those

relating to minimum net assets, governmental or local authorities can seek the involuntary liquidation of such company in court, and the company's creditors will have the right to accelerate their claims or demand early performance of the company's obligations as well as demand compensation for any damages. If involuntary liquidation of any of our subsidiaries were to occur, such liquidation could materially adversely affect our business, financial condition and results of operations.

Risks Associated with Intellectual Property

We may not be able to prevent unauthorized use of our intellectual property and our intellectual property rights may not be adequate to protect our business, financial condition and results of operations.

Our success largely depends on methodologies, practices, tools and technical expertise and other intellectual property that we use in designing, developing, implementing and maintaining our services and solutions. We rely upon a combination of nondisclosure, confidentiality, assignment of invention and other contractual arrangements as well as trade secret, patent, copyright and trademark laws to protect our intellectual property rights. We may also rely on litigation to enforce our intellectual property rights and contractual rights.

The nondisclosure and confidentiality agreements that we enter into with our employees, independent contractors, vendors and clients in order to protect our proprietary information may not provide meaningful protection against unauthorized use, misappropriation or disclosure for trade secrets, know-how or other proprietary information and there can be no assurance that others will not independently develop the know-how and trade secrets or develop better methods than us. Policing unauthorized use of such proprietary information is difficult and expensive. We may not be able to deter current and former employees, contractors, vendors, clients and other parties from breaching confidentiality agreements and misappropriating proprietary information and it is possible that third parties may copy, reverse engineer, or otherwise obtain and use our information and proprietary technology without authorization or otherwise infringing on our intellectual property rights.

In addition, our current and former employees or contractors could challenge our exclusive rights in the intellectual property they have developed in the course of their employment. In Russia and certain other countries in which we operate, an employer is deemed to own the copyright in works created by its employees during the course, and within the scope, of their employment, provided certain requirements are complied with. The employer may be required to satisfy additional legal requirements in order to make further use and dispose of such works. While we believe that we have complied with all such requirements and have fulfilled all requirements necessary to acquire all rights in intellectual property developed by our contractors and subcontractors, these requirements are often ambiguously defined and enforced.

Implementation of intellectual property-related laws in CIS and CEE countries in which we operate has historically been lacking and there is no assurance that we will be able to enforce or defend our rights under our non-disclosure, confidentiality or assignment of invention agreements or that protection of intellectual property rights in such countries will be as effective as that in the U.S. Any litigation relating to our intellectual property may not prove successful and might result in substantial costs and diversion of resources and management attention.

In some cases, litigation may be necessary to enforce our intellectual property rights or to protect our trade secrets. Litigation could be costly, time consuming and distracting to management and could result in the impairment or loss of portions of our intellectual property. Furthermore, our efforts to enforce our intellectual property rights may be met with defenses, counterclaims and countersuits attacking the validity and enforceability of our intellectual property rights and exposing us to significant damages or injunctions. Our inability to protect our intellectual property against unauthorized copying or use, as well as any costly litigation or diversion of our management's attention and resources, could delay sales or the implementation of our products, impair the functionality of our products, delay introductions of new products, result in our substituting less-advanced or more-costly technologies into our products or harm our reputation. In addition, we may be required to license additional intellectual property from third parties to develop and market new products, and we cannot assure you that we could license that intellectual property on commercially reasonable terms or at all.

Due to the foregoing reasons, we cannot guarantee that we will be successful in maintaining existing or obtaining future intellectual property rights or registrations, be able to detect unauthorized use of our intellectual property and take appropriate steps to enforce and protect our rights, or that any such steps will be successful. We can also neither guarantee that we have taken all necessary steps to enforce our intellectual property rights in each jurisdiction in which we operate nor that the intellectual property laws of any jurisdiction in which we operate are adequate to protect our interest or that any favorable judgment obtained by us with respect thereto will be enforced in the courts. Unauthorized use by third parties of, or other failure to protect, our intellectual property, including the costs of enforcing intellectual property rights, could have a material adverse effect on our business, financial condition and results of operations.

We may face intellectual property infringement claims that could be time-consuming and costly to defend and failure to defend against such claims may have a material adverse effect on our reputation, business, financial condition and results of operations.

Our success largely depends on our ability to use and develop our technology, tools, code, methodologies and services without infringing the intellectual property rights of third parties, including patents, copyrights, trade secrets and trademarks. We may be subject to litigation involving claims of patent infringement or violation of other intellectual property rights of third parties.

We typically indemnify clients who purchase our services and solutions against potential infringement of intellectual property rights, which subjects us to the risk of indemnification claims. These claims may require us to initiate or defend protracted and costly litigation on behalf of our clients, regardless of the merits of these claims and are often not subject to liability limits or exclusion of consequential, indirect or punitive damages. If any of these claims succeed, we may be forced to pay damages on behalf of our clients, redesign or cease offering our allegedly infringing services or solutions or obtain licenses for the intellectual property such services or solutions allegedly infringe. If we cannot obtain all necessary licenses on commercially reasonable terms, our clients may be forced to stop using our services or solutions.

The holders of patents and other intellectual property rights potentially relevant to our service offerings may make it difficult for us to acquire a license on commercially acceptable terms. Also, we may be unaware of intellectual property registrations or applications relating to our services that may give rise to potential infringement claims against us. There may also be technologies licensed to and relied on by us that are subject to infringement or other corresponding allegations or claims by third parties which may damage our ability to rely on such technologies.

Parties making infringement claims may be able to obtain an injunction to prevent us from delivering our services or using technology involving the allegedly infringing intellectual property. Intellectual property litigation is expensive and time-consuming and could divert management's attention from our business. A successful infringement claim against us, whether with or without merit, could, among other things, require us to pay substantial damages, develop non-infringing technology, or rebrand our name or enter into royalty or license agreements that may not be available on acceptable terms, if at all, and would require us to cease making, licensing or using products that have infringed a third party's intellectual property rights. Protracted litigation could also result in existing or prospective clients deferring or limiting their purchase or use of our software product development services or solutions until resolution of such litigation or could require us to indemnify our clients against infringement claims in certain instances. Any intellectual property claims or litigation in this area, whether or not we ultimately win or lose, could damage our reputation and materially adversely affect our business, financial condition and results of operations.

Our use of open source software may lead to possible litigation, negatively affect sales and create liability.

We often incorporate software licensed by third parties under so-called "open source" licenses, which may expose us to liability and have a material impact on our software development services. Use of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide support, warranties, indemnification, or other contractual protections regarding infringement claims or the quality of the code. In addition, the public availability of such software may make it easier for others to compromise our services. Although we monitor our use of open source software in an effort both to comply with the terms of the applicable open source licenses and to avoid subjecting our client deliverables to conditions we do not intend, the terms of many open source licenses have not been interpreted by courts in relevant jurisdictions, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our clients' ability to use the software that we develop for them and operate their businesses as they intend. Moreover, we cannot assure you that our processes for controlling our use of open source software in our products will be effective. From time to time, there have been claims challenging the ownership of open source software against companies that incorporate it into their products.

Therefore, there is a possibility that our clients could be subject to actions by third parties claiming that what we believe to be licensed open source software infringes such third parties' intellectual property rights, and we would generally be required to indemnify our clients against such claims. In addition, in the event that portions of client deliverables are determined to be subject to an open source license, we or our clients could be required to publicly release the affected portions of source code or re-engineer all, or a portion of, the applicable software. Disclosing our proprietary source code could allow our clients' competitors to create similar products with lower development effort and time and ultimately could result in a loss of sales for our clients. Furthermore, if the license terms for the open source code change, we may be forced to re-engineer our software or incur additional costs. Any of these events could create liability for us to our clients and damage our reputation, which could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Our Common Stock

Our bylaws provide that the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, another State court in Delaware or the federal district court for the District of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for substantially all disputes between us and our stockholders (other than claims arising under federal securities laws, including the Securities Act or the Exchange Act and any successors thereto), which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our bylaws provide that the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, another State court in Delaware or the federal district court for the District of Delaware) shall, to the fullest extent permitted by law, be the sole and exclusive forum for the following (except for 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 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):

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of a fiduciary duty owed by, or otherwise wrongdoing by, any of our directors, officers or other employees to us or our stockholders;
- any action arising pursuant to any provision of the Delaware General Corporation Law (the "DGCL"), our certificate of incorporation or bylaws;
- · any action to interpret, apply, enforce or determine the validity of our certificate of incorporation or bylaws; and
- any other action asserting a claim that is governed by the internal affairs doctrine.

However, notwithstanding the exclusive forum provisions, our bylaws explicitly state that they would not preclude the filing of claims brought to enforce any liability or duty created under federal securities laws, including the Exchange Act or Securities Act.

Our amended and restated bylaws also provide that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall be the sole and exclusive forum for any action asserting a claim arising pursuant to the Securities Act, such a provision known as a "Federal Forum Provision." Any person or entity purchasing or otherwise acquiring any interest in our shares of capital stock shall be deemed to have notice of and consented to these provisions.

These exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and other employees. Additionally, a court could determine that the exclusive forum provision is unenforceable. If a court were to find the exclusive forum provision in our bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could seriously harm our business.

The price of our common stock may be volatile.

The price of our common stock may fluctuate due to a variety of factors, including:

- our ability to effectively service any current and future outstanding debt obligations;
- the announcement the introduction of new products or services, or enhancements thereto, by us or our competitors;
- · developments concerning intellectual property rights;
- changes in legal, regulatory and enforcement frameworks impacting our products;
- variations in our and our competitors' results of operations;
- the addition or departure of key personnel;
- announcements by us or our competitors of acquisitions, investments or strategic alliances;
- actual or perceived data security incidents or breaches;
- actual or anticipated fluctuations in our quarterly and annual results and those of other public companies in our industry;

- the failure of securities analysts to publish research about us, or shortfalls in our results of operations compared to levels forecast by securities analysts;
- any delisting of our common stock from NASDAQ due to any failure to meet listing requirements;
- · adverse developments from litigation; and
- the general state of the securities market.

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

As of December 31, 2021, over twenty percent of our outstanding common stock was held or beneficially owned by our executive officers and directors, or by stockholders controlled by our executive officers or directors. The concentration of ownership provides such persons with substantial control over us, which could limit your ability to influence the outcome of key transactions, including a change of control, and future resales of our common stock held by such persons may cause the market price of our common stock to drop significantly.

As a result, such stockholders, acting together, have significant influence over all matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. Corporate action might be taken even if other stockholders oppose them. This concentration of ownership might also have the effect of delaying or preventing a change of control of our company that other stockholders may view as beneficial.

To the extent that such persons purchase additional shares of ours, the percentage of shares that will be held by them will increase, decreasing the percentage of shares that are held by public stockholders.

If any significant stockholder sells large amounts of our common stock in the open market or in privately negotiated transactions, this could have the effect of increasing the volatility in the price of our common stock or putting significant downward pressure on the price of our common stock.

We do not currently intend to pay dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have not paid any cash dividends on our common stock since our merger with ChaSerg. The payment of any cash dividends will be dependent upon our revenue, earnings and financial condition from time to time. The payment of any dividends will be within the discretion of our board of directors. It is presently expected that we will retain all earnings for use in our business operations and, accordingly, it is not expected that our board of directors will declare any dividends in the foreseeable future. Our ability to declare dividends may be limited by the terms of any financing and/or other agreements entered into by us or our subsidiaries from time to time and by requirements under the laws of our subsidiaries' respective jurisdictions of incorporation to set aside a portion of their net income in each year to legal reserves. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future and the success of an investment in shares of our common stock will depend upon any future appreciation in its value. Consequently, investors may need to sell all or part of their holdings of our common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which our stockholders have purchased their shares.

Delaware law and our certificate of incorporation and bylaws 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 certificate of incorporation and bylaws, and 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 certificate of incorporation and bylaws include provisions regarding:

• a classified board of directors with three-year staggered terms, which could delay the ability of stockholders to change the membership of a majority of our board of directors;

- 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;
- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of the board of
 directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on
 our board of directors;
- the requirement that directors may only be removed from our board of directors for cause;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special
 meeting of stockholders and could delay the ability of stockholders to force consideration of a stockholder proposal or to take
 action, including the removal of directors;
- the requirement that a special meeting of stockholders may be called only by our board of directors, the chairman of our board
 of directors, or our chief executive officer, 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 requirement for the affirmative vote of holders of at least a majority of the voting power of all of the then outstanding shares of the voting stock, voting together as a single class, to amend, alter, change or repeal any provision of our certificate of incorporation or our bylaws, 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 inhibit the ability of an acquirer to effect such amendments to facilitate an unsolicited takeover attempt;
- the ability of our board of directors to amend the 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 our company.

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, as a Delaware corporation, we are subject to provisions of Delaware law, including 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.

Any provision of our certificate of incorporation, bylaws or Delaware law that has the effect of delaying or preventing a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock and could also affect the price that some investors are willing to pay for our common stock.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Facilities

Grid Dynamics currently provides its services through a network of 19 facilities in nine countries. Grid Dynamics' principal executive offices are located at 5000 Executive Pkwy Suite 520, San Ramon, CA 94583. Grid Dynamics' offices are located in Plano, Texas, the

U.S., as well as Guadalajara, Mexico; Krakow and Wroclaw in Poland; Belgrade in Serbia; Lviv, Kyiv, Kharkiv, and Dnipro in Ukraine; Chisinau, Moldova; Amsterdam, the Netherlands; London, the United Kingdom, and St.

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Petersburg and Saratov, Russia. Grid Dynamics leases all of its facilities. Grid Dynamics believes that its existing facilities are adequate to support its existing operations and that it has ample opportunities to expand office space in all current locations to sustain expected growth.

ITEM 3. LEGAL PROCEEDINGS

Although Grid Dynamics may, from time to time, be involved in litigation and claims arising out of its operations in the normal course of business, Grid Dynamics is not currently a party to any material legal proceeding. In addition, Grid Dynamics is not aware of any material legal or governmental proceedings against it or contemplated to be brought against it. Future litigation may be necessary, among other things, to defend Grid Dynamics or its customers by determining the scope, enforceability and validity of third-party proprietary rights or to establish Grid Dynamics' proprietary rights. The results of any litigation cannot be predicted with certainty and, regardless of the outcome, litigation can have an adverse impact on Grid Dynamics because of defense and settlement costs, diversion of management resources and other factors.

ITEM 4. MINE SAFETY DISCLOSURE

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information for Common Stock

Our common stock has been listed on the NASDAQ under the symbol "GDYN" since March 6, 2020. Prior to that date, there was no public trading market for our common stock.

Holders of Record

As of February 28, 2022, there were approximately 14 holders of record of our common stock. Because many of our 66,954,362 shares of common stock are held by brokers or other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by the record holders.

Dividend Policy

We have not paid any cash dividends on our common stock since our merger with ChaSerg Technology Acquisition Corp. The payment of cash dividends in the future will be dependent upon revenues and earnings, if any, capital requirements and general financial condition from time to time and may be limited by the terms of any financing and/or other agreements entered into by us or our subsidiaries from time to time and by requirements under the laws of our subsidiaries' respective jurisdictions of incorporation to set aside a portion of their net income in each year to legal reserves. The payment of any cash dividends will be within the discretion our board of directors and the board of directors will consider whether or not to institute a dividend policy. It is presently expected that we will retain all earnings for use in our business operations and, accordingly, it is not expected that our board of directors will declare any dividends in the foreseeable future.

Securities Authorized for Issuance Under Equity Compensation Plans

Information about our equity compensation plans is incorporated herein by reference to Part III, Item 12 of this Report.

Unregistered Sales of Equity Securities

None.

Issuer Purchases of Equity Securities

None.

Performance Graph

The following chart compares the changes in cumulative total return on our common stock with the changes in cumulative total returns of the S&P 500 and a Peer Group for the period from March 6, 2020 (the date our common stock began trading on the Nasdaq after the ChaSerg Business Combination) through December 31, 2021. The Peer Group includes Accenture Plc (NYSE: ACN), Cognizant Technology Solutions Corp. (NASDAQ: CTSH), Endava plc (NYSE: DAVA), Epam Systems Inc. (NYSE: EPAM), Globant S.A. (NYSE: GLOB), and Infosys Ltd. (NYSE: INFY). The comparisons in this chart are required by the SEC and are not intended to forecast or be indicative of the possible future performance of our common stock. The performance graph and related information shall not be deemed "soliciting material" or to be "filed" with the SEC, nor shall information be incorporated by reference into any future filing under the Securities Act of 1933 or Securities Exchange Act of 1934, each as amended, except to the extent that we specifically incorporate it by reference into such filing.

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ITEM 6. [RESERVED]

Not applicable.

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 in conjunction with our consolidated financial statements and the accompanying notes thereto included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements based upon current plans, expectations, and beliefs, involving risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements. You should review the section titled "Special Note Regarding Forward-Looking Statements" for a discussion of forward-looking statements and in Item 1A, "Risk Factors" for a discussion of factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis and elsewhere in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results that may be expected for any period in the future.

Overview

Grid Dynamics, Inc. ("Grid Dynamics," "GDH," the "Company," "we," "us," or "our") is a fast-growing company focused on enterprise-level digital transformations in Fortune 1000 companies. For enterprises that create innovative digital products and experiences, Grid Dynamics offers close collaboration to provide digital transformation initiatives that span strategy consulting, development of early prototypes and enterprise-scale delivery of new digital platforms. Since its inception in 2006 in Menlo Park, California, as a grid and cloud consultancy firm, Grid Dynamics has been on the forefront of digital

transformation, working on big ideas like cloud computing, NOSQL, DevOps, microservices, big data and AI, and quickly established itself as a provider of choice for technology and digital enterprise companies.

As a leading global digital engineering and IT services provider with its headquarters in Silicon Valley and engineering centers in the United States, Mexico and multiple European countries, Grid Dynamics' core business is to deliver focused and complex technical consulting, software design, development, testing and internet service operations. Grid Dynamics also helps organizations become more agile and create innovative digital products and experiences through its deep expertise in emerging technology, such as AI, data science, cloud computing, big data and DevOps, lean software development practices and a high-performance product culture. Grid Dynamics believes that the key to its success is a business culture that puts products over projects, client success over contract terms and real business results over pure technical innovation. By leveraging Grid Dynamics' proprietary processes optimized for innovation, emphasis on talent development and technical expertise, Grid Dynamics has been able to achieve significant growth.

We are a former blank check company that completed our initial public offering on October 4, 2018. In March 2020, Grid Dynamics, formerly known as ChaSerg Technology Acquisition Corp ("ChaSerg"), completed its acquisition of Grid Dynamics International, Inc. ("GDI") pursuant to the business combination agreement dated November 13, 2019 (the "Business Combination"). In conjunction with the completion of the Business Combination, ChaSerg was renamed as Grid Dynamics Holdings, Inc.

The Business Combination was accounted for as a reverse recapitalization for which GDI was determined to be the accounting acquirer. Outstanding shares of GDI were converted into our common shares, presented as a recapitalization, and the net assets of ChaSerg were acquired at historical cost, with no goodwill or other intangible assets recorded.

Business Update Regarding Military Action in Ukraine

On February 24, 2022, Russian forces launched significant military action against Ukraine, and sustained conflict and disruption in the region is possible. The impact to Ukraine as well as actions taken by other countries, including new and stricter sanctions imposed by Canada, the United Kingdom, the European Union, the U.S. and other countries and companies and organizations against officials, individuals, regions, and industries in Russia and Ukraine, and each country's potential response to such sanctions, tensions, and military actions could have a material adverse effect on our operations. For example, in response to increased sanctions, Russia could attempt to take control of assets in Russia or Ukraine of companies registered in the United States, such as Grid Dynamics. Any such material adverse effect from the conflict and enhanced sanctions activity may disrupt our delivery of services, impair our ability to complete financial or banking transactions, cause us to shift all or portions of our work occurring in the region to other countries, and may restrict our ability to engage in certain projects in the region or involving certain customers in the region.

We have a significant number of personnel in Ukraine and Russia. We are actively monitoring the security of our personnel and the stability of our infrastructure, including communications and internet availability. We are also executing our business continuity plan and adapting to developments as they occur to protect the safety of our people and handle potential impacts to our delivery infrastructure, including reallocating work to other geographies within our global footprint. We are actively working with our personnel and with our customers to meet their needs and to mitigate delivery challenges.

We have no way to predict the progress or outcome of the situation, as the conflict and government reactions are rapidly developing and beyond our control. Prolonged unrest, military activities, or broad-based sanctions, should they be implemented, could have a material adverse effect on our operations and business outlook. We have accelerated hiring in locations outside of the region as part of our business continuity planning and in order to support client demand. In addition, we have implemented plans to move some of our existing personnel to other countries in order to keep them safe and mitigate impacts on our delivery of services to our customers.

The information contained in this section is accurate as of the date hereof, but may become outdated due to changing circumstances beyond our present awareness or control.

