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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2022
OR

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

For transition period from ____ to ____
Commission File Number 001-40812

/thoughtworks

THOUGHTWORKS HOLDING, INC.
(Exact name of registrant as specified in its charter)

Delaware	**82-2668392**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

200 East Randolph Street, 25th Floor
Chicago, Illinois 60601
(312) 373-1000
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, $0.001 par value	TWKS	Nasdaq Global Select Market

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

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

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

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

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

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

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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 7(a)(2)(B) of the Securities Act. ☐

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

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

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to Section 204.10D-1(b). ☐

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

The aggregate market value of the common stock held by non-affiliates of the registrant as of June 30, 2022, the last business day of the registrant's most recent completed second fiscal quarter, was $1.6 billion (based on the closing sale price of the registrant's common stock on that date as reported on the Nasdaq Global Select Market).

As of February 23, 2023, there were approximately 316,540,810 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The information required by Items 10, 11, 12, 13 and 14 will be filed (and is hereby incorporated) by an amendment hereto or pursuant to a definitive proxy statement pursuant to Regulation 14A that will contain such information.

THOUGHTWORKS HOLDING, INC.

ANNUAL REPORT ON FORM 10-K

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FORWARD-LOOKING STATEMENTS AND RISK FACTOR SUMMARY

This annual report on Form 10-K (the "Annual Report") contains "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, as amended. Forward-looking statements include statements that are not historical facts and can be identified by terms such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "potential," "predict," "project," "seek," "should," "strive," "will," "would" or similar expressions and the negatives of those terms, but the absence of these words does not mean that the statement is not forward-looking. The forward-looking statements are contained principally in the sections captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Risk Factors." Forward-looking statements may include information concerning our possible or assumed future results of operations, client demand, business strategies, technology developments, financing and investment plans, competitive position, our industry, macroeconomic and regulatory environment, potential growth opportunities and the effects of competition.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Given these uncertainties, you should not place undue reliance on forward-looking statements. Also, forward-looking statements represent our management's beliefs and assumptions only as of the date of this Annual Report. You should read this Annual Report and the documents that we have filed as exhibits to the Annual Report, completely and with the understanding that our actual future results may be materially different from what we expect.

Risk Factor Summary

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

- our business has been, and may continue to be, adversely affected by volatile or uncertain operational, geopolitical, regulatory, legal and economic conditions;
- our business, financial condition and results of operations may be adversely affected by fluctuations in foreign currency exchange rates;
- increases in wages, equity compensation and other compensation expenses could prevent us from sustaining our competitive advantage and increase our costs;
- our results of operations have been adversely affected and could in the future be materially adversely affected by the COVID-19 pandemic;
- our effective tax rate could be materially adversely affected by several factors;
- we may not be successful at attracting new clients or retaining and expanding our relationships with our existing clients;
- we generally do not have long-term commitments or contracts with our clients;
- we face risks associated with having a long selling and implementation cycle for our services;
- our cash flows and results of operations may be adversely affected if we are unable to collect on billed and unbilled receivables from clients;
- our profitability could suffer if we cannot accurately price our solutions and services, maintain favorable pricing for our solutions and services, are unable to collect on receivables from clients or fail to meet our contractual and other obligations to clients;
- we may be unable to implement our growth strategy;
- our ability to generate and retain business depends on our reputation in the marketplace;
- our business and operations may be harmed if we cannot positively evolve and preserve our Thoughtworks culture;
- if we fail to manage our acquisition strategy, our culture and growth plans could be materially adversely affected;
- we must successfully attract, hire, train and retain skilled professionals to service our clients' projects and we must productively deploy our professionals to remain profitable;
- if we fail to adequately innovate, adapt and/or remain at the forefront of emerging technologies and related client demands, we could be materially adversely affected;
- we face intense competition and operate in a rapidly evolving industry, which makes it difficult to evaluate our future prospects;

- if we cause disruptions to our clients' businesses, provide inadequate service, or breach contractual obligations, our clients may have claims against us, which our insurance may not adequately protect against, and our reputation may be damaged;
- we face risks associated with security breaches as well as privacy and data protection regulations, and we may incur significant liabilities if we fail to manage those risks;
- a significant failure in our systems, telecommunications or IT infrastructure could harm our service model, which could result in a reduction of our revenues and otherwise disrupt our business;
- changes in privacy and data protection regulations could expose us to risks of noncompliance and costs associated with compliance;
- we are subject to laws and regulations in the U.S. and other countries in which we operate, compliance with these laws requires significant resources and non-compliance may result in civil or criminal penalties and other remedial measures;
- we may become subject to disputes or legal or other proceedings that could involve significant expenditures by us, which could have a material adverse effect on us, including our financial results;
- our existing indebtedness could adversely affect our business and growth prospect;
- we may face intellectual property infringement or misappropriation claims that could be costly to defend or if we do not protect our brand through our intellectual property rights, our business may be harmed;
- we may not be able to prevent unauthorized use of our client's intellectual property and our business and competitive position may be damaged as a result;
- our stock price may be volatile, and the value of our common stock may decline;
- our issuance of additional capital stock in connection with financings, acquisitions, investments, our equity incentive plans, or otherwise will dilute all other stockholders;
- if securities or industry analysts do not publish research or publish unfavorable or inaccurate research about our business, the market price and trading volume of our common stock could decline;
- we do not intend to pay dividends for the foreseeable future and, as a result, the ability of the holders of our common stock to achieve a return on their investment will depend on appreciation in the price of our common stock;
- investment funds (the "Apax Funds") advised by Apax Partners L.L.P. ("Apax Partners") control us, and such control may give rise to actual or perceived conflicts of interests;
- our status as a "controlled company" grants us exemptions from certain corporate governance requirements;
- as a result of being a public company, we are obligated to develop and maintain proper and effective internal control over financial reporting, and any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our common stock;
- we no longer qualify as an emerging growth company as defined in the JOBS Act and as such we no longer are entitled to rely on exemptions from certain compliance requirements that are applicable to companies that are emerging growth companies;
- we may fail to comply with the rules that apply to public companies, which could result in sanctions or other penalties;
- provisions of our corporate governance documents could make an acquisition of us more difficult and may prevent attempts by our shareholders to replace or remove our current management, even if beneficial to our shareholders;
- provisions of our certificate of incorporation could limit our shareholders' ability to obtain a favorable judicial forum for disputes with us; and
- a significant portion of our total outstanding shares may be sold into the market, which could cause the market price of common stock to drop.

For more information, see "Item 1A. Risk Factors."

We derive many of our forward-looking statements from our operating budgets and forecasts, which are based on many detailed assumptions. While we believe that our assumptions are reasonable, we caution that it is very difficult to predict the impact of known factors, and it is impossible for us to anticipate all factors that could affect our actual results. Important factors that could cause actual results to differ materially from our expectations, or cautionary statements, include, but are not limited to those are disclosed under the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and

Results of Operations" in this Annual Report. All written and oral forward-looking statements attributable to us, or persons acting on our behalf, are expressly qualified in their entirety by these cautionary statements as well as other cautionary statements that are made from time to time in our other Securities and Exchange Commission ("SEC") filings and public communications. You should evaluate all forward-looking statements made in this Annual Report in the context of these risks and uncertainties.

We caution you that the important factors referenced above may not contain all of the factors that are important to you. In addition, we cannot assure you that we will realize the results or developments we expect or anticipate or, even if substantially realized, that they will result in the consequences or affect us or our operations in the way we expect. The forward-looking statements included in this Annual Report are made only as of the date hereof. We undertake no obligation to update or revise any forward-looking statement as a result of new information, future events or otherwise, except as otherwise required by law.

The United Nations Sustainable Development Goals (SDGs) are aspirational in nature. The analysis involved in determining whether and how certain initiatives may contribute to the SDGs is inherently subjective and dependent on a number of factors. There can be no assurance that reasonable parties will agree on a decision as to whether certain projects or initiatives contribute to a particular SDG. Accordingly, investors should not place undue reliance on our application of the SDGs, as such application is subject to change at any time and in our sole discretion.

PART I

Item 1. *Business*

Overview

Thoughtworks Holding, Inc. ("Thoughtworks," the "Company," "we," "us," or "our") is a premium global technology consultancy that integrates strategy, design and software engineering to enable enterprises and technology disruptors across the globe to thrive as modern digital businesses. Thoughtworks exists to deliver extraordinary impact for clients, employees, partners and the communities we serve through our culture and technology excellence.

In the face of ongoing digital disruption, many companies lack the capabilities and talent necessary to keep pace with the accelerating rate of technological change. Thoughtworks has been a thought leader at the forefront of technology innovation for the past 29 years. We leverage our vast experience to improve our clients' ability to flourish in the digital era.

We are a globally diversified business, with clients across all major verticals and geographies. Our global distributed agile delivery model operates where our clients are, with over 12,500 employees working across 18 countries on five continents, including North America, South America, Europe, Asia and Australia. Further, our unique, diverse and cultivating culture, with a reputation for technology excellence and thought leadership, enables us to attract and retain what we believe is the best talent in the industry. That is why our clients trust Thoughtworks as their premium digital transformation partner.

Global spending on digital transformation is forecast by International Data Corporation ("IDC") to reach $3.4 trillion in 2026.

Thoughtworks provides premium, end-to-end digital strategy, design and engineering services and we are well positioned to capitalize on this opportunity. We connect strategy to execution, using cross-functional teams to deliver value to our clients at scale. Our four global service lines provide specialized capabilities and thought leadership to drive digital transformation:

- Enterprise Modernization, Platforms & Cloud
- Customer Experience, Product & Design
- Data & Artificial Intelligence ("AI")
- Digital Transformation & Operations

Our unique service offerings, differentiated delivery, global talent and culture have enabled us to attract over 410 current clients, including global enterprises and technology disruptors. Our clients are highly diversified across industry verticals. We have relatively low client concentration, with only 24.7% of our revenues coming from our top 10 clients in 2022. Our deep client integration and senior executive relationships have enabled us to drive long-standing partnerships with our clients, as demonstrated by an average tenure of nine years across our top 10 clients by revenue in 2022. As a result, 87.2% of our revenues in 2022 were generated from existing clients.

Since our inception, we have been pioneers in technologies that now underpin today's modern digital businesses, such as agile software development, continuous delivery, microservices, evolutionary architecture and data mesh. We have established ourselves as a thought leader and are continually advancing digital trends with our innovations. We believe our approach enables us to deliver the innovations that deliver value for our clients before new technologies reach mass adoption.

We utilize a distributed agile delivery model, leveraging a broad base of high-quality, poly-skilled global technology talent. Our professionals seamlessly work with clients both where they are located and nearshore/offshore. Our local presence enables us to develop deep client intimacy and assimilate market context and knowledge. Blending our local presence with our nearshore/offshore capabilities allows us to innovate rapidly at scale. Our differentiated delivery model enables us to generate an average annual revenue per employee of over $100,000 in each of 2020, 2021 and 2022 (based on the average number of employees for the relevant year). For more information regarding our average annual revenue per employee in historical periods, see

"Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations—Key Factors Affecting Our Performance—Expanding our technical capabilities and client solutions."

Our differentiated approach is rooted in a unique culture that is championed by our global management team, which has an average tenure of 16 years. Our reputation for technology excellence, thought leadership and advocacy for social change enables us to attract what we believe is the best talent in the industry. Allied to this, our cultivating culture enables us to develop and retain talent. In addition, Thoughtworks is widely recognized for leading the technology industry through our efforts on diversity and inclusion. For example, 40% of our global management team are women or underrepresented gender minorities ("WUGM"). Thoughtworkers are incredibly engaged and loyal, as evidenced by our 2022 annual employee engagement survey, where our overall engagement remained consistent with 2021 at 8.7 which is in the top 25% for the technology sector. Our diversity and inclusion score increased to 9.0 which puts Thoughtworks in the top 5% in the sector. Our attrition rate of 12.0% for 2022 is lower than the industry average.

We believe the Thoughtworks value proposition is sustainable and difficult to replicate. The core elements form a virtuous cycle: clients trust us to deliver on their most complex and business-critical projects; those experiences allow us to explore cutting-edge technologies and expand our thought leadership; this enables us to continuously attract, develop and retain the very best global talent; which gives us the ability to meet and exceed our clients' needs. Our position is at the forefront of successive waves of technological change — spotting important trends early.

Our approach has enabled us to consistently grow our revenues and profits. In 2022, we reported revenues of approximately $1.3 billion, representing 21.1% year-over-year growth. Net loss for the full year was $(105.4) million compared to $(0.6) million in 2021. Adjusted EBITDA for the full year was $256.8 million representing year-over-year growth of 15.0%. See "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations —Non-GAAP Financial Measures" for a definition of and a reconciliation of Adjusted EBITDA to net (loss) income, the most directly comparable GAAP measure, how we use Adjusted EBITDA and an explanation of why we consider this non-GAAP measure to be helpful for investors.

Key milestones for our business include:

- **1993**—Thoughtworks was founded.
- **1999**—Guo Xiao and Dr. Rebecca Parsons joined Thoughtworks.
- **2000–2004**—Opened offices in Australia, United Kingdom, India, Canada and China.
- **2001**—Manifesto for Agile Software Development published (co-authored by our Chief Scientist Martin Fowler).
- **2004**—Surpassed 500 Thoughtworkers; Selenium, the leading web application testing framework today, was developed based on work started at Thoughtworks.
- **2005**—Established Thoughtworks University.
- **2009–2010**—Opened offices in Brazil and Germany.
- **2011**—Published first edition of Thoughtworks Technology Radar, tracking new developments in technology across techniques, tools, platforms, languages, and frameworks.
- **2012–2014**—Opened first offices in Singapore, Ecuador and Italy.
- **2014**—Surpassed $300 million in annual revenues and 3,000 Thoughtworkers. Published the seminal article Microservices and Building Microservices.
- **2015**—Collaborated with Save the Children in the fight against Ebola, developing an open-source and adaptable electronic medical record system for Sierra Leone.
- **2016**—Opened offices in Spain and Chile; Awarded winner of the AnitaB.org Institute's Top Companies for Women Technologists, winning again in 2017 and 2018 and recognized as a leader in 2019 and 2020.
- **2017**—Surpassed $500 million in annual revenues; Apax Funds acquired Thoughtworks.
- **2018**—Thoughtworks surpassed 5,000 Thoughtworkers.
- **2019**—Published the Digital Transformation Game Plan: 34 Tenets for Masterfully Merging Technology and Business and How to Move Beyond a Monolithic Data Lake to a Distributed Data Mesh.
- **2020**—Named strong performer in digital product development by Forrester Research Inc.; committed to the Valuable 500, the global movement putting disability on the business leadership agenda; awarded IT Vendor of the Year by the UK IT Industry Awards.

- **2021**—Surpassed $1 billion in annual revenues. Acquired Gemini and Fourkind; completed initial public offering (IPO) and began trading publicly on the NASDAQ.
- **2022**—Acquired Connected and Handmade; ranked in the top 25 most valuable and strongest IT services brands globally by Brand Finance; opened office in Vietnam; recognized as a Leader in Modern Application Development Services by Forrester Research.

Our Growth Strategies

We continue to differentiate ourselves as a leading global technology consultancy that drives digital innovation by leveraging the following key growth strategies:

- **Deepen our relationships with existing clients.** We have a successful track record of expanding our relationships with our existing clients. This is reflected in our total percentage of revenues from existing clients, which represented 87.2% in 2022. In addition, in 2022, we had 32 clients generating between $5 million and $10 million in revenues and 35 clients generating over $10 million. We intend to focus on larger, higher value projects. We believe we have a substantial opportunity to cross-sell additional services to our existing clients.
- **Establish new client relationships.** We believe there are significant untapped opportunities to win new clients across current and adjacent industry verticals and geographies. To that end, we increased the total number of clients to 416 in 2022 from 371 in 2021. Adding new clients has also enabled us to maintain relatively low client concentration with only 15.4% and 24.7% of our revenues coming from our top five and 10 clients, respectively, in 2022.
- **Develop new technical capabilities and client solutions.** For 29 years, we have been at the forefront of innovation, pioneering numerous innovative trends. We have built a thought leadership engine that we believe is consistently pioneering technology-driven business change. We accomplish this by giving our teams, who work in close proximity to our clients, autonomy to experiment with new technologies while solving complex client problems. When they discover new innovations, we give them resources to develop and harvest them, then scale them through our global delivery model.
- **Develop and grow our strategic partnerships.** While we remain technologically agnostic and work with the appropriate technologies for our clients, we have expanded our relationships with hyperscale cloud providers, including Amazon, Google, Microsoft and Alibaba. This enables us to deepen our capabilities, target new clients and drive meaningful growth. We partner with other third-party product and service companies to expand our delivery capabilities as well as identify additional client opportunities.
- **Pursue strategic, targeted acquisitions.** Our historic growth has been predominantly organic and we expect this to continue. In 2022, we made two strategic acquisitions: (i) Handmade in Brazil to bolster and enhance our customer experience, product and design service line and (ii) Connected in Canada to advance our capabilities in solving business problems through product-led design processes, from defining the strategy to discovery and delivery. Going forward, we believe there is further opportunity to augment our growth by selectively pursuing acquisitions that broaden our service offerings, add leading talent, expand our client base and addressable market and enhance the depth of our capabilities in all of our verticals and geographies.
- **Focused-geographic expansion.** Thoughtworks has throughout its history expanded into key new countries, for instance we opened an office in Vietnam in 2022, and intend to continue to do so, as and when opportunities to do so make strategic sense.

Thoughtworks' Differentiation

Thoughtworks was founded in Chicago in 1993 by a small team with a unified purpose. At that time, information technology functions were largely regarded as ineffective cost centers. As a digital native business, Thoughtworks aspired to change this through experimenting and learning to drive continuous improvement and the pursuit of excellence in the craft of software development.

Today, we believe our clients benefit from our differentiation, including our:

- **Ability to digitally transform global enterprises at scale by applying strategic consulting and cutting edge technologies.** Digital transformation requires alignment across the entire organization. Thoughtworks' unique and consistent global approach and end-to-end capabilities span strategy, design, software engineering and organizational transformation. We believe that is why we can enable clients to realize value swiftly, and why our clients rely on Thoughtworks to solve their most complex problems.

- **Deep agile and technical expertise coupled with a history of thought leadership.** Thoughtworks was an early visionary behind some of today's leading technologies, as reflected by our range of publications, including approximately 100 software engineering and technology books Thoughtworkers have collectively authored. We have been delivering software and subsequently digital transformation, in an agile manner for over 20 years, long before it was a mainstream practice.
- **Poly-skilled, transformational and global talent.** We believe we deliver transformational change to our clients through our differentiated and diversified talent base of over 12,500 Thoughtworkers. To achieve that, we hire poly-skilled, high-aptitude Thoughtworkers who can learn new skills quickly. We see this as a competitive advantage in the talent market.
- **Global and distributed agile delivery with a strong local presence.** We use highly skilled, distributed teams to deliver custom software projects more effectively and to give our over 410 clients access to the diverse talent they need. Our global delivery ensures our ability to meet our clients' global demands, while our local presence provides us with specialized knowledge of the local market and culture, enabling us to work side-by-side with our clients in their time zones and languages on innovative and effective solutions.
- **Award-winning and cultivating culture.** Since our founding, we have relentlessly focused on evolving our culture, creating a differentiated brand that Thoughtworkers are proud to be a part of. We believe our culture not only drives higher quality work but also enables us to efficiently recruit and retain Thoughtworkers to drive growth.
- **Experienced management team with a long history of working together.** Our global management team has an average tenure of 16 years at Thoughtworks and the majority have been working together as a team for over a decade. Most of the team members have worked across multiple functions and geographies, giving the group a diverse and well-rounded experience-base on all facets of our business.

As a result of our competitive advantages, we have created a virtuous cycle that is difficult to replicate. We earn our clients' trust to deliver on their most complex and business-critical projects. Our demonstrated track record of success encourages us to further develop cutting-edge technology solutions and expand our thought leadership. As a result, we continuously attract, develop and retain high caliber talent, enabling us to meet and exceed our clients' needs. The reputation we have built as the go-to partner for digital transformation allows us to command premium bill rates.

Our Culture & People

Since inception, revolutionizing the technology industry has been a core part of Thoughtworks' mission. We are driven by a desire to "create an extraordinary impact on the world through our culture and technology excellence." Our people relentlessly pursue our values of integrity, excellence, global-first, cultivation, curiosity, autonomy, inclusivity and courage. We aim to be an awesome partner for clients and their ambitions.

Diversity & Inclusion

Thoughtworks proudly and actively seeks to make itself and the technology industry more reflective and inclusive of the society that we serve. We believe that our culture encourages discourse and collaboration at all levels, as evidenced by our 2022 employee engagement survey: we scored 8.7 as an aggregated average across Thoughtworks.

Diversity and inclusion has been a core guiding principle since we were founded. As of December 31, 2022, 40% of our global management team and approximately 40.4% of our technologists identify as WUGM.

Our Recognition

Our differentiated culture has been widely recognized by the industry, earning us numerous awards, including:

- Thirteen of Thoughtworks' countries now have the Great Place to Work certification. We are proud that we have achieved industry-leading Great Place to Work trust index scores, with a global average of 91%.

- In Q4 2022, our overall global Glassdoor rating is 4.47, higher than the Glassdoor rating for the IT services sector of 3.95.

Attracting Talent

Our employee brand is strong in the market and in 2022, we had approximately 225,000 applications for roles. Our recruitment capability is a source of key differentiation, with 99.99% of all hires being recruited internally through our recruitment and recruitment marketing teams on a 30/30/30 model — with a goal of 30% referrals, 30% direct applicants and 30% sourced, with the help of channels like Access Thoughtworks, our online community for career development and job opportunities.

Thoughtworkers come from a variety of traditional and non-traditional technology backgrounds and include career changers and/or self-taught technologists, valuing transferable skills, adaptability and continuous learning. Our blended delivery approach gives us a clear advantage when it comes to attracting talent. Candidates have the opportunity to work on in-region service line projects, as well as in distributed agile teams — either as part of a nearshore or far-shore delivery team. We believe candidates are attracted by our career development opportunities. We continue to innovate in our recruitment and onboarding processes and tools.

Training Talent

As a pioneer of agile and extreme programming practices, in 2005 we set up Thoughtworks University, our immersive entry-level program for new hires. This provides guidance on career coaching and progression, ensuring our newest Thoughtworkers have the full toolset required for them to build long-term careers at Thoughtworks. As of December 2022, there have been approximately 4,100 graduates from Thoughtworks University since its inception, including 62% WUGM in 2022.

Retaining Talent

Cultivation and empowerment is a core part of our culture; we call this "Empowering Thoughtworker Growth"—enabling Thoughtworkers to have a personalized, integrated journey of cultivation and growth. We developed tools, including "Pathways" for career planning and growth paths and "Summit" for self-assessment, expectation-setting and feedback, as well as offering Thoughtworkers extensive online training opportunities.

When we became a public company in September 2021, every Thoughtworker with us at that time became an equityholder. Going forward, we can offer equity as part of the total reward package to a broad set of our people. This approach aligns with our inclusive culture and proactive approach to employee retention.

Our Differentiated Service Offerings

We are passionate about creating exceptional customer experiences and helping clients achieve their unique business goals. As our clients continuously evolve and grow their modern digital business capabilities, they capitalize on our end-to-end services that combine strategy, innovative experience design and world-class software engineering. Our four global service lines influence thought leadership, capability development, community building and client work to reinforce our premium brand position.

Enterprise Modernization, Platforms & Cloud

Our Enterprise Modernization, Platforms & Cloud service line focuses on evolving clients' platforms, processes and talent to deliver business value quickly and enables continuous innovation and development. Key offerings include: modernization strategy and execution; digital platform strategy and engineering organization transformation; cloud modernization; cloud-native application support and evolution; and platform assessment and remediation.

Customer Experience, Product & Design

Our Customer Experience, Product & Design service line brings together design and product thinking with software engineering excellence, integrating product and platform strategies to help our clients build quality, digital products and deliver differentiated customer experiences. This service line delivers: idea to market; customer experience strategy; product management transformation; product design and delivery.

Data & AI

Our Data & AI service line combines best-in-class data and software engineering practices, product thinking and data science expertise to help our clients extract value, insights and information from their data assets, connect data silos and create effective predictive analysis tools. This service line delivers: data strategy; intelligent products; data platforms and data mesh; continuous delivery for machine learning (CD4ML); and data governance.

Digital Transformation & Operations

Our Digital Transformation & Operations service line connects strategic understanding with software and platform expertise to deliver fast, effective organizational transformation, enabling clients to respond to ever-changing market expectations. This service line delivers: delivery transformation; digital fluency; organizational transformation; value-driven portfolio management; technology strategy; executive advisory services; and digital foundations training.

Our Global Distributed Agile Delivery Model

Thoughtworks is a global business, operating as a single organization, with consistent global capabilities, regardless of country. We have a broad geographical presence with proven capabilities in key regions. As of December 31, 2022, we have 9.6% of our employees in North America, 14.3% in Europe, 15.5% in Latin America ("LATAM") and 60.6% in Asia-Pacific ("APAC").

Our blended delivery model means we are able to partner with our clients in ways that suit them. By offering a combination of onshore and nearshore/offshore talent, we are able to deliver the services our clients need, while balancing costs and proximity considerations.

Our Clients

During 2022, we served over 410 clients ranging from large, global enterprises to technology disruptors, who utilized our services and talent to help them evolve the digital capabilities within their organizations. We have a diversified client base spanning a range of geographies and industry verticals. In 2022, our revenues as a percentage of total revenues were as follows across geographies: 38.9% North America; 32.4% APAC; 24.4% Europe; and 4.3% LATAM. In addition, in 2022, our revenues as a percentage of total revenues were as follows across industry verticals: 27.8% technology and business services; 24.4% energy, public and health services; 18.3% retail and consumer; 17.1% financial services and insurance; and 12.4% automotive, travel and transportation. Additionally, our top five and 10 clients in 2022 represented just 15.4% and 24.7%, respectively, of our revenues.

We have long-term and trusted relationships with our clients. In 2022, 87.2% of our revenues came from existing clients and our 10 largest clients in 2022 have been clients with us for an average of nine years. We look to partner with clients who recognize the importance of technology as a central component of their business strategy. With that shared understanding, we engrain ourselves in their organizations and collaborate with them to translate that strategy into higher business value over the long term.

Key Challenges Our Clients are Facing

As much as digital transformation is considered an imperative, companies face several key challenges in their digital transformation journeys, including the ability to:

- **Keep up with the latest technological innovations.** Often companies lack the ability to synthesize and prioritize the latest technology to drive value and to compete.
- **Embrace digital to drive sustainable change across the enterprise.** Often, companies are unable to align key functional stakeholders on competing priorities between business and technology.
- **Deliver digital products and experiences rapidly and at scale.** Many organizations struggle to adapt to the pace of change required to thrive in a digital marketplace.

- **Adopt platform thinking.** To benefit fully from digital platforms requires significant investments and, often, cultural changes.
- **Recruit and retain high-quality talent.** Competition for digital talent is fierce.

Sales & Marketing

Our sales and marketing strategy is focused on increasing revenues from existing clients, generating revenues from new clients and continuing to maintain our brand to appeal to current and prospective clients and employees.

Sales

Our sales strategy emphasizes a team-based approach involving client partners, account managers, delivery professionals, country heads and senior leaders. We have created a three-prong model for our demand teams. One group targets new client acquisition, a second looks after existing clients and the third builds on growing our partner business.

In 2022, we invested in our outbound demand generation capacity, increasing our ability to win new business.

Excellence in Client Services Initiative

Our approach to client relationships is based on the understanding that technology and delivery are as important as sales. Each of our clients has a Client Leadership Team ("CLT"), whose mission is to drive success for the client's business. The CLT consists of three senior leaders. They are supported by the Excellence in Client Services program, which enables the CLTs to execute strategic change with their clients through masterclasses, workshops and tools. This has been an effective model for us, allowing us to stay close to not only the client but also the work we deliver and how we deliver it.

Marketing

Our reputation as a leading digital transformation services provider helps us generate new business opportunities. In addition to the flagship Thoughtworks Technology Radar, we have a portfolio of high impact publications such as our annual Looking Glass report, as well as thought leadership events, such as XConf, a global event series focused on the latest thinking from Thoughtworks' technology community.

The investment in our Digital Experience Platform—including the implementation of a new customer relationship management system and migration to a new content management system—has strengthened our ability to reach and influence our target business executive audience, support account growth with personalized account-based marketing and collate real-time insights to inform our go-to-market strategy.

Our focus on building our premium brand has resulted in Thoughtworks being ranked as a Brand Finance top 25 global IT services brand.

Revolutionizing the Technology Industry

Alongside our commitment to diversity and inclusion in the technology industry, Thoughtworks has been at the forefront of revolutionizing the technology industry and thought leadership and authorship are part of our DNA.

Books

Thoughtworkers have published approximately 100 books on a wide variety of topics, cementing Thoughtworks' industry-leading ideas around distributed agile, lean thinking, microservices and evolutionary architecture. Through nurturing talent and supporting would-be authors, Thoughtworks has established a reputation as an attractive place to work for top talent.

Thoughtworks Technology Radar and Thoughtworks Looking Glass

Published twice a year over the past 13 years and now in its 27th edition, Thoughtworks Technology Radar has become the go-to guide for software developers. It helps technologists keep up with the rapid innovation and the ever-evolving technology landscape. The publication received endorsements from Porsche, Redgate and REA Group.

Thoughtworks Looking Glass is our annual report into the day's most important technology trends. It gives business executives advice on how advances in technology will impact their organization and how quickly they need to react.

Open Source

Thoughtworks has always been an ardent supporter of open source software. This support stems from a philosophical perspective on how the best software is created and from a practical perspective, in that many of the software tools and products we have developed have been created through the use of open source licenses; many Thoughtworkers are dedicated contributors to a wide variety of open source projects.

We believe that open source enables us to build superior solutions to those based on proprietary software in terms of cost, freedom, privacy, security, quality and community. Building open source software allows us to share new ways of working and learn from the wider community.

Environment and Social Impact

Environment

Thoughtworks is passionate about sustainability and the environment, and has a long-standing commitment to creating positive social change through our technology contributions. This includes in May 2021, co-founding the Green Software Foundation, along with Microsoft, GitHub, Accenture and the Linux Foundation, which seeks to build a trusted ecosystem for green software. In 2019, Thoughtworks committed to set near-term company-wide emission reductions targets for which we are currently coordinating validation from the Science Based Targets initiative ("SBTi").

Social Impact

Diversity and inclusion has been a guiding principle since we were founded as evidenced by our 2022 employee engagement survey: Our diversity and inclusion score increased to 9.0 which, according to Peakon surveys, puts Thoughtworks in the top 5% in the sector. As of December 31, 2022, 42.8% of Thoughtworkers globally were WUGM.

We work with communities around the world on over 70 initiatives, and strive to make significant contributions to the United Nations ("U.N.") Sustainable development goals ("SDGs"), particularly goals three (good health and well-being), five (gender equality), nine (industry, innovation and infrastructure), 10 (reduced inequalities) and 13 (climate action). We believe that our social impact ethic is a key pillar of our culture and business and is considered a board-level priority. Thoughtworkers seek to undertake transformational social impact projects around the world. An example of this is the work we do in support of the Digital Public Goods Alliance, whose mission is to promote digital public goods to create a more equitable world. In 2022, Thoughtworks joined the United Nations Global Compact. We believe the ten UN Global Compact principles are reflected in our company purpose and we intend to make incorporating these principles into our strategies, policies and procedures a board-level priority.

Our Industry

Modern, next-generation technologies have spawned a digital revolution, advancing the global economy towards a digital age driven by seamless connectivity, efficient cloud computing and advanced data analytics. This is redefining business models, disrupting the competitive landscape and increasing consumer expectations. To survive and enable growth, companies across all industries and geographies need to adapt to the accelerated pace of technological change by undergoing holistic and continuous digital transformations.

Key Technology Industry Trends Driving Digital Transformation

A number of key industry trends are driving spending for digital transformation:

- **Platforms as products: Delivering value through customer focus.** To be truly effective and transformative, platforms must be designed and delivered with a relentless commitment to end-user value.
- **Hostile tech: Confronting challenges in security, ethics and privacy.** Successful innovation requires a strong commitment to mitigating the potential risks of new technologies.
- **Partnering with AI: Making machine intelligence mainstream.** Businesses must consider where and how to embed machine learning capabilities, ensuring a tangible impact.
- **Making the metaverse: Exploring the frontiers of digital interaction.** Emerging technologies, such as extended and augmented reality, are enabling new forms of connection inside organizations and across the wider economy.
- **Evaluating Web3: Navigating the internet's possible futures.** The future of the internet is still taking shape; leaders must make smart and informed choices about their participation.
- **Accelerating sustainability: Responding to the climate crisis with technology.** Technology is not only an important area for sustainable transformation, it can also help drive it.

Our Market Opportunity

As companies struggle to keep pace with this accelerating rate of technological innovation, they need to rely on service providers to drive digital transformation, creating a massive market opportunity. According to IDC, global spending on digital transformation is forecast to reach $3.4 trillion in 2026.

Competition

We operate in a global, dynamic and rapidly evolving market and, as a result, face competition from a wide number of organizations and service providers, both global as well as local. These include software engineering specialists, large global consulting firms, strategic consulting firms, traditional IT services providers and our clients' in-house development teams.

We believe that our thought leadership, excellence in modern software engineering capabilities, end-to-end solutions that we are able to deliver to our clients rapidly and at scale, differentiated global delivery model and unique culture with a focus on diversity and inclusion provide us with strong, sustained differentiation from our competition.

Limitations of Other Digital Service Providers

While the market for digital transformation services is large and growing rapidly with a range of quality providers, many face some key limitations, including:

- **Inability to deliver new technological innovations ahead of mass adoption.** Many service providers offer expertise around digital innovations only after such innovations reach mass adoption. As a result, they struggle to innovate and adopt newer technologies earlier to differentiate their clients' digital products and experiences.
- **Lack of expertise to provide early stage strategy for complex digital transformations.** Many service providers are optimized to execute once a template for scaling is designed, but often lack early stage strategy expertise. If technology expertise is absent from strategic decision-making, then the resulting solution may be ineffective or undifferentiated.
- **Employees focused on narrower specialties.** Many service providers train their employees in narrower specialties, resulting in both siloed development and solutions. By taking this approach, employees often lack the full context needed to identify potential problems and opportunities, limiting the speed and depth of innovation.
- **Limited onshore talent.** Many service providers have a high concentration of employees offshore, but offer limited onshore talent. As a result, they may lack important local market context, client intimacy to

drive innovation and the ability to influence culture, transfer knowledge and enable sustained organizational change.

- **Concentration of talent in fewer offshore geographies.** Many service providers rely on a limited number of international geographies to recruit their offshore talent. As a result, they may miss out on broader pools of high-quality talent to support demand and are unable to consistently provide talent in the client's preferred location.

Intellectual Property

Our intellectual property rights are important to our business, particularly around our branding. We rely on a combination of copyright, trademark, patent and unfair competition laws, as well as intellectual property assignment and confidentiality agreements and other methods to protect our intellectual property rights. We require our employees, independent contractors, vendors and clients to enter into written confidentiality agreements upon the commencement of their relationships with us. These agreements generally provide that any confidential or proprietary information disclosed or otherwise made available by us be kept confidential.

We customarily enter into non-disclosure agreements with our clients with respect to the use of their software systems and platforms. Our clients usually own the intellectual property in the software or systems we develop for them. Furthermore, we usually grant a perpetual, worldwide, royalty-free, nonexclusive, transferable and non-revocable license to our clients to use our pre-existing intellectual property but only to the extent necessary to use the software or systems we developed for them.

We have invested and plan to continue to invest in research and development to enhance our domain knowledge and create complex, specialized solutions for our clients. We have registered (or applied for registration of) the trademark "Thoughtworks" in over fifteen jurisdictions, including the United States, the European Union and the United Kingdom, as of December 31, 2022. We have developed several tools, including consulting frameworks and software applications, that we use to deliver digital services to our clients. We have also secured patent protection for certain internal asset tracking and human machine interaction designs. In addition, to ensure we maintain the ability to engage with our clients, employees and the public, we have registered and maintained dozens of domain names.

We do not believe that any individual intellectual property right, other than our rights in our name and logo, is material to our business.

Government Regulations

Due to the industry and geographic diversity of our operations and services, our operations are subject to a variety of rules and regulations. Several foreign and U.S. federal and state agencies regulate various aspects of our business. We are subject to laws and regulations in the United States and other countries in which we operate, including export-import restriction and regulations, economic and trade sanctions, anti-corruption laws, and privacy laws and regulations like the California Consumer Privacy Act (CCPA), the California Privacy Rights Act ("CPRA") and the General Data Protection Regulation (GDPR), among others. Compliance with these laws requires significant resources and non-compliance may result in civil or criminal penalties and other remedial measures.

Corporate & Website Information

Thoughtworks Holding, Inc. was incorporated in Delaware in 2017 to serve as the indirect holding company of Thoughtworks, Inc. and its direct and indirect subsidiaries. Our principal executive offices are located at 200 East Randolph Street, 25th Floor, Chicago, Illinois 60601. Our telephone number is (312) 373-1000. Our website address is www.thoughtworks.com. The information contained on, or that can be accessed through, our website is not incorporated by reference into this Annual Report or any other report or document we file with the SEC.

Available Information

The SEC maintains an Internet website that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The address of that website is www.sec.gov. We are subject to the information and reporting requirements of the Securities Exchange Act of 1934 (the "Exchange

Act") and, in accordance with this law, will file periodic reports, proxy statements and other information with the SEC. These periodic reports, proxy statements and other information will be available at the website of the SEC referred to above. We also maintain a website at www.thoughtworks.com. You may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Our website also provides access to reports filed by our directors, executive officers and certain significant shareholders pursuant to Section 16 of the Exchange Act. In addition, our Code of Conduct, Code of Ethics for Senior Financial Officers and charters for the committees of our Board of Directors (the "Board") are available on our website as well as other shareholder communications.

Item 1A. *Risk Factors*

Our business, financial condition, cash flows, and operating results can be affected by a number of factors, whether currently known or unknown, any one or more of which could, directly or indirectly, cause our actual financial condition and operating results to vary materially from past, or from anticipated future, financial condition and operating results. Any of these factors, in whole or in part, could materially and adversely affect our business, financial condition, operating results and stock price. Before making a decision to invest in our common stock, you should carefully consider all of the risks and uncertainties.