For additional information on the various risks posed by the military action in Ukraine and the impact in the region, please read "Part I. Item 1A. Risk Factors" included in this Annual Report on Form 10-K.

Fiscal Year Highlights

Non-GAAP Diluted EPS(1)

The following table sets forth a summary of Grid Dynamics' financial results for the annual periods indicated:

0.36

	Year ended December 31,						
		2021		2020)	2019	
			% of revenue		% of revenue		% of revenue
			(dollars	in thousands, e	xcept per share	data)	
Revenues	\$	211,280	100.0 % 5	111,283	100.0 % \$	118,326	100.0 %
Gross profit		87,728	41.5 %	41,621	37.4 %	48,236	40.8 %
Income/(loss) from operations		50	<u> </u>	(15,448)	(13.9)%	15,625	13.2 %
Net income/(loss)		(7,700)	(3.6)%	(12,599)	(11.3)%	10,807	9.1 %
Diluted EPS	\$	(0.13)	n/a S	(0.28)	n/a	0.49	n/a
Non-GAAP Financial Information							
Adjusted EBITDA(1)		39,077	18.5 %	12,549	11.3 %	23,661	20.0 %
Non-GAAP Net Income(1)		24,160	11.4 %	7,013	6.3 %	15,487	13.1 %

⁽¹⁾ Adjusted EBITDA, Non-GAAP Net Income and Non-GAAP Diluted EPS are non-GAAP financial measures. See "Non-GAAP Measures" below for additional information and reconciliations to the most directly comparable GAAP financial measures.

n/a

0.14

0.73

n/a

n/a

In the twelve months ended December 31, 2021 our revenues were \$211.3 million, which included \$44.9 million from our recent acquisitions of Daxx and Tacit. Organic revenue of \$166.4 million for the twelve months ended December 31, 2021 was up from \$110.3 million in the same period of 2020. The key reasons for the organic year-over-year increase of 50.8% were increased demand for our services by our customers resulting in increased billable hours combined with revenue contribution from new customers. Our largest vertical, Technology Media & Telecom, continued to grow; in the twelve months ended December 31, 2021 it represented 32.0% of our full year of 2021 revenue and grew by 49.2% on a year-over-year basis. While many customers positively grew on the year-over-year basis, Grid Dynamics' two largest TMT customers contributed meaningfully.

In the twelve months ended December 31, 2021, our Retail vertical contributed \$61.7 million in revenue, up from \$34.0 million in revenue in the twelve months ended December 31, 2020. We have been witnessing a steady sequential pick up in business. Furthermore, within our Retail vertical, since the beginning of the pandemic, we have witnessed a shift towards retail customers who have embraced digital and online commerce. This is a contrast to some of our other customers who have not recovered from the impacts of the pandemic, and going forward, we expect that some of them will not recover to pre-COVID levels.

We continue to focus on revenue diversification by increasing our customer base with additions. During the twelve months ended December 31, 2021, our organic and acquisitions combined received revenues from a total of 273 customers.

In the twelve months ended December 31, 2021, our GAAP Net loss was \$(7.7) million, or (3.6)% of revenue and Non-GAAP EBITDA was \$39.1 million, or 18.5% of revenue. This was down from GAAP Net loss of \$(12.6) million, or (11.3)% of revenue and and up from \$12.5 million or 11.3% of revenue in Non-GAAP EBITDA in the twelve months ended December 31, 2020. The decrease in GAAP Net Loss and increase in non-GAAP EBITDA on a year-over-year basis was due to a combination of higher levels of revenue and gross profit.

Acquisition of Tacit Knowledge Inc.

On May 29, 2021, we acquired UK based Tacit in an all-cash transaction. Tacit is a global consultancy focused on digital commerce serving customers in the UK, North America, Continental Europe, and Asia. The company serves leading global brands across technology, CPG, financial, and retail markets. The company has approximately 180 employees with engineering centers situated in Moldova and Mexico. The acquisition is augmenting our service offerings and strengthening our competitive position within the market. Additionally, the acquisition is also enabling us to leverage near-shore capabilities with the company's presence in Mexico.

COVID-19 Related Updates

In December 2019, a novel coronavirus COVID-19 was reported in China, and in March 2020, the World Health Organization declared it a pandemic. This contagious disease pandemic has continued to spread across the globe, including extensively within the U.S., and is impacting worldwide economic activity and financial markets, significantly increasing economic volatility and uncertainty. In response to this global pandemic, several local, state, and federal governments have been prompted to take unprecedented steps that include, but are not limited to, travel restrictions, closure of businesses, social distancing, and quarantines.

Starting in March 2020, headwinds to our business from the pandemic were largely centered around our retail customers as many of them witnessed a slowdown in their sales. After witnessing a low point in the month of May 2020, our retail business has steadily improved as we have added new customers and have grown existing business across industry verticals. We are now facing challenges from COVID-19 such as employee retention and shortage of talent on the job market. We continue to take precautionary measures intended to minimize the risk of the virus to our employees, our customers, and the communities in which we operate that include suspension of all non-essential travel. Although a significant proportion of our employees continue to work remotely, all our facilities have been opened for employees to work following local government guidelines. We continue to deliver services to our customers in this fashion and this has resulted in minimal disruption in our operational and delivery capabilities.

Comparability of Financial Information

Grid Dynamics' results of operations and statements of assets and liabilities may not be comparable between periods as a result of the Business Combination on March 5, 2020 and the other events and transactions discussed below.

Key Performance Indicators and Other Factors Affecting Performance

Grid Dynamics uses the following key performance indicators and assesses the following other factors to analyze its business performance, to make budgets and financial forecasts and to develop strategic plans:

Employees by Region

Attracting and retaining the right employees is critical to the success of Grid Dynamics' business and is a key factor in Grid Dynamics' ability to meet customers' needs and grow its revenue base. Grid Dynamics' revenue prospects and long-term success depend significantly on its ability to recruit and retain qualified IT professionals. A substantial majority of Grid Dynamics' personnel is comprised of such IT professionals.

The following table shows the number of Grid Dynamics personnel (including full-time and part-time employees and contractors serving in similar capacities) by region, as of the dates indicated:

	As	As of December 31,			
	2021	2020	2019		
United States and Mexico	386	259	265		
Central and Eastern Europe(1), U.K. and the Netherlands	2,888	1,635	1,165		
Total	3,274	1,894	1,430		

⁽¹⁾ Includes Ukraine, Russia, Poland, Serbia, and Moldova.

Attrition

There is competition for IT professionals in the regions in which Grid Dynamics operates, and any increase in such competition may adversely impact Grid Dynamics' business and gross profit margins. Employee retention is one of Grid Dynamics' main priorities and is a key driver of operational efficiency. Grid Dynamics seeks to retain top talent by providing the opportunity to work on exciting, cutting-edge projects for high profile clients, a flexible work environment and training and development programs. Grid Dynamics' management targets a voluntary attrition rate no higher than the mid-teen percentages, in line with the industry.

Hours and Utilization

As most of Grid Dynamics' customer projects are performed and invoiced on a time and materials basis, Grid Dynamics' management tracks and projects billable hours as an indicator of business volume and corresponding resource needs for IT professionals. To maintain its gross profit margins, Grid Dynamics must effectively utilize its IT professionals, which depends on its ability to integrate and train new personnel, to efficiently transition personnel from completed projects to new assignments, to forecast customer demand for services and to deploy personnel with appropriate skills and seniority to projects. Grid Dynamics' management generally tracks utilization with respect to subsets of employees, by location or by project, and calculates the utilization rate for each subset by dividing (x) the aggregate number of billable hours for a period by (y) the aggregate number of total available hours for the same period. Grid Dynamics' management analyzes and projects utilization to measure the efficiency of its workforce and to inform management's budget and personnel recruiting decisions.

Customer Concentration

Grid Dynamics' ability to retain and expand its relationships with existing customers and add new customers are key indicators of its revenue potential. Excluding Daxx and Tacit, Grid Dynamics grew its customer base from 52 customers in 2020 to 65 customers in 2021. Grid Dynamics' procurement of new customers has a direct impact on its ability to diversify its sources of revenue and replace customers that may no longer require its services. Grid Dynamics has a relatively high level of revenue concentration with certain customers. Of Grid Dynamics' customers, two customers each accounted for 10% or more of Grid Dynamics' revenue in the years ended December 31, 2021 and 2020, respectively, and three customers each accounted for 10% or more of Grid Dynamics' revenue in the year ended December 31, 2019.

The following table shows the evolution of Grid Dynamics' customer base and revenue concentration, as of the dates and for the annual periods indicated:

	Year ended December 31,								
	 2021	2020	2020						
	(in thousands, except a number of customers and percentages)								
Total customers (for the period) (1)	273		182		40				
Of which:									
>\$5.0 million	9		7		7				
>\$2.5 - 5.0 million	5		3		3				
>\$1.0 - 2.5 million	20		7		5				
Top five customers	43.9 %)	55.9 %)	66.5 %				
Top ten customers	60.4 %)	78.4 %)	86.7 %				
Top five customers	\$ 92,768	\$	62,152	\$	78,715				
Top ten customers	\$ 127,564	\$	87,203	\$	102,646				

⁽¹⁾ Number of customers acquired as a result of Daxx and Tacit acquisitions for the years ended December 31, 2021 and 2020 is 208 and 130, respectively.

Foreign Currency Exchange Rate Exposure

Grid Dynamics is exposed to foreign currency exchange rate risk and its profit margins are subject to volatility between periods due to changes in foreign currency exchange rates relative to the U.S. dollar. Grid Dynamics' functional currency apart from the U.S. dollar includes EURO, British pounds, Mexican pesos and Moldovan leu. Grid Dynamics contracts with customers for payment in and generates predominantly all of its revenue in U.S. dollars, except for Daxx and Tacit that generate revenue predominantly in EURO and British pounds. Its non-U.S. subsidiaries' operations relate substantially to performing services under those contracts. Several of Grid Dynamics' subsidiaries conduct operations and employ or contract personnel in Russia, Ukraine, Poland and Serbia, but keep their books and records in U.S. dollars. Daxx's books are kept in EURO. Tacit's books are kept in local currencies. Grid Dynamics' foreign currency transaction exposure is a result of having to convert U.S. dollars into the local currencies of the countries in which it must pay expenses, typically by transferring funds to its non-U.S. subsidiaries. These expenses are primarily comprised of compensation and benefits and other operating costs, such as rent. Subsidiary transactions executed in local currencies are converted into U.S. dollars at the exchange rate in effect on the date of the transaction, in the case of asset and liability transactions, or at the average monthly

exchange rate, in the case of income and expense transactions. Certain balances in local currencies, particularly cash and financial instruments, are adjusted at each

balance sheet date to reflect the then-current exchange rate, which is the rate at which the related receivable or payable could be settled at that date. As a result, Grid Dynamics' assets, liabilities, profit margins and other measures of profitability may be subject to volatility due to changes in the exchange rate of the U.S. dollar against the currencies in which Grid Dynamics' subsidiaries incur operating expenses, hold assets, or owe liabilities, and may not be comparable between periods.

For the twelve months ended December 31, 2021, approximately 12.5%, 11.9%, and 6.4% of Grid Dynamics' \$211.2 million of combined cost of revenue and total operating expenses were denominated in the Ukrainian hryvnia, Russian rouble, and Polish zloty, respectively. Comparatively, for the year ended December 31, 2020 approximately 11.7%, 13.8% and 9.6% of of Grid Dynamics' \$126.7 million of combined cost of revenue and total operating expenses were denominated in the Ukrainian hryvnia, Russian rouble, and Polish zloty, respectively. Grid Dynamics does not currently hedge its foreign currency exposure, although it seeks to minimize such exposure by limiting cash transfers to amounts necessary to fund subsidiary operating expenses for a short period, typically one to two weeks. When and where possible, Grid Dynamics seeks to match expenses to the U.S. dollar. For example, in Ukraine, Grid Dynamics generally pays salaries in the current hryvnia equivalent of an agreed U.S. dollar amount, consistent with local requirements. As a result, a significant portion of Grid Dynamics' exposure to fluctuations in the value of the Ukrainian hryvnia against the U.S. dollar is naturally hedged. Management carefully evaluates its exposure to foreign currency risk and, though Grid Dynamics does not currently hedge this exposure through the use of financial instruments, it may do so in the future. See Item 7A, "Quantitative and Qualitative Disclosures about Market Risk—Foreign Currency Exchange Rate Risk" below for more information about Grid Dynamics' exposure to foreign currency exchange rates.

Seasonality

Grid Dynamics' business is subject to seasonal trends that impact its revenues and profitability between quarters. Some of the factors that influence the seasonal trends include the timing of holidays in the countries in which Grid Dynamics operates and the U.S. retail cycle, which drives the behavior of Grid Dynamics' retail customers. Excluding the impact of growth in its book of business, Grid Dynamics has historically recorded higher revenue and gross profit in the second and third quarters of each year compared to the first and fourth quarters of each year. The Christmas holiday season in Russia and Ukraine, for example, falls in the first quarter of the calendar year, resulting in reduced activity and billable hours. In addition, many of Grid Dynamics' retail sector customers tend to slow their discretionary spending during the holiday sale season, which typically lasts from late November (before Thanksgiving) through late December (after Christmas).

Non-GAAP Measures

To supplement Grid Dynamics' consolidated financial data presented on a basis consistent with U.S. GAAP, this Annual Report contains certain non-GAAP financial measures, including Adjusted EBITDA, Non-GAAP Net Income and Non-GAAP Diluted Earnings Per Share, or EPS. Grid Dynamics has included these non-GAAP financial measures because they are financial measures used by Grid Dynamics' management to evaluate Grid Dynamics' core operating performance and trends, to make strategic decisions regarding the allocation of capital and new investments and are among the factors analyzed in making performance-based compensation decisions for key personnel. These measures exclude certain expenses that are required under U.S. GAAP. Grid Dynamics excludes these items because they are not part of core operations or, in the case of stock-based compensation, non-cash expenses that are determined based in part on Grid Dynamics' underlying performance.

Grid Dynamics believes these supplemental performance measurements are useful in evaluating operating performance, as they are similar to measures reported by its public industry peers and those regularly used by security analysts, investors and other interested parties in analyzing operating performance and prospects. These non-GAAP financial measures are not intended to be a substitute for any GAAP financial measures and, as calculated, may not be comparable to other similarly titled measures of performance of other companies in other industries or within the same industry.

There are significant limitations associated with the use of non-GAAP financial measures. Further, these measures may differ from the non-GAAP information, even where similarly titled, used by other companies and therefore should not be used to compare our performance to that of other companies. Grid Dynamics compensates for these limitations by providing investors and other users of its financial information a reconciliation of non-GAAP measures to the related GAAP financial measures. Grid Dynamics encourages investors and others to review its financial information in its entirety, not to rely on any single financial measure and to view its non-GAAP measures in conjunction with GAAP financial measures.

Grid Dynamics defines and calculates its non-GAAP financial measures as follows:

• Non-GAAP EBITDA: Net income/(loss) before interest income/expense, provision for income taxes and depreciation and amortization, and further adjusted for the impact of stock-based compensation expense, transaction-related costs (which

to Grid Dynamics' merger and acquisition and capital-raising activities), impairment of goodwill and other income/expenses, net (which includes mainly interest income and expense, foreign currency transaction losses and gains, fair value adjustments and other miscellaneous expenses), and restructuring costs.

- *Non-GAAP Net Income*: Net income/(loss) adjusted for the impact of stock-based compensation, impairment of goodwill, transaction-related costs, restructuring costs, other income/expenses, net, and the tax impacts of these adjustments.
- Non-GAAP Diluted EPS: Non-GAAP Net Income, divided by the diluted weighted-average number of common shares outstanding for the period.

The following table presents the reconciliation of Grid Dynamics' Non-GAAP EBITDA to its consolidated net income/(loss), the most directly comparable GAAP measure, for the annual periods indicated:

	Year ended December 31,							
	2021		2020	20	19			
		(in	thousands)					
GAAP net income/(loss)	\$ (7,700) \$	(12,599)	\$	10,807			
Adjusted for:								
Depreciation and amortization	5,049)	2,672		2,311			
Provision/(benefit) for income taxes	5,248	}	(2,613)		4,642			
Impairment of goodwill	_	-	_		139			
Stock-based compensation	33,036	5	20,006		2,441			
Transaction and transformation-related costs(1)	942	2	4,407		3,145			
Restructuring ⁽²⁾	_	-	912		_			
Other (income)/expenses, net ⁽³⁾	2,502	2	(236)		176			
Non-GAAP EBITDA	\$ 39,077	5	12,549	\$	23,661			

⁽¹⁾ Transaction and transformation-related costs include, when applicable, external deal costs, transaction-related professional fees, transaction-related retention bonuses, which are allocated proportionally across cost of revenue, engineering, research and development, sales and marketing and general and administrative expenses as well as other transaction-related costs including integration expenses consisting of outside professional and consulting services.

⁽²⁾ During the year ended December 31, 2020, we implemented a cost reduction plan and incurred restructuring and severance charges of \$0.9 million, primarily resulting from a reduction in workforce and other charges. We did not incur any restructuring expenses during the year ended December 31, 2021.

⁽³⁾ Other (income)/expenses consist primarily of losses and gains on foreign currency transactions, fair value adjustments, and other miscellaneous non-operating expenses and other income consists primarily of interest on cash held at banks.

The following table presents a reconciliation of Grid Dynamics' Non-GAAP Diluted EPS and its Non-GAAP Net Income to its consolidated net income/(loss) for the annual periods indicated:

		Year ended December 31,						
		2021		2020		2019		
	_	(in thous	ınds,	except per sh	are	data)		
Net income/(loss)	\$	(7,700)	\$	(12,599)	\$	10,807		
Adjusted for:								
Impairment of goodwill		_				139		
Stock-based compensation		33,036		20,006		2,441		
Transaction-related costs ⁽¹⁾		942		4,407		3,145		
Restructuring ⁽²⁾		_		912		_		
Other (income)/expenses, net ⁽³⁾		2,502		(236)		176		
Tax impact of non-GAAP adjustments(4)		(4,620)		(5,477)		(1,221)		
Non-GAAP Net Income	\$	24,160	\$	7,013	\$	15,487		
Number of shares used in the Non-GAAP Diluted EPS	_	67,305		48,778		21,122		
Non-GAAP Diluted EPS(5)	\$	0.36	\$	0.14	\$	0.73		

- (1) Transaction and transformation-related costs include, when applicable, external deal costs, transaction-related professional fees, transaction-related retention bonuses, which are allocated proportionally across cost of revenue, engineering, research and development, sales and marketing and general and administrative expenses as well as other transaction-related costs including integration expenses consisting of outside professional and consulting services.
- (2) During the year ended December 31, 2020, we implemented a cost reduction plan and incurred restructuring and severance charges of \$0.9 million, primarily resulting from a reduction in workforce and other charges. We did not incur any restructuring expenses during the year ended December 31, 2021.
- (3) Other (income)/expenses consist primarily of losses and gains on foreign currency transactions, fair value adjustments, and other miscellaneous non-operating expenses and other income consists primarily of interest on cash held at banks.
- (4) Reflects the estimated tax impact of the non-GAAP adjustments presented in the table.
- (5) Non-GAAP Diluted EPS is calculated by dividing Non-GAAP Net Income/(Loss) by the diluted weighted-average shares outstanding. From the three months ended December 31, 2020 onwards, we have chosen to calculate its Non-GAAP Diluted EPS based on the diluted share count even in Net GAAP Loss situation. This methodology differs from the prior approach when we applied the basic share count in situations of a Net GAAP Loss and a positive Non-GAAP Net Income. Management believes that the new methodology provides better representation of the company's financial results as it takes into account the significance of the dilutive impact from any outstanding equity instruments in a GAAP Net Loss/Non-GAAP Net Income situation.

Key Components of Revenue and Expenses

Revenue

Grid Dynamics generates revenue by providing focused and complex services in the area of software engineering, development, integration, testing, and operations of digital services. Grid Dynamics provides services mainly on a time and materials basis and, to a much lesser extent, on a fixed-fee basis. While fixed-fee contracts currently represent an immaterial portion of overall revenue for the periods presented, Grid Dynamics expects proportionate revenue from fixed-fee contracts to increase in future periods. On a time and materials basis, Grid Dynamics earns and recognizes revenue as hours and costs are incurred. On its current and future fixed fee contracts, Grid Dynamics earns and recognizes revenue as the work is performed, the monthly calculation of which is based upon actual labor hours incurred and level of effort expended throughout the duration of the contract. For both time and materials contracts and fixed fee contracts, hourly rates are typically determined based on the location and experience of Grid Dynamics personnel selected to perform the service and are negotiated for each contract or statement of work, as the case may be. For fixed fee contracts, the fixed fee generally remains constant for the contracted project period unless the customer directs a change in scope of project work or requests additional Grid Dynamics employees in excess of those scheduled for a specific project.