Risks Related to Our Global Operations

Our business has been, and may continue to be, adversely affected by volatile or uncertain operational, geopolitical, regulatory, legal and economic conditions.

Global macroeconomic conditions have, and may continue to, impact us and our clients' businesses. Volatile economic conditions, including a potential recession, may continue to undermine business confidence in the markets in which we operate. We have seen, and may continue to see, clients reducing or deferring their spending on new initiatives and technologies. In addition, we have experienced, and may continue to experience, clients reducing, delaying or eliminating spending under existing contracts with us, which negatively affects our business.

Ongoing economic volatility and changing demand patterns affect our business in a number of other ways, including making it more difficult to accurately forecast client demand and effectively build our revenue pipeline. Furthermore, it may take some time for the effects and changes in demand patterns to manifest themselves in our business and results of operations. Changing demand patterns from economic volatility and uncertainty, including as a result of increasing geopolitical tensions, inflation, increasing energy costs, economic downturns, changes in global trade policies, global health emergencies and their impact on us, our clients and the industries we serve, could have a significant negative impact on our results of operations. Furthermore, the hyper-growth period experienced in the global technology industry during the COVID-19 pandemic may slow and return to normal.

Our operations and our clients are located throughout the world, and a significant part of our revenue comes from international sales. The global nature of our business creates operational and economic risks. Our results of operations may be affected by global, regional, and local economic developments, monetary policy, inflation, and recession, as well as political, trade and military disputes. War, terrorism, riot, civil insurrection or social unrest; and natural or man-made disasters, including famine, flood, fire, earthquake, pandemics and other regional or global health crises, storm or disease may cause difficulties in staffing and managing foreign operations, cause clients to delay their decisions on spending for the services we provide, give rise to sudden significant changes in regional and global economic conditions and cycles and may create unanticipated challenges for our growth strategy. Further escalation or expansion of the war between Russia and Ukraine could impact our European business operations including disrupting our client service delivery and negatively impacting the demand for our services. Emerging nationalist trends in specific countries may significantly alter the trade environment. Changes to trade policy or agreements as a result of populism, protectionism, or economic nationalism may result in higher tariffs, local sourcing initiatives, or other developments that make it more difficult to sell our services and solutions internationally. Travel restrictions resulting from natural or man-made disruptions and political or social conflict increase the difficulty of obtaining and retaining highly-skilled and qualified professionals and could unexpectedly increase our labor costs and expenses, both of which could also adversely affect our ability to serve our clients.

Operational, geopolitical and economic events may pose significant security risks to our employees, the facilities where they work, our operations, electricity and other utilities, communications, travel and network services, and the disruption of any or all of them could materially adversely affect our financial results. Our crisis management procedures, business continuity plans and disaster recovery capabilities may not be effective at preventing or mitigating the effects of a disaster.

Certain legal systems or policy decisions may make it more difficult to obtain, maintain, protect and enforce intellectual property, contractual or corporate rights. Disruptions of these kinds in developed or emerging markets could negatively impact demand for our services and solutions or increase our operating costs.

We have significant operations in China. While we believe that our unique position in the Chinese market presents long-term opportunities, doing business in China has increased risks given the uncertainties around domestic legislation, foreign policy, trade policy and international relations. Our reliance on our employees in China to help deliver our services to clients world-wide presents the risk that clients may refuse to accept, or may be prohibited from accepting, services originating from China. Furthermore, we face the risk that our business operations in China will be impacted by government regulations and/or foreign sanctions. Escalation of current geopolitical tensions may implicate China and could increase the risk of government regulations and/or foreign sanctions and imposition of export controls and import restrictions. In addition, our information technology systems may be at risk of being blocked from our world-wide operations. Ongoing human rights concerns in China may result in boycotts of our services or client requests not to use Chinese operations to support their projects.

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

Our functional currency is the U.S. dollar. However, we are exposed to foreign currency exchange transactions related to our non-U.S. operations. Our profit margins are subject to volatility as a result of changes in foreign exchange rates. Significant fluctuations in currency exchange rates have had, and may continue to 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. Management's Discussion and Analysis of Financial Condition and Results of Operations—Quantitative and Qualitative Disclosures About Market Risk—Foreign Currency Risk.”

Increases in wages, equity compensation and other compensation expenses could prevent us from sustaining our competitive advantage and increase our costs.

In all countries in which we operate, wage inflation, whether driven by competition for talent, macroeconomic pressures, or ordinary course pay increases, may also increase our cost of providing services and reduce our profitability if we are not able to pass those costs on to our clients or charge premium prices when justified by market demand. If we do not keep up with wage inflation in the markets in which we operate, we could reduce our ability to attract and retain talent. As a corollary, if we increase operations and hiring to a significant degree in developed countries above the hiring rate in emerging countries, our compensation expenses may increase at a faster rate because of the higher wages for technology professionals in those developed markets. In addition, if we are unable to maintain our premium pricing model, we may see reduced profitability or be unable to pay wages consistent with market practices, which may result in higher attrition.

Our results of operations have been adversely affected and could in the future be materially adversely affected by the COVID-19 pandemic.

The COVID-19 pandemic has created widespread economic disruption and uncertainty, including as it relates to our operations, our people’s ability to work and demand for our services and solutions. The extent to which the COVID-19 pandemic will continue to further impact our business, operations and financial results will depend on numerous factors that are frequently changing or unknown, and that we may not be able to accurately predict, including: the duration and scope of the pandemic, including the development of new and unique variants of COVID-19; governmental, business and individuals’ responses or planned responses to the pandemic, including availability, adoption, efficacy and administration rates of vaccines; the impact of the pandemic on economic activity and any ongoing or future governmental interventions; the effect on our clients and client demand for our services and solutions; our ability to sell and provide our services and solutions, including travel restrictions; our ability to acquire new clients or deepen relationships with our existing clients due to budgetary constraints or changes in business strategy at our clients as a result of the COVID-19 pandemic; the ability of our clients to pay in a timely manner, if at all, for our services and solutions with or without discounts requested by our clients; bankruptcy or other insolvency procedures among our clients; and closures of our and our clients' offices and facilities.

We have also experienced higher than normal employee absentee rates due to illness, family medical leave and bereavement leave. For example, we have seen more of our employees unable to work during a more localized surge of COVID-19 cases. Such a surge, if sufficiently widespread, could materially impact our operations. In addition, government policies may result in periodic lock-downs, border closures, supply chain disruptions and employee absenteeism, which could have an impact on our business directly or may affect our clients and their engagement with us. An overall or prolonged labor shortage, lack of skilled labor, increased turnover or labor inflation could have a material adverse impact on our operations, results of operations, liquidity or cash flows.To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this section of this Annual Report.

Our effective tax rate could be materially 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 one or more jurisdictions; and the resolution of issues arising from tax audits or examinations and any related interest or penalties. The determination of our income tax expense 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, but not limited to, a determination that the transfer prices and terms we have applied are not appropriate, such an adjustment could have a negative impact on our results of operations, business and profitability. In addition, 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.

Risks Related to Our Client Relationships

We are dependent on our existing client base and our ability to retain and expand our relationships with such clients.

Historically, a significant percentage of our revenues has come from our existing client base. For example, during the fiscal year ended December 31, 2022, 87.2% of our revenues came from Existing Clients (as defined elsewhere in this Annual Report). However, the volume of work performed for a specific client is likely to vary from year to year, especially since we generally do not have long-term commitments from our clients and are often not our clients' exclusive technology services provider. A client in one year may not provide the same level of revenue for us in any subsequent year. Further, one or more of our significant clients could be acquired, and there can be no assurance that the acquirer would choose to use our services in respect of such clients to the same degree as previously, if at all.

In addition, the services we provide to our clients, and the revenues and income from those services, may decline or vary as the type and quantity of services we provide changes over time. In addition, our reliance on any individual client for a significant portion of our revenues may give that client a certain degree of pricing leverage against us when negotiating contracts and terms of service.

Our business model depends on relationships our teams develop with our clients so that we can understand our clients' needs and deliver solutions and services that are tailored to those needs. If a client is not satisfied with the quality of work performed by us, or with the type of services or solutions delivered, we could incur additional costs to address the situation, the profitability of that work might be impaired, and the client's dissatisfaction with our services could damage our ability to obtain additional work from that client. In particular, clients that are not satisfied might seek to terminate existing contracts, which could mean that we could incur costs for the services performed with no associated revenue. This could also direct future business to our competitors.

We generally do not have long-term commitments from our clients, our clients may terminate contracts before completion or choose not to renew contracts, and we are not guaranteed payment for services performed under contract. A loss of business, non-payment or a decrease in the scope of business from significant clients could materially affect our results of operations.

We are generally not our clients' exclusive IT services provider and we generally do not have long-term commitments from clients to purchase our services. Our clients' ability to terminate engagements with or without cause and our clients' inability or unwillingness to pay for services we performed makes our future revenues and profitability uncertain. Although a substantial majority of our revenues are typically generated from clients who also contributed to our revenues during the prior year, our engagements with our clients are typically for projects that are singular in nature. Therefore, we must seek to obtain new engagements when our current engagements end.

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

- economic uncertainty;
- financial difficulties;
- corporate restructuring, or mergers and acquisitions activity;
- our inability to complete our contractual commitments and bill and collect our contracted revenues;
- change in strategic or operational priorities, resulting in elimination of the project or a reduced level of technology-related spending;
- change in outsourcing strategy resulting in moving more work to the client's in-house technology departments or to our competitors;
- replacement of existing software with packaged software supported by licensors; and
- uncertainty and disruption to the global markets due to including, but not limited to, public health pandemics, such as the ongoing COVID-19 pandemic, war, inflation, supply chain slowdown, and increasing energy prices.

Termination or non-renewal of a client contract could cause us to experience a higher-than-expected number of unassigned employees and thus compress our margins until we are able to reallocate our headcount. Clients that delay payment, request modifications to their payment arrangements, or fail to meet their payment obligations to us could increase our cash collection time, cause us to incur bad debt expense, or cause us to incur expenses in collections actions. The loss of clients, a significant decrease in the volume of work our clients outsource to us or the price they are willing or able to pay us, if not replaced by new service engagements and revenue, could materially adversely affect our revenues and results of operations.

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

We have experienced, and may in the future experience, a long selling cycle for our services. Our sales cycle is defined as the elapsed time between the date of opening a qualified client opportunity and the date the opportunity is closed with an agreement to provide services to the client, and is on average 87 days. Before potential clients commit to use our services, they require us to expend substantial time and resources educating them on the value of our services and our ability to meet their requirements. Therefore, our selling cycle is subject to many risks and delays over which we have little or no control, including our clients' decision to select another service provider or in-house resources to perform the services, the timing of our clients' budget cycles, and client procurement and approval processes. If our sales cycle unexpectedly lengthens for one or more large projects, it could negatively affect the timing of our revenues and our revenue growth. In certain cases, we may begin work and incur costs prior to executing a contract, which may cause fluctuations in recognizing revenues between periods or jeopardize our ability to collect payment from clients.

Implementing our services also involves a significant commitment of resources over an extended period of time from both our clients and us. Our current and future clients may not be willing or able to invest the time and resources necessary to implement our services, and we may fail to close sales with potential clients despite devoting significant time and resources to them. Any significant failure to generate revenues or delays in recognizing revenues after incurring costs related to our sales or services processes could have a material adverse effect on our business.

Our cash flows and results of operations may be adversely affected if we are unable to collect on billed and unbilled receivables from clients.

Our business depends on our ability to successfully obtain payment from our clients of the amounts they owe us for work performed. We maintain provisions against receivables. Actual losses on client balances could differ from those that we currently anticipate and, as a result, we may need to adjust our provisions. We may not accurately assess the creditworthiness of our clients. Macroeconomic conditions, such as a global recession, could also result in financial difficulties for our clients, including limited access to the credit markets, insolvency or bankruptcy. Such conditions could cause clients to delay payment, request modifications of their payment terms, or default on their payment obligations to us, all of which could increase our receivables balance. Timely collection of fees for client services also depends on our ability to complete our contractual commitments and subsequently bill for and collect our contractual service fees. If we are unable to meet our contractual obligations, we might experience delays in the collection of or be unable to collect our client balances, which would adversely affect our results of operations and could adversely affect our cash flows. In addition, if we experience an increase in the time required to bill and collect for our services, our cash flows could be adversely affected, which in turn could adversely affect our ability to make necessary investments and, therefore, our results of operations.

If our pricing structures are based on inaccurate expectations and assumptions regarding the cost of performing our work, or if we are not able to maintain favorable pricing for our services, then our contracts could be unprofitable.

We face a number of risks when pricing our contracts and setting terms with our clients. Our pricing is highly dependent on our internal forecasts, assumptions and predictions about our projects, the marketplace, global economic conditions (including foreign exchange volatility) and the coordination of operations and our people in multiple locations with different skill sets and competencies. If our pricing for a project includes dedicated professionals or facilities and the client were to slow or stop that project, we may not be able to reallocate resources to other clients. Our pricing and cost estimates for the work that we perform may include anticipated long-term cost savings that we expect to achieve and sustain over the life of the contract. Because of such inherent uncertainties, we may underprice our services, fail to accurately estimate the costs of performing the work, or fail to accurately assess the risks associated with potential contracts, such as defined performance goals, service levels and completion schedules. The risk of underpricing our services or underestimating the costs of performing the work is heightened in fixed-price contracts and other similar commercial contracting arrangements, which may become a larger portion of our revenues if our pricing structures change. If we fail to accurately estimate the resources, time or quality levels required to complete such engagements, or if the cost to us of employees, facilities, or technology unexpectedly increases, we could be exposed to cost overruns. Any increased or unexpected costs, delays or failures to achieve anticipated cost savings, or unexpected risks we encounter in connection with the performance of the services, including those caused by factors outside our control, could make these contracts less profitable or unprofitable. In addition, our industry is sensitive to the economic environment and the industry tends to decline during general economic downturns.

Risks Related to Our People and Growth

We may be unable to implement our growth strategy.

We have grown rapidly and significantly expanded our business over the past several years. Our growth has resulted in part from developing innovative solutions at the forefront of emerging technologies for our clients. However, this requires that we invest substantial amounts of cash in human capital and the infrastructure to support our growth, including training, administration and facilities. Our growth strategy places significant demands on our management and our administrative, operational and financial infrastructure, and our growth strategy creates challenges, including:

- recruiting, training and retaining sufficiently skilled professionals and management personnel;
- planning our staffing needs on a consistent basis and efficiently using on-site and off-site staffing;
- maintaining close and effective relationships with a larger number of clients in a greater number of industries and locations;
- controlling costs and minimizing cost overruns and project delays in delivery center and infrastructure expansion;

- effectively maintaining productivity levels and implementing process improvements across geographies and business units;
- balancing our hiring patterns with anticipated demand for our services; and
- improving our internal administrative, operational and financial infrastructure.

We intend to continue our expansion and pursue available opportunities for the foreseeable future. As we introduce new services, enter into new markets, integrate corporate acquisitions, and take on increasingly innovative projects, often implementing or introducing new technologies to our clients, our business may face new risks and challenges. If our clients do not choose us for innovative projects or we do not effectively manage those projects, our reputation, business and financial goals may be damaged. We need to generate business and revenues to support new investments and infrastructure projects. We risk inaccurately estimating our human capital needs, which may result in having personnel with the wrong skill sets in our business, having an excess in personnel or deficiency in certain specialized skills sets and as a result we may need to recalibrate our workforce including adjusted hiring patterns and undertaking periodic workforce reductions. Furthermore, inaccurately assessing human capital needs may, and which in the past has resulted, and in the future may result, in workforce reductions. The challenges associated with expansion could negatively impact our anticipated growth and margins. As a result, our business, prospects, financial condition and results of operations could be materially adversely affected.

Our ability to generate and retain business depends on our reputation in the marketplace.

Our services are marketed to clients and prospective clients based on a number of factors, including reputation. Our corporate reputation is a significant factor in our potential clients' evaluation of whether to engage our services. Our clients' perception of our ability to add value through our services is critical to the profitability of our engagements. We believe that the Thoughtworks brand name and our reputation are important corporate assets that help distinguish our services from those of our competitors and contribute to our efforts to recruit and retain talented employees.

Our corporate reputation is potentially susceptible to damage by actions or statements made by current or former clients and employees, competitors, vendors, adversaries in legal proceedings, government regulators, as well as members of the investment community and the media. We and our officers and directors are and may from time to time be subject to legal proceedings in the ordinary course of business or otherwise, which could adversely affect our reputation even if we or they ultimately prevail. There is a risk that negative information about us, even if untrue, could adversely affect our business, could cause damage to our reputation and be challenging to repair, could make potential or existing clients reluctant to select us for new engagements, could lead to a loss of revenue or litigation, and could adversely affect our recruitment and retention efforts. Damage to our reputation could also reduce the value and effectiveness of the Thoughtworks brand name and could reduce investor confidence in us.

If we cannot positively evolve our Thoughtworks culture as we grow, we could lose the innovation, teamwork, passion and execution that we believe contribute to our success, and our business may be harmed.

We believe a critical component to our success has been our corporate culture. We have invested substantial time and resources in building our team and developing our leaders. Our culture has evolved over time, including in ways that may be unforeseeable or unfavorable to us. As we develop the infrastructure of a public company, our operations may need to change to support that infrastructure. In particular, we are committed to a business culture that promotes intentional sharing of business information and decision-making processes so that our team members are engaged and invested in our mission and operational success. Due to certain operational changes needed to become a public company, we may find it difficult to maintain important aspects of our corporate culture. Further, we may have difficulties maintaining our culture in our on-going environment where employees are working remotely.

If we fail to integrate or manage acquired companies successfully, or if acquisitions do not perform to our expectations, our overall profitability, our culture and growth plans could be materially adversely affected.

As part of our growth strategy, we expect to acquire businesses that we believe are a strategic fit with ours, both culturally and operationally, to augment our organic growth or to keep us at the forefront of emerging technologies. However, we may not be able to find acquisition targets that meet our criteria, and there may be intense competition for acquisition targets that are attractive to us. In addition, we do not have extensive experience integrating and managing acquired businesses or assets. Such acquired businesses or assets may not advance our business strategy or achieve a satisfactory return on our investment; we may not be able to successfully integrate acquired employees into our culture, client relationships or operations; and acquisitions divert significant management attention and financial resources from our ongoing business. Historical practices, policies and controls of acquired companies may present reputation and business risks to us. Furthermore, contracts between our acquisition targets and their clients may lack terms and conditions that adequately protect us against the risks associated with the services we provide, which may increase our potential exposure to damages. If not effectively managed, the disruption of our ongoing business, increases in our expenses (including significant one-time expenses and write-offs) and the difficulty and complexity of effectively integrating acquired operations may adversely affect our overall growth and profitability.

We must successfully attract, hire, train and retain qualified professionals to service our clients' projects and we must productively deploy our professionals to remain profitable.