In select cases, Grid Dynamics offers volume discounts or early settlement discounts, which are recorded as contra-revenue items. Volume discounts apply once the customer reaches certain contractual spend thresholds. Early settlement discounts are

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issued contingent upon the timing of the payment from the customer. If there is uncertainty about project completion or receipt of payment for services provided, revenue is deferred until the uncertainty is sufficiently resolved.

Costs and Expenses

Cost of Revenue. Cost of revenue consists primarily of salaries and employee benefits, including performance bonuses and stock-based compensation, and travel expenses for client-serving personnel. Cost of revenue also includes depreciation and amortization expense related to client-serving activities.

Engineering, Research and Development. Engineering, research and development expenses consist mainly of salaries and employee benefits including performance bonuses and stock-based compensation for personnel engaged in the design and development of solutions. Engineering, research and development expenses also include depreciation and amortization expenses related to such activities. Engineering, research and development costs are expensed as incurred.

Sales and Marketing. Sales and marketing expenses consist primarily of expenses associated with promoting and selling Grid Dynamics' services and consists mainly of salaries and employee benefits, including performance bonuses and stock-based compensation, marketing events, travel, as well as depreciation and amortization expenses related to such activities.

General and Administrative. General and administrative expenses consist primarily of administrative personnel and officers' salaries and employee benefits including performance bonuses and stock-based compensation, legal and audit expenses, insurance, operating lease expenses (mainly facilities and vehicles) and other facility costs, workforce global mobility initiatives, restructuring and employee relocations cost (not in connection with customer projects), and depreciation and amortization expenses related to such activities. General and administrative expenses include a substantial majority of Grid Dynamics' stock-based compensation costs for the financial periods discussed herein.

Provision for Income Taxes. Grid Dynamics follows the asset and liability method of accounting for income taxes, whereby deferred income taxes are recognized for the tax consequences of temporary differences between the financial statement carrying amounts and the tax basis of the assets and liabilities. The provision for income taxes reflects income earned and taxed in the various U.S. federal and state and non-U.S. jurisdictions. Jurisdictional tax law changes, increases or decreases in permanent differences between book and tax items, accruals or adjustments of accruals for tax contingencies or valuation allowances, and the change in the mix of earnings from these taxing jurisdictions all affect the overall effective tax rate. Grid Dynamics' effective tax rate was (214.0)%, 17.2%, and 30.1% in the years ended December 31, 2021, 2020 and 2019, respectively. The differences in effective tax rate between the years ended December 31, 2021 and 2020 and 2019 were attributable mainly to stock based compensation excess tax benefit, partially offset by Section162(m) compensation deduction limitations.

Results of Operations

Year Ended December 31, 2021 compared to Year Ended December 31, 2020

The following table sets forth a summary of Grid Dynamics' consolidated results of operations for the periods indicated, and the changes between periods:

	Year ended December 31,					Change			
		2021		2020		Dollars	Percentage		
			(in	thousands, ex	cej	pt percentages)			
Revenue	\$	211,280	\$	111,283	\$	99,997	89.9 %		
Cost of revenue		123,552		69,662		53,890	77.4 %		
Gross profit		87,728		41,621		46,107	110.8 %		
Engineering, research, and development		8,459		9,311		(852)	(9.2)%		
Sales and marketing		14,457		10,051		4,406	43.8 %		
General and administrative		64,762		37,707		27,055	71.8 %		
Total operating expense		87,678		57,069		30,609	53.6 %		
Income/(loss) from operations		50		(15,448)		15,498	(100.3)%		
Other income/(expenses), net		(2,502)		236		(2,738)	(1,160.2)%		
Loss before income taxes	'	(2,452)		(15,212)		12,760	(83.9)%		
Provision/(benefit) for income taxes		5,248		(2,613)		7,861	(300.8)%		
Net loss	\$	(7,700)	\$	(12,599)	\$	4,899	(38.9)%		
Foreign currency translation adjustments, net of tax		(122)		(4)		(118)	2,950.0 %		
Comprehensive loss	\$	(7,822)	0\$	(12,603)	\$	4,781	(37.9)%		

Revenues by Vertical. We assign our customers into one of our four main vertical markets or a group of various industries where we are increasing our presence, which we label as "Verticals". The following table presents our revenues by vertical and revenues as a percentage of total revenues by vertical for the periods indicated:

	Year ended December 31,											
	 20	20)20		20	019						
		% of revenue % of revenue				% of revenue						
				(dollars in	thousands)							
Tech, Media and Telecom	\$ 67,689	32.0 %	\$	45,362	40.8 %	\$	32,337	27.3 %				
Retail	61,717	29.2 %		33,975	30.5 %		67,367	56.9 %				
Finance	17,515	8.3 %		13,589	12.2 %		12,479	10.6 %				
CPG/Manufacturing	43,461	20.6 %		14,202	12.8 %		4,850	4.1 %				
Other	 20,898	9.9 %		4,155	3.7 %		1,293	1.1 %				
Total	\$ 211,280	100.0 %	\$	111,283	100.0 %	\$	118,326	100.0 %				

Revenue. Revenue increased by \$100.0 million, or 89.9%, to \$211.3 million in 2021 from \$111.3 million in 2020. In 2021, we witnessed growth across all our verticals in comparison to 2020. Additionally, our Retail vertical, which declined in 2020 in comparison to 2019, witnessed increase in 2021. Growth was also driven by contributions from our acquisitions of Daxx and Tacit which we acquired in December of 2020 and May of 2021, respectively. For the year ended December 31, 2021, retail revenues were \$61.7 million, up from \$34.0 million in the same period a year ago. The 81.7% year-over-year increase in retail revenues was driven by combination of factors that include adding new customers and increase in revenue from the existing customers. Additionally, Grid Dynamics' top ten customers contributed \$127.6 million and \$87.2 million to revenue for the years ended December 31, 2021 and 2020, respectively, in the aggregate accounting for \$40.4 million of the increase. The

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remainder of the other industry verticals increase reflected growth in revenue from new customers (*i.e.*, customers for which Grid Dynamics performed services for the first time during the period) and other existing customers.

Cost of Revenue and Gross Profit. Cost of revenue increased by \$53.9 million, or 77.4%, to \$123.6 million in 2021 from \$69.7 million in 2020 largely from increased costs of personnel to support higher revenue offset by lower expenses, such as travel related expenses and retention bonuses.

Gross profit increased by \$46.1 million, or 110.8%, to \$87.7 million in 2021 from \$41.6 million in 2020. Gross margin (gross profit as a percentage of revenue) increased to 41.5% in the year ended December 31, 2021 from 37.4% in the year ended December 31, 2020. The gross margin increase was attributable to a combination of increased levels of business resulting in higher revenue, favorable mixshift towards offshore delivery locations, and improving engineering workforce utilization.

Engineering, Research and Development. Engineering, research and development expenses decreased by \$(0.9) million to \$8.5 million in the year ended December 31, 2021, a (9.2)% decrease from \$9.3 million in the year ended December 31, 2020. The decrease in R&D expenses was largely due to the wind down of R&D programs initiated during the period of the pandemic in 2020 and their replacement with the new R&D initiatives.

Sales and Marketing. Sales and marketing expenses increased by \$4.4 million, or 43.8%, to \$14.5 million in the year ended December 31, 2021 from \$10.1 million in the year ended December 31, 2020. Sales and marketing expenses accounted for 6.8% of Grid Dynamics' revenue in the year ended December 31, 2021 compared to 9.0% in the year ended December 31, 2020, a decrease of (2.2) percentage points. The increase was due mainly to the increased personnel costs associated with the expansion activities both on the sales and marketing fronts. Additionally, the acquisition of Tacit partially contributed to the increase in the year ended December 31, 2021 in comparison to the year ended December 31, 2020.

General and Administrative. General and administrative expenses increased by \$27.1 million, or 71.8%, to \$64.8 million in the year ended December 31, 2021 from \$37.7 million in the year ended December 31, 2020. Increased stock-based compensation accounted for approximately \$12.6 million of the increase. The remaining portion of the increase was due mainly to costs associated with expanding our operations that required increased levels of hiring along with investments in infrastructure and facilities to support our increased headcount. Additionally our acquisitions of Daxx and Tacit contributed to the increase. As a result, general and administrative expenses accounted for 30.7% of Grid Dynamics' revenue in the year ended December 31, 2021, a decrease of (3.2) percentage points from 33.9% in the year ended December 31, 2020.

Other income/(expenses), net. Other net income/(expenses) decreased to \$(2.5) million for the year ended December 31, 2021 from \$0.2 million for the year ended December 31, 2020, mainly due to changes in the fair value of private warrants of \$1.0 million, adjustment to the final Daxx earnout of \$0.4 million in the third quarter of 2021, and fair value adjustment of Tacit earnout of \$1.0 million in the fourth quarter of 2021.

Provision/(benefit) for Income Tax. Provision/(benefit) for income tax was \$5.2 million in the year ended December 31, 2021 compared to \$(2.6) million in the year ended December 31, 2020. The effective tax rate decreased by 231.21% between periods. See "—Key Components of Revenue and Expenses—Costs and Expenses—Provision for Income Taxes.

Net Income/(loss). Net loss decreased to \$(7.7) million million in the year ended December 31, 2021 from \$(12.6) million in the year ended December 31, 2020 for the reasons discussed above.

Year Ended December 31, 2020 Compared to Year Ended December 31, 2019

The following table sets forth a summary of Grid Dynamics' consolidated results of operations for the years indicated, and the changes between periods:

	Year ended December 31,					Change		
		2020	2019			Dollars	Percentage	
		(do	llars	in thousand	ls, e	ages)		
Revenue	\$	111,283	\$	118,326	\$	(7,043)	(6.0)%	
Cost of revenue		69,662		70,090		(428)	(0.6)%	
Gross profit		41,621		48,236		(6,615)	(13.7)%	
Engineering, research, and development		9,311		4,346		4,965	114.2 %	
Sales and marketing		10,051		6,947		3,104	44.7 %	
General and administrative		37,707		21,318		16,389	76.9 %	
Total operating expense		57,069		32,611		24,458	75.0 %	
Income from operations		(15,448)		15,625		(31,073)	(198.9)%	
Other income/(expenses), net		236		(176)		412	(234.1)%	
Income before income taxes		(15,212)		15,449		(30,661)	(198.5)%	
Provision/(benefit) for income taxes		(2,613)		4,642		(7,255)	(156.3)%	
Net Income	\$	(12,599)	\$	10,807	\$	(23,406)	(216.6)%	
Foreign currency translation adjustments, net of tax		(4)		_		(4)	n.m.	
Comprehensive loss	\$	(12,603)	\$	10,807	\$	(23,410)	(216.6)%	

Revenue. Revenue decreased by \$(7.0) million, or (6.0)%, to \$111.3 million in 2020 from \$118.3 million in 2019. The key reason for the year-over-year decline was the decline in revenues from Retail customers impacted by the COVID-19 pandemic. This decline in Retail business was offset by increase in revenue from other industry verticals such as TMT, CPG/Manufacturing, and Other. For the year ended December 31, 2020, retail revenues were \$34.0 million, down from \$67.4 million in the same period a year ago. The 50% year-over-year decline in retail revenues was partially offset by revenues of the other segments that, on a combined basis, grew from \$51.0 million in the year ended December 31, 2020. Additionally, Grid Dynamics' top ten customers contributed \$87.2 million and \$102.6 million to revenue for the years ended December 31, 2020 and 2019, respectively, in the aggregate accounting for \$15.4 million of the decrease. The remainder of the other industry verticals increase reflected growth in revenue from new customers (*i.e.*, customers for which Grid Dynamics performed services for the first time during the period) and other existing customers.

Cost of Revenue and Gross Profit. Cost of revenue decreased by \$(0.4) million, or (0.6)%, to \$69.7 million in 2020 from \$70.1 million in 2019 reflecting a decrease in revenue offset by higher retention bonuses resulting from the Business Combination and stock-based compensation expenses.

Gross profit decreased by \$(6.6) million, or (13.7)%, to \$41.6 million in 2020 from \$48.2 million in 2019. Gross margin (gross profit as a percentage of revenue) decreased by 3.4 percentage points to 37.4% in the year ended December 31, 2020 from 40.8% in the year ended December 31, 2019. The gross margin decline was attributable to a combination of increased costs associated with stock-based compensation and retention bonuses resulting from the Business Combination and lower levels of revenue in the year ended December 31, 2020 due to the impacts of the ongoing COVID-19 pandemic.

Engineering, Research and Development. Engineering, research and development expenses increased by \$5.0 million to \$9.3 million in the year ended December 31, 2020, a 114.2% increase from \$4.3 million in the year ended December 31, 2019. The increase was primarily due to a combination of enhanced efforts around engineering and development projects, Grid Dynamics' efforts to develop its solutions and expertise, reallocation of delivery personnel to strategic R&D initiatives, costs associated with stock-based compensation, and retention bonuses resulting from the Business Combination.

Sales and Marketing. Sales and marketing expenses increased by \$3.1 million, or 44.7%, to \$10.1 million in the year ended December 31, 2020 from \$6.9 million in the year ended December 31, 2019. Sales and marketing expenses accounted for 9.0% of Grid Dynamics' revenue in the year ended December 31, 2020 compared to 5.9% in the year ended December 31, 2019, an increase of 3.1 percentage points. The increase was due mainly to the increased costs associated with stock-based compensation and retention bonuses resulting from the Business Combination and partially offset by decrease in marketing and sales events due to the COVID-19 pandemic.

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General and Administrative. General and administrative expenses increased by \$16.4 million, or 76.9%, to \$37.7 million in the year ended December 31, 2020 from \$21.3 million in the year ended December 31, 2019. Increased stock-based compensation accounted for approximately \$17,565 million of the increase. The remaining portion of the increase was due mainly to the retention bonuses resulting from the Business Combination. As a result, general and administrative expenses accounted for 33.9% of Grid Dynamics' revenue in the year ended December 31, 2020, an increase of 15.9 percentage points from 18.0% in the year ended December 31, 2019.

Other income/(expenses), net. Other net income/(expenses) increased to \$0.2 million for the year ended December 31, 2020 from \$(0.2) million for the year ended December 31, 2019, mainly due to interest and other income offset by miscellaneous expenses.

Provision/(benefit) for Income Tax. Provision/(benefit) for income tax was \$(2.6) million in the year ended December 31, 2020 compared to \$4.6 million in the year ended December 31, 2019. The effective tax rate decreased by 13% between periods. See "—Key Components of Revenue and Expenses—Costs and Expenses—Provision for Income Taxes.

Net Income/(loss). Net income/(loss) decreased to \$(12.6) million in the year ended December 31, 2020 from \$10.8 million in the year ended December 31, 2019 for the reasons discussed above.

Liquidity and Capital Resources

Grid Dynamics measures liquidity in terms of its ability to fund the cash requirements of its business operations, including working capital needs, capital expenditures, contractual obligations and other commitments with cash flows from operations and other sources of funding. Grid Dynamics' current liquidity needs relate mainly to compensation and benefits of Grid Dynamics' employees and contractors and capital expenditures for computer hardware and office furniture. Grid Dynamics' ability to expand and grow its business will depend on many factors including its capital expenditure needs and the evolution of its operating cash flows. Grid Dynamics may need more cash resources due to changing business conditions or other developments, including investments or acquisitions. Grid Dynamics believes that its current cash position on its balance sheet of \$144.4 million is sufficient to fund its currently expected levels of operating, investing and financing expenditures for a period of twelve months from the date of this filing. However, if Grid Dynamics' resources are insufficient to satisfy its cash requirements, it may need to seek additional equity or debt financing, which may be subject to conditions outside of Grid Dynamics' control and may not be available on terms acceptable to Grid Dynamics' management or at all.

As of December 31, 2021, Grid Dynamics had cash and cash equivalents amounting to \$144.4 million (compared to \$112.7 million at December 31, 2020). Of this amount, \$8.5 million was held in Russia, Ukraine, Poland, Serbia, the Netherlands, UK, Mexico, Moldova, and Singapore (compared to \$3.1 million as of December 31, 2020). As many of Grid Dynamics' assets, operations and employees are located in these countries, Grid Dynamics expects that all such cash and cash equivalents will be used to fund future operating needs. In a scenario that Grid Dynamics decides to remit funds from these countries to the United States in the future, whether in the form of inter-company dividends or otherwise, the company may be subject to foreign withholding taxes. In addition, Grid Dynamics' cash in banks in Russia, Ukraine, Moldova, Serbia, and Mexico may be subject to other risks, as the banking sector in some of these countries are subject to periodic instability, may be subject to sanctions, and may be subject to capital adequacy and other banking standards that are substantially less rigorous than those of the United States. This is particularly true given the significant military action against Ukraine launched by Russia and the sanctions on certain Russian banks that have been imposed as a result, although this would not materially disrupt our liquidity as a whole.

Grid Dynamics does not have any debt outstanding as of December 31, 2021 and did not have any debt outstanding at any balance sheet date presented.

Cash Flows

The following table summarizes Grid Dynamics' cash flows for the annual periods indicated:

	Year ended December 31,						
	2021			2020		2019	
			(in	thousands)		_	
Net cash provided by operating activities	\$	17,973	\$	5,932	\$	12,534	
Net cash used in investing activities		(35,366)		(18,339)		(2,811)	
Net cash provided by financing activities		49,134		82,967		14,604	
Effect of exchange rate changes on cash and cash equivalents		(122)		(4)		_	
Net increase in cash and cash equivalents		31,619		70,556		24,327	
Cash, cash equivalents (beginning)		112,745		42,189		17,862	
Cash, cash equivalents (end)	\$	144,364	\$	112,745	\$	42,189	

Operating Activities. Net cash provided by operating activities during the year ended December 31, 2021 increased by \$12.0 million, or 203.0%, to \$18.0 million from \$5.9 in the same period in 2020, driven by higher cash operating profit (before non-cash depreciation and amortization and stock-based compensation charges). The key reasons for the increase in cash operating profit in year ended December 31, 2021 in comparison to the year ended December 31, 2020, were higher levels of revenue and greater billable utilization resulting in higher profitability.

Net cash provided by operating activities during the year ended December 31, 2020 decreased by \$6.6 million, or 52.7%, to \$5.9 million from \$12.5 million in the same period in 2019, driven by lower cash operating profit (before non-cash depreciation and amortization and stock-based compensation charges). The key reasons for the decline in net cash provided by operating activities were retention bonuses paid out to employees due to the successful Business Combination on March 5, 2020, lower level of revenues due to the impact of the COVID-19 pandemic in the period of March through September 30, 2020, and higher costs associated with our delivery centers.

Investing Activities. Net cash used in investing activities during the year ended December 31, 2021 was \$(35.4) million compared to \$(18.3) million in cash used in the same period in 2020, due primarily to cash paid for the Tacit acquisition in the year ended December 31, 2021 as well as capital expenditures for computer hardware and related equipment in both periods.

Net cash used in investing activities during the year ended December 31, 2020 was \$18.3 million compared to \$2.8 million in cash used in the same period in 2019, due primarily to cash paid for the Daxx acquisition in the year ended December 31, 2020 as well as capital expenditures for computer hardware and related equipment in both periods.

Financing Activities. Net cash provided by financing activities was \$49.1 million in the year ended December 31, 2021, reflecting the equity offering and warrant exercise proceeds offset by tax obligations resulted from net share settlement of vested stock awards.

Net cash provided by financing activities was \$83.0 million in the year ended December 31, 2020, reflecting primarily the proceeds from the Business Combination.

Off-Balance Sheet Arrangements and Commitments

Except for its credit support for the letter of credit and balances on corporate credit cards, Grid Dynamics does not have any off-balance sheet arrangements of the kind required to be disclosed under SEC rules and does not have any off-balance sheet or contingent commitments, except as described elsewhere with respect to operating leases.

As a result of analysis related to Grid Dynamics' functional control of subcontractor GD Ukraine, LLC, the subcontractor was determined to be a variable interest entity ("VIE") and is therefore consolidated in Grid Dynamics' financial statements. The assets and liabilities of this VIE consist primarily of intercompany balances and transactions, all of which have been eliminated in consolidation.

Critical Accounting Policies and Estimates

Grid Dynamics management's discussion and analysis of our financial condition and results of operations is based on the consolidated financial statements, which have been prepared in accordance with U.S. GAAP. Preparation of the financial statements requires Grid Dynamics to make judgments, estimates and assumptions that impact the reported amount of revenue

and expenses, assets and liabilities and the disclosure of contingent assets and liabilities. Grid Dynamics considers an accounting judgment, estimate or assumption to be critical when (1) an estimate or assumption is complex in nature or requires a high degree of judgment, and (2) the use of different judgments, estimates and assumptions could have a material impact on Grid Dynamics' consolidated financial statements. Grid Dynamics' critical accounting policies are described in Note 2 to its consolidated financial statements.