Identifying, recruiting, hiring and retaining professionals with specialized and diverse skill sets across our broad geography of operations and consistent with our evolving client delivery model is critical to maintaining existing engagements and obtaining new business. If we are unable to recruit skilled professionals and if we do not deploy those professionals productively, our profitability will be significantly impacted. We must manage our professionals well and by planning and training for future needs effectively and staffing projects appropriately while accurately predicting the general economy and our clients' need for our services. Increased hiring by technology companies, and increasing worldwide competition for skilled technology professionals may lead to a shortage in the availability of skilled professionals in the locations where we operate and hire. If we are unable to attract, hire, train and retain highly skilled professionals and productively deploy them on client projects, we will jeopardize our ability to meet our clients' expectations and develop ongoing and future business, which could adversely affect our financial condition and results of operations.

Competition for highly skilled professionals is intense in the markets where we operate, and we may experience significant employee turnover rates due to such competition. If we are unable to retain professionals with specialized skills, our revenues, operating efficiency and profitability will decrease. Cost reductions, such as reducing headcount, or voluntary departures that result from our failure to retain the professionals we hire, could negatively affect our reputation as an employer and our ability to hire skilled professionals to meet our business requirements in the future. Inability to attract or retain professionals with specialized skill sets may disrupt our ability to provide certain client services and impact our reputation for innovation on our industry. Increased compensation to retain skilled professionals could lead to lower margins or to price increases that may in turn lead to a decline in demand for our services.

Any significant growth in the market for our services or solutions or our entry into new markets may require an expansion of our employee base for managerial, operational, financial and other purposes. During any period of growth, we may face problems related to our operational and financial systems and controls, including quality control and delivery and service capacities. We would also need to continue to expand, train and manage our employee base. Continued future growth will impose significant added responsibilities upon the members of management to identify, recruit, maintain, integrate and motivate new employees. If we experience a period of stagnation or contraction, we may be required to reassess our staffing needs and consider workforce reductions.

Risks Related to Our Industry

If we are unable to adapt to rapidly changing technologies, methodologies and evolving industry standards, we may lose clients and our business could be materially adversely affected.

Rapidly changing technologies, methodologies and evolving industry standards are inherent in the market for our services and solutions. Our ability to anticipate developments in our industry, enhance our existing services, develop and introduce new services or tools, provide enhancements and new features for our solutions and tools, and keep pace with changes and developments are critical to meeting changing client needs. Our ability to keep pace with, anticipate or respond to changes and developments is subject to a number of risks, including that:

- we may not be able to develop new, or update existing, services, applications, tools and software quickly or inexpensively enough to meet our clients' needs;

- we may find it difficult or costly to make existing software and tools work effectively and securely over the internet or with new or changed operating systems;
- we may find that operating in a rapidly evolving industry, it is difficult to evaluate future prospective clients;
- we may find it challenging to develop new, or update existing, software, services and tools to keep pace with evolving industry standards, methodologies and regulatory developments in the industries where our clients operate at a pace and cost that is acceptable to our clients;
- we may find that the services, tools, technologies or methodologies we develop or implement may not be successful in the marketplace; and
- we may find it difficult to maintain high quality levels of performance with new technologies and methodologies.

Further, services, tools, technologies or methodologies that our competitors develop may render our services or tools non-competitive or obsolete. Our failure to enhance our existing services and tools and to develop and introduce new services and tools to promptly address the needs of our clients could have a material adverse effect on our business.

We face intense competition from a range of technology and software services providers, and an increase in competition or our inability to compete successfully could materially adversely affect our business.

The market for technology services and solutions is intensely competitive, highly fragmented and subject to rapid change and evolving industry standards and we expect competition to intensify. Our success depends on creating software services and solutions that deeply connect our clients with consumers and employees. For example, if we are unable to anticipate technology developments, enhance our existing services or develop and introduce new services to keep pace with such changes and meet changing client needs, we may lose clients and our revenues and results of operations could suffer. Our results of operations would also suffer if our innovations are not responsive to the needs of our clients, are not appropriately timed with market opportunities, are not effectively brought to market or are commoditized. Existing and new competitors may be able to offer engineering, design and innovation services that are, or that are perceived to be, substantially similar or better than those we offer, or they may offer such services at a discounted rate. In addition, our competitors may have greater financial, technical and other resources and greater name recognition than we do. Certain competitors may also have, or over time will have, a stronger presence in certain geographic markets. We may also face competition from in-house development by our clients, academic and government institutions, and the open-source community who may offer similar solutions or an adequate substitute for our services and solutions. These factors may force us to compete on other fronts in addition to the quality of our services and to expend significant resources in order to remain competitive, which we may be unable to do.

Risks Related to Our Services and Solutions

If we cause disruptions to our clients' businesses, provide inadequate service, or breach contractual obligations, our clients may have claims for substantial damages against us and our reputation may be damaged. Our insurance coverage may be inadequate to protect us against such claims.

If our professionals make errors in the course of delivering services or we fail to meet contractual obligations to a client, these errors or failures could disrupt the client's business or expose confidential or personally identifiable information. Any of these events could result in a reduction in our revenues, damage to our reputation, and could also result in a client terminating our engagement and making claims for substantial damages against us. Some of our client agreements do not limit our potential liability for occurrences such as breaches of confidentiality and indemnification relating to intellectual property infringement, misappropriation or other violations, and we cannot generally limit liability to third parties with which we do not have a contractual relationship. In some cases, breaches of confidentiality obligations, including obligations to protect personally identifiable information, may entitle the aggrieved party to equitable remedies, including injunctive relief.

Although we maintain professional liability insurance, product liability insurance, commercial general and property insurance, business interruption insurance, workers' compensation coverage, cyber insurance and umbrella insurance for certain of our operations, our insurance coverage does not insure against all risks in our operations or all claims we may receive. Damage claims from clients or third parties brought against us or claims that we initiate due to the disruption of our business, litigation or natural disasters, may not be covered by our insurance, may exceed the limits of our insurance coverage, and may result in substantial costs and diversion of resources even if insured. Some types of insurance are not available on reasonable terms or at all in some countries in which we operate, and we cannot insure against damage to our reputation. The assertion of one or more large claims against us, whether or not successful and whether or not insured, could materially adversely affect our reputation, business, financial condition and results of operations.

Security breaches, cyber-attacks, employee and other internal misconduct, computer viruses, the mishandling of personal data and other disruptions to network security could compromise our information and expose us to liability, which would cause our business and reputation to suffer.

In the ordinary course of business, we collect, use, store, process, transmit and view sensitive or confidential data, including intellectual property, proprietary business information or personally identifiable information belonging to us, our clients, respective employees and other end users. This information is stored on our networks or in the data centers and networks of third-party providers. Physical security and the secure processing, maintenance and transmission of this information is critical to our operations and business strategy. Some of our clients have sought, and may continue to seek, additional assurances for the protection of their sensitive information, including personally identifiable information, and attach greater liability in the event that their sensitive information is disclosed.

Despite security measures, information technology and infrastructure may be vulnerable to attacks by hackers, computer malware, viruses, social engineering (including phishing and ransomware attacks), or breached due to software bugs, human error, employee theft, misuse, misconduct or malfeasance, system failure or other disruptions. Any such breach could compromise our networks, or the networks of our third-party providers, and the information stored there could be accessed, held for ransom, publicly disclosed, misappropriated, lost or stolen. Some of our systems will not be fully redundant and any problems at our third-party providers' data centers could result in lengthy interruptions in service. Such a breach, misappropriation or disruption could also disrupt our operations and the services we provide to clients, damage our reputation, and cause a loss of confidence in our tools and services, as well as require us to expend significant resources to protect against further breaches and to rectify problems caused by these events. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under applicable laws, and regulatory penalties and could adversely affect our business, revenues and competitive position.

The techniques utilized and planned by hackers, bad actors, and other unauthorized entrants are varied and constantly evolving and may not be detected until a breach has occurred. As a result, despite our efforts, it may be difficult or impossible for us to implement measures that fully prevent such attacks or react in a timely manner. Unauthorized parties may in the future attempt to gain access to our systems or facilities through various means, including, among others, hacking into our or our clients' systems or facilities, or attempting to fraudulently induce our employees, clients or others into disclosing usernames, passwords, or other sensitive information, which may, in turn, be used to access our information technology systems and gain access to our data or other confidential, proprietary, or sensitive information. Such efforts may be state-sponsored and supported by significant financial and technological resources, making them even more difficult to detect and prevent. There can be no assurance that any security or other operational measures that we or our third-party providers have implemented will be effective against any of the foregoing threats or issues.

In addition, certain of our third-party providers may also be subject to such attempts, which then can be used to attempt to infiltrate our systems or to access our data or other confidential, proprietary, or sensitive information. Because we do not control our third-party service providers or the processing of data by such providers, other than through our contractual relationships, our ability to monitor our third-party providers' data security may be very limited such that we cannot ensure the integrity or security of measures they take to protect and prevent the loss of our or our clients' data. As a result, we are subject to the risk that cyber-attacks on, or other security incidents affecting, our third-party providers may adversely affect our business even if an attack or breach does not directly impact our systems. It is also possible that security breaches sustained by, or other security incidents affecting, our competitors could result in negative publicity for our entire industry that indirectly harms our reputation and diminishes demand for our services and solutions.

Furthermore, federal and state regulators and many federal and state laws and regulations require notice of certain data security breaches that involve personal information, which, if applicable, could lead to widespread negative publicity, which may cause our clients to lose confidence in the effectiveness of our data security measures. In addition, we may incur significant costs and operational consequences in connection with investigating, mitigating, remediating, eliminating, and putting in place additional measures designed to prevent future actual or perceived security incidents, as well as in connection with complying with any notification or other obligations resulting from any security incidents.

Our insurance policies may not be adequate to reimburse us for losses caused by security breaches, and we may not be able to collect fully, if at all, under these insurance policies. The successful assertion of one or more large claims against us that exceed 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 adversely affect our business. Furthermore, we cannot be certain that insurance coverage will continue to be available on acceptable terms or at all, or that the insurer will not deny coverage as to any future claim.

If we are unable to fully protect the security and privacy of our data, or if we or our third-party service providers are unable to prevent any data security breach, incident, unauthorized access, and/or misuse of our information by our clients, employees, service providers, or hackers, it could result in significant liability (including litigation and regulatory actions and fines), cause lasting harm to our brand and reputation and cause us to lose existing clients and fail to win new clients.

A significant failure in our systems, telecommunications or IT infrastructure could harm our service model, which could result in a reduction of our revenues and otherwise disrupt our business.

Our service model relies on maintaining well-functioning voice and data communications, online resource management, financial and operational record management, client service and data processing systems between our client sites and our client management locations. Our business activities may be materially disrupted in the event of a partial or complete failure of any of these technologies, which could be due to software malfunction, computer virus attacks, conversion errors due to system upgrades, damage from fire, earthquake, power loss, telecommunications failure, unauthorized entry, demands placed on internet infrastructure by growing numbers of users and time spent online, increased bandwidth requirements or other events beyond our control. Such events could result in interruptions in service to our clients, damage to our reputation, harm to our client relationships, and reduced revenues and profitability. Further, because we rely on third-party service providers, we may be affected by security incidents that we can neither control nor mitigate, including their vulnerability to damage or interruption from physical theft, fire, natural disasters, acts of terrorism, power loss, war, telecommunications and other service failures, computer viruses, degradation of service attacks, ransomware, insider theft or misuse, break-ins, software bugs, human error, technical malfunctions and similar events.

Our crisis management procedures, business continuity plans and disaster recovery capabilities may not be effective at preventing or mitigating the effects of such disruptions, particularly in the case of a catastrophic event. Loss of all or part of the infrastructure or systems for a period of time could hinder our performance or our ability to complete client projects on time which, in turn, could lead to a reduction of our revenues or otherwise materially adversely affect our business and business reputation.

Risks Related to Regulation, Legislation and Legal Proceedings

Changes in privacy and data protection regulations could expose us to risks of noncompliance and costs associated with compliance.

We are subject to federal, state and international data privacy and data security regimes due to our global business. For example, among others, we are subject to the European Union’s General Data Protection Regulation (the “GDPR”), California’s Consumer Privacy Act (the “CCPA”), China’s PRC Cybersecurity Law and Brazil’s General Protection Data Law. Each regulatory regime imposes significant restrictions and requirements relating to the processing of personal data. These and other national and international data protection laws are more burdensome than historical privacy standards. Each regime has established complex legal obligations that organizations must follow with respect to the processing of personal data, including a limitation on the transfer of personal information to third parties or to other countries, and the imposition of additional notification, security and other control measures. Compliance with such regimes, including U.S. and foreign data protection laws and regulations, could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, or in some cases, impact our ability to operate.

In the United States, numerous federal and state laws and regulations, including state data breach notification laws and state consumer protection laws, which govern the collection, use, disclosure and protection of personal information could apply to our operations. Many state legislatures have adopted legislation that regulates how businesses operate online, including measures relating to privacy, data security and data breaches. Laws in all 50 states require businesses to provide notice to clients whose personally identifiable information has been disclosed as a result of a data breach. The laws are not consistent, and compliance in the event of a widespread data breach is costly. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches. Additionally, a new privacy law, the California Privacy Rights Act (the “CPRA”), was approved by California voters in the November 2020 election. The CPRA, which will take effect in most material respects in January 2023, modifies the CCPA significantly, potentially resulting in further uncertainty and requiring us to incur additional costs and expenses in an effort to comply.

Foreign data protection laws, including the GDPR, may also apply to other personal information obtained outside of the United States. The GDPR introduced new data protection requirements in the European Union (the “EU”), as well as potential fines for noncompliant companies of up to the greater of €20 million or 4% of annual global revenue. Among other requirements, the GDPR regulates transfers of personal data subject to the GDPR to third countries that have not been found to provide adequate protection to such personal data, including the United States, and the efficacy and longevity of current transfer mechanisms between the EU and the United States remains uncertain. For example, in 2016, the EU and United States agreed to a transfer framework for data transferred from the EU to the United States, called the Privacy Shield, but the Privacy Shield was invalidated in July 2020 by the Court of Justice of the European Union.

Enforcement actions and decision notices taken by the European Union data protection authorities, in the case of GDPR, by individuals or the California regulatory authorities, in the case of the CCPA, or by other relevant supervisory bodies as well as audits or investigations by one or more individuals, organizations, or foreign government agencies could result in civil or criminal penalties and fines for non-compliance or direct claims against us in the event of any loss or damage as a result of a breach of these regulations. The burden of compliance with additional data protection requirements may result in significant additional costs, complexity and risk in our services. Clients may seek to shift the potential risks resulting from the implementation of data privacy legislation to us. We are required to establish processes and change certain operations in relation to the processing of personal data as a result of these many regulatory regimes, which may involve substantial expense and distraction from other aspects of our business. The rate of change in the privacy and data protection landscape compounds these risks. Claims that we have violated individuals’ privacy rights, failed to comply with data protection laws or breached our contractual obligations, even if we are not found liable, could be expensive and time consuming to defend, could result in adverse publicity and could have a material adverse effect on our business, financial condition, results of operations and prospects.

We are subject to laws and regulations in the U.S. and other countries in which we operate, including export-import restrictions and regulations, economic and trade sanctions, and the Foreign Corrupt Practices Act (the “FCPA”) and similar anti-corruption laws. Compliance with these laws requires significant resources and non-compliance may result in civil or criminal penalties and other remedial measures.

We are subject to many laws and regulations that restrict our international operations, including laws that prohibit activities involving restricted countries, organizations, entities and persons that have been identified as unlawful actors or that are subject to U.S. sanctions. The U.S. Office of Foreign Assets Control ("OFAC)" and other regulatory bodies that may have jurisdiction of aspects of our operations from time to time have imposed sanctions that prohibit us from engaging in trade or financial transactions with certain countries, businesses, industry sectors, organizations and individuals. We are also subject to the FCPA and anti-bribery and anti-corruption laws in other countries, all of which prohibit companies and their intermediaries from bribing government officials and other business partners for the purpose of obtaining or keeping business or otherwise obtaining favorable treatment. We operate in many parts of the world that have experienced government corruption to some degree, and, in certain circumstances, strict compliance with anti-bribery laws may conflict with local customs and practices, although adherence to local customs and practices is generally not a defense under U.S. and other anti-bribery laws.

Our compliance program contains controls and procedures designed to ensure our compliance with the FCPA, OFAC and other sanctions, and laws and regulations. The continuing implementation and ongoing development and monitoring of our compliance program may be time consuming, expensive, and could result in the discovery of compliance issues or violations by us or our employees, independent contractors, subcontractors or agents of which we were previously unaware.

Any violations of these or other laws, regulations and procedures by our employees or agents, including third parties with whom we associate or companies we acquire, could expose us to administrative, civil or criminal penalties, fines or business restrictions, which could have a material adverse effect on our results of operations and financial condition and would adversely affect our reputation and the market for shares of our common stock and may require certain of our investors to disclose their investment in us under certain state laws.

We may become subject to disputes or legal or other proceedings that could involve significant expenditures by us, which could have a material adverse effect on us, including our financial results.

The nature of our business exposes us to the potential for disputes or legal or other proceedings from time to time relating to product liability, tax matters, personal injury, labor and employment matters, contract disputes, intellectual property, data privacy and data security, and other issues. These disputes, individually or collectively, could affect our business by distracting our management from the operation of our business or impacting our market reputation with our clients. If these disputes develop into proceedings or judgments, these proceedings or judgments, individually or collectively, could involve significant expenditures and any reserves relating thereto may ultimately prove to be inadequate.

Our environmental, social and governance (ESG) commitments and disclosures may expose us to reputational risks and legal liability.

Our brand and reputation are also associated with our public commitments to various ESG initiatives, including our goals relating to sustainability and inclusion and diversity. Our disclosures on these matters and any failure or perceived failure to achieve or accurately report on our commitments, could harm our reputation and adversely affect our client relationships or our recruitment and retention efforts, as well as expose us to potential legal liability. In addition, positions we take or do not take on social issues may be unpopular with some of our employees, our clients or potential clients, governments or advocacy groups, which may impact our ability to attract or retain employees or the demand for our services. We also may choose not to conduct business with potential clients or discontinue or not expand business with existing clients due to these positions.

Increasing focus on ESG matters from regulators, investors and consumers has resulted in, and is expected to continue to result in, the adoption of legal and regulatory requirements designed to mitigate the effects of climate change on the environment, legal and regulatory requirements requiring climate, human rights and supply chain-related disclosures and changing consumer preferences and buying practices. If we fail to comply with new laws, regulations or reporting requirements or keep pace with ESG trends and developments or fail to meet the expectations of our clients and investors, our reputation and business could be adversely impacted. Further, if new laws or regulations are more stringent than current legal or regulatory requirements, we may experience increased compliance burdens and costs to meet such obligations. In addition, our selection of voluntary disclosure frameworks and standards, and the interpretation or application of those frameworks and standards, may change from time to time or may not meet the expectations of investors or other stakeholders.

In addition, organizations that provide information to investors on ESG performance and related matters have developed ratings processes for evaluating companies on their approach to ESG matters. Such ratings are used by some investors to inform their investment and voting decisions, and thus unfavorable ESG ratings could have a negative impact on our stock price and our access to and costs of capital.