Revenue

Grid Dynamics derives its revenue through time and materials and fixed fee contracts. Although the majority of revenues have been derived through time and material contracts, our fixed-fee customer contracts business is increasing, although not significant historically, will comprise a more significant portion of revenue in future periods. For all contracts, Grid Dynamics uses master agreements that govern the overall relevant terms and conditions of the business arrangement and executes statements of work pursuant to such agreements to execute specific projects. Grid Dynamics recognizes revenue for services over time as hours are incurred by Grid Dynamics' engineering personnel. For all contracts, the customer derives value from the Company providing daily consulting services, and the value derived corresponds to the labor hours expended. Therefore, the Company measures the progress and recognizes revenue using an effort-based input method.

Grid Dynamics also offers volume discounts or early settlement discounts. Volume discounts apply once the customer reaches certain contractual spend thresholds. Early settlement discounts are issued contingent upon the timing of the payment from the customer. If the consideration promised in a contract includes a variable amount, Grid Dynamics only includes estimated amounts of consideration in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved.

Income Taxes

The determination of the provision for income taxes requires significant judgment, the use of estimates and the interpretation and application of complex tax laws. The provision for income taxes reflects a combination of income earned and taxed in the various U.S. federal and state and non-U.S. jurisdictions. Changes in tax law, increases or decreases in permanent differences between book and tax items, accruals or adjustments of accruals for tax contingencies or valuation allowances, and the change in the mix of earnings across taxing jurisdictions all affect the overall effective tax rate.

In assessing the realizability of deferred tax assets, Grid Dynamics considers whether it is more-likely-than-not that some portion, or all, of the deferred tax assets will not be realized. Management considers all available evidence, both positive and negative, in determining whether a valuation allowance is required, including prior earnings history, the scheduled reversal of deferred tax liabilities, projected future taxable income, carryback and carryforward periods of tax attributes and tax planning strategies that could potentially enhance the likelihood of realization of a deferred tax asset in making this assessment. The weight given to the positive and negative evidence is commensurate with the extent to which the evidence may be objectively verified.

Grid Dynamics evaluates for uncertain tax positions at each balance sheet date. When it is more likely than not that a position will be sustained upon examination by a tax authority that has full knowledge of all relevant information, Grid Dynamics measures the amount of tax benefit from the position and records the largest amount of tax benefit that is greater than 50% likely of being realized after settlement with a tax authority. Grid Dynamics' policy for interest and/or penalties related to underpayments of income taxes is to include interest and penalties in provision for income tax.

Business Combinations

The Company accounts for business combinations under the acquisition method of accounting, in accordance with Accounting Standards Codification ("ASC") Topic 805, Business Combinations, recording any assets acquired and liabilities assumed based on their respective fair values. Any excess of the fair value of purchase consideration over the fair value of the assets acquired less liabilities assumed is recorded as goodwill. The Company uses management estimates and industry data to assist in establishing the acquisition date fair values of assets acquired, liabilities assumed, and contingent consideration granted, if any. These estimates and valuations require the Company to make significant assumptions, including projections of future events and operating performance.

The Company determines the fair value of the contingent consideration liabilities using Monte Carlo model which involves a simulation of future revenues and earnings during the earn-out period using management's best estimates and assumptions. Changes in financial projections, market risk assumptions, discount rates or probability assumptions with respect to the likelihood of achieving the various earnout criteria may result in a significant change in the fair value of contingent

consideration. Such changes, if any, are recorded within Other income/(expense), net in the Company's consolidated statements of income.

Stock-based Compensation

Grid Dynamics has in the past issued, currently issues and intends to continue issuing incentive stock options and non-qualifying stock options, performance stock units and restricted stock units. While Grid Dynamics does not currently have any other form of stock-based awards outstanding, it may also issue stock appreciation rights. Stock-based compensation expense is measured based on the grant-date fair value of the share-based awards. Forfeitures are recognized as incurred. Grid Dynamics estimates grant date fair value of its stock using a number of objective and subjective factors, as described in more detail below, and the Black-Scholes option pricing model to estimate the grant date fair value of option grants. The model requires management to make a number of key assumptions, including expected volatility, expected term, risk free interest rate and expected dividends. As Grid Dynamics' shares do not have sufficient trading history, expected volatility is estimated based on the average historical volatility of similar entities with publicly traded shares. The risk free rate for the expected term of the option is based on the U.S. Treasury yield curve at the date of grant. The expected term is estimated using the simplified method, which takes into account vesting and contractual term. Grid Dynamics' options grants generally vest over a 4-year period and from time to time Grid Dynamics makes grants with a portion vesting at the time of grant. Management elected to use the simplified method instead of historical experience due to a lack of relevant historical data resulting from changes in option vesting schedules and changes in the pool of employees receiving option grants. Grid Dynamics evaluates the assumptions used to value its stock-based awards on each grant date. Grants are approved by Grid Dynamics' Board of Directors.

Grid Dynamics amortizes the grant date fair value of all stock-based compensation awards over the employee's requisite service period for the entire award on a straight-line basis, which is generally the vesting period. For an award with graded vesting that is subject only to a service condition (e.g., time-based vesting), Grid Dynamics uses the straight-line attribution method under ASC 718, under which it recognizes compensation cost on a straight-line basis over the total requisite service period for the entire award. Additionally, Grid Dynamics applies the "floor" concept, so that the amount of compensation cost that is recognized as of any date is at least equal to the grant-date fair value of the vested portion of the award on that date. In other words, if the straight-line expense recognized to date is less than the grant date fair value of the award that is legally vested at that date (for example, as a result of a portion of a grant vesting at the grant date), Grid Dynamics will increase its recognized expense to at least equal the fair value of the vested amount. The fair market value of Grid Dynamics stock is determined based on the closing price on NASDAQ on the measurement date. For more detailed information about Grid Dynamics' historical and outstanding grants and its valuation of its stock-based compensation and awards, see Note 13 to the audited consolidated financial statements included elsewhere in this Annual Report.

Emerging Growth Company Accounting Election

Section 102(b)(1) of the Jumpstart Our Business Startups Act of 2012 ("JOBS Act") exempts emerging growth companies from being required to comply with new or revised financial accounting standards until private companies are required to comply with the new or revised financial accounting standards. The JOBS Act provides that a company can choose not to take advantage of the extended transition period and comply with the requirements that apply to non-emerging growth companies and any such election to not to take advantage of the extended transition period is irrevocable. Prior to the Business Combination, ChaSerg was an "emerging growth company" as defined in Section 2(a) of the Securities Act and has elected to take advantage of the benefits of this extended transition period. Following the consummation of the Business Combination, Grid Dynamics remains an emerging growth company and continues to take advantage of the benefits of the extended transition period.

Recently Adopted and Issued Accounting Pronouncements

Recently issued and adopted accounting pronouncements are described in Note 2 to Grid Dynamics' consolidated financial statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Grid Dynamics has in the past and may in the future be exposed to certain market and credit risks in the ordinary course of business, including exposure related to fluctuations in foreign currency rates, and on occasion and to a lesser extent, changes in interest rates and concentration of credit risk. In addition, Grid Dynamics' international operations are subject to risks related to differing economic conditions, changes in political climate, differing tax structures, and other regulations and restrictions. See Item 1A, "Risk Factors" for additional information.

Foreign Currency Exchange Rate Risk

Grid Dynamics is exposed to foreign currency exchange transaction risk related to funding its non-US operations and to foreign currency translation risk related to certain of its subsidiaries' cash balances that are denominated in currencies other than the U.S. dollar. In addition, Grid Dynamics' profit margins are subject to volatility as a result of changes in foreign exchange rates. When and where possible, Grid Dynamics seeks to match expenses to the U.S. dollar, and believes, due to Ukrainian payroll being pegged to the U.S. dollar, that a significant portion of its foreign currency exchange rate exposure to the Ukrainian hryvnia is naturally hedged. In future periods, Grid Dynamics may also become materially exposed to changes in the value of the Serbian dinar against the U.S. dollar, as it continues to expand its operations in Serbia.

For the year ended December 31, 2021, approximately 12.5%, 11.9%, and 6.4% of our \$211.2 million of Grid Dynamics' combined cost of revenue and total operating expenses were denominated in the Ukrainian hryvnia, Russian rouble, and Polish zloty, respectively. Comparatively, for the year ended December 31, 2020, approximately 11.7%, 13.8% and 9.6% of our \$126.7 million of combined cost of revenue and total operating expenses were denominated in the Ukrainian hryvnia, Russian rouble, and Polish zloty, respectively.

In the year ended December 31, 2021:

- a 10% decrease in the value of the Russian rouble against the U.S. dollar would have resulted in a \$2.3 million increase in Grid Dynamics' income from operations, while a 10% increase in the rouble's value would have resulted in a \$2.8 million decrease in income from operations.
- a 10% decrease in the value of the Polish zloty against the U.S. dollar would have resulted in a \$1.2 million increase in Grid Dynamics' income from operations, while a 10% increase in the zloty's value would have resulted in a \$1.5 million decrease in income from operations.

In the year ended December 31, 2020:

- a 10% decrease in the value of the Russian rouble against the U.S. dollar would have resulted in a \$1.6 million increase in Grid Dynamics' income from operations, while a 10% increase in the rouble's value would have resulted in a \$0.7 million decrease in income from operations.
- a 10% decrease in the value of the Polish zloty against the U.S. dollar would have resulted in a \$1.1 million increase in Grid Dynamics' income from operations, while a 10% increase in the zloty's value would have resulted in a \$1.4 million decrease in income from operations.

Grid Dynamics analyzes sensitivity to the rouble and zloty separately because, in management's experience, fluctuations in the value of these currencies against the U.S. dollar are frequently driven by distinct macroeconomic and geopolitical factors.

Grid Dynamics does not currently hedge its foreign currency exposure, although it seeks minimize it by limiting cash transfers to amounts necessary to fund subsidiary operating expenses for a short period, typically one week. Grid Dynamics' management may evaluate new hedging strategies in future periods.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

GRID DYNAMICS HOLDINGS, INC Index to Consolidated Financial Statements

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Shareholders Grid Dynamics Holdings, Inc.

Opinion on the financial statements

We have audited the accompanying consolidated balance sheets of Grid Dynamics Holdings, Inc. (a Delaware corporation) and subsidiaries (the "Company") as of December 31, 2021 and 2020, the related consolidated statements of income/(loss) and comprehensive income/(loss), convertible preferred stock and stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America.

Basis for opinion

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

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

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

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2017.

San Francisco, California March 3, 2022

GRID DYNAMICS HOLDINGS, INC. CONSOLIDATED BALANCE SHEETS (In thousands, except share and per share data)

	As of December 31,			
	 2021		2020	
Assets				
Current assets				
Cash and cash equivalents	\$ 144,364	\$	112,745	
Accounts receivable, net of allowance of \$315, and \$418 as of December 31, 2021 and December 31, 2020	38,838		16,890	
Unbilled receivables	4,475		1,799	
Prepaid income taxes	584		821	
Prepaid expenses and other current assets	4,503		2,361	
Total current assets	192,764		134,616	
Property and equipment, net	6,169		4,095	
Intangible assets, net	19,097		8,125	
Deferred tax assets	2,731		5,609	
Goodwill	35,958		14,690	
Total assets	\$ 256,719	\$	167,135	
Liabilities and equity				
Current liabilities				
Accounts payable	\$ 2,053	\$	757	
Accrued liabilities	1,150		628	
Accrued compensation and benefits	10,562		7,479	
Accrued income taxes	1,980		1,248	
Other current liabilities	9,599		3,206	
Total current liabilities	25,344		13,318	
Deferred tax liabilities	 4,324		2,093	
Total liabilities	 29,668		15,411	
Commitments and contingencies (Note 17)				
Stockholders' equity (Note 12)				
Common stock, \$0.0001 par value; 110,000,000 shares authorized; 66,850,941 and 50,878,780 issued and outstanding as of December 31, 2021 and December 31, 2020, respectively	7		5	
Additional paid-in capital	212,077		128,930	
Retained earnings	15,093		22,793	
Accumulated other comprehensive loss	(126)		(4)	
Total stockholders' equity	227,051		151,724	
Total liabilities and stockholders' equity	\$ 256,719	\$	167,135	

GRID DYNAMICS HOLDINGS, INC. CONSOLIDATED STATEMENTS OF INCOME/(LOSS) AND COMPREHENSIVE INCOME/(LOSS) (In thousands, except per share data)

	For the years ended December 31,					
		2021		2020		2019
Revenue	\$	211,280	\$	111,283	\$	118,326
Cost of revenue		123,552		69,662		70,090
Gross profit		87,728		41,621		48,236
Operating expenses						
Engineering, research, and development		8,459		9,311		4,346
Sales and marketing		14,457		10,051		6,947
General and administrative		64,762		37,707		21,318
Total operating expenses		87,678		57,069		32,611
Income/(loss) from operations		50		(15,448)		15,625
Other income/(expenses), net		(2,502)		236		(176)
Income/(loss) before income taxes		(2,452)		(15,212)		15,449
Provision/(benefit) for income taxes		5,248		(2,613)		4,642
Net income/(loss)	\$	(7,700)	\$	(12,599)	\$	10,807
Foreign currency translation adjustments, net of tax		(122)		(4)		_
Comprehensive income/(loss)	\$	(7,822)	\$	(12,603)	\$	10,807
Comprehensive mediae (1998)	-	(, ,				<u> </u>
Earnings/(loss) per share						
Basic	\$	(0.13)	\$	(0.28)	\$	0.49
Diluted	\$	(0.13)	\$	(0.28)	\$	0.49
Weighted anguage shows autotonding						
Weighted average shares outstanding		59.662		44.727		21 110
Basic		58,662		44,737		21,118
Diluted		58,662		44,737		21,122

GRID DYNAMICS HOLDINGS, INC. CONSOLIDATED STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (In thousands)

	Preferr	ertible ed Stock	-	on Stock	Additional paid-in	Retained	Accumulated Other Comprehensive	
	Shares	Amount	Shares	Amount	capital	earnings	Loss	equity
Balance at December 31, 2018		<u>\$</u>	20,217	\$ 2	\$ 8,792	\$ 24,585	<u>s — </u>	\$ 33,379
Net income	_	_	_	_		10,807	_	10,807
Stock-based compensation	_	_	_	_	2,441	_	_	2,441
Issuance of common and preferred stock, net of \$96 issuance costs	1,048	9,187	1,048	_	5,717	_	_	5,717
Exercise of stock options			379		1,700			1,700
Balance at December 31, 2019	1,048	\$ 9,187	21,644	\$ 2	\$ 18,650	\$ 35,392	\$ —	\$ 54,044
Net loss	_			_	_	(12,599)		(12,599)
Stock-based compensation	_	_	_	_	20,006	_	_	20,006
Conversion of preferred stock	(1,048)	(9,187)	1,048	1	9,187	_	_	9,188
Consideration paid to Grid shareholders	_	_	_	_	(123,865)	_	_	(123,865)
ChaSerg shares recapitalized, net of transaction costs of \$4,142	_	_	28,088	2	204,323	_	_	204,325
Conversion of promissory note to common stock	_	_	53	_	530	_	_	530
Exercise of stock options	_	_	18	_	99	_	_	99
Issuance of shares in connection with vested RSUs	_	_	28	_	_	_	_	_
Foreign currency translation adjustment, net of tax	_	_	_	_	_	_	(4)	(4)
Balance at December 31, 2020	_	\$ —	50,879	\$ 5	\$ 128,930	\$ 22,793	\$ (4)	\$ 151,724
Net loss	_			_	_	(7,700)		(7,700)
Stock-based compensation	_	_	_	_	33,036	_	_	33,036
Exchange of warrants into common stock	_	_	6,680	1	49,123	_	_	49,124
Exercise of stock options, net of shares withheld	_	_	1,631	_	(27,528)	_	_	(27,528)
Issuance of common stock in July 2021 offering, net of transaction costs of \$498	_	_	5,470	1	77,812	_	_	77,813
Issuance of shares and payments of tax obligations resulted from net share settlement of vested stock awards			2 060		(40 206)			(49,296)
			2,060		(49,296)	_	_	(49,296)
Issuance of escrow common stock due to Closing of Business Combination	_	_	131	_	_	_	_	_
Foreign currency translation adjustment, net of tax							(122)	(122)
Balance at December 31, 2021		\$ —	66,851	\$ 7	\$ 212,077	\$ 15,093	\$ (126)	\$ 227,051

GRID DYNAMICS HOLDINGS, INC. CONSOLIDATED STATEMENTS OF CASH FLOWS (In thousands)

	For the years ended December 31,					
	2021		2020		2019	
Cash flows from operating activities						
Net income/(loss)	\$ (7,700) \$	(12,599)	\$	10,807	
Adjustments to reconcile net income/(loss) to net cash provided by operating activities:						
Depreciation and amortization	5,049)	2,672		2,311	
Impairment of goodwill	_	-	_		139	
Bad debt expense	45		398		_	
Deferred income taxes	2,611		(4,135)		(425)	
Stock-based compensation	33,036)	20,006		2,441	
Change in fair value of warrants	979)	_		_	
Changes in operating assets and liabilities:						
Accounts receivable	(18,676)	(1,418)		(885)	
Unbilled receivables	(849)	3,237		(722)	
Prepaid income taxes	237	'	(410)		121	
Deferred transaction costs	_	-	_		(1,878)	
Prepaid expenses and other current assets	(1,176)	373		(1,101)	
Accounts payable	957	'	(49)		301	
Accrued liabilities	18	}	(1,579)		(552)	
Accrued compensation and benefits	873	}	(255)		1,424	
Accrued income taxes	532	2	(166)		712	
Other current liabilities	2,037	,	(143)		(159)	
Net cash provided by operating activities	17,973	;	5,932		12,534	
Cash flows from investing activities						
Purchase of property and equipment	(4,716)	(2,252)		(2,811)	
Acquisition of business, net of cash acquired (Note 4)	(30,650		(16,087)		_	
Net cash used in investing activities	(35,366		(18,339)		(2,811)	
Cash flows from financing activities	(00,000	<u>, </u>	(20,000)		(=,===)	
Cash received from ChaSerg	<u> </u>	_	208,997		_	
GDI shares redeemed for cash	_	-	(123,865)		_	
Proceeds related to issuance of Common Stock from July 2021 Offering	78,311		_		_	
Equity issuance costs	(498		(2,264)		_	
Sales of common and preferred stock	_	-	_		14,904	
Payments of dividends	_	-	_		(2,000)	
Payments of tax obligations resulted from exercises of stock options, net of proceeds	(27,528)	99		1,700	
Payments of tax obligations resulted from net share settlement of vested stock units	,		_			
Proceeds from exercise of warrants	48,145		_			
Net cash provided by financing activities	49,134		82,967		14,604	
Effect of exchange rate changes on cash and cash equivalents	(122		(4)			
Net increase in cash and cash equivalents	31,619	/	70,556		24,327	
Cash and cash equivalents, beginning of period	112,745		42,189		17,862	
	\$ 144,364		112,745	\$	42,189	
Cash and cash equivalents, end of period	ψ 177,30°	Ф	114,743	Ψ	74,107	

GRID DYNAMICS HOLDINGS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Continued)

	For the years ended December 31,					
	2021		2020		2019	
Supplemental disclosure of cash flow information:						
Cash paid for income taxes	\$	2,448	\$	2,128	\$	3,195
Supplemental disclosure of non-cash activities						
Accrued software implementation costs	\$		\$	_	\$	227
Acquisition fair value of contingent consideration issued for acquisition of	ф	4.006	Ф	1.045	ф	
business	\$	4,986	\$	1,947	\$	_
Conversion of preferred stock to common stock	\$	_	\$	9,187	\$	_

GRID DYNAMICS HOLDINGS, INC. NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except share and per share data)

Note 1 — Background and nature of operations

Grid Dynamics Holdings, Inc. (the "Company" or "GDH") provides enterprise-level digital transformation in the areas of search, analytics, and release automation to Fortune 1000 companies. The Company's headquarters and principal place of business is in San Ramon, California.

The Company was originally incorporated in Delaware on May 21, 2018 as a special purpose acquisition company under the name ChaSerg Technology Acquisition Corp. ("ChaSerg") for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or similar business combination involving ChaSerg and one or more businesses. On March 5, 2020 (the "Closing"), the Company consummated its business combination with Grid Dynamics International, Inc. ("GDI") pursuant to the Agreement and Plan of Merger (the "Merger Agreement"), dated November 13, 2019 (the "Business Combination"). In connection with the Closing, the Company changed its name from ChaSerg Technology Acquisition Corp. to Grid Dynamics Holdings, Inc. The Company's common stock is now listed on the NASDAQ under the symbol "GDYN".