Further, while we have certain ESG initiatives, goals and commitments, including in relation to sustainability and inclusion and diversity, there can be no assurance that investors and other stakeholders will determine that these programs are sufficiently robust. There can be no assurance that we will be able to accomplish any announced goals related to such initiatives, as statements regarding our ESG-related goals reflect our current plans and aspirations and are not guarantees that we will be able to achieve them within the timelines we announce or at all. Our ability to achieve our ESG commitments, including our goals relating to sustainability and inclusion and diversity, is also subject to numerous risks, many of which are outside of our control. Methodologies for reporting ESG data may be updated and previously reported ESG data may be adjusted to reflect improvement in availability and quality of third-party data, changing assumptions, changes in the nature and scope of our operations and other changes in circumstances. Our processes and controls for reporting ESG matters across our operations and supply chain are evolving along with multiple disparate standards for identifying, measuring, and reporting ESG metrics, including ESG-related disclosures that may be required by the SEC, European and other regulators, and such standards may change over time, which could result in significant revisions to our current goals, reported progress in achieving such goals, or ability to achieve such goals in the future as well as additional costs and administrative burden that may result from compliance efforts in connection with such evolving standards.

Risks Related to Our Indebtedness

Our existing indebtedness could adversely affect our business and growth prospects.

As of December 31, 2022, we had $402.5 million outstanding under our senior secured term loan provided for under the Term Loan and $300.0 million of availability under our Revolver (as defined below). Our debt service obligation includes the payment of interest expense. Failure to pay on our obligations could trigger an event of default, the consequences of which are explained herein. See “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Our Credit Facilities.” Our indebtedness, and any future indebtedness we may incur, could require us to divert funds identified for other purposes for debt service, which could adversely affect our business and growth prospects.

Our level of indebtedness may place us at a competitive disadvantage to our competitors that are not as highly leveraged. Fluctuations in interest rates can increase borrowing costs. Increases in interest rates may directly impact the amount of interest we are required to pay and reduce earnings accordingly. In addition, developments in tax policy, such as the disallowance of tax deductions for interest paid on outstanding indebtedness, could have an adverse effect on our liquidity and our business, financial condition and results of operations.

The Credit Agreement governing our Term Loan and Revolver contains a number of restrictive covenants that impose significant operating and financial restrictions on us and may limit our ability to engage in acts that may be in our long-term best interests, including our ability to incur additional debt, create or incur liens, engage in mergers or consolidations, sell, transfer or otherwise dispose of assets, make voluntary prepayments to subordinated debt, pay dividends or distributions, make investments, and enter into certain transactions with affiliates. In addition, the restrictive covenants in the Credit Agreement require us to satisfy a financial condition test for the benefit of our Revolver in the event our Revolver usage exceeds 35% of our available Revolver (subject to certain exclusions for letters of credit). Our ability to satisfy those tests can be affected by events beyond our control.

A breach of the covenants or restrictions under the Credit Agreement could result in an event of default, which could permit our creditors to accelerate our debt and terminate commitments to extend credit to us. In addition, if we cannot generate sufficient cash flow from operations to service our debt, we may need to refinance our debt, dispose of assets or issue equity to obtain necessary funds, which we may not be able to do on favorable terms, or at all.

In addition, the Credit Agreement currently uses London Interbank Offered Rate (LIBOR) as a reference rate for the Term Loan and the Secured Overnight Financing Rates (SOFR) as a reference rate for the Revolver. It is expected that US banks will phase LIBOR out as a benchmark for loans by mid-2023. The Credit Agreement allows us to continue to use LIBOR for the Term Loan until that time with the option to switch to SOFR prior to the LIBOR phase out. While the Credit Agreement includes LIBOR replacement provisions, it is impossible to predict the effect of LIBOR being phased out on our interest expense or financial condition generally.

Risks Related to Our Intellectual Property

If we cannot protect our brand through our intellectual property rights, our business may be harmed.

We believe that developing and maintaining our brand is critical to achieving widespread acceptance of our services and solutions and is an important element in attracting new clients and retaining existing clients. We rely on our brand names, trademarks, trade names and service marks to distinguish our services and solutions from the services of our competitors. If we are unable to adequately protect our brand, trademarks and other intellectual property rights, third parties may use brand names or trademarks similar to ours in a manner that may cause confusion or dilute our brand or trademarks, which could decrease the value of our brand. From time to time, third parties may challenge our use of our trademarks. If we do enforce our trademarks and our other intellectual property rights through litigation, we may not be successful and the litigation may result in substantial costs and diversion of resources and management attention. In the event that our trademarks are successfully challenged, we could be forced to rebrand the affected services and solutions, which could result in loss of brand recognition and could have a material adverse impact on our business.

We may not be able to prevent unauthorized use of our or our clients' intellectual property, and our business and competitive position may be damaged as a result.

We rely on a combination of copyright, trademark, patent and unfair competition laws, as well as intellectual property assignment and confidentiality agreements and other methods to protect our intellectual property rights. Protection of intellectual property rights and confidentiality in some countries, including China, India and Brazil, in which we operate may not be as effective as in other countries with more developed intellectual property protections.

We require our employees and independent contractors to assign to us all intellectual property and work product they create in connection with their employment or engagement. These assignment agreements also obligate our people to keep proprietary information confidential. While it is our policy to require our employees and independent contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. If these agreements are not enforceable in any of the jurisdictions in which we operate, we cannot ensure that we will own the intellectual property they create or that our clients' proprietary information will not be disclosed. Reverse engineering, unauthorized copying or other misappropriation of our clients' proprietary technologies, tools and applications could enable unauthorized parties to benefit from our clients' technologies, tools and applications without payment and may make us liable to our clients for damages and compensation, which could harm our business and competitive position.

We may face intellectual property infringement, misappropriations or other violation claims that could be time-consuming and costly to defend. If we fail to defend ourselves against such claims, we may lose significant intellectual property rights, our reputation may be damaged, we may lose clients and our business could be materially adversely affected.

Our success largely depends on our ability to use and develop our technology, tools, code, methodologies, solutions and services for our clients without infringing, misappropriating or otherwise violating third parties' intellectual property rights, including patents, copyrights, trade secrets and trademarks. We may be unaware of intellectual property rights relating to our solutions or services that could give rise to potential infringement, misappropriation or violation claims against us or our clients. If those intellectual property rights are potentially relevant to our service offerings, we may need to license those rights in order to continue to use the applicable technology, but the holders of those intellectual property rights may be unwilling to license those rights to us on commercially acceptable terms, if at all.

We typically indemnify clients who purchase our services and solutions against potential infringement of third-party intellectual property rights, which subjects us to the risk and cost of defending the underlying infringement 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 our indemnification obligations are often not subject to liability limits or exclusion of consequential, indirect or punitive damages. Intellectual property litigation could also divert our management's attention from our business and existing or potential clients could defer or limit their purchase or use of our software product development services or solutions until we resolve such litigation. 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 tools, services or solutions to that client, or obtain a license for the intellectual property that such services or solutions allegedly infringe. If we cannot obtain all necessary licenses on commercially reasonable terms, the affected client may be forced to stop using our services or solutions.

Any of these actions, regardless of the outcome of litigation or merits of the claim, could damage our reputation and materially adversely affect our business, financial condition and results of operations.

Risks Related to Our Common Stock

Our stock price may be volatile, and the value of our common stock may decline.

The market price of our common stock may be highly volatile and may fluctuate or decline substantially as a result of a variety of factors, some of which are beyond our control, including without limitation:

- actual or anticipated fluctuations in our financial condition or results of operations;
- variance in our financial performance from expectations of securities analysts;
- changes in our projected operating and financial results;
- announcements by us or our competitors of significant business developments, acquisitions, or new offerings;
- significant data breaches, disruptions to, or other incidents involving our services;
- our involvement in litigation;
- future sales of our common stock by us or our stockholders, including as a result of our contractual and other Company-imposed equity plan lock-up releases, beginning in March 2022 or the perception that such sales may occur;
- changes in senior management or key personnel;
- the trading volume of our common stock;
- changes in the anticipated future size and growth rate of our market; and
- general macroeconomic, geopolitical and market conditions beyond our control.

Broad market and industry fluctuations, as well as general economic, political, regulatory, and market conditions, such as recessions, interest rate changes, or international currency fluctuations, may also negatively impact the market price of our common stock. In addition, technology stocks have historically experienced high levels of volatility. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial expenses and divert our management's attention.

Our issuance of additional capital stock in connection with financings, acquisitions, investments, our equity incentive plans, or otherwise will dilute all other stockholders.

We expect to issue additional capital stock in the future that will result in dilution to all other stockholders. We expect to grant equity awards to employees, directors, and consultants under our equity incentive plans. We may also raise capital through equity financings in the future. As part of our business strategy, we may acquire or make investments in companies, products, or technologies and issue equity securities to pay for any such acquisition or investment. Any such issuances of additional capital stock may cause stockholders to experience significant dilution of their ownership interests and the per share value of our common stock to decline.

If securities or industry analysts do not publish research or publish unfavorable or inaccurate research about our business, the market price and trading volume of our common stock could decline.

The market price and trading volume of our common stock is heavily influenced by the way analysts interpret our financial information and other disclosures. We do not have control over these analysts. If securities analysts or industry analysts cease coverage of us, our stock price would be negatively affected. If securities or industry analysts do not publish research or reports about our business, downgrade our common stock, or publish negative reports about our business, our stock price would likely decline.

We do not intend to pay dividends for the foreseeable future and, as a result, the ability of the holders of our common stock to achieve a return on their investment will depend on appreciation in the price of our common stock.

We do not intend to pay any cash dividends in the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our Board. Accordingly, holders of our common stock may need to rely on sales of our common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment.

The Apax Funds control us, and their interests may conflict with ours or yours in the future.

The Apax Funds indirectly beneficially own approximately 62.6% as of December 31, 2022, of our common stock. As a result, the Apax Funds are able to control the election and removal of directors on the Board and thereby determine our corporate and management policies, including potential mergers or acquisitions, payment of dividends, asset sales, amendment of our certificate of incorporation or bylaws, and other significant corporate transactions for so long as the Apax Funds and their affiliates retain significant ownership of us. This concentration of our ownership may delay or deter possible changes in control of the Company, which may reduce the value of an investment in our common stock. Even when the Apax Funds cease to own shares of our stock representing a majority of the total voting power, for so long as the Apax Funds continue to own a significant portion of our stock, the Apax Funds will still be able to significantly influence the composition of our Board and the approval of actions requiring shareholder approval. Accordingly, for such period of time, the Apax Funds will have significant influence with respect to our management, business plans and policies, including the appointment and removal of our officers, decisions on whether to raise future capital, and amending our charter and bylaws, which govern the rights attached to our common stock. In particular, for so long as the Apax Funds continue to beneficially own a significant percentage of our stock, the Apax Funds could cause or prevent a change of control of the Company or a change in the composition of our Board and could preclude any unsolicited acquisition of us. The concentration of ownership could deprive you of an opportunity to receive a premium for your shares of common stock as part of a sale of us and ultimately might affect the market price of our common stock.

On September 17, 2021, we entered into a director nomination agreement (the "Director Nomination Agreement") with the Apax Funds through their control of Turing EquityCo. II L.P. that provides the Apax Funds the right, but not the obligation, to nominate a number of individuals designated for election as our Board at any meeting of our stockholders (the “Apax Directors”), such that, upon the election of each such individual, and each other individual nominated by or at the direction of our Board or a duly-authorized committee of the board, as a director of our company, the number of Apax Directors serving as directors of our company will be equal to: (i) if the Apax Funds and their affiliates together continue to beneficially own at least 50% of the total voting power of the outstanding shares of our common stock, the lowest whole number that is greater than 50% of the total number of directors comprising our Board; (ii) if the Apax Funds and their affiliates together continue to beneficially own at least 40% (but less than 50%) of the total voting power of the outstanding shares of our common stock, the lowest whole number that is at least 40% of the total number of directors comprising our Board; (iii) if the Apax Funds and their affiliates together continue to beneficially own at least 30% (but less than 40%) of the total voting power of the outstanding shares of our common stock, the lowest whole number that is at least 30% of the total number of directors comprising our Board; (iv) if the Apax Funds and their affiliates together continue to beneficially own at least 20% (but less than 30%) of the total voting power of the outstanding shares of our common stock, the lowest whole number that is at least 20% of the total number of directors comprising our Board; and (v) if the Apax Funds and their affiliates together continue to beneficially own at least 10% (but less than 20%) of the total voting power of the outstanding shares of our common stock, the lowest whole number that is at least 10% of the total number of directors comprising our Board. The Apax Funds may also assign such rights to their affiliates. The Director Nomination Agreement also provides for certain consent rights for the Apax Funds so long as they own at least 50% of the total voting power of the outstanding shares of our common stock. Additionally, the Director Nomination Agreement also prohibits us from increasing or decreasing the size of our Board without the prior written consent of the Apax Funds for so long as the Apax Funds hold at least 40% of the total voting power of the outstanding shares of our common stock.

Apax Partners, the Apax Funds and their affiliates engage in a broad spectrum of activities, including investments in the software industry and technology industry generally. In the ordinary course of their business activities, Apax Partners, the Apax Funds and their affiliates may engage in activities where their interests conflict with our interests or those of our other shareholders, such as investing in or advising businesses that directly or indirectly compete with certain portions of our business or are suppliers or clients of ours. Our certificate of incorporation provides that none of Apax Partners, the Apax Funds, any of their affiliates, or any director who is not employed by us (including any non-employee director who serves as one of our officers in both his or her director and officer capacities) will have any duty to refrain from engaging, directly or indirectly, in the same business activities or similar business activities or lines of business in which we operate. Apax Partners and the Apax Funds also may pursue acquisition opportunities that may be complementary to our business, and, as a result, those acquisition opportunities may not be available to us. In addition, Apax Partners and the Apax Funds may have an interest in pursuing acquisitions, divestitures and other transactions that, in their judgment, could enhance their investment, even though such transactions might involve risks to you.

We are a “controlled company” within the meaning of Nasdaq rules and, as a result, we will qualify for, and intend to rely on, exemptions from certain corporate governance requirements. You will not have the same protections as those afforded to stockholders of companies that are subject to such governance requirements.

The Apax Funds continue to indirectly control a majority of the voting power of our outstanding common stock. As a result, we are a “controlled company” within the meaning of the corporate governance standards of Nasdaq. Under these rules, a company of which more than 50% of the voting power for the election of directors is held by an individual, group or another company is a “controlled company” and may elect not to comply with certain corporate governance requirements, including:

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

In the future, we may not have a majority of independent directors on our Board, our Compensation and Talent Committee and our Nominating and Governance Committee may not consist entirely of independent directors, and our Compensation and Talent and Nominating and Governance Committees may not be subject to annual performance evaluations. Accordingly, you will not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance requirements of other companies listed on Nasdaq.

As a result of being a public company, we are obligated to develop and maintain proper and effective internal control over financial reporting, and any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our common stock.

We are required, pursuant to Section 404 of the Sarbanes-Oxley Act of 2002 ("SOX"), to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting as of December 31, 2022. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. In addition, our independent registered public accounting firm is required to attest to the effectiveness of our internal control over financial reporting. Our compliance with Section 404 requires that we incur substantial expenses and expend significant management efforts.

During the evaluation and testing process of our internal controls, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to certify that our internal control over financial reporting is effective. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition or results of operations. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

We no longer qualify as an emerging growth company as defined in the JOBS Act and as such we no longer are entitled to rely on exemptions from certain compliance requirements that are applicable to companies that are emerging growth companies.

We are no longer able to continue to take advantage of cost savings associated with the JOBS Act. Furthermore, if the additional requirements applicable to non-emerging growth companies divert the attention of our management and personnel from other business concerns, they could have a material adverse effect on our business, financial condition and results of operations. The increased costs will decrease our net income or increase our net loss and may require us to reduce costs in other areas of our business. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. Furthermore, if we are unable to satisfy our obligations as a non-emerging growth company, we could be subject to delisting of our common stock, fines, sanctions and other regulatory action and potentially civil litigation.

Provisions of our corporate governance documents could make an acquisition of us more difficult and may prevent attempts by our shareholders to replace or remove our current management, even if beneficial to our shareholders.

In addition to the Apax Funds' beneficial ownership of 62.6% as of December 31, 2022, of our common stock, our certificate of incorporation and bylaws and the Delaware General Corporation Law (the "DGCL") contain provisions that could make it more difficult for a third party to acquire us, even if doing so might be beneficial to our shareholders. Among other things:

- these provisions allow us to authorize the issuance of undesignated preferred stock, the terms of which may be established and the shares of which may be issued without shareholder approval, and which may include supermajority voting, special approval, dividend or other rights or preferences superior to the rights of shareholders;
- these provisions provide for a classified Board with staggered three-year terms;
- these provisions provide that, at any time when the Apax Funds beneficially own, in the aggregate, less than 50% in voting power of our stock entitled to vote generally in the election of directors, directors may only be removed for cause, and only by the affirmative vote of holders of at least $66^{2/3}$% in voting power of all the then-outstanding shares of our stock entitled to vote thereon, voting together as a single class;
- these provisions prohibit shareholder action by written consent from and after the date on which the Apax Funds beneficially own, in the aggregate, less than 50% in voting power of our stock entitled to vote generally in the election of directors;
- these provisions provide that, for as long as the Apax Funds beneficially own, in the aggregate, at least 50% in voting power of our stock entitled to vote generally in the election of directors, any amendment, alteration, rescission or repeal of our bylaws by our shareholders will require the affirmative vote of a majority in voting power of the outstanding shares of our stock and at any time when the Apax Funds beneficially own, in the aggregate, less than 50% in voting power of all outstanding shares of our stock entitled to vote generally in the election of directors, any amendment, alteration, rescission or repeal of our bylaws by our shareholders will require the affirmative vote of the holders of at least $66^{2/3}$% in voting power of all the then-outstanding shares of our stock entitled to vote thereon, voting together as a single class; and
- these provisions establish advance notice requirements for nominations for elections to our Board or for proposing matters that can be acted upon by shareholders at shareholder meetings.

Our certificate of incorporation contains a provision that provides us with protections similar to Section 203 of the DGCL and will prevent us from engaging in a business combination with a person (excluding the Apax Funds and any of their direct or indirect transferees and any group as to which such persons are a party) who acquires at least 15% of our common stock for a period of three years from the date such person acquired such common stock, unless board or shareholder approval is obtained prior to the acquisition. These provisions could discourage, delay or prevent a transaction involving a change in control of us. These provisions could also discourage proxy contests and make it more difficult for you and other shareholders to elect directors of your choosing and cause us to take other corporate actions you desire, including actions that you may deem advantageous, or negatively affect the trading price of our common stock. In addition, because our Board is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our shareholders to replace current members of our management team.

These and other provisions in our certificate of incorporation, bylaws and Delaware law could make it more difficult for shareholders or potential acquirers to obtain control of our Board or initiate actions that are opposed by our then-current Board, including delay or impede a merger, tender offer or proxy contest involving our company. The existence of these provisions could negatively affect the price of our common stock and limit opportunities for you to realize value in a corporate transaction.

Our certificate of incorporation designates the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation that may be initiated by our shareholders and the federal district courts of the United States as the exclusive forum for litigation arising under the Securities Act, which could limit our shareholders' ability to obtain a favorable judicial forum for disputes with us.