Unless the context otherwise requires, the "Company" refers to the combined company and its subsidiaries following the Business Combination, "ChaSerg" refers to the Company prior to the Closing, and "GDI" refers to GDI prior to the Closing. Refer to Note 3 for further discussion of the Business Combination.

Note 2 — Basis of presentation and summary of significant accounting policies

The following is a summary of the significant accounting policies consistently applied in the preparation of the accompanying consolidated financial statements.

Basis of presentation

The Business Combination was accounted for as a reverse recapitalization in accordance with U.S. GAAP. Although ChaSerg was the legal acquirer, for accounting purposes, GDI was deemed to be the accounting acquirer. GDI was determined to be the accounting acquirer based on evaluation of the following facts and circumstances:

- GDI holds executive management roles for the Company and those individuals are responsible for the day-to-day operations;
- GDI's former owners have the largest minority voting rights in the Company;
- From a revenue and business operation standpoint, GDI was the larger entity in terms of relative size;
- GDI's San Ramon, CA headquarters are the headquarters of the Company; and
- The intended strategy of the Company will continue GDI's strategy of driving enterprise-level digital transformation in the Fortune 1000 companies.

Refer to Note 3 for further discussion of the Business Combination.

Principles of consolidation

The accompanying consolidated financial statements include the accounts of the Company and all of its subsidiaries that are directly or indirectly owned or controlled. Intercompany transactions and balances have been eliminated upon consolidation.

The Company provides services to its customers utilizing its own personnel as well as personnel from subcontractors. The most significant subcontractor is GD Ukraine, LLC ("Affiliate"), a third-party contractor in the Ukraine. The affiliate performs services and support exclusively on behalf of the Company and its customers. The Company has no ownership in the Affiliate. The Company is required to apply accounting standards which address how a business enterprise should evaluate whether it has a controlling financial interest in a variable interest entity ("VIE") through means other than voting rights and accordingly should determine whether or not to consolidate the entity. The Company has determined that it is required to consolidate the Affiliate because the Company has the power to direct the VIE's most significant activities and is the primary beneficiary of the Affiliate. The assets and liabilities of the Affiliate primarily consist of inter-company balances and transactions all of which have been eliminated in consolidation. The net income of the

Affiliate was \$0.6 million for the year ended December 31, 2021 and \$0.1 million for each of the years ended December 31, 2020 and 2019.

Use of estimates

The preparation of the consolidated financial statements in accordance with U.S. GAAP requires the Company to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from these estimates and such differences could be material. Significant estimates include useful lives and recoverability of property and equipment, determination of fair value, useful lives and recoverability of intangible assets and goodwill, allowances for receivables, calculation of accrued liabilities, capitalization of internally developed software, stock-based compensation, contingent consideration payable, determination of provision for income taxes, deferred tax assets and liabilities and uncertain tax positions.

Cash and cash equivalents

The Company considers cash equivalents to be highly liquid investments with original maturities of three months or less. Cash equivalents are stated at cost, which approximates fair value. At times, cash deposits with banks may exceed federally insured limits.

Accounts receivable and allowance for doubtful accounts

Accounts receivable, less allowance for doubtful accounts, reflect the net realizable value of receivables and approximate fair value. The Company maintains an allowance against accounts receivable for the estimated probable losses on uncollectible accounts. The allowance is based upon historical loss experience, current economic conditions within the industries the Company serves as well as determination of the specific risk related to certain customers. Accounts receivable are charged off against the reserve when, in management's estimation, further collection efforts would not result in a reasonable likelihood of receipt.

Unbilled receivables

Generally, the Company will not bill customers until the services have been completed. From time-to-time, a service period may overlap with a period-end and the unbilled receivables represent amounts for services performed through period-end, but not yet billed. The unbilled receivable represents the amount expected to be billed and collected for services performed through period-end in accordance with contract terms.

Property and equipment

Property and equipment are stated at cost, less accumulated depreciation and amortization. Depreciation and amortization are computed using the straight-line method over the estimated useful lives of the respective assets, generally two to twelve years. Leasehold improvements and property under capital leases are amortized over the shorter of estimated useful lives of the assets or the lease term. Expenditures for repairs and maintenance are expensed as incurred.

Software development costs

The Company capitalizes costs incurred during the application development and implementation stages for computer software developed or obtained for internal use that are specifically identifiable, have determinable lives and relate to probable future economic benefits. Capitalized computer software costs are included in Property and equipment, net in the consolidated balance sheets. Average useful life of such costs is two years. Amortization of internally developed software is recorded within Engineering, research, and development and Sales and marketing expenses in the consolidated statements of income/(loss) and comprehensive income/(loss) as the software is developed for purposes of supporting internal R&D, engineering, and marketing activities. Costs associated with minor enhancements and maintenance or costs incurred during the preliminary project stage, and costs for training, data conversion, and maintenance are expensed as incurred. Management evaluates the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets. Internally developed software did not have any impairment as of December 31, 2021 and 2020.

Business combinations

The Company accounts for business combinations under the acquisition method of accounting, in accordance with Accounting Standards Codification ("ASC") Topic 805, Business Combinations, recording any assets acquired and liabilities assumed based on their respective fair values. Any excess of the fair value of purchase consideration over the fair value of the assets acquired less liabilities assumed is recorded as goodwill. The Company uses management estimates and industry data to assist in establishing the acquisition date fair values of assets acquired, liabilities assumed, and contingent consideration granted, if

any. These estimates and valuations require the Company to make significant assumptions, including projections of future events and operating performance.

Goodwill

Goodwill represents the excess of purchase price over the fair value of the net assets of businesses acquired. On an annual basis, the Company makes a qualitative assessment to determine if it is more likely than not that the fair value of the reporting unit is less than its carrying amount, including goodwill. If the Company determines that the fair value of the reporting unit is less than its carrying amount, it will perform a quantitative analysis; otherwise, no further evaluation is necessary. For the quantitative impairment assessment, the Company compares the fair value of the reporting unit to its carrying value, including goodwill. The Company uses the discounted cash flow method of the income approach and market approach to determine the fair value of the reporting unit. If the fair value of the reporting unit exceeds the carrying value of the net assets assigned to that unit, goodwill is not impaired and no further testing is performed. If the carrying value of the net assets assigned to the reporting unit exceeds the fair value of the reporting unit, then the Company will recognize a loss equal to the excess, limited to the total amount of goodwill allocated to that reporting unit. Impairments, if any, are charged directly to earnings. As of December 31, 2021, the Company has a single reporting unit and determined there were no indicators of impairment.

Intangible assets

Finite-lived intangible assets are stated at cost less accumulated amortization. Amortization is computed either on the straight-line basis over the asset's useful lives or declining balance method ranging between two and twelve years. Intangible assets are evaluated for impairment whenever events or changes in circumstances indicate that the carrying value of the assets may not be fully recoverable. If facts and circumstances indicate that the carrying value might not be recoverable, projected undiscounted net cash flows associated with the related asset or group of assets over their estimated remaining useful lives is compared against their respective carrying amounts. If an asset is found to be impaired, the impairment charge will be measured as the amount by which the carrying amount of an entity exceeds its fair value. As of December 31, 2021, the Company determined there were no indicators of impairment.

Fair value

Financial instruments are required to be categorized within a valuation hierarchy based upon the lowest level of input that is significant to the fair value measurement. Assets and liabilities recorded at fair value are measured and classified in accordance with a three-tier fair value hierarchy based on the observability of the inputs available in the market used to measure fair value:

- Level 1 Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2 Inputs that are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques for which all significant inputs are observable in the market or can be derived from observable market data.
- Level 3 Unobservable inputs that are supported by little or no market activities. Where applicable, these models project future cash flows and discount the future amounts to a present value using market-based observable inputs including interest rate curves, foreign exchange rates, and credit ratings.

Revenue recognition

The Company accounts for a contract with a customer when 1) the parties to the contract have approved the contract and are committed to performing their respective obligations, 2) the contract identifies each party's rights regarding the goods or services to be transferred, 3) the contract identifies the payment terms for the goods or services to be transferred, 4) the contract has commercial substance, and 5) collection of substantially all consideration pursuant to the contract is probable.

The Company derives its revenue from offering a suite of digital engineering and information technology ("IT") consulting services, including digital transformation strategy, emerging technology, lean labs and legacy system replatforming. For most contracts, the Company uses master agreements to govern the overall relevant terms and conditions of the business arrangement between the Company and its customers. When the Company and a customer enter into a Master Services Agreement ("MSA"), purchases are generally made by the customer via a statement of work ("SOW") which explicitly references the MSA and specifies the services to be delivered. Fees for these contracts may be in the form of time-and-materials or fixed-fee arrangements. The majority of the Company's revenues are generated under time-and-material contracts which are billed using hourly, daily or monthly rates to determine the amounts to be charged directly to the customer. Fees are billed and collected as

stipulated in the contract, and revenue is recognized as services are performed. If there is an uncertainty about the receipt of payment for the services, revenue is recognized to the extent that a significant reversal of revenue would not be probable.

Consulting services revenue is a single performance obligation earned through a series of distinct daily services and may include services such as those described above. The Company recognizes revenue for services over time as the customer simultaneously receives and consumes the benefits as the Company performs IT consulting services. For revenue contracts, the customer derives value from the Company providing daily consulting services, and the value derived corresponds to the labor hours expended. Therefore, the Company measures the progress and recognizes revenue using an effort-based input method. For fixed fee contracts, the Company recognizes revenue as the work is performed, the monthly calculation of which is based upon actual labor hours incurred and level of effort expended throughout the duration of the contract.

For time-and-material contracts, the Company applies the variable consideration allocation exception. Therefore, instead of allocating the variable consideration to the entire performance obligation, the Company determined the variable consideration should be allocated to each distinct service to which the variable consideration relates, which is providing the customer daily consulting services. The Company also offers volume discounts or early settlement discounts. Volume discounts apply once the customer reaches certain contractual spend thresholds. Early settlement discounts are issued contingent upon the timing of the payment from the customer. If the consideration promised in a contract includes a variable amount, the Company only includes estimated amounts of consideration in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved. These estimates may require management to make subjective judgments and to make estimates about the effects of matters inherently uncertain. The determination of whether to constrain consideration in the transaction price are based on information (historical, current and forecasted) that is reasonably available to the Company, taking into consideration the type of customer, the type of transaction and the specific facts and circumstances of each arrangement. Although the Company believes that its approach in developing estimates and its reliance on certain judgments and underlying inputs is reasonable, actual results may differ from management's estimates, judgments and assumptions. These estimates have historically not been material to the consolidated financial statements.

Cost of revenue

Cost of revenue primarily consists of compensation for professional staff generating revenues for the Company. Compensation includes salary, benefits, performance bonuses, retention bonuses, stock compensation expense, technology and travel expenses. The Company allocates a portion of depreciation and amortization to cost of revenue.

Engineering, research and development

Engineering, research, and development expenses primarily include compensation for professional staff performing research and development related activities that are not directly attributable to generating revenues for the Company. Research and development activities relate to building and scaling the next generation e-commerce platform solutions for customers. Research and development costs are expensed as incurred. Engineering, research, and development expenses also include depreciation and amortization costs, stock-based compensation expenses and performance and retention bonuses.

Sales and marketing

Sales and marketing expenses are those expenses associated with promoting and selling the Company's services and include such items as sales and marketing personnel salaries, benefits, stock compensation expenses, travel, advertising, depreciation and amortization, performance and retention bonuses, and other promotional activities.

General and administrative

General and administrative expenses include other operating items such as officers' and administrative personnel salaries, benefits, stock compensation expenses, legal, tax and audit expenses, public company related expenses, insurance, technology costs, facility costs, performance and retention bonuses, depreciation and amortization, including amortization of purchased intangibles, and operating lease expenses.

Stock-based compensation expense

Stock-based compensation expense is measured based on the grant-date fair value of the share-based awards. Forfeitures are recognized as incurred. The Company estimates stock options grant-date fair value using the Black-Scholes-Merton option pricing model. The model requires management to make a number of key assumptions including expected volatility, expected term, risk-free interest rate,

and expected dividends. The Company evaluates the assumptions used to value its share-based awards on each grant date. The fair market value of Grid Dynamics stock is determined based on the closing price on NASDAQ

on the measurement date. The Company amortizes the grant-date fair value of all share-based compensation awards over the employee's requisite service period for the entire award on a straight-line basis, which is generally the vesting period. For an award with graded vesting that is subject only to a service condition (e.g., time-based vesting), the Company uses the straight-line attribution method under ASC 718 under which they recognize compensation cost on a straight-line basis over the total requisite service period for the entire award (i.e., over the requisite service period of the last separately-vesting tranche of the award). Additionally, the Company applies the "floor" concept so that the amount of compensation cost that is recognized as of any date is at least equal to the grant-date fair value of the vested portion of the award on that date. That is, if the straight-line expense recognized to date is less than the grant date fair value of the award that is legally vested at that date, the company will increase its recognized expense to at least equal the fair value of the vested amount. The Company made an accounting policy election to account for accounts for forfeitures when they occur. Refer to Note 13 — Stock-based compensation for additional information.

Benefit plans

The Company maintains a 401(k) defined contribution savings and retirement plan for substantially all of its U.S. employees. Subject to ERISA regulations, an employee may elect to contribute an amount up to 90% of compensation during each plan year. The Company is not required to make contributions to the plan but can make discretionary contributions. The Company has not made any contributions to the 401(k) plan for the years ended December 31, 2021, 2020, and 2019.

Income taxes

The Company follows the asset and liability method of accounting for income taxes. Under this method, deferred income taxes are recognized for the tax consequences of temporary differences between the financial statement carrying amounts and the tax basis of the assets and liabilities. The determination of the provision for income taxes requires significant judgment, the use of estimates and the interpretation and application of complex tax laws. The provision for income taxes reflects a combination of income earned and taxed in the various U.S. federal and state, international and other jurisdictions. Jurisdictional tax law changes, increases or decreases in permanent differences between book and tax items, accruals or adjustments of accruals for tax contingencies or valuation allowances, and the change in the mix of earnings from these taxing jurisdictions all affect the overall effective tax rate.

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion, or all, of the deferred tax assets will not be realized. Management considers all available evidence, both positive and negative, in determining whether a valuation allowance is required. Such evidence includes prior earnings history, the scheduled reversal of deferred tax liabilities, projected future taxable income, carryback and carryforward periods of tax attributes, and tax planning strategies that could potentially enhance the likelihood of realization of a deferred tax asset in making this assessment. The weight given to the positive and negative evidence is commensurate with the extent to which the evidence may be objectively verified.

The Company evaluates for uncertain tax positions at each balance sheet date. When it is more likely than not that a position will be sustained upon examination by a tax authority that has full knowledge of all relevant information, the Company measures the amount of tax benefit from the position and records the largest amount of tax benefit that is greater than 50% likely of being realized after settlement with a tax authority. The Company's policy for interest and/or penalties related to underpayments of income taxes is to include interest and penalties in income tax expense.

Restructuring

The Company initiated a restructuring plan focused on optimizing utilization during 2020. For twelve months ended December 31, 2020, the Company incurred and paid total restructuring expenses of \$0.9 million, which mostly included employee termination costs. This amount is included as a component of General and administrative expenses in the consolidated financial statements. The Company did not incur any restructuring expenses during the year ended December 31, 2021.

Earnings per share

The Company accounts for earnings per share in accordance with ASC Topic 260, Earnings per Share. Basic earnings per share is computed by dividing net income by the weighted-average number of common shares outstanding during the period. Diluted earnings per share is computed using the weighted-average number of common and potential dilutive common shares outstanding during the period. Under U.S. GAAP, companies are required to include certain option grants granted to employees and convertible preferred stock in the diluted earnings per share calculation, except in cases where the effect of the inclusion of options and convertible preferred stock would be antidilutive.

Certain significant risks and uncertainties

The Company is subject to risks, including but not limited to customer concentration, concentrations of credit and foreign currency risks.

On February 24, 2022, Russian forces launched significant military action against Ukraine, and sustained conflict and disruption in the region is ongoing. The conflict and related sanctions activity could have a material adverse effect upon the Company. Refer to Note 19 — Subsequent events for additional information.

Additionally, the Company has been impacted by the recent coronavirus ("COVID-19") pandemic. The global pandemic of COVID-19 has negatively affected the U.S. and global economy, disrupted global supply chains, resulted in significant travel and transport restrictions, including mandated closures and orders to "shelter-in-place," and created significant disruption of the financial market. The COVID-19 pandemic has impacted the Company's revenues and the Company's business continues to be exposed to risks and uncertainties related to the pandemic. The impact of the COVID-19 pandemic has been more pronounced with the Company's retail customers, which depend on keeping their stores open. Additionally, in situations where the Company's customers encounter financial difficulties, there is a risk associated with the Company's inability to collect money from customers. The Company has taken several actions to deal with the COVID-19 pandemic. These include enabling its employees to work from home, company-wide salary and compensation cuts, hiring freezes, and suspending all non-essential travel. The ultimate impact and the extent to which the COVID-19 pandemic will continue to affect the business, results of operation and financial condition is difficult to predict and depends on numerous evolving factors outside of the Company's control including: the duration and scope of the pandemic; government, social, business and other actions that have been and will be taken in response to the pandemic; and the effect of the pandemic on short and long-term general economic conditions.

Concentrations of credit risk and significant customers

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and accounts receivable. The Company's cash is held with high-quality financial institutions. Deposits held with banks may, at times, exceed the amount of insurance provided on such deposits. The Company also has cash deposited with commercial banks outside the United States, including countries such as Russia and Ukraine, in which banking and other financial systems are less developed and regulated. Bank deposits made by corporate entities in less developed markets such as these are not insured. As of December 31, 2021, \$0.5 million and \$0.6 million of total cash was held in Russia and Ukraine, respectively. As of December 31, 2020, \$0.7 million of total cash was held in Russia and \$0.2 million was held in Ukraine. In these regions, and particularly in Russia, a banking crisis, bankruptcy or insolvency of banks that process or hold the Company's funds, may result in the loss of the Company's deposits or adversely affect the Company's ability to complete banking transactions, which could adversely affect the Company's business and financial condition.

The Company records its accounts receivable and unbilled receivables at their face amounts less allowances. Accounts receivable and unbilled receivables are generally dispersed across the Company's customers in proportion to their revenue. The following table shows number of customers exceeding 10% of the Company's billed and unbilled receivable balances at December 31, 2021 and 2020:

	As of D	As of December 31,				
	2021	2020				
Accounts receivable		1	3			
Unbilled receivable		1	3			

The Company has not experienced any losses on its cash and cash equivalents and minimal losses on its accounts receivable. The Company performs ongoing evaluations of its customers' financial condition.

The following table shows the amount of revenue derived from each customer exceeding 10% of the Company's revenue during the years ended December 31, 2021, 2020 and 2019:

	For the ye	For the years ended December 31,						
	2021	2020	2019					
Customer 1	11.6 %	21.3 %	23.1 %					
Customer 2	11.0 %	11.8 %	14.8 %					
Customer 3	n/a	n/a	13.0 %					

Foreign currency risks

Grid Dynamics' functional currency apart from the U.S. dollar includes EURO, British pounds, Mexican pesos, Moldovan leu. Grid Dynamics contracts with customers for payment in and generates predominantly all of its revenue in U.S. dollars, except for Daxx and Tacit that generate revenue predominantly in EURO and British pounds. The international subsidiaries convert the U.S. dollars to their respective local currencies to fund operations such as labor and materials required for the entity to operate. The Company's international subsidiaries' accounting records are denominated in their respective local currencies. The Company is exposed to foreign currency exchange rate changes that could impact remeasurement of foreign denominated monetary assets and liabilities into U.S. dollars with the remeasurement impact recorded to income. The Company is also exposed to fluctuations in foreign currency exchange rates related to cash outflows for expenditures in foreign currencies. The net income/(loss) on foreign currency transactions was \$(0.7) million, \$0.3 million, and \$(0.3) million for the years ended December 31, 2021, 2020, and 2019, respectively. The Company has not entered into any foreign exchange forward contracts, derivatives, or similar financial instruments to hedge against the risk of foreign exchange rate fluctuations.

Recently adopted accounting pronouncements

Changes to U.S. GAAP are established by the Financial Accounting Standards Board (the "FASB"), in the form of Accounting Standards Updates ("ASUs"), to the FASB's ASC. The Company has elected not to opt out of the extended transition period and thus when a standard is issued or revised and it has different application dates for public or private companies, the Company, as an emerging growth company, can adopt the new or revised standard at the time private companies adopt the new or revised standard.