Pursuant to our certificate of incorporation, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our shareholders, (iii) any action asserting a claim against us arising pursuant to any provision of the DGCL, our certificate of incorporation or our bylaws, or (iv) any other action asserting a claim against us that is governed by the internal affairs doctrine; provided that, for the avoidance of doubt, the forum selection provision that identifies the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation, including any "derivative action," will not apply to suits to enforce a duty or liability created by the Securities Act, the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. Our certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the federal district courts of the U.S. shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. However, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce a duty or liability created by the Securities Act or the rules and regulations thereunder; accordingly, we cannot be certain that a court would enforce such a provision. Our certificate of incorporation further provides that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock is deemed to have notice of and consented to the provisions of our certificate of incorporation described above; however, our shareholders will not be deemed to have waived (and cannot waive) compliance with the federal securities laws and the rules and regulations thereunder. The forum selection clause in our certificate of incorporation may have the effect of discouraging lawsuits against us or our directors and officers and may limit our shareholders' ability to obtain a favorable judicial forum for disputes with us. If the enforceability of our forum selection provision were to be challenged, we may incur additional costs associated with resolving such a challenge. While we currently have no basis to expect that any such challenge would be successful, if a court were to find our forum selection provision to be inapplicable or unenforceable, we may incur additional costs associated with having to litigate in other jurisdictions, which could have an adverse effect on our business, financial condition and results of operations and result in a diversion of the time and resources of our employees, management and Board.

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

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. In addition, pursuant to a Registration Rights Agreement, certain holders of shares of our common stock, including the Apax Funds, have the right, in certain circumstances, to require us to register shares of our common stock under the Securities Act for sale into the public markets. Upon the effectiveness of such a registration statement, all shares covered by the registration statement will be freely transferable under the Securities Act.

Item 1B. *Unresolved Staff Comments*

None.

Item 2. *Properties*

Our corporate headquarters are leased and located at 200 E. Randolph Street, in Chicago, Illinois. We also lease additional office space domestically in Atlanta, Georgia; Chicago, Illinois; Dallas, Texas; Denver, Colorado; New York, New York; and San Francisco, California. In addition, we lease office space in various international locations, including offices in Australia, Brazil, Canada, Chile, China, Ecuador, Finland, Germany, India, Italy, Netherlands, Romania, Singapore, Spain, Thailand, the United Kingdom and Vietnam.

We may procure additional space as we add employees and expand geographically. We believe that our facilities are adequate to meet our needs for the immediate future and that suitable additional space will be available to accommodate any expansion of our operations as needed.

Item 3. *Legal Proceedings*

From time to time, we may be involved in litigation relating to claims arising out of our operations and businesses that cover a wide range of matters, including, among others, intellectual property, data privacy and cybersecurity, contract and employment, personal injury, product liability and warranty. Currently, there are no claims or proceedings against us that we believe will have a material adverse effect on our business, financial condition, results of operations or cash flows. However, the results of any current or future litigation cannot be predicted with certainty and, regardless of the outcome, we may incur significant costs and experience a diversion of management resources as a result of litigation.

Item 4. *Mine Safety Disclosures*

Not applicable.

PART II

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

Market Information for Common Stock

Our common stock began trading on the Nasdaq Global Select Market under the symbol "TWKS" on September 15, 2021. Prior to that date, there was no public trading market for our common stock.

Holders of Record

As of February 23, 2023, there were 18 holders of record of our common stock. Because many of our shares of common stock are held in street name by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these holders of record.

Dividend Policy

We currently intend to retain all available funds and any future earnings to fund the development and growth of our business and to repay indebtedness and, therefore, we do not anticipate paying any cash dividends in the foreseeable future. Additionally, our ability to pay dividends on our common stock is limited by restrictions on the ability of our subsidiaries to pay dividends or make distributions to us, including as a result of the restrictions in our credit agreement. Any future determination to pay dividends will be at the discretion of our Board, subject to compliance with covenants in current and future agreements governing our and our subsidiaries' indebtedness and requirements under Delaware law, and will depend on our results of operations, financial condition, capital requirements and other factors that our Board may deem relevant.

Because we are a holding company and have no direct operations, we will only be able to pay dividends from our available cash on hand and any funds we received from our subsidiaries.

Under Delaware law, dividends may be payable only out of surplus, which is calculated as our net assets less our liabilities and our capital, or, if we have no surplus, out of our net profits for the fiscal year in which the dividend is declared and/or the preceding fiscal year.

See "Risk Factors—Risks Related to Our Common Stock—We do not intend to pay dividends for the foreseeable future and, as a result, the ability of the holders of our common stock to achieve a return on their investment will depend on appreciation in the price of our common stock."

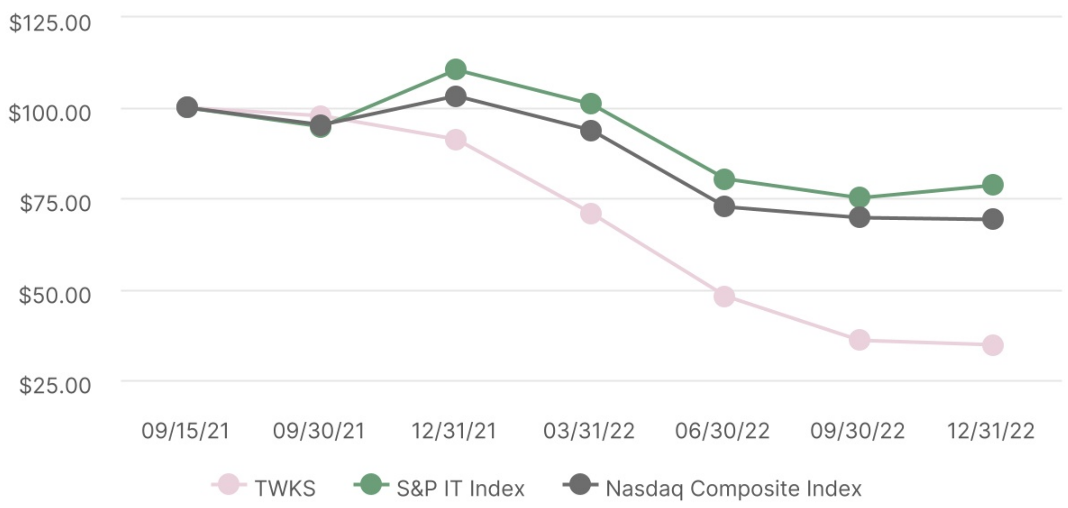
Securities Authorized for Issuance under Equity Compensation Plans

The information required by this item will be filed (and is hereby incorporated by reference) by an amendment hereto or pursuant to a definitive proxy statement pursuant to Regulation 14A that will contain such information.

Stock Performance Graph

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

The following graph and related information shows a comparison of the change in the cumulative total return of our common stock, the Nasdaq Composite Index and the S&P 500 Information Technology Index, between September 15, 2021 (the date our common stock commenced trading on Nasdaq) and December 31, 2022. All values assume an initial investment of $100 and reinvestment of any dividends. The comparisons are based on historical data and are not indicative of, nor intended to forecast, the future performance of our common stock.



Unregistered Sales of Equity Securities

There were no unregistered sales of equity securities during the year ended December 31, 2022.

Issuer Purchases of Equity Securities

None.

Item 6. *[Reserved]*

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K. Some of the information contained in this discussion and analysis, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should read the sections titled “Risk Factors” and “Forward-Looking Statements and Risk Factor Summary” herein for a discussion of important 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.

A discussion of our financial condition and results of operations for the fiscal year ended December 31, 2022 compared to the fiscal year ended December 31, 2021 is presented below. A discussion of our financial condition and results of operations for the fiscal year ended December 31, 2021 compared to the fiscal year ended December 31, 2020 is included under "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended December 31, 2021, filed with the Securities and Exchange Commission (the “SEC”) on March 8, 2022.

Overview

We are a global technology consultancy that integrates strategy, design and engineering to drive digital innovation. We are over 12,500 Thoughtworkers strong across 50 offices in 18 countries. Over the last 25+ years, we have delivered extraordinary impact together with our clients by helping them solve complex business problems with technology as the differentiator.

In April 2022, we completed the acquisition of Connected Lab Inc. ("Connected"), an end-to-end product design and development firm, which will advance our capabilities in solving business problems through product-led design processes, from defining the strategy to discovery and delivery. Refer to Note 3, Acquisitions, for further detail.

In August 2022, we completed the acquisition of Handmade Design, an innovation through design consultancy, which will add premium customer experience ("CX") and product design capacity and capabilities in Brazil for the benefit of clients and end users worldwide. The effect of this acquisition was not material on the Company’s consolidated financial statements.

Our revenues are generated from providing professional services based on the mix and locations of delivery professionals involved, the pricing structure, which is predominantly time-and-materials, and the type of services, including: enterprise modernization, platforms & cloud; customer experience, product & design; data & artificial intelligence; and digital transformation & operations.

Key Operational and Business Metrics

In addition to the measures presented in our consolidated financial statements, we use the following key operational and business metrics to evaluate our business, measure our performance, develop financial forecasts and make strategic decisions (in thousands, except percentages):

	Year Ended December 31,		
	2022	2021	2020
Revenues	$ 1,296,238	$ 1,069,945	$ 803,375
Revenue Growth Rate as reported (1)	21.1 %	33.2 %	4.0 %
Revenue Growth Rate at constant currency (1)	26.8 %	29.3 %	5.1 %
Net (loss) income	$ (105,393)	$ (575)	$ 78,973
Net (loss) income margin	(8.1)%	(0.1)%	9.8 %
Adjusted Net Income (2)	$ 139,911	$ 125,400	$ 86,383
Adjusted EBITDA (3)	$ 256,793	$ 223,247	$ 153,193
Adjusted EBITDA Margin (3)	19.8 %	20.9 %	19.1 %

(1) Certain of our subsidiaries use functional currencies other than the U.S. dollar and the translation of these foreign currency amounts into the U.S. dollar can impact the comparability of our revenues between periods. Accordingly, we use Revenue Growth Rate at constant currency as an important indicator of our underlying performance. Revenue Growth Rate at constant currency is calculated by applying the average exchange rates in effect during the earlier comparative fiscal period to the later fiscal period.

(2) We use Adjusted Net Income as an important indicator of our performance. See "—Non-GAAP Financial Measures" below for a definition of and reconciliation of Adjusted Net Income to net (loss) income, the most directly comparable GAAP measure, how we use this measure and an explanation of why we consider this non-GAAP measure to be helpful for investors.

(3) We also use Adjusted EBITDA and Adjusted EBITDA Margin as important indicators of our performance. See "—Non-GAAP Financial Measures" below for a definition of and a reconciliation of Adjusted EBITDA to net (loss) income, the most directly comparable GAAP measure, how we use Adjusted EBITDA and Adjusted EBITDA Margin and an explanation of why we consider these non-GAAP measures to be helpful for investors.

Revenue Growth Rate and Revenue Growth Rate at constant currency

For the year ended December 31, 2022, we reported revenue growth of 21.1% over the prior year. Acquisitions completed in the last twelve months contributed approximately 2% to revenue growth for the year ended December 31, 2022. Had our consolidated revenues been expressed in constant currency terms using the exchange rates in effect for the year ended December 31, 2021, we would have reported revenue growth of 26.8%. The negative impact to revenues, from foreign currencies, was due to the appreciation of the U.S. dollar relative to certain principal functional currencies of our subsidiaries.

For more detail regarding our exposure to foreign currency rate fluctuations, see Note 2, *Revenue Recognition*, to our consolidated financial statements and "Item 7A. Quantitative and Qualitative Disclosures About Market Risk."

Net (Loss) Income, Net (Loss) Income Margin and Adjusted Net Income

For the year ended December 31, 2022, the $104.8 million increase in net loss and 8.0 percentage point increase in net loss margin as compared to 2021 were driven by increased stock-based compensation expense of $121.6 million, which includes (a) $24.0 million of recurring RSU expense primarily related to the annual grant and (b) $97.6 million of nonrecurring expense mainly related to option and RSU expense from the IPO. The increases in net loss and net loss margin were also driven by increased payroll expense (excluding stock-based compensation) of $162.2 million due to our investment in additional headcount to support revenue growth. These increases were partially offset by revenue growth reflecting strong demand for our services and our continued focus on obtaining new clients and growing our existing client relationships. For more information, see "—Results of Operations." We consider net income margin as the most directly comparable GAAP measure to Adjusted EBITDA Margin.

For the year ended December 31, 2022, the increase in Adjusted Net Income as compared to 2021 of $14.5 million, or 11.6%, was due to higher revenues as a result of strong demand for our services, partially offset by increased payroll expense (excluding stock-based compensation) to support revenue growth.

Adjusted EBITDA and Adjusted EBITDA Margin

For the year ended December 31, 2022, the $33.5 million, or 15.0%, increase in Adjusted EBITDA compared to 2021 was due to higher revenues, partially offset by and higher payroll expense (excluding stock-based compensation) as a result of headcount growth.

The 110 basis point decrease in Adjusted EBITDA Margin as compared to 2021 was primarily due to decreased utilization with growth in our cost of services wages outpacing our revenue growth which was offset by increased efficiency in SG&A expenses.

Key Factors Affecting Our Performance

Our long-term financial trend is characterized by strong organic growth, strong client retention, a majority of revenues from existing clients and substantial margin optimization with the support of onshore, nearshore and offshore delivery centers. Our performance for historical periods and future periods is driven by numerous factors discussed, including the following key factors.

Ability to retain and expand existing client relationships

For the year ended December 31, 2022, we served over 410 clients, which we define as clients with spend in excess of $25,000 within the preceding fiscal year, many of whom we work with across multiple geographies. We actively manage our client portfolio and target clients where we believe there is opportunity to develop long-term relationships and drive significant growth. Accordingly, for the years ended December 31, 2022 and 2021, 87.2% and 86.5%, respectively, of our revenues were derived from existing clients, which we define as clients for whom we have done work and generated revenues in excess of $25,000 within the preceding fiscal year, representing increases of 14.5% and 22.2% in revenues from new and existing clients, respectively. For the year ended December 31, 2022, 35 clients generated greater than $10 million in revenues, a 16.7% increase compared to 30 clients for the prior year.

While we continue to derive a substantial part of our overall revenues from existing clients, we maintain relatively low client concentration among our largest clients. For the year ended December 31, 2022, we experienced strong growth in our top five, ten and fifty clients and a continued diversification of our business. Revenues from our top five, ten and fifty clients as a percentage of total revenues were 15.4%, 24.7% and 64.1%, respectively, for the year ended December 31, 2022 compared to 16.8%, 27.3% and 69.0%, respectively for the year ended December 31, 2021.

Net Dollar Retention Rate

We also utilize the net dollar retention rate to measure revenue growth from our clients. Net dollar retention rate provides visibility into the risks associated with our revenues and expected growth, and it measures our ability to continually offer and deliver innovative services to our clients. We use this metric to appropriately manage resources and client retention and growth, such as account management and capability development of our account leadership teams. The net dollar retention rate is calculated by dividing (a) the current period revenue from existing clients by (b) the prior comparative period revenue from existing clients.

The net dollar retention rate was approximately 109% and 126% for the years ended December 31, 2022 and 2021, respectively. The decrease was driven by pauses in ongoing engagements and slower engagement growth due to some clients impacted by budget pressures in the second half of 2022.

Ability to acquire new clients

We intend to continue to acquire new clients through programs designed to generate new business demand and position us as a trusted partner. Winning new business in existing and new geographies and industry verticals is a critical component of our growth strategy. Dedicated new business teams work with marketing using data-driven approaches to focus on client acquisition efforts. In 2022, we invested in our outbound demand generation capacity, increasing our ability to win new business. Commensurately, our total number of clients increased to 416 as of December 31, 2022 from 371 as of December 31, 2021, as we saw increased demand for our global services. Going forward, we may also add new clients, including in new geographies and industry verticals, through selective strategic acquisitions.

Expanding our technical capabilities and client solutions

We combine strategy, design and software engineering expertise to offer premium, end-to-end solutions to our clients. Our value proposition is based on our thought leadership and expertise across innovative new technologies, differentiated client solutions across our service lines and local and nearshore capabilities (*i.e.*, those delivered from nearby countries in similar time zones) and offshore capabilities (*i.e.*, those delivered from distant countries in different time zones). Our premium position enabled us to drive average revenue per employee of approximately $108,000 for 2022, compared to approximately $116,000 for 2021. The decrease compared to 2021 was driven by the negative impact from foreign currency translation, geographic mix and decreased utilization. We believe our average revenue per employee is meaningfully higher than all our pure-play competitors. We define average revenue per employee as total revenues for the period divided by the average number of employees in such period. Our ability to continue delivering premium and innovative services to our clients depends on evolving our technical and engineering capabilities.

Ability to recruit and retain talent

To provide services to our clients, we must efficiently hire, train and retain skilled professionals without compromising on the high standards we set for our people. We believe our ability to attract and retain top talent drives high client satisfaction and enables us to deliver on strong client demand to generate growth. Apart from driving high client satisfaction, lower attrition leads to lower hiring and training costs and increased productivity. For 2022, our voluntary attrition rate was 12.0%, down from 15.1% for 2021. We believe the decrease in attrition and thus higher retention was due to technology industry hiring trends and our unique culture, focus on career development, intensive training programs and interesting work opportunities. We increased our total number of employees to over 12,500 as of December 31, 2022.

Ability to optimize our global delivery

We have a global footprint with the ability to deliver services from multiple geographic regions. As of December 31, 2022, 9 out of our top 10 clients by revenue relied on Thoughtworks' delivery from more than one region. We utilize a blended delivery model, which means we are able to offer a combination of local talent with nearshore/offshore talent, allowing us to maintain close proximity to our clients for context and local market knowledge, while driving rapid and high-quality delivery at scale.

Components of Our Operating Results

We operate and manage our business as one reportable segment. While the Company has offerings in multiple market segments and operates in multiple countries, the Company's business operates as one operating segment. Almost all of the Company's service offerings are delivered and supported on a global basis. Additionally, most of the Company's service offerings are deployed in a nearly identical way and the Company's chief operating decision maker, who is the Company's Chief Executive Officer, evaluates the Company's financial information and resources and assesses the performance of these resources on a consolidated basis.

Revenues

Time-and-Materials Revenues. We generate the majority of our revenues under time-and-materials contracts, which are billed using hourly, daily or monthly rates to determine the amounts to be charged to the client. Revenue from time-and-material contracts is based on the number of hours worked and at contractually agreed-upon hourly rates and is recognized as those services are rendered as control of the services passes to the customer over time.

Fixed-Price Revenues. Fixed-price contracts include application development arrangements, where progress towards satisfaction of the performance obligation is measured using input methods as there is a direct correlation between hours incurred and the end product delivered to the client. Assumptions, risks and uncertainties inherent in the estimates used to measure progress could affect the amount of revenues, receivables and deferred revenues at each reporting period. Revenues under these contracts are recognized using costs incurred to date relative to total estimated costs at completion to measure progress toward satisfying performance obligations.

For a detailed discussion of our revenue recognition policy, refer to Note 2, *Revenue Recognition.*

Cost of Revenues

Cost of revenues consists primarily of personnel and related costs directly associated with professional services, including salaries, bonuses, fringe benefits, stock-based compensation, project related travel costs, and costs of contracted third-party vendors. Also included in cost of revenues is depreciation attributable to the portion of our property and equipment utilized in the delivery of services to our clients.