The Company transitioned to ASC Topic 606, Revenue From Contracts with Customers ("ASC 606", the "New Standard"), from ASC Topic 605, Revenue Recognition on January 1, 2019. The New Standard was applied to all contracts that were not complete as of the date of adoption, using the modified retrospective transition method. The transition to ASC 606 represents a change in accounting principle. The Company's consolidated financial statements reflect the adoption of ASC 606 beginning in 2019, while the Company's consolidated financial statements prior to 2019 were prepared under the guidance of ASC 605. The New Standard did not materially affect the Company's consolidated statements of income/(loss) and comprehensive income/(loss), balance sheets, or cash flows, and prior periods were not impacted as a result of the adoption of the standard. The New Standard resulted in insignificant changes to the timing of recognition of revenues for certain volume discounts.

The Company elected to early adopt ASU No. 2018-15, Intangibles, Goodwill, and Other - Internal Use Software (Subtopic 350-40): Customer's accounting for implementation costs incurred in a Cloud Computing Arrangement that is a service contract as of January 1, 2019. The amendments in this ASU align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). Accordingly, the amendments require an entity (customer) in a hosting arrangement that is a service contract to follow the guidance in Subtopic 350-40 to determine which implementation costs to capitalize as an asset related to the service contract and which costs to expense. The adoption of the new standard did not materially affect the Company's consolidated statements of income and comprehensive income, balance sheets, or cash flows.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework — Changes to the Disclosure Requirements for Fair Value Measurement, which amends ASC 820, Fair Value Measurement. ASU 2018-13 modifies the disclosure requirements for fair value measurements by removing, modifying or adding certain disclosures. The accounting standard update was effective beginning in the first quarter of fiscal year 2020, with removed and modified disclosures to be adopted on a retrospective basis, and new disclosures to be adopted on a prospective basis. The Company has determined that the adoption of this guidance did not have a material effect on the consolidated financial statements.

In October 2018, the FASB issued ASU No. 2018-17, Consolidation (Topic 810): Targeted Improvements to Related Party Guidance for Variable Interest Entities. The new standard changes how entities evaluate decision-making under the variable interest entity guidance. The new standard is effective on January 1, 2020 and was applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings of the adoption date. The Company has determined that the adoption of this guidance did not have a material effect on the consolidated financial statements.

In December 2019, the FASB issued Accounting Standard Update No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* (ASU 2019-12), which simplifies the accounting for income taxes by removing certain exceptions to the general principles and also simplification of areas such as franchise taxes, step-up in tax basis goodwill, separate entity financial statements and interim recognition of enactment of tax laws or rate changes. The update is effective for fiscal years and interim periods within those fiscal years beginning after December 15, 2020, and early adoption is permitted. The Company

adopted the standard as of January 1, 2021 and has determined that the adoption of this guidance did not have a material effect on the consolidated financial statements.

Recently issued accounting pronouncements

The Company considered the applicability and impact of all ASUs. ASUs not listed below were assessed and determined to be either not applicable or are expected to have minimal impact on the consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, *Leases*. ASU 2016-02 requires lessees to put most leases on their balance sheet while recognizing expense in a manner similar to existing accounting. ASU 2016-02 states that a lessee would recognize a lease liability for the obligation to make lease payments and a right-to-use asset for the right to use the underlying asset for the lease term. The standard allows for two methods of adoption to recognize and measure leases: retrospectively to each prior period presented in the financial statements with the cumulative effect of initially applying the guidance recognized at the beginning of the earliest comparative period presented or retrospectively at the beginning of the period of adoption with the cumulative effect of initially applying the guidance recognized at the beginning of the period in which the guidance is first applied. Both adoption methods include a number of optional practical expedients that entities may elect to apply.

The Company is close to completion of implementing its transition plan, which includes making necessary changes to policies and processes, conducting detailed contract reviews, developing incremental borrowing rates, implementing a global lease accounting system, and assessing internal control impacts to comply with the new standard. The Company will adopt this standard effective January 1, 2022 using the optional transition approach, which allows the Company to apply the provisions of the standard at the effective date without adjusting the comparable periods and carry forward disclosures under previously existing guidance for those periods presented within the Company's financial statements. The Company has elected to use the package of practical expedients permitted under the transition guidance within the new standard. The Company has also elected the practical expedient that permits it to not separate lease and non-lease components. While the Company is currently finalizing its assessment of the quantitative impact, the Company expects to recognize right-of-use assets ranging from \$2.4 million to \$3.0 million and lease liabilities ranging from \$2.3 million to \$2.9 million in its consolidated balance sheet upon adoption, principally related to its office space leases. The Company does not expect the new guidance to have a material impact on its consolidated statement of income/(loss) and comprehensive income/(loss) or its consolidated statement of cash flows.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments-Credit Losses (Topic 326) — Measurement of Credit Losses on Financial Instruments. Topic 326 was subsequently amended by ASU 2019-04, Codification Improvements to Topic 326, Financial Instruments — Credit Losses, ASU 2019-05, Financial Instruments — Credit Losses (Topic 326): Targeted Transition Relief, and clarified the guidance with the release of ASU 2020-02 Financial Instruments—Credit Losses (Topic 326) and Leases (Topic 842). These ASUs replace the current incurred loss impairment methodology with a methodology that reflects expected credit losses measured at amortized cost and certain other instruments, including loans, held-to-maturity debt securities, net investments in leases, and off-balance sheet credit exposures. The update is effective for fiscal years beginning after December 15, 2022, and interim periods with fiscal years after December 15, 2022. The Company has not yet determined the impact that the adoption of this guidance will have on the consolidated financial statements.

In March 2020, FASB issued ASU No. 2020-03, *Codification to Financial Instruments*. This ASU improves and clarifies various financial instruments topics, including the current expected credit losses standard issued in 2016. The ASU includes seven different issues that describe the areas of improvement and the related amendments to U.S. GAAP, intended to make the standards easier to understand and apply by eliminating inconsistencies and providing clarifications. The amendments related to Issue 1, Issue 2, Issue 3, Issue 4, and Issue 5 were effective upon issuance of this update. The new guidance did not have a material impact on the consolidated financial statements. The amendments related to Issue 6 and Issue 7 are effective for the Company the earlier of January 1, 2023 or when the Company adopts ASU 2016-13, if early adopted. The Company is currently evaluating the impact these topics will have on the consolidated financial statements.

Note 3 – Business combination

On March 5, 2020, ChaSerg consummated its business combination with GDI pursuant to the Merger Agreement. Immediately following the Business Combination, there were 50.8 million shares of common stock with a par value of \$0.0001, and 11.3 million warrants outstanding.

GDI began operations in September 2006 to provide next-generation ecommerce platform solutions in the areas of search, analytics, and release automation to Fortune 1000 companies. Under ASC 805, *Business Combinations*, GDI was deemed the accounting acquirer,

and the Business Combination was accounted for as a reverse recapitalization, with no goodwill or other intangible assets recorded in accordance with U.S. GAAP. ChaSerg was treated as the "acquired" company for financial

reporting purposes. Accordingly, for accounting purposes, the Business Combination was treated as the equivalent of GDI issuing stock for the net assets of ChaSerg, accompanied by a recapitalization. The net assets of ChaSerg were stated at historical cost, with no goodwill or other intangible assets recorded. Reported shares and earnings per share available to holders of the Company's common stock, prior to the Business Combination, have been retroactively restated as shares reflecting the exchange ratio established in the Business Combination (approximately 1.685 GDH shares to 1.0 GDI share).

The following represents the aggregate consideration for the Business Combination:

(in thousands, except for per share amounts)

Shares transferred at Closing	_	27,006
Less: Post-Closing share adjustment		(857)
Total shares transferred at Closing		26,149
Value per share	\$	10.19
Total share consideration	\$	266,459
Plus: Cash transferred to GDI stockholders		130,000
Closing merger consideration	\$	396,459

The shares transferred at Closing included 4.3 million options to purchase the Company's shares that were vested, outstanding and unexercised, which were determined using 1.7 million vested options at Closing converted at an exchange ratio of approximately 2.48. Additionally, 0.4 million options to purchase the Company's common stock that were unvested, outstanding and unexercised were assumed by the Company, which were determined using 0.1 million unvested options at Closing converted at an exchange ratio of approximately 2.48.

In connection with the Closing, 0.1 million shares of common stock were redeemed at a price per share of approximately \$10.21. See Note 12 for details of the Company's common stock prior to and subsequent to the Business Combination.

In connection with the Business Combination, the Company incurred direct and incremental costs of approximately \$4.7 million, consisting of legal and professional fees, of which \$4.1 million were related to equity issuance costs and recorded to Additional paid-in capital as a reduction of proceeds and \$0.6 million were recorded to General and administrative expenses.

In connection with the Business Combination, all outstanding retention bonus obligations from a 2017 acquisition totaling \$3.4 million were accelerated and paid in full to Grid Dynamics' personnel immediately prior to the Closing and were recorded in Cost of revenue and Operating expenses in the consolidated financial statements.

Note 4 — Acquisitions

Tacit — On May 29, 2021, the Company acquired 100% of the equity interest of the global consultancy company Tacit Knowledge Inc. ("Tacit"). Founded in 2002, Tacit is a global provider of digital commerce solutions, serving customers across the UK, North America, Continental Europe, and Asia. The acquisition of Tacit added approximately 180 employees to the Company's headcount. The acquisition will augment the Company's service offerings and will strengthen its competitive position within the market. Additionally, the acquisition will also enable the Company to leverage near-shore capabilities with Tacit's presence in Mexico.

The total purchase consideration is \$37.6 million and consists of cash consideration of \$33.6 million paid at closing, and fair value of the contingent consideration at the date of the acquisition of \$4.0 million. The maximum amount of potential contingent cash consideration is \$5.0 million. During the fourth quarter of 2021 the Company adjusted fair value of contingent consideration as of December 31, 2021 to its maximum amount and reflected the expense in its consolidated statement of income/(loss). The contingent consideration is payable based on revenue and EBITDA metrics to be achieved by Tacit within 12 months. The Company recorded a liability for the contingent consideration amount based on the Company's best estimate of the fair value of the expected payout. See Note 5 for further details on contingent consideration.

Daxx — On December 14, 2020, the Company completed its acquisition of Daxx Web Industries B.V. ("Daxx"), a Netherlands-based software development and technology consulting company. In addition to high-end software development, Daxx provides consulting services spanning agile process reengineering, lean development, and DevOps. The Company expects to gain market share and realize synergies through the acquisition of Daxx.

The total purchase consideration is up to \$23.3 million and included cash consideration of approximately \$18.4 million and contingent consideration payable of up to \$4.9 million. The contingent consideration is payable based on revenue and EBITDA metrics achieved

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contingent consideration amount based the Company's best estimate of the fair value of the expected payout. See Note 5 for further details on contingent consideration.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed as updated for any changes as of December 31, 2021 for Daxx and Tacit:

	Daxx	Tacit
Current assets	\$ 4,527	\$ 9,145
Property, plant and equipment	352	466
Intangible assets	8,174	12,913
Goodwill	14,690	21,268
Total assets acquired	\$ 27,743	\$ 43,792
Accounts payable and accrued expenses	(4,718)	(3,675)
Deferred taxes	(2,639)	(2,500)
Total liabilities assumed	\$ (7,357)	\$ (6,175)
Purchase price allocation	\$ 20,386	\$ 37,617

Current assets acquired include cash and cash equivalents in the amount of \$2.3 million and \$3.0 million for Daxx and Tacit acquisitions, respectively. The purchase price was assigned to assets acquired and liabilities assumed based on their estimated fair values as of the date of acquisition, and any excess was allocated to goodwill, as shown in the table above. Goodwill represents the value the Company expects to achieve through the implementation of operational synergies and growth opportunities as the Company expands its global reach. The goodwill for both acquisitions is not deductible for income tax purposes.

During the first quarter of 2021, the Company finalized the fair value of the assets acquired and liabilities assumed in the acquisition of Daxx with no additional adjustments recorded. During the second half of 2021 the Company updated fair value of contingent consideration for Tacit at acquisition date that resulted in the increase of goodwill for \$0.7 million. During the fourth quarter of 2021, the Company finalized the fair value of the assets acquired and liabilities assumed in the acquisition of Tacit.

The estimated fair value, useful lives and amortization methods of identifiable intangible assets as of the date of acquisition updated for any changes during the year ended December 31, 2021 are as follows:

Tacit	Fa	ir Value	Useful Life	Amortization method
Customer relationships	\$	11,737	12 years	Straight-line
Trade name		1,176	4 years	Declining balance
Total Tacit identified intangible assets	\$	12,913		

Daxx	Fa	ir Value	Useful Life	Amortization method
Customer relationships	\$	4,234	8 years	Straight-line
Trade name		3,500	10 years	Straight-line
Non-compete agreements		440	2 years	Straight-line
Total Daxx identified intangible assets	\$	8,174		

The Company used acquisition method of accounting for both acquisitions, and consequently, the results of operations for Daxx and Tacit are reported in the consolidated financial statements from the dates of acquisition. Revenues of Daxx and Tacit from the date of acquisition to December 31, 2021 were \$29.2 million and \$16.7 million, respectively. Out of that revenue \$1.0 million was recognized during the year ended December 31, 2020.

The following unaudited pro forma information presents the combined results of operations as if the acquisitions of Daxx and Tacit had occurred at the beginning of 2020 and 2021, respectively. Pre-acquisition results of businesses acquired have been added to the Company's historical results. The pro forma results contained in the table below include adjustments for

amortization of acquired intangibles, depreciation expense, related to the financing and related income taxes. Any potential cost savings or other operational efficiencies that could result from the acquisition are not included in these pro forma results.

These pro forma results have been prepared for comparative purposes only and are not necessarily indicative of the results of operations as they would have been had the acquisitions occurred on the assumed dates, nor are they necessarily an indication of future operating results.

(Unaudited)	2021	2020
Revenue	\$ 219,312	\$ 149,219
Net loss	\$ (5,910)	\$ (10,792)
Diluted loss per share	\$ (0.10)	\$ (0.24)

Note 5 — Fair value

The Company's financial assets and liabilities, with the exceptions of contingent consideration payable described further herein, are all short term in nature; therefore, the carrying value of these items approximates their fair value.

The Company measures contingent consideration payable at fair value on a recurring basis using significant inputs that are not observable in the market. Fair value of the contingent consideration liability is based on the Monte-Carlo model which is primarily based on budgets and discounted cash flow analysis. The Company believes its estimates and assumptions are reasonable, however, there is significant judgment involved. Changes in the fair value of contingent consideration payable primarily result from changes in the timing and amount of specific milestone estimates and changes in probability assumptions with respect to the likelihood of achieving the various earnout criteria. These changes could cause a material impact to, and volatility in the Company's operating results.

During the years ended December 31, 2021 and 2020 the Company completed two acquisitions under which the Company committed to make a cash earnout payment subject to attainment of specific performance targets. By the end of 2021 Daxx completed its earn-out period based on which the Company is obligated to make an earnout payment of \$1.9 million in cash. See Note 4 "Acquisitions" in the consolidated financial statements for additional information regarding business acquisitions.

The Company records contingent consideration payable in Other current liabilities in its consolidated balance sheet. A reconciliation of the beginning and ending balances of Level 3 acquisition-related contingent consideration payable using significant unobservable inputs for the years ended December 31, 2021 and 2020 are as follows:

	A	mount
Contingent consideration payable as of December 31, 2019	\$	_
Acquisition date fair value of contingent consideration payable - Daxx		1,947
Contingent consideration payable as of December 31, 2020	\$	1,947
Acquisition date fair value of contingent consideration payable - Tacit	' <u>-</u>	4,000
Change in fair value of contingent consideration payable included in Other income/(expense) - Daxx		(14)
Change in fair value of contingent consideration payable included in Other income/(expense) - Tacit		1,000
Contingent consideration payable as of December 31, 2021	\$	6,933

Note 6 — Prepaid expenses and other current assets

The components of prepaid expenses and other current assets were as follows:

		As of December 31,				
	2021					
Prepaid expenses		2,188		1,058		
Value added tax receivable	\$	931	\$	325		
Prepaid insurance	\$	921	\$	592		
Other assets		463		386		
Total prepaid expenses and other current assets	\$	4,503	\$	2,361		

Note 7 — Property and Equipment, net

Property and equipment consist of the following:

	Estimated Useful Life	As of Dec	emb	er 31,
	(In Years)	2021		2020
Computers and equipment	2 - 5	\$ 10,784	\$	6,447
Machinery and automobiles	5	246		551
Furniture and fixtures	3 - 7	1,174		643
Software	3 - 5	513		554
Leasehold improvements	7 - 12	486		236
		\$ 13,203	\$	8,431
Less: Accumulated depreciation and amortization		(8,240)		(5,622)
		\$ 4,963	\$	2,809
Capitalized software development costs	2 - 3	\$ 4,656	\$	3,531
Less: Accumulated amortization		(3,450)		(2,245)
		\$ 1,206	\$	1,286
Property and equipment, net		\$ 6,169	\$	4,095

During the years ended December 31, 2021 and 2020, the Company capitalized \$1.1 million and \$1.1 million of internally developed software costs, respectively.

Property and equipment depreciation and amortization expense for the years ended December 31, 2021, 2020, and 2019 was \$3.1 million, \$2.6 million, and \$2.2 million, respectively.

Note 8 — Goodwill and intangible assets, net

Goodwill rollforward for the years ended December 31, 2021 and 2020 was as follows:

	<i>F</i>	Amount
Goodwill as of December 31, 2019	\$	_
Acquisition of Daxx		14,690
Goodwill as of December 31, 2020	\$	14,690
Acquisition of Tacit		21,268
Goodwill as of December 31, 2021	\$	35,958

There were no impairment losses of goodwill recognized as of December 31, 2021 and 2020.

Intangible assets consist of the following:

	Estimated Useful Life		As of Dec	emb	er 31,								
	(In Years)	2021		2021		2021		2021		2021			2020
Customer relationships	8 - 12	\$	15,971	\$	4,234								
Tradename	4 - 10		4,676		3,500								
Non-compete agreements	2		440		440								
		\$	21,087	\$	8,174								
Less: Accumulated amortization			(1,990)		(49)								
Intangible assets, net		\$	19,097	\$	8,125								

Intangible assets amortization expense for the years ended December 31, 2021, 2020, and 2019 was \$2.0 million, \$0.1 million, \$0.1 million, respectively.

Note 9 — Other current liabilities

The components of other current liabilities were as follows:

		er 31,		
	2021			2020
Contingent consideration payable	\$	6,933	\$	1,947
Value added tax payable		1,274		515
Customer deposits	\$	798		731
Other liabilities		594		13
Total other current liabilities	\$	9,599	\$	3,206

Note 10 — Revenue

Disaggregation of revenues

The tables below present disaggregated revenues from contracts with clients by client location, industries and contract-types. The Company believes this disaggregation best depicts how the nature, amount, timing and uncertainty of our revenues and cash flows are affected by industry, market and other economic factors. The Company has a single reportable segment for the years ended December 31, 2021, 2020 and 2019.

The following table shows the disaggregation of the Company's revenues by major customer location. Revenues are attributed to geographic regions based upon billed client location. Substantially all of the revenue in our North America region relates to operations in the United States.

	For the years ended December 31,						
		2021		2020		2019	
Customer Location	(in thousands)						
North America	\$	168,524	\$	110,288	\$	118,326	
Europe		42,479		995		_	
Other		277		_		_	
Total Revenues	\$	211,280	\$	111,283	\$	118,326	

The following table shows the disaggregation of the Company's revenues by main vertical markets for the years ended December 31, 2021, 2020 and 2019:

	For the years ended December 31,						
		2021		2020		2019	
Vertical			(in	thousands)			
Tech, Media and Telecom	\$	67,689	\$	45,362	\$	32,337	
Retail		61,717		33,975		67,367	
Finance		17,515		13,589		12,479	
CPG/Manufacturing		43,461		14,202		4,850	
Other		20,898		4,155		1,293	
Total Revenues	\$	211,280	\$	111,283	\$	118,326	

The following table shows the disaggregation of the Company's revenues by contract types for the years ended December 31, 2021, 2020 and 2019:

	For the years ended December 31,						
	 2021 2020				2019		
Contract Type	 (in thousands)						
Time-and-material	\$ 194,926	\$	105,578	\$	116,825		
Fixed-fee	 16,354		5,705		1,501		
Total Revenues	\$ 211,280	\$	111,283	\$	118,326		

Contract balances

A contract asset is a right to consideration that is conditional upon factors other than the passage of time. A contract liability, or deferred revenue, consist of advance payments and billings in excess of revenues recognized. As of December 31, 2021 and 2020 the Company did not have material contract assets or liabilities recognized in consolidated financial statements.

Remaining performance obligation

ASC 606 requires that the Company disclose the aggregate amount of transaction price that is allocated to performance obligations that have not yet been satisfied as of December 31, 2021. This disclosure is not required for:

- 1) contracts with an original duration of one year or less, including contracts that can be terminated for convenience without a substantive penalty,
- 2) contracts for which the Company recognizes revenues based on the right to invoice for services performed,
- 3) variable consideration allocated entirely to a wholly unsatisfied performance obligation or to a wholly unsatisfied promise to transfer a distinct good or service that forms part of a single performance obligation in accordance with ASC 606-10-25-14(b), for which the criteria in ASC 606-10-32-40 have been met, or
- 4) variable consideration in the form of a sales-based or usage-based royalty promised in exchange for a license of intellectual property.

All of the Company's contracts met one or more of these exemptions as of December 31, 2021.

Note 11 — Income taxes

Income before provision for income taxes consisted of the following:

		For the years ended December 31,						
	· · · · · · · · · · · · · · · · · · ·	2021 2020				2019		
	(in thousands)							
United States	\$	(11,530)	\$	(18,084)	\$	13,486		
International		9,078		2,872		1,963		
Total income/(loss) before provision for income taxes	\$	(2,452)	\$	(15,212)	\$	15,449		

The federal and state income tax provision/(benefit) is summarized as follows:

	For the years ended December 31,					
	 2021		2020		2019	
		(in	thousands)	ds)		
Current						
Federal	\$ 71	\$	167	\$	3,799	
State	80		97		599	
International	2,164		1,199		669	
Total current tax expense	\$ 2,315	\$	1,463	\$	5,067	
Deferred						
Federal	\$ 2,752	\$	(3,042)	\$	(375)	
State	(59)		(811)		(50)	
International	240		(222)		_	
Total deferred tax expense/(benefit)	\$ 2,933	\$	(4,075)	\$	(425)	
Total tax expense/(benefit)	\$ 5,248	\$	(2,613)	\$	4,642	
		_				

Deferred income taxes reflect the net tax effects of (a) temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes, and (b) operating losses and tax credit carryforwards.

The tax effects of significant items comprising the Company's deferred taxes as of December 31, 2021 and 2020 are as follows (in thousands):

	As of Dec	emb	nber 31,	
	 2021	2020		
	 (in tho	usan	ds)	
Deferred tax assets				
Accrued compensation	\$ 818	\$	545	
Allowance for bad debt	74		105	
State tax accrual	13		13	
Stock-based compensation	1,328		2,595	
Net operating loss	755		2,364	
Credits	195		71	
Total deferred tax assets	\$ 3,183	\$	5,693	
Deferred tax liabilities				
Fixed asset basis	\$ (153)	\$	(84)	
Intangible assets	\$ (4,599)	\$	(2,093)	
Other foreign DTLs	(24)			
Total deferred tax liabilities	 (4,776)		(2,177)	
Net deferred taxes	\$ (1,593)	\$	3,516	

The Company assessed its ability to realize the benefits of its domestic deferred tax assets ("DTA") by evaluating all available positive and negative evidence, objective and subjective in nature, including (1) cumulative results of operations in recent years, (2) sources of recent pre-tax income, (3) estimates of future taxable income, and (4) the length of net operating loss ("NOL") carryforward periods. The Company determined it is in a three-year cumulative taxable income position as of December 31, 2021 and expects to continue to be in a taxable income position in the long-term foreseeable future.

After an evaluation of all available qualitative and quantitative evidence, both positive and negative in nature, the Company concluded it is more likely than not that sufficient future taxable income will be generated to realize the benefits of its DTAs prior to expiration. As a result, the Company determined that no valuation allowance was needed as of December 31, 2021.

Net operating losses and tax credit carryforwards as of December 31, 2021 are as follows:

	A	mount	Expiration years
	(in tl	nousands)	
Net operating losses, federal (Pre January 1, 2018)	\$	259	2023
Net operating losses, state	\$	10,903	2032 - 2040
Tax credits, federal	\$	186	2040 - 2041
Tax credits, state	\$	75	Does not expire

The effective tax rate of the Company differs from the federal statutory rate as follows:

	For the years ended December 31,				
	2021	2020	2019		
Statutory rate	21.00 %	21.00 %	21.00 %		
State tax	(0.37)%	3.86 %	2.53 %		
Permanent items	(10.77)%	(2.81)%	3.17 %		
Stock-based compensation deductions	114.37 %	16.80 %	1.19 %		
R&D credits	3.80 %	0.10 %	(0.70)%		
Foreign rate differential	(4.86) %	(2.62)%	2.86 %		
GILTI	(75.67)%	(4.78)%	_		
Foreign intangible amortization	(15.74)%	_	_		
162M limitation	(245.79) %	(14.37)%	_		
Total	(214.03)%	17.18 %	30.05 %		

As of December 31, 2021, the Company has approximately \$0.8 million of unrecognized tax benefits. Approximately all of the unrecognized tax benefits, if recognized, would affect the effective tax rate. A reconciliation of beginning to ending amounts of unrecognized tax benefits is as follows:

	For the years ended December 31,									
		2021		2020		2020		2020		2019
	(in thousands)									
Unrecognized tax benefit as of January 1	\$	654	\$	357	\$	75				
Changes related to prior year tax positions		(50)		1		123				
Changes related to current year tax positions		176		296		159				
Unrecognized tax benefit as of December 31	\$	780	\$	654	\$	357				

Unrecognized tax benefits may change during the next twelve months for items that arise in the ordinary course of business. The Company does not anticipate a material change to its unrecognized tax benefits over the next twelve months.

The Company's policy is to recognize interest expense and penalties related to income tax matters as tax expense. There was no interest or penalties accrued as of December 31, 2021 and 2020.

The Company is subject to income taxes in U.S. federal and various state, local and foreign jurisdictions. For Federal and states, tax years subsequent to 2017 remain open to examination due to the carryover of unused net operating losses or tax credits. With respect to foreign jurisdictions, tax years 2014 and after remain open.

On March 27, 2020, the U.S. President signed into law the CARES Act, an economic stimulus package in response to the COVID-19 global pandemic. The CARES Act contains several corporate income tax provisions, including making remaining alternative minimum tax credits immediately refundable; providing a 5-year carryback of NOLs generated in tax years 2018, 2019, and 2020, and removing the 80% taxable income limitation on utilization of those NOLs if carried back to prior tax years or utilized in tax years beginning before 2021; and temporarily liberalizing the interest deductibility rules under Section 163(j) of the Tax Cuts and Jobs Act, by raising

the adjusted taxable income limitation from 30% to 50% for tax years 2019 and 2020 and giving taxpayers the election of using 2019 adjusted taxable income for purposes of computing 2020 interest deductibility.

The provisions of the CARES Act did not have a material effect on the realizability of deferred income tax assets or tax expense.

The Company's provision for income taxes does not include provisions for foreign withholding taxes associated with the repatriation of undistributed earnings of certain foreign subsidiaries that we intend to reinvest indefinitely in our foreign subsidiaries.

On December 27, 2020, the U.S. president has signed into law the "Consolidated Appropriations Act, 2021" which includes further COVID-19 economic relief and extension of certain expiring tax provisions. The relief package was not materially impactful on the Company's tax positions.

California Assembly Bill 85 (AB 85) was signed into law by Governor Gavin Newsom on June 29, 2020. The legislation suspends the California Net Operating Loss deductions for 2020, 2021, and 2022 for certain taxpayers and imposes a limitation of California Tax Credits utilization for 2020, 2021, and 2022. The legislation disallows the use of California Net Operating Loss deductions if the taxpayer recognizes business income and its income subject to tax is greater than \$1.0 million. Additionally, business credits will only offset a maximum of \$5.0 million of California tax liability. The Company has estimated its 2021 California state taxable income to be below \$1.0 million. As such, this credit limitation does not impact the Company in 2021.

The American Rescue Plan Act of 2021 was signed into law on March 11, 2021, expanding on the definition of covered employees as defined under IRC §162(m). The provisions under the expanded definition of covered employees have been considered and were determined not to be materially impactful on the Company's tax positions.

Note 12 — Stockholders' equity

The following description summarizes the material terms and provisions of the securities that the Company has authorized.

Common stock

The Company is authorized to issue 110.0 million shares of common stock. At Closing, March 5, 2020, the Company had issued 50.8 million shares of common stock.

On July 6, 2021, the Company concluded a follow-on public offering of 11.6 million shares of its common stock, which included 5.5 million shares offered by Grid Dynamics and 6.1 million shares offered by certain selling stockholders, at a price to the public of \$15.03 per share. These amounts included shares sold upon exercise in full of the underwriters' option to purchase additional shares. J.P. Morgan Securities, LLC, William Blair & Company, L.L.C. and Cowen and Company, LLC acted as joint book-running managers for the offering. Needham & Company, LLC and Cantor Fitzgerald & Co. acted as co-managers for the offering. The net proceeds from this offering for the company, after deducting underwriting discounts and commissions and estimated offering expenses, were \$78.3 million. The Company did not receive any proceeds from the sale of the shares by the selling stockholders.

As of December 31, 2021 the Company had 66.9 million shares of common stock that were outstanding. Additionally, there were 2.4 million outstanding vested options to purchase the Company's common stock.

Preferred Stock

As of December 31, 2019 GDI had 1.0 million shares of no par value shares of preferred stock outstanding convertible on a 1:1 basis with GDI's common stock. At the Closing, the preferred stock outstanding was converted into common stock of the Company, par value \$0.0001 per share. Therefore, as of December 31, 2020 and December 31, 2021 there was no preferred stock outstanding.

Founders and underwriter shares subject to earnout provisions

At the Closing, the Company had 1.2 million shares of common stock issued and outstanding subject to earnout provisions (the "Earnout Shares"). The Earnout Shares are subject to transfer restrictions and the owners of the Earnout Shares cannot sell, transfer or otherwise dispose of their respective shares until the respective earnout provisions have been achieved as described further below. The Earnout Shares have full ownership rights including the right to vote and receive dividends and other

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distributions thereon. Dividends and other distributions are not subject to forfeiture in accordance with the Amended and Restated Sponsor Share Letter filed with the SEC on January 26, 2020. The Earnout Shares vesting conditions are as follows:

399,999; 400,000; and 400,001 Earnout Shares vest if the closing price of the Company's common stock on the principal exchange on which the securities are listed or quoted have been at or about \$12.00; \$13.50; and \$15.00 per share, respectively, for 20 trading days (which need not be consecutive) over a thirty trading day period at any time.

The Earnout Shares automatically vest upon and immediately prior to any of the following events:

- 1) The Company engages in a "going private" transaction pursuant to Rule 13e-3 under the Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise cease to be subject to reporting obligations under Sections 13 or 15(d) of the Exchange Act;
- 2) The Company's common stock ceases to be listed on a national securities exchange;
- 3) The Company is amalgamated, merged, consolidated or reorganized with or into another company or person (an "Acquiror") and as a result of such amalgamation, merger, consolidation or reorganization, fewer than 50.1% (whether by voting or economic rights) of the outstanding equity securities or other capital interests of the Acquiror or surviving or resulting entity is owned in the aggregate by the shareholders of the Company, directly or indirectly, immediately prior to such amalgamation, merger, consolidation or reorganization, excluding from such computation the interests of the Acquiror or any affiliate of the Acquiror;
- 4) The Company and/or its subsidiaries sell, assign, transfer or otherwise dispose of (including by bulk reinsurance outside of the ordinary course of business consistent with past practice), in one or a series of related transactions, all or substantially all of the assets of the Company and its subsidiaries, taken as a whole, to an Acquiror, fewer than 50.1% (whether by voting or economic rights) of the outstanding equity securities or other capital interests of which, immediately following such sale, assignment or transfer, are owned in the aggregate by the pre-transaction Company stockholders; or
- 5) If a Schedule 13D or Schedule 13G report (or any successor schedules, form or report), each as promulgated pursuant to the Exchange Act, is filed with the SEC disclosing that any person or group (as the terms "person" and "group" are used in Section 13(d) or Section 14(d) of the Exchange Act and the rules and regulations promulgated thereunder) has become the beneficial owner (as the term "beneficial owner" is defined in Rule 13d-3 or any successor rule or regulation promulgated under the Exchange Act) of a percentage of shares of the outstanding Company common shares as shall be greater than the percentage of such shares that, at the date of such filing, is held by any other person or group that held more than 50% of the voting or economic power of Company immediately after the Closing.

The Earnout Shares released for any event as noted above shall be subject to an equitable adjustment for share splits, share dividends, reorganizations, combinations, recapitalizations and similar transactions affecting the common stock after the Closing. Additionally, each such price threshold shall be reduced by the amount of the aggregate cash or the fair market value of any securities or other assets paid or payable by the Company to the holders of common stock, on a per share basis, as an extraordinary dividend or distribution following the Closing; provided that the declaration and payment of any such extraordinary dividend or distribution shall be subject to all applicable Laws. An "extraordinary dividend or distribution" means any dividend or distribution other than a regularly-scheduled dividend or distribution.

All of the Earnout Shares vested and are no longer subject to transfer restrictions during the year ended December 31, 2021.

Warrants

On April 12, 2021, the Staff of the SEC issued the "Staff Statement on Accounting and Reporting Considerations for Warrants Issued by Special Purpose Acquisition Companies ("SPACs")" (the "Staff Statement"). The Staff Statement provided new guidance for all SPAC-related companies regarding the accounting and reporting for their warrants that could result in the warrants issued by SPACs being classified as a liability measured at fair value, with non-cash fair value adjustments reported in earnings at each reporting period. The Company reviewed the accounting for both its public warrants and private warrants following the Staff Statement. The Company determined that the accounting for its public warrants as equity was consistent with the Staff Statement. The Company determined that its private warrants should be accounted for as liabilities but that the related accounting errors during the year ended December 31, 2020 were not material to the required financial statements and disclosures included in its annual report on Form 10-K filed on March 5, 2021. The Company began accounting for the private warrants correctly in the beginning of 2021, as disclosed in its quarterly report on Form 10-Q filed on May 6, 2021.

As part of its initial public offering ("IPO"), ChaSerg issued 22.0 million units including one share of common stock and one-half of one redeemable warrant. Simultaneously with its IPO, ChaSerg issued 0.6 million private placement units to its sponsor underwriter, each consisting of one common share and one-half of one redeemable warrant. ChaSerg issued 0.1 million units as a result of the conversion of a working capital sponsor loan consisting of one common share and one-half of one redeemable warrant.

Each whole warrant entitles the holder to purchase one share of common stock at a price of \$11.50. Warrants may only be exercised for a whole number of shares for common stock. No fractional shares will be issued upon exercise of the warrants. Each warrant is currently exercisable and will expire March 5, 2025 (five years after the completion of the Business Combination), or earlier upon redemption or liquidation.

The Company may call the warrants for redemption at a price of \$0.01 per warrant upon a minimum 30 days' prior written notice of redemption, if and only if, the reported last sale price of the Company's common stock equals or exceeds \$18.00 per share for any 20 trading days within a 30-trading day period ending three business days before the Company sends the notice of redemption to the warrant holders; and if and only if, there is a current registration statement in effect with respect to the shares of common stock underlying such warrants.

From July 23, 2021 to July 26, 2021, 1.4 million public warrants were exercised with cash proceeds of \$16.4 million. On July 28, 2021, the Company announced the redemption of its 2.8 million then outstanding public warrants. Any public warrants not exercised prior to 5:00 p.m., New York City time, on August 30, 2021 were redeemed at that time for \$0.01 per warrant. The public warrants were exercisable at a price of \$11.50 per share. Of the total of 2.8 million warrants outstanding on July 28, 2021, 2.8 million were exercised and cash proceeds generated from these exercised warrants were approximately \$31.7 million. Pursuant to the terms of the agreements governing the rights of the holders of the public warrants, the Company redeemed the remaining unexercised and outstanding 19,744 public warrants on August 30, 2021 for a redemption price of \$0.01 per public warrant.

As of December 31, 2021, there were no outstanding private or public warrants.

Note 13 — Stock-based compensation

Stock-Based Compensation Expense

Employee stock-based compensation cost recognized in the consolidated statements of income/(loss) and comprehensive income/(loss) was as follows:

	Twelve months ended December 31,								
	 2021 2020				2019				
Cost of revenue	\$ 664	\$	840	\$	148				
Engineering, research, and development	2,980		2,419		175				
Sales and marketing	3,606		3,532		53				
General and administrative	25,786		13,215		2,065				
Total stock-based compensation	\$ 33,036	\$	20,006	\$	2,441				

Stock-based compensation costs recognized for the year ended December 31, 2020 included \$2.5 million of compensation expense related to the acceleration of vesting of awards under the 2018 Stock Plan. Additional \$3.4 million of stock-based compensation cost recognized for the year ended December 31, 2021, in connection to partial vesting and early release of 2021 PSU otherwise would have been recognized in the first quarter of 2022.

Equity Plans

2018 Stock Plan - Effective November 12, 2018, GDI adopted 2018 Stock Option Plan. Under the terms of the 2018 Stock Plan, certain options are subject to accelerated vesting in full or by an additional 12 months as a result of business combinations. The Company is no longer issuing any awards under the 2018 Plan. All of the awards issued pursuant to the 2018 Plan expire 10 years from the date of grant.

2020 Equity Incentive Plan - Effective March 5, 2020, our Board of Directors approved an equity incentive plan (the "2020 Plan"). The 2020 Plan permits the Company to grant a maximum aggregate amount of 16.3 million Incentive Stock Options,

Non-Statutory Stock Options ("NSOs"), Restricted Stock, Restricted Stock Units ("RSUs"), Stock Appreciation Rights, Performance Units ("PSUs"), and Performance Shares ("PSAs") (collectively, the "Awards") to employees, directors, and consultants of the Company. Our Board of Directors or any committee appointed by The Board has the authority to grant Awards. NSOs and RSUs issued under the 2020 Plan have the following vesting conditions: one-fourth of the NSOs will vest on one year after the grant date; and thereafter one-sixteenth of the NSOs will vest each subsequent three-month anniversary.

The Company made an accounting policy election to account for accounts for forfeitures when they occur.

RSUs granted to the Board in lieu of the quarterly payments vest immediately. PSUs are normally capped at 300% maximum payout and have the following performance goals:

- 1) Year-over-year growth in Non-Retail revenue for the Performance Period, which is Fiscal Year 2021, expressed as a percentage increase over the fiscal year 2020 Non-Retail revenue ("Revenue Growth"), and
- 2) Contribution Margin for the Performance Period as a percentage of Non-Retail revenue for the Performance Period.

Fifty percent (50%) of the target number of performance shares granted will vest (if at all) based on the extent of achievement of Revenue Growth for the Performance Period and the remaining fifty percent (50%) of the target number of performance shares granted will vest (if at all) based on the extent of achievement of the Contribution Margin.

As of December 31, 2021, 10.3 million shares of stock remained available for issuance under 2020 Plan. All of the awards issued pursuant to the 2020 Plan expire 10 years from the date of grant.

Stock Options

The grant date fair value of each NSO issued under both plans was estimated on the date of grant using the Black-Scholes option pricing model. The key assumptions for the years ended December 31, 2021 and 2020 are provided in the following table.

		For the years ended December 31,		
	2021	2020		
Dividend yield	0%	0%		
Expected volatility	40%	40%		
Risk-free interest rate	0.81%-1.33%	0.31%-0.80%		
Expected term in years	6.11	6.11		
Grant date fair value of common stock.	\$14.40-\$29.07	\$6.86-\$11.89		

The Company used a zero percent dividend yield assumption for all Black-Scholes stock option-pricing calculations. Since the Company's shares were not publicly traded prior to the Closing and its shares were rarely traded privately, expected volatility is estimated based on the average historical volatility of similar entities with publicly traded shares. The risk-free rate for the expected term of the options is based on the U.S. Treasury yield curve at the date of grant. Expected term is estimated using the simplified method, which takes into account vesting and contractual term. The simplified method is being used to calculate expected term instead of historical experience due to a lack of relevant historical data resulting from changes in option vesting schedules and changes in the pool of employees receiving option grants.

2018 Plan

On March 5, 2020 the Company accelerated vesting of certain options due to completion of Business Combination. It resulted in recognition of additional expenses of \$2.5 million. Additionally part of options was modified and settled in cash pursuant to the terms of the Merger Agreement. The remaining portion of outstanding vested and unvested options were automatically assumed and converted into options to purchase the Company's common stock as of the Closing. Refer to Note 3 for details.

The following table presents details on conversion of the vested and unvested options:

	Number of Options
Options outstanding as of December 31, 2019	2,734,327
Options converted to cash at Closing	(828,590)
Options forfeited	(18,940)
Options outstanding as of March 5, 2020	1,886,797
Options outstanding converted as of March 5, 2020	4,678,011

The following table sets forth the activity for the 2018 Stock Plan for the years ended December 31, 2021 and 2020 after conversion:

	Number of Options	Avo	Weighted erage Exercise Price]	Aggregate Intrinsic Value	Weighted Average Contractual Term (in years)
Options outstanding converted as of March 5, 2020	4,678,011	\$	3.54			
Options exercised	(28,057)	\$	3.54			
Options forfeited	(50,164)	\$	3.54			
Options outstanding as of December 31, 2020	4,599,790	\$	3.54	\$	41,674	
Options exercised	(2,668,191)	\$	3.54			
Options forfeited	(15,498)	\$	3.54			
Options outstanding as of December 31, 2021	1,916,101	\$	3.54	\$	65,971	6.97
Options vested and exercisable as of December 31, 2021	1,791,612	\$	3.54	\$	61,685	6.97

The total unrecognized compensation expenses related to 2018 Plan options as of December 31, 2021 was \$0.1 million, net of forfeitures, to be expensed on a straight-line basis over 1.68 years.