Gross Profit and Gross Margin

Gross profit represents revenues less cost of revenues. Gross margin represents gross profit as a percentage of revenues.

Selling, General and Administrative Expenses

Selling, general and administrative ("SG&A") expenses represent expenses associated with promoting and selling our services and general and administrative functions of our business. These expenses include the costs of salaries, bonuses, fringe benefits, stock-based compensation, severance, bad debt, travel, legal and accounting services, insurance, facilities (including operating leases), advertising and other promotional activities.

Depreciation and Amortization

Depreciation and amortization consist primarily of depreciation of fixed assets, amortization of capitalized software development costs (internal-use software) and amortization of acquisition-related intangible assets.

Other (Expense) Income

Other (expense) income consists of interest expense, impacts from foreign exchange transactions, gains (losses) on the sale of assets, gains related to the sale and settlement of trade receivables, change in fair value of contingent consideration and the write-off of deferred financing fees.

Income Tax Expense

Determining the consolidated income tax expense, deferred income tax assets and liabilities and any potential related valuation allowances involves judgment. We consider factors that may contribute, favorably or unfavorably, to the overall annual effective tax rate in the current year as well as the future. These factors include statutory tax rates and tax law changes in the countries where we operate as well as consideration of any significant or unusual items. Our income tax expense includes the impact of provisions established for uncertain income tax positions, as well as any related interest and penalties. These reserves are adjusted given changing facts and circumstances, such as the closing of a tax audit, statute of limitation lapse or the refinement of an estimate. To the extent the final outcome of an uncertain income tax position differs from the amounts recorded, such differences will impact our income tax expense in the period in which such determination is made.

Results of Operations

The following table sets forth a summary of our consolidated results of operations for the periods indicated (in thousands, except percentages):

	Year Ended December 31,		
	2022	2021	2020
Revenues	$ 1,296,238	$ 1,069,945	$ 803,375
Operating expenses:			
Cost of revenues (1)	950,305	669,681	475,560
Selling, general and administrative expenses (1)	372,761	333,904	189,850
Depreciation and amortization	20,484	17,599	17,479
(Loss) income from operations	**(47,312)**	**48,761**	**120,486**
Other (expense) income:			
Interest expense	(22,461)	(25,456)	(25,767)
Net realized and unrealized foreign currency (loss) gain	(5,405)	(5,469)	7,175
Other income (expense), net	610	(1,671)	185
Total other (expense) income	(27,256)	(32,596)	(18,407)
(Loss) income before income taxes	**(74,568)**	**16,165**	**102,079**
Income tax expense	30,825	16,740	23,106
Net (loss) income	**$ (105,393)**	**$ (575)**	**$ 78,973**
Effective tax rate	(41.3)%	103.6 %	22.6 %

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

	Year Ended December 31,		
	2022	2021	2020
Cost of revenues	$ 176,046	$ 60,678	$ —
Selling, general and administrative expenses	73,869	67,624	2,020
Total stock-based compensation expense	**$ 249,915**	**$ 128,302**	**$ 2,020**

Summary Comparison of the Year Ended December 31, 2022 with the Year Ended December 31, 2021

Revenues

We continue to expand our international presence and nearshore capabilities in different geographies. For the year ended December 31, 2022, total revenues grew 21.1% to $1,296.2 million compared to $1,069.9 million for the prior year. The increase in revenues was attributable to continued strong demand for our services, including strong growth across geographies and verticals, and expansion in our top fifty clients.

Revenues by Industry Vertical

The following table presents our revenues by industry vertical and revenues as a percentage of total revenues by industry vertical for the periods indicated (in thousands, except percentages):

	Year Ended December 31,			
	2022		2021	
Technology and business services	$360,117	27.8%	$288,709	27.0%
Energy, public and health services	316,478	24.4%	275,279	25.7%
Retail and consumer	236,731	18.3%	203,193	19.0%
Financial services and insurance	221,748	17.1%	170,492	15.9%
Automotive, travel and transportation	161,164	12.4%	132,272	12.4%
Total revenues	$1,296,238	100.0%	$1,069,945	100.0%

During the year ended December 31, 2022, we continued to see a healthy demand environment and strong revenue growth. The financial services and insurance industry vertical grew by 30.1%, technology and business services by 24.7%, and automotive, travel and transportation by 21.8%, respectively, compared to the year ended December 31, 2021. Revenue growth in the financial services and insurance and technology and business services verticals was driven by enterprise modernization, platforms and cloud while growth in the automotive, travel and transportation vertical was driven by customer experience, product and design.

Revenues by Customer Location

Our revenues are sourced from four geographic markets: North America, APAC, Europe and LATAM. We present and discuss our revenues by the geographic location where the revenues are under client contract; however, the delivery of those client contracts could be supported by offshore delivery locations.

The following table presents our revenues by customer location and revenues as a percentage of total revenues by customer location for the periods indicated (in thousands, except percentages):

	Year Ended December 31,			
	2022		2021	
North America	$503,948	38.9%	$396,491	37.1%
APAC	419,982	32.4%	358,596	33.5%
Europe	315,875	24.4%	267,121	25.0%
LATAM	56,433	4.3%	47,737	4.4%
Total revenues	$1,296,238	100.0%	$1,069,945	100.0%

For the year ended December 31, 2022, we had revenue growth of 27.1% in North America, with the United States contributing $474.3 million of our North America revenues, compared to $372.8 million for the same period in 2021. The largest client demand came from the energy, public and health services and technology and business services industry verticals.

For the year ended December 31, 2022, we had revenue growth of 17.1% in APAC where the top revenue contributing customer location country was Australia with revenues of $148.3 million compared to $116.5 million for the same period in 2021. The largest client demand came from the technology and business services industry vertical. We saw a negative impact to revenue from the strengthening of the United States Dollar against the foreign currencies in APAC, particularly the Australian Dollar.

For the year ended December 31, 2022, we had revenue growth of 18.3% in Europe where the top revenue contributing customer location country was the United Kingdom with revenues of $132.6 million compared to $115.2 million for the same period in 2021. The largest driver of client demand came from our automotive, travel and transportation industry vertical. We saw a negative impact to revenue from the strengthening of the United States Dollar against the foreign currencies in Europe, particularly the Euro and the Great British Pound.

For the year ended December 31, 2022, we had revenue growth of 18.2% in LATAM, with Brazil being our largest customer location. The largest driver of client demand came from our retail and consumer vertical.

Revenues by Client Concentration

We have long-standing relationships with many of our clients. We seek to grow revenues from our existing clients by continually increasing the value we provide and expanding the scope and size of our engagements. Revenues derived from these clients may fluctuate as these accounts mature or upon beginning or completing multi-year projects. We believe there is significant potential for future growth as we expand our capabilities and offerings within existing clients. In addition, we remain committed to diversifying our client base and adding new clients to our client mix.

The following table presents revenues contributed by our largest clients by amount and as a percentage of total revenues for the periods indicated (in thousands, except percentages):

	Year Ended December 31,			
	2022		2021	
Top five clients	$199,837	15.4%	$179,755	16.8%
Top ten clients	$320,580	24.7%	$291,787	27.3%
Top fifty clients	$830,614	64.1%	$737,829	69.0%

For the year ended December 31, 2022, revenues from our top five, ten and fifty clients experienced strong but slower growth compared to our reported revenue growth rate of 21.1%. We continued to focus on opportunities with new and existing clients and further diversified our business. For the year ended December 31, 2022, 12.8% of revenues came from new clients and 87.2% of revenues from existing clients, representing increases of 14.5% and 22.2% in revenues from new and existing clients, respectively.

Bookings

We use Bookings ("Bookings") as a forward-looking metric that measures the value of new contracts, renewals, extensions and changes to existing contracts during the fiscal period. We believe Bookings provides a broad measure of useful trend information regarding changes in the volume of our business. We use Bookings to evaluate the results of our operations, generate future operating plans and assess the performance of our company. However, Bookings can vary significantly quarter to quarter due to both timing and demand from our clients and thus the conversion of Bookings to revenues is uncertain. The amount of Bookings involves estimates and judgments and is not a reliable predictor of revenues over time. There is no standard definition or measurement of Bookings thus our methodology may not be comparable to other companies. Bookings were $1.4 billion and $1.5 billion for the years ended December 31, 2022 and 2021, respectively.

Cost of Revenues

	Year Ended December 31,			
(in thousands, except percentages)	2022	2021	Change	% Change
Cost of revenues	$950,305	$669,681	$280,624	41.9%

For the year ended December 31, 2022, cost of revenues (including stock-based compensation) increased 41.9% compared to 2021. This increase was primarily driven by an increase in payroll expense (excluding stock-based compensation) of $150.3 million due to higher headcount as we invested in additional talent to support growth and an increase in stock-based compensation expense of $115.4 million.

Gross Profit and Gross Margin

	Year Ended December 31,			
(in thousands, except percentages)	**2022**	**2021**	**Change**	**% Change**
Gross profit	$345,933	$400,264	$(54,331)	(13.6)%
Gross margin	26.7%	37.4%		

Our gross margin decreased by 10.7 percentage points for the year ended December 31, 2022 compared to 2021 primarily due to an increase in stock-based compensation expense of $115.4 million and payroll expense (excluding stock-based compensation) of $150.3 million which was partially offset by our revenue growth from increased demand for our services.

Selling, General and Administrative Expenses

	Year Ended December 31,			
(in thousands, except percentages)	**2022**	**2021**	**Change**	**% Change**
Selling, general and administrative expenses	$372,761	$333,904	$38,857	11.6%

For the year ended December 31, 2022, SG&A expenses increased 11.6% compared to 2021. The increase was driven by increases in payroll expense (excluding stock-based compensation) of $11.8 million, facility expenses of $9.5 million and stock-based compensation expense of $6.2 million. SG&A expenses as a percentage of revenues was 28.8% for the year ended December 31, 2022 compared to 31.2% for the year ended December 31, 2021 reflecting improved efficiencies in the cost of delivering the general and administrative activities of our business.

Depreciation and Amortization

	Year Ended December 31,			
(in thousands, except percentages)	**2022**	**2021**	**Change**	**% Change**
Depreciation and amortization	$20,484	$17,599	$2,885	16.4%

The increase was primarily due to an increase in the amortization expense related to increased capitalized software development costs for the year ended December 31, 2022 as compared to 2021.

(Loss) Income from Operations and (Loss) Income from Operations Margin

	Year Ended December 31,			
(in thousands, except percentages)	**2022**	**2021**	**Change**	**% Change**
(Loss) income from operations	$(47,312)	$48,761	$(96,073)	(197.0)%
(Loss) income from operations margin	(3.6)%	4.6%		

The decrease was primarily driven by an increase in stock-based compensation expense of $121.6 million, as previously discussed, which includes $46.7 million related to the approval of China SAFE during the first quarter of 2022 and an increase in payroll expense (excluding stock-based compensation) of $162.2 million. This was partially offset by an increase in revenues of $226.3 million.

Interest Expense

(in thousands, except percentages)	Year Ended December 31, 2022	2021	Change	% Change
Interest expense	$22,461	$25,456	$(2,995)	(11.8)%

Interest expense is primarily related to our Term Loan and Revolver. The decrease for the year ended December 31, 2022 as compared to 2021 was primarily due to a decrease in our debt balance as a result of certain voluntary prepayments under our Credit Agreement.

Other (Income) Expense, Net

(in thousands, except percentages)	Year Ended December 31, 2022	2021	Change	% Change
Other (income) expense, net	$(610)	$1,671	$(2,281)	(136.5)%

Other (income) expense, net is primarily related to the change in fair value of contingent consideration, the write-off of deferred financing fees and gains (losses) on the sale of assets. The decrease in the expense for the year ended December 31, 2022 as compared to 2021 was due to a $2.3 million gain recognized on the sale and settlement of trade receivables and $1.1 million decrease in the amount of deferred financing fees written off as a result of debt prepayments, partially offset by the change in fair value of contingent consideration of $1.0 million.

Income Tax Expense and Effective Tax Rate

(in thousands, except percentages)	Year Ended December 31, 2022	2021	Change	% Change
Income tax expense	$30,825	$16,740	$14,085	84.1%
Effective tax rate	(41.3)%	103.6%		

The increase in income tax expense for the year ended December 31, 2022 as compared to 2021 was primarily due to capitalized research and experimental costs under Internal Revenue Code ("IRC") §174 increasing the Company's net global intangible low tax income ("GILTI") inclusion, the non-deductibility of China SAFE RSUs and executive compensation expense in compliance with IRC §162(m), and the unfavorable impact of excess tax deficiencies on stock-based compensation.

The effective tax rate in each period differed from the U.S. statutory tax rate of 21% principally due to U.S. corporate state income taxation and the effect of foreign operations which reflects the impact of different income tax rates in locations outside the United States, the unfavorable impacts of valuation allowances on deferred tax assets of select foreign operations and the non-deductibility of executive compensation expense in compliance with IRC §162(m), further impacted by excess tax deficiencies unfavorably and excess tax benefits favorably on stock-based compensation for the years ended December 31, 2022 and 2021, respectively. The change in the effective tax rate for the year ended December 31, 2022 as compared to the prior year was primarily due to the non-deductibility of China SAFE restricted stock units ("RSUs") and the unfavorable impact of capitalized research and experimental costs under IRC §174 increasing the Company's net GILTI inclusion. The negative effective tax rate for the year ended December 31, 2022 is a result of the aforementioned unique net unfavorable items when compared to the pre-tax loss recorded for the period.

Foreign Currency Exchange Gains and Losses

See “Item 7A. *Quantitative and Qualitative Disclosures About Market Risk*” as well as “Item 1A. Risk Factors—Risks Related to Our Global Operations—Our business, financial condition and results of operations may be adversely affected by fluctuations in foreign currency exchange rates."

Non-GAAP Financial Measures

We define Adjusted Net Income as net (loss) income adjusted for unrealized foreign exchange loss (gain), stock-based compensation expense, amortization of acquisition-related intangibles, acquisition costs, certain professional fees that are considered unrelated to our ongoing revenue-generating operations, employer payroll related expense on employee equity incentive plan, final tax assessment for closed operations, tender offer compensation expense that is considered one-time in nature, certain costs related to business rationalization, IPO-related costs, the change in fair value of contingent consideration, and income tax effects of adjustments.

We define Adjusted EBITDA as net (loss) income adjusted to exclude income tax expense; interest expense; other expense (income), net, excluding the gain from the sale and settlement of trade receivables; unrealized foreign exchange loss (gain); stock-based compensation expense; depreciation and amortization expense; acquisition costs; certain professional fees that are considered unrelated to our ongoing revenue-generating operations; employer payroll related expense on employee equity incentive plan; final tax assessment for closed operations; tender offer compensation expense that is considered one-time in nature; certain costs related to business rationalization; and IPO-related costs. Adjusted EBITDA Margin is calculated by dividing Adjusted EBITDA by total revenues.

We use Adjusted EBITDA, Adjusted EBITDA Margin and Adjusted Net Income as measures of operating performance and the operating leverage in our business. We believe that these non-GAAP financial measures are useful to investors for supplemental period-to-period comparisons of our business and in understanding and evaluating our operating results for the following reasons:

- Our management uses Adjusted Net Income to assess our overall performance, without regard to items that are considered to be unique or non-recurring in nature or otherwise unrelated to our ongoing revenue-generating operations, net of the income tax effect of the adjustments;
- Adjusted EBITDA and Adjusted EBITDA Margin are widely used by investors and securities analysts to measure a company’s operating performance without regard to the aforementioned adjustments which can vary substantially from company to company depending upon their financing, capital structures, and the method by which assets were acquired or costs that are unique or non-recurring in nature or otherwise unrelated to our ongoing revenue-generating operations;
- Our management uses Adjusted Net Income, Adjusted EBITDA and Adjusted EBITDA Margin in conjunction with financial measures prepared in accordance with GAAP for planning purposes, including the preparation of our annual operating budget, as a measure of our core operating results and the effectiveness of our business strategy, and in evaluating our financial performance; and
- Adjusted Net Income, Adjusted EBITDA and Adjusted EBITDA Margin provide consistency and comparability with our past financial performance, facilitate period-to-period comparisons of our core operating results, and also facilitate comparisons with other peer companies, many of which use similar non-GAAP financial measures to supplement their GAAP results.

Adjusted Net Income, Adjusted EBITDA and Adjusted EBITDA Margin have limitations as analytical tools, and you should not consider these measures in isolation or as substitutes for analysis of our financial results as reported under GAAP. Some of these limitations are, or may in the future be, as follows:

- Although depreciation and amortization expense is a non-cash charge, the assets being depreciated and amortized may have to be replaced in the future, and Adjusted EBITDA and Adjusted EBITDA Margin do not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements;
- Adjusted Net Income, Adjusted EBITDA and Adjusted EBITDA Margin exclude stock-based compensation expense, which has recently been, and will continue to be for the foreseeable future, a significant recurring non-cash expense for our business and an important part of our compensation strategy;

- Adjusted Net Income, Adjusted EBITDA and Adjusted EBITDA Margin do not reflect changes in, or cash requirements for, our working capital needs;
- Adjusted EBITDA and Adjusted EBITDA Margin do not reflect (i) interest expense, or the cash requirements necessary to service interest or principal payments on our debt, which reduces cash available to us; or (ii) accruals or tax payments that may represent a reduction in cash available to us;
- Adjusted Net Income, Adjusted EBITDA and Adjusted EBITDA Margin do not reflect transaction costs related to acquisitions; and
- The expenses and other items that we exclude in our calculations of Adjusted Net Income, Adjusted EBITDA and Adjusted EBITDA Margin may differ from the expenses and other items, if any, that other companies may exclude from similarly-titled non-GAAP measures when they report their operating results, and we may, in the future, exclude other significant, unusual or non-recurring expenses or other items from these financial measures.

Because of these limitations, Adjusted Net Income, Adjusted EBITDA and Adjusted EBITDA Margin should be considered along with other financial performance measures presented in accordance with GAAP.