2020 Plan

The following table summarizes option activity for for the years ended December 31, 2021 and 2020 under the 2020 Plan:

	Number of Options	Av	Weighted erage Exercise Price	Aggregate Intrinsic Value	Weighted Average Contractual Term (in years)
Options outstanding as of December 31, 2019	_	\$	_	<u> </u>	
Options granted	2,087,000	\$	8.37		
Options forfeited	(144,600)	\$	8.13		
Options outstanding as of December 31, 2020	1,942,400	\$	8.38	8,200	
Options granted	766,250	\$	21.61		
Options exercised	(112,087)	\$	8.20		
Options forfeited	(371,876)	\$	8.88		
Options outstanding as of December 31, 2021	2,224,687	\$	12.86	55,856	8.53
Options vested and exercisable as of December 31, 2021	596,811	\$	8.32	17,694	8.03

The total unrecognized compensation expenses related to 2020 Stock Plan options as of December 31, 2021 was \$8.7 million, net of forfeitures, to be expensed on a straight-line basis over the remaining 2.89 years.

Restricted Stock Units

RSUs granted do not participate in earnings, dividends, and do not have voting rights until vested.

The following table summarizes activity of the Company's RSUs for the years ended December 31, 2021 and 2020:

	Number of Shares	Weighted verage Grant te Fair Value
Unvested awards as of December 31, 2019	_	\$ _
Awards granted	3,053,969	\$ 8.22
Awards vested and released	(28,300)	\$ 7.07
Awards forfeited	(30,000)	\$ 8.26
Unvested awards as of December 31, 2020	2,995,669	\$ 8.38
Awards granted	61,539	\$ 24.35
Awards vested and released	(1,272,136)	\$ 8.32
Awards forfeited	(291,157)	\$ 8.14
Unvested awards as of December 31, 2021	1,493,915	\$ 8.82

The total unrecognized compensation expenses related to 2020 Stock Plan RSUs as of December 31, 2021 was \$12.7 million to be expensed on a straight-line basis over 2.21 years.

Performance Stock Units

The following table summarizes activity of the Company's PSUs for the years ended December 31, 2021 and 2020:

Unvested awards as of December 31, 2020 1,452,696 \$ 7.92 Awards granted 1,478,765 \$ 15.68 Awards vested (2,787,001) \$ 11.64 Awards forfeited (32,375) \$ 15.61		Number of Shares	Av Da	Weighted verage Grant te Fair Value
Unvested awards as of December 31, 2020 1,452,696 \$ 7.92 Awards granted 1,478,765 \$ 15.68 Awards vested (2,787,001) \$ 11.64 Awards forfeited (32,375) \$ 15.61	Unvested awards as of December 31, 2019		\$	_
Awards granted 1,478,765 \$ 15.68 Awards vested (2,787,001) \$ 11.64 Awards forfeited (32,375) \$ 15.61	Awards granted	1,452,696	\$	7.92
Awards vested (2,787,001) \$ 11.64 Awards forfeited (32,375) \$ 15.61	Unvested awards as of December 31, 2020	1,452,696	\$	7.92
Awards forfeited (32,375) \$ 15.61	Awards granted	1,478,765	\$	15.68
	Awards vested	(2,787,001)	\$	11.64
Unvested awards as of December 31, 2021 112,085 \$ 15.69	Awards forfeited	(32,375)	\$	15.61
	Unvested awards as of December 31, 2021	112,085	\$	15.69

The vesting of the PSUs with the performance factors based on 2020 results was certified by the Board of Directors for release on February 12, 2021. Approximately 0.7 million shares were issued upon vesting of the PSUs and 0.8 million shares were withheld to cover \$10.8 million in tax obligations. The vesting of the PSUs granted for 2021 performance was partially certified by the Board of Directors with 250% performance factor for release on December 10, 2021. Approximately 0.7 million shares were issued upon vesting of the PSUs and 0.7 million shares were withheld to cover \$25.4 million in tax obligations.

The total unrecognized compensation expenses related to 2020 Stock Plan PSUs as of December 31, 2021 was \$0.3 million to be expensed on over 0.16 years.

The fair value of vested RSUs and PSUs issued under the 2020 Plan (measured at the vesting date) for the years ended December 31, 2021 and 2020 was as follows:

	For the ye Decem
	2021
thousa	(in thou
702 \$	\$ 25,702
615	72,615

Note 14 — Earnings per share

The Company computed earnings per share ("EPS") in conformity with the two-class method required for participating securities. Undistributed earnings allocated to participating securities are subtracted from net income in determining net income attributable to common stockholders. The Company allocated income between its common and preferred shareholders only for the periods the preferred stock was outstanding, which was January 1, 2020 to March 4, 2020 and May 6, 2019 to December 31, 2019. There was no preferred stock outstanding March 5, 2020 to December 31, 2020 and January 1, 2019 to May 6, 2019. As the Company was in a net loss position for the year ended December 31, 2020, the net loss was allocated entirely to common shareholders.

All participating securities are excluded from basic weighted-average number of common shares outstanding. Diluted EPS is computed by dividing net income available to common shareholders by the weighted-average number of shares of common stock outstanding during the period increased to include the number of additional shares of common stock that would have been outstanding if the potentially dilutive securities had been issued. Potentially dilutive securities include outstanding stock options, restricted stock units, performance stock units, and convertible preferred securities. The dilutive effect of potentially dilutive securities is reflected in diluted EPS in order of dilution and by application of the treasury stock method and the if-converted method for stock-based compensation and convertible preferred securities, respectively.

The following table sets forth the computation of basic and diluted EPS of common stock as follows:

	For the years ended December 31,				r 31,	
		2021		2020		2019
	<u>-</u>	(in thous	ands	, except per sl	are	data)
Numerator for basic earnings per share						
Net income/(loss)	\$	(7,700)	\$	(12,599)	\$	10,807
Less: Income attributable to preferred shareholders		_				(377)
Net income/(loss) available to common shareholders	\$	(7,700)	\$	(12,599)	\$	10,430
Denominator for basic earnings per share						
Weighted-average shares outstanding – basic		58,662		44,737		21,118
Basic earnings/(loss) per share	\$	(0.13)	\$	(0.28)	\$	0.49
Numerator for diluted earnings per share						
Net income available to common shareholders	\$	(7,700)	\$	(12,599)	\$	10,430
Denominator for diluted earnings per share						
Basic weighted-average common shares outstanding		58,662		44,737		21,118
Add: Dilutive impact of options in the money						4
Weighted-average shares outstanding for diluted earnings per share		58,662		44,737		21,122
Diluted earnings/(loss) per share	\$	(0.13)	\$	(0.28)	\$	0.49

The denominator used in the calculation of basic and diluted EPS has been retrospectively adjusted for the recapitalization of the Company's shares as a result of the Business Combination as further described in Note 3.

The following potential dilutive common shares, presented based on weighted average potential shares outstanding during each period and adjusted for the stock split as a result of the transaction, were excluded from the calculation of diluted net loss per

share attributable to common stockholders for the periods indicated because including them would have had an anti-dilutive effect:

	For the y	years ended Decem	iber 31,	
Potential common shares	2021	2020	2019	
	-	(in thousands)	_	
Convertible preferred stock	_	184	689	
Stock options to purchase common stock	5,826	4,649	5,273	
Restricted stock units	2,110	2,261	_	
Performance stock units	1,301	961	_	
Warrants to purchase common stock	3,657	9,326	_	
Total	12,894	17,381	5,962	

Note 15 — Segment and geographic information

In accordance with ASC 280, Segment Reporting, the Company has determined it has one operating segment and one reportable segment. The chief operating decision maker assesses the Company's performance and allocates resources based on the Company's consolidated financial information. The Company's business activities have similar economic characteristics and are similar in all of the following areas: the nature of services, the type or class of customer for which they provide their services, and the methods used to provide their services.

Significant portion of the Company's revenues is generated within North America. Refer to Note 10 ("Revenue") for details.

Long-lived assets include property and equipment, net of accumulated depreciation and amortization and is summarized as follows (in thousands):

		As of December 31,			
Long-lived assets, net of accumulated depreciation and amortization		2021		2020	
	(in thousands)			3)	
Ukraine	\$	2,267	\$	1,340	
Russia		1,920		1,023	
United States		715		712	
Serbia		433		492	
Poland		313		528	
Other		521		_	
Total	\$	6,169	\$	4,095	

Note 16 — Related parties transactions

Several of the Company's minority shareholders are also members of the Board of Directors of some of the Company's customers. Total revenue recorded from the related parties for the year ended December 31, 2021, and 2020 and 2019 was approximately \$4.3 million, \$0.1 million, and \$1.0 million, respectively. Accounts receivable from the related parties was \$0.6 million and \$0.5 million as of December 31, 2021 and 2019, respectively. There was no accounts receivable from related party as of December 31, 2020.

As of December 31, 2021 the Company had payables to one of its related parties in the amount of \$0.6 million that was classified as Other current liabilities in consolidated balance sheet.

As discussed further in Note 2, the Company provides services to its customers utilizing personnel from the Affiliate. The Affiliate performs services and support exclusively on behalf of the Company and its customers, however, the Company has no ownership in the Affiliate. The Affiliate's equity holder is an employee of the Company.

Note 17 — Commitments and contingencies

Operating leases

The Company leases its vehicles and facilities under non-cancelable operating leases expiring between January, 2022 and July, 2026. Rent expense related to the Company's operating leases was approximately \$4.2 million, \$4.2 million, and \$4.8 million for the year ended December 31, 2021, 2020, and 2019, respectively.

Future minimum payments under non-cancelable leases are as follows:

Years ending December 31, (in thousands)	Lease Payr	ments
2022	\$ 2	2,318
2023		580
2024		361
2025		289
2026		119
Total	\$ 3	3,667

Software subscription services agreement

The Company entered into a software subscription services agreement (the "SSA") effective as of June 1, 2019. The SSA is non-cancelable for a term of 5 years from the effective date and renewable at the election of the Company. Payments under the terms of the SSA are due quarterly in advance. Total future minimum payments under the non-cancelable SSA are as follows:

Years ending December 31, (in thousands)	Subso Pay	scription syments	
2022	\$	369	
2023		324	
2024		81	
Total	\$	774	

Litigation

The Company is subject to legal proceedings and claims that arise in the ordinary course of its business. Management evaluates each claim and provides for potential loss when the claim is probable to be paid and reasonably estimable. While adverse decisions in certain of these litigation matters, claims and administrative proceedings could have a material effect on a particular period's results of operations, subject to the uncertainties inherent in estimating future costs for contingent liabilities, management believes that any future accruals with respect to these currently known contingencies would not have a material effect on the financial condition, liquidity or cash flows of the Company. There are no amounts required to be reflected in these consolidated financial statements related to contingencies.

Note 18 — Line of credit

In October 2017, the Company entered into a loan agreement for a revolving line of credit facility ("Line of Credit") with a borrowing capacity of \$0.5 million. The Line of Credit is secured by substantially all of the Company's assets and was secured in order to provide credit support for a letter of credit facility and balances under the Company's credit cards.

Borrowings under the Line of Credit are subject to a variable interest rate, based on changes in the Prime Rate, as calculated published by the Wall Street Journal. There were no borrowings on the Line of Credit as of December 31, 2021 and 2020.

Note 19 — Subsequent events

On February 24, 2022, Russian forces launched significant military action against Ukraine, and sustained conflict and disruption in the region is possible. The impact to Ukraine as well as actions taken by other countries, including new and stricter sanctions by Canada, the United Kingdom, the European Union, the U.S. and other countries and organizations against officials, individuals, regions, and industries in Russia and Ukraine, and actions take by Russia in response to such sanctions, and each country's potential response to

such sanctions, tensions, and military actions could have a material effect on the Company's operations. For example, in response to increased sanctions, Russia could attempt to take control of assets in Russia

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or Ukraine of companies registered in the United States, such as the Company. Any such material adverse effect from the conflict and enhanced sanctions activity may disrupt the Company's delivery of services, impair the Company's ability to complete financial or banking transactions, cause the Company to shift all or portions of its work occurring in the region to other countries, and may restrict the Company's ability to engage in certain projects in the region or involving certain customers in the region. The Company has a significant number of personnel in Ukraine and Russia.

The Company has no way to predict the progress or outcome of the situation, as the conflict and government reactions are rapidly developing and beyond the Company's control. Prolonged unrest, military activities, or broad-based sanctions, should they be implemented, could have a material adverse effect on the Company's financial condition, results of operations and cash flows.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Our internal control over financial reporting is 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.

An evaluation was conducted under the supervision and with the participation of management, including our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), of the effectiveness of our internal control over financial reporting based on the Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). In accordance with guidance issued by the Securities and Exchange Commission, companies are permitted to exclude acquisitions from their final assessment of internal control over financial reporting for the first fiscal year in which the acquisition occurred. We have excluded Tacit Knowledge Inc. ("Tacit") from our evaluation of the internal control over financial reporting. Tacit constituted 5.2% of total assets as of December 31, 2021 and 7.9% of total revenues for the year ended December 31, 2021.

Based on the results of this evaluation, our management concluded that our internal control over financial reporting was effective at the end of fiscal 2021.

Evaluation of Disclosure Controls and Procedures

An evaluation was conducted under the supervision and with the participation of management, including our CEO and CFO, of the effectiveness of our disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and Exchange Act Rules 15d-15(e)) as of December 31, 2021. Based on that evaluation, the CEO and CFO concluded that our disclosure controls and procedures were effective as of such date.

Internal Control Over Financial Reporting

Our management, including the CEO and CFO, confirmed there were no changes in our internal control over financial reporting during the three months ended December 31, 2021 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our CEO and CFO, do not expect that our disclosure controls or our internal control 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, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

ITEM 9B. OTHER INFORMATION

None.

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ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information called for by this item will be set forth in our Proxy Statement for the Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended December 31, 2021 and is incorporated herein by reference.

Our board of directors has adopted a code of business conduct and ethics that applies to all of our employees, officers and directors, including our Chief Executive Officer, Chief Financial Officer and other executive and senior financial officers. The full text of our code conduct is posted on the investor relations page on our website which is located at https://ir.griddynamics.com. We will post any amendments to our code of conduct, or waivers of its requirements, on our website.

ITEM 11. EXECUTIVE COMPENSATION

The information called for by this item will be set forth in our Proxy Statement and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item will be set forth in our Proxy Statement and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information, if any, required by this item will be set forth in our Proxy Statement and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item will be set forth in our Proxy Statement and is incorporated herein by reference.

PART IV.

ITEM 15. EXHIBIT AND FINANCIAL STATEMENT SCHEDULES

- (a) The following documents are filed as part of, or incorporated by reference into, this Annual Report on Form 10-K:
 - 1. Financial Statements: See Item 8 of this Annual Report on Form 10-K.
- 2. Financial Statement Schedules: All schedules are omitted because they are not required, are not applicable or the information is included in the consolidated financial statements or notes thereto.
- (b) The following exhibits are filed as part of, or incorporated by reference into, this Annual Report on Form 10-K:

Incorporated by Reference Exhibit Number **Description Form** File No. **Exhibit** Filing Date Amended and Restated Certificate of Incorporation 001-38685 3.1 March 9, 2020 3.1 8-K of the Registrant. Amended and Restated Bylaws of the Registrant. 3.2 8-K 001-38685 3.1 May 6, 2020 4.1 Specimen Common Stock Certificate of the 8-K 001-38685 4.1 March 9, 2020 Registrant. 4.2* Description of Securities. 10.1 +Grid Dynamics International, Inc. 2018 Stock Plan 10-O 001-38685 10.16 May 11, 2020 and Forms of Agreement. 10.2 +Grid Dynamics Holdings, Inc. 2020 Equity Incentive 10-Q 001-38685 10.1 May 11, 2020 Plan. 10.3 +Grid Dynamics Holdings, Inc. 2020 Equity Incentive 8-K 001-38685 10.2 March 9, 2020 Plan - Form of Stock Option Agreement. <u>Grid Dynamics Holdings, Inc. 2020 Equity Incentive</u> <u>Plan - Form of Restricted Stock Unit Agreement.</u> 10.4 +8-K 001-38685 10.3 March 9, 2020 <u>Grid Dynamics Holdings, Inc. 2020 Equity Incentive</u> <u>Plan - Form of Restricted Stock Agreement.</u> 10.5 +8-K 001-38685 10.4 March 9, 2020 10.6 +Grid Dynamics Holdings, Inc. 2020 Equity Incentive 8-K 001-38685 10.5 March 9, 2020 Plan - Form of Performance Share Award Agreement. 10.7 +10.6 Form of Director and Officer Indemnification 8-K 001-38685 March 9, 2020 Agreement. 10.8 +Outside Director Compensation Policy. 8-K 001-38685 10.7 March 9, 2020 Employment Agreement between the Registrant and 10.9 +8-K 001-38685 10.8 March 9, 2020 Leonard Livschitz. Employment Agreement between the Registrant and 10.9 10.10 +8-K 001-38685 March 9, 2020 Anil Doradla. 8-K 10.10 10.11 +Employment Agreement between the Registrant and 001-38685 March 9, 2020 Victoria Livschitz.

10.12+	Employment Agreement between the Registrant and Yury Gryzlov.	8-K	001-38685	10.12	March 9, 2020
10.13*+	Employment Agreement between the Registrant and Stan Klimoff.	8-K	001-38685	10.14	March 9, 2020
10.14*+	Form of Tax Indemnification Agreement of the Registrant.	8-K	001-38685	10.15	March 9, 2020
10.15	Amended and Restated Registration Rights Agreement, dated as of March 5, 2020, by and among the Company and certain security holders.	10-Q	001-38685	10.17	May 11, 2020
10.16	Waiver of Amended and Restated Registration Rights Agreement, dated as of April 17, 2020, by and among the Company and certain security holders.	S-1	333-238202	10.21	May 12, 2020
10.17	Stockholders' Agreement, dated as of November 13, 2019, by and among the Company and certain security holders.	10-Q	001-38685	10.18	May 11, 2020
10.18*+	Consulting Agreement, dated as of June 15, 2021, between the Registrant and Livschitz Family Enterprises, LLC, as amended.				
16.1	Letter from WithumSmith+Brown, PC regarding Change in Independent Registered Public Accounting Firm dated March 17, 2020.	8-K	001-38685	16.1	March 17, 2020
21.1*	<u>List of subsidiaries of the Registrant.</u>				
23.1*	Consent of Independent Registered Public Accounting Firm (Grant Thornton LLP).				
31.1*	Certification of the Chief Executive Officer pursuant to Exchange Act Rule 13a-14 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2*	Certification of the Chief Financial Officer pursuant to Exchange Act Rule 13a-14 as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1†	Certification of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
32.2†	Certification of the Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS	XBRL Instance Document.				
101.SCH	XBRL Taxonomy Extension Schema Document.				
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.				

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101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

^{*} Filed Herewith

ITEM 16. FORM 10-K SUMMARY

None.

⁺ Indicates a management contract or compensatory plan or arrangement

[†] The certifications attached as Exhibit 32.1 that accompany this Annual Report on Form 10-K are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

Date: March 3, 2022

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

GRID DYNAMICS HOLDINGS, INC.

By: /s/ Leonard Livschitz

Leonard Livschitz Chief Executive Officer (Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Leonard Livschitz and Anil Doradla, and each one of them, as their true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for them and in their name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as they might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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Pursuant to the requirements of the Securities Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Leonard Livschitz	Chief Executive Officer and Director	March 3, 2022
Leonard Livschitz	(Principal Executive Officer)	
/s/ Anil Doradla Anil Doradla	Chief Financial Officer (Principal Financial and Accounting Officer)	March 3, 2022
/s/ Lloyd Carney Lloyd Carney	Chairman of the Board and Director	March 3, 2022
/s/ Eric Benhamou Eric Benhamou	Director	March 3, 2022
/s/ Marina Levinson Marina Levinson	Director	March 3, 2022
/s/ Michael Southworth Michael Southworth	Director	March 3, 2022
Weihang Wang	Director	March 3, 2022
/s/ Yueou Wang Yueou Wang	Director	March 3, 2022
/s/ Shuo Zhang Shuo Zhang	Director	March 3, 2022
/s/ Patrick Nicolet Patrick Nicolet	Director	March 3, 2022