The following tables present a reconciliation of Adjusted Net Income, Adjusted EBITDA and Adjusted EBITDA Margin to their most directly comparable financial measure prepared in accordance with GAAP for the periods indicated (in thousands, except percentages):

	Year Ended December 31,		
	2022	**2021**	**2020**
Net (loss) income	$ (105,393)	$ (575)	$ 78,973
Unrealized foreign exchange loss (gain)	10,106	5,028	(5,336)
Stock-based compensation	249,915	128,302	2,020
Amortization of acquisition-related intangibles	13,144	12,046	10,537
Acquisition costs (a)	4,126	8,524	633
Certain professional fees (b)	2,014	1,991	56
Employer payroll related expense on employee equity incentive plan (c)	6,353	1,154	—
Final tax assessment for closed operations (d)	258	—	—
Non-recurring tender offer compensation expense (e)	—	2,715	—
Business rationalization (f)	—	—	1,316
IPO-related costs (g)	—	2,713	315
Change in fair value of contingent consideration (h)	1,027	—	—
Income tax effects of adjustments (i)	(41,639)	(36,498)	(2,131)
Adjusted Net Income	$ 139,911	$ 125,400	$ 86,383

	Year Ended December 31,		
	2022	2021	2020
Net (loss) income	$ (105,393)	$ (575)	$ 78,973
Income tax expense	30,825	16,740	23,106
Interest expense	22,461	25,456	25,767
Other expense (income), net (j)	1,682	1,671	(185)
Unrealized foreign exchange loss (gain)	10,106	5,028	(5,336)
Stock-based compensation	249,915	128,302	2,020
Depreciation and amortization	34,446	29,528	26,528
Acquisition costs (a)	4,126	8,524	633
Certain professional fees (b)	2,014	1,991	56
Employer payroll related expense on employee equity incentive plan (c)	6,353	1,154	—
Final tax assessment for closed operations (d)	258	—	—
Non-recurring tender offer compensation expense (e)	—	2,715	—
Business rationalization (f)	—	—	1,316
IPO-related costs (g)	—	2,713	315
Adjusted EBITDA	$ 256,793	$ 223,247	$ 153,193
Net (loss) income margin	(8.1)%	(0.1)%	9.8 %
Adjusted EBITDA Margin	19.8 %	20.9 %	19.1 %

(a) Reflects costs for certain professional fees and retention wage expenses related to certain acquisitions.
(b) Adjusts for certain transaction expenses, non-recurring legal expenses, and one-time professional fees.
(c) Excludes employer payroll related expense on employee equity incentive plan as these expenses are tied to the exercise or vesting of underlying equity awards and the price of our common stock at the time of vesting or exercise. As a result, these taxes may vary in any particular period independent of the financial and operating performance of our business.
(d) Adjusts for certain tax related expenses related to final tax assessments from closing operations in Uganda, which was completely shut down in 2015.
(e) Adjusts for the additional compensation expense related to the tender offer completed in the first quarter of 2021.
(f) Adjusts for business rationalization revenues and costs related to closing Thoughtworks Studios, which was completely shut down as of December 31, 2020. Thoughtworkers previously associated with Thoughtworks Studios were transitioned to other revenue generating functions.
(g) Adjusts for IPO-readiness costs and expenses that do not qualify as equity issuance costs.
(h) Adjusts for the non-cash adjustment to the fair value of contingent consideration.
(i) Adjusts for the income tax effects of the foregoing adjusted items.
(j) Excludes a $2.3 million gain related to the sale and settlement of trade receivables which was included within Other income (expense), net in the 2022 consolidated statements of (loss) income and comprehensive (loss) income.

Liquidity and Capital Resources

The following table summarizes certain key measures of our liquidity and capital resources (in thousands):

	As of December 31,	
	2022	2021
Cash and cash equivalents	$ 194,294	$ 368,209
Availability under Revolver	300,000	165,000
Borrowings under Revolver	—	—
Long-term debt, including current portion (1)	399,006	504,530

(1) The balance includes deferred financing fees. A reconciliation of gross to net amounts is presented in Note 12, *Credit Agreements*.

Our cash generated from operations and financing activities has been our primary source of liquidity to fund operations and investments. Our capital investments focus on our technology solutions, corporate infrastructure and strategic acquisitions to further expand into new business sectors and/or expand sales in existing sectors. The Company generates sufficient cash flows for working capital and expects to do so for the foreseeable future.

In September 2021, we completed our IPO resulting in net proceeds of $314.7 million, after deducting underwriting discounts and commissions and offering expenses of approximately $30.3 million.

As of December 31, 2022, our principal sources of liquidity were cash and cash equivalents of $194.3 million and $300.0 million of available borrowings under our Revolver.

In the future, we may enter into arrangements to acquire or invest in complementary businesses, services and technologies, or intellectual property rights. To fund these acquisitions or investments, we may seek to access the debt or capital markets. Our ability to obtain additional funding will be subject to various factors, including general market conditions, our operating performance, the market's perception of our growth potential, lender sentiment and our ability to incur additional debt in compliance with our contractual restrictions, including those in our Credit Agreement (as defined below).

Our Credit Facilities

Our subsidiaries are party to an amended and restated credit agreement, dated March 26, 2021 (as amended, the "Credit Agreement"), among the Company, the syndicate lenders thereto and Credit Suisse, AG, Cayman Islands Branch, as administrative agent, which provides for a term loan ("Term Loan") and revolver ("Revolver"). On December 9, 2022, we amended and restated the credit agreement to (i) increase the amount of revolving credit commitments from $165.0 million to $300.0 million and (ii) transition the reference rate for the revolving borrowings under the Credit Agreement from LIBOR to the secured overnight financing rate ("SOFR") and amend the applicable margins as specified therein. See Note 12, *Credit Agreements*, for a discussion of the Term Loan and Revolver. As of December 31, 2022, we had $402.5 million outstanding under our Term Loan with an interest rate of 6.88% and no borrowings outstanding under the Revolver.

Borrowings under the Credit Agreement are guaranteed by substantially all the Borrowers' direct and indirect wholly owned material domestic subsidiaries subject to customary exceptions (the "Guarantors" and together with the Borrowers and Holdings, the "Loan Parties"). The obligations under the Credit Agreement and the guarantees of the Guarantors are secured by substantially all of the Loan Parties' assets, subject to customary exceptions and thresholds.

Borrowings under the Term Loan bear interest at a rate per annum equal to an applicable margin plus either (a) a base rate or (b) a LIBOR rate, at our option, subject to interest rate floors. Borrowings under the Revolver bear interest at a rate per annum equal to an applicable margin plus either (x) a base rate or (y) SOFR at our option. In addition to paying interest on outstanding borrowings under the Revolver, we are required to pay a commitment fee to the lenders under the Revolver in respect of unutilized commitments thereunder and customary letter of credit fees. The applicable margins in respect of both the Term Loan and the Revolver are subject to adjustments based on our first lien leverage ratios and corporate family ratings. The interest rate applicable to our Term Loan and our Revolver was permanently reduced by 25 basis points in the first quarter of 2022 and was reduced another 25 basis points upon the update to our corporate family rating in November 2022. See "Recently Issued Accounting Pronouncements Not Yet Adopted" within Note 1, *Business and Summary of Significant Accounting Policies*, in the notes to our consolidated financial statements for further discussion on the potential impact of the transition away from LIBOR.

The Credit Agreement requires compliance with certain covenants customary for agreements of this type. As of December 31, 2022, we were in compliance with our debt covenants.

Cash Flows

The following table shows a summary of our cash flows for the periods indicated (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Net cash provided by (used in):			
Operating activities	$ 89,389	$ 118,304	$ 125,296
Investing activities	(93,945)	(70,309)	(14,993)
Financing activities	(175,125)	(140,630)	318,197
Effect of exchange rate changes on cash and cash equivalents	(19,697)	(4,622)	6,543
Net (decrease) increase in cash and cash equivalents	$ (199,378)	$ (97,257)	$ 435,043

Operating Activities

Net cash provided by operating activities in 2022 decreased $28.9 million compared to 2021. The decrease in 2022 was primarily driven by an increase in trade receivables as a result of increased revenue and an increase in days sales outstanding ("DSO") in 2022 compared to 2021 and a decrease in accrued expenses and other liabilities, partially offset by a decrease in other assets.

Investing Activities

Net cash used in investing activities in 2022 was $93.9 million compared to $70.3 million used in 2021. The increase was primarily attributable to the acquisition of Connected.

Financing Activities

Net cash used in financing activities of $175.1 million in 2022 was driven by the repayment of long-term debt of $107.2 million and withholding taxes paid related to the following: net share settlement on equity awards of $45.6 million, tender offer of $15.5 million and dividends previously declared of $10.0 million.

Net cash used in financing activities of $140.6 million in 2021 was primarily attributable to the repurchase of shares and vested options from our securityholders using the proceeds from the issuance of $720.0 million of preferred stock, partially offset by proceeds from an increase in our term loan which were subsequently used to pay a dividend to our securityholders in April 2021. In addition, our net financing activities were driven by the repayment of long-term debt of $336.7 million, offset by $314.7 million of net proceeds from our IPO.

Contractual Obligations and Future Capital Requirements

Contractual Obligations

We recorded an acquisition purchase price liability of $14.0 million for contingent consideration related to the acquisition of Connected which is expected to be paid in the second quarter of 2023. The fair value of the liability as of December 31, 2022 was $14.3 million.

Refer to Note 3, *Acquisitions*, and Note 8, *Leases,* in the notes to our consolidated financial statements for further detail regarding the aforementioned contingent consideration and additional information related to our lease commitments.

Except as disclosed in “—Our Credit Facilities” and those mentioned above, we did not have other material contractual obligations for cash expenditures.

Future Capital Requirements

We believe that our existing cash and cash equivalents combined with our expected cash flow from operations will be sufficient to meet our projected operating and capital expenditure requirements for at least the next twelve months and that we possess the financial flexibility to execute our strategic objectives, including the ability to make acquisitions and strategic investments in the foreseeable future. However, our ability to generate cash is subject to our performance, general economic conditions, industry trends and other factors, and due to our global operations, the value of cash generated may be adversely affected by fluctuations in foreign currency exchange rates. To the extent that existing cash and cash equivalents and operating cash flow are insufficient to fund our future activities and requirements, we may need to raise additional funds through public or private equity or debt financing. If we incur new debt, the debt holders would have rights senior to common stockholders to make claims on our assets, and the terms of any debt could restrict our operations, including our ability to pay dividends on our common stock. If we issue additional equity or convertible debt securities, existing stockholders may experience dilution, and such new securities could have rights senior to those of our common stock. These factors may make the timing, amount, terms and conditions of additional financings unattractive. Our inability to raise capital could impede our growth or otherwise require us to forego growth opportunities and could materially adversely affect our business, financial condition and results of operations. There is no assurance that we would be able to raise additional funds on favorable terms or at all.

Commitments and Contingencies

Certain conditions may exist as of the date of the consolidated financial statements which may result in a loss to the Company but will only be resolved when one or more future events occur or fail to occur. Such liabilities for loss contingencies arising from claims, assessments, litigation, fines, penalties and other sources, are recorded when the Company assesses that it is probable that a future liability has been incurred and the amount can be reasonably estimated. Recoveries of costs from third parties, which the Company assesses as being probable of realization, are recorded to the extent of related contingent liabilities accrued. Legal costs incurred in connection with matters relating to contingencies are expensed in the period incurred. The Company records gain contingencies when realized.

Off-Balance Sheet Arrangements

We did not have during any of the periods presented, and we do not currently have, any off-balance sheet financing arrangements or any relationships with unconsolidated entities or financial partnerships, including entities sometimes referred to as structured finance or special purpose entities, that were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Recent Accounting Pronouncements

See Note 1, *Business and Summary of Significant Accounting Policies*, in the notes to our consolidated financial statements for a discussion of recent accounting pronouncements.

Critical Accounting Policies and Estimates

Our consolidated financial statements and the related notes thereto included elsewhere in this Annual Report are prepared in accordance with GAAP. In preparing the consolidated financial statements, we make estimates and judgments that affect the reported amounts of assets, liabilities, stockholders' equity, revenues, expenses and related disclosures. We re-evaluate our estimates on an on-going basis. Our estimates are based on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Because of the uncertainty inherent in these matters, actual results may differ from these estimates and could differ based upon other assumptions or conditions. The critical accounting policies that reflect our more significant judgments and estimates used in the preparation of our consolidated financial statements include those noted below.

Revenue Recognition

We generate revenues by providing professional services in software development and consulting services to companies across the globe.

We determine revenue recognition through the following steps in accordance with Accounting Standards Codification ("ASC") 606:

- identification of the contract, or contracts, with a client;

- identification of the performance obligations in the contract;
- determination of the transaction price;
- allocation of the transaction price to the performance obligations in the contract; and
- recognition of revenues when, or as, we satisfy a performance obligation.

Revenue is recognized when control of services is passed to a client in an amount of revenue that reflects the consideration we expect to be entitled to in exchange for those services. Such control may be transferred over time or at a point in time, depending on satisfaction of obligations stipulated by the contract. We record sales and other taxes collected from clients and remitted to governmental authorities on a net basis.

We generate revenues from a variety of professional service arrangements. Fees for these contracts may be in the form of time-and-materials and fixed price. We also report gross reimbursable expenses incurred as both revenues and cost of revenues in the consolidated statements of (loss) income and comprehensive (loss) income.

Revenues are measured based on consideration specified in a contract with a client, which may consist of both fixed and variable components, and the consideration expected to be received is allocated to each separately identifiable performance obligation based on the performance obligation's relative stand-alone selling price. The standalone selling prices are generally determined based on the prices at which we separately sell the services.

Stock-Based Compensation

We grant equity incentive awards to certain employees and directors. These compensation arrangements are settled in equity, or in certain cases at our discretion, in cash, at a predetermined price. The equity incentive awards generally vest over a period of one to four years and, in certain cases, vest in full on a liquidity event involving the Company. The options have a contractual term of 10 years from the grant date. We measure share-based awards at the grant date based on the fair value of the award and we recognize such fair value as compensation expense over the vesting period using the straight-line amortization method (or, in the case of performance stock units, using the accelerated amortization method).

Performance Vesting and Time Vesting Options

Through September 17, 2021 (the "IPO Closing Date"), we estimated grant date fair value for stock option awards using a hybrid of the Probability-Weighted Expected Return Method ("PWERM") and the Option-Pricing Model ("OPM") that used assumptions including expected volatility, expected term, and the expected risk-free rate of return. Prior to the completion of our IPO, we relied, in part, on valuation reports prepared by unrelated third-party valuation firms to assist us in valuing our share-based awards.

On September 9, 2021, the Board, through unanimous written consent, approved a modification to the Company's 2017 Stock Option Plan (the "2017 Plan") which, upon completion of the IPO, a sponsor return of 2.8x times sponsor investment was achieved, and the service condition under the Plan that participants must provide at least 18 months of continuous service following the grant date in order for performance vesting options to vest was waived. Additionally, the Board also approved accelerated vesting of all remaining, unvested former Class C performance vesting options, after the achievement of such sponsor return, which resulted in all performance vesting options becoming fully vested upon pricing of the IPO. Unless otherwise prohibited by law in local jurisdictions, time vesting options will continue to vest according to the Plan. No stock option awards were granted during the third or fourth quarters of 2021 or during 2022. For more information regarding the stock option awards, see Note 10, *Stock-Based Compensation,* to our consolidated financial statements.

Restricted Stock Units ("RSUs")

In September 2021, the Board approved the 2021 Omnibus Incentive Plan (the "Omnibus Plan"). Under the Omnibus Plan, RSUs are awarded to eligible employees as well as directors and entitle the grantee to receive shares of common stock at the end of a vesting period. The fair value of the RSUs is determined based on the market price of our common stock on the date of grant.

All RSUs granted in connection with the IPO, including the RSUs granted in connection with the SARs conversion, included a lock-up period of 6 months, ending March 17, 2022, before the participants could redeem the shares. Throughout the vesting period and the lock-up period, shareholders are subject to the market risk on the value of their shares.

Performance Stock Units (“PSUs”)

In April 2022, the Board approved the grant of PSUs to certain executives and employees under the Omnibus Plan, which consisted of PSUs with non-market-based performance and time-based vesting conditions and PSUs with market-based performance and time-based vesting conditions. The PSUs subject to non-market-based performance and time-based vesting conditions are earned based on our achievement of specified adjusted EBITDA targets (the “EBITDA PSUs”). The PSUs subject to market-based performance and time-based vesting conditions are earned based on our achievement of specified relative total shareholder return ("rTSR") targets (the “rTSR PSUs”). Both types of PSUs vest over a three-year service period, subject to the participant’s continued employment with us or our affiliate, as applicable.

The fair value of the EBITDA PSUs is determined using the closing stock price on the grant date. For the EBITDA PSUs, the compensation expense is recognized based upon the achievement percentage of the performance target and amortized over the service period of the award. The fair value for the rTSR PSUs is determined using a Monte-Carlo simulation, which is amortized in full over the service period. For the rTSR PSUs, the compensation expense is not adjusted for the achievement percentage of the performance target. Compensation expense for both types of PSUs is recognized using the accelerated amortization method.

Business Combinations

We account for business combinations using the acquisition method of accounting which requires us to allocate the fair value of purchase consideration to the assets acquired and liabilities assumed based on the estimated fair values at the acquisition date. The fair value of the net assets acquired for the business is determined utilizing expectations and assumptions we believe reasonable, which include the timing and amount of forecasted revenues and cash flows, expected growth rates, customer attrition rates, the discount rate reflecting the risk of future cash flows and the useful lives for finite-lived assets. Intangible assets other than goodwill are comprised of finite-lived intangibles and indefinite-lived intangibles. At initial recognition, intangible assets acquired in a business combination are recognized at their fair value as of the date of acquisition. Following initial recognition, finite-lived intangible assets are carried at cost less accumulated amortization and impairment losses, if any, and are amortized on a straight-line basis over the estimated useful life of the asset, which was determined based on management’s estimate of the period over which the asset will contribute to our future cash flows.

The excess of the purchase consideration transferred over the fair values of assets acquired and liabilities assumed is recorded as goodwill. As additional information is obtained about the assets and liabilities of the acquisition during the measurement period, not to exceed one year from the date of acquisition, we may record adjustments to the assets acquired and liabilities assumed with an offset to goodwill. After the measurement period, any adjustments are recorded in the consolidated statements of (loss) income and comprehensive (loss) income. We review goodwill for impairment annually or whenever events or changes in circumstances indicate the carrying amount of the asset may not be recoverable. We assess goodwill for impairment at the reporting unit level. In conducting our annual goodwill impairment test, we first review qualitative factors to determine whether it is more likely than not that the fair value of the asset is less than its carrying amount. If factors indicate that the fair value of the asset is less than its carrying amount, we perform a quantitative impairment assessment of the asset, analyzing the expected present value of future cash flows to quantify the amount of impairment, if any. We perform our annual impairment tests in the fourth quarter of each fiscal year. We assess the impairment of intangible assets whenever events or changing circumstances indicate that the carrying amount may not be recoverable.

Some business combinations may include a contingent consideration agreement. We determine the fair value of the contingent consideration liability using a Monte Carlo Simulation, which involves a simulation of future revenues and earnings during the earn-out period using management's best estimates. The liability is remeasured to fair value at each reporting date with adjustments recorded within other income (expense), net in the consolidated statements of (loss) income and comprehensive (loss) income.

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

We are exposed to certain market risks in the ordinary course of our business. These risks primarily result from changes in concentration of credit, interest rates and foreign currency exchange rates. In addition, our international operations are subject to risks related to differing economic conditions, civil unrest, political instability or uncertainty, military activities, broad-based sanctions, differing tax structures, and other regulations and restrictions. Refer to Note 1, Business and Summary of Significant Accounting Policies, for discussion related to concentration of credit risk.

Interest Rate Risk

We are primarily exposed to changes in interest rates with respect to our cost of borrowing under our Credit Agreement. We monitor our cost of borrowing under our credit facilities, taking into account our funding requirements and our expectations for interest rates in the future. In 2022, a hypothetical 100 basis point increase in the average LIBOR (SOFR effective December 9, 2022 for the Revolver) divided by the base rate applicable to our borrowings would have resulted in a $5.0 million increase in our interest expense, while a hypothetical 100 basis point decrease in the average LIBOR (SOFR effective December 9, 2022 for the Revolver)/base rate would have resulted in a $4.3 million decrease in our interest expense reflecting a LIBOR (SOFR effective December 9, 2022 for the Revolver)/base rate floor under our credit facilities of 0.5%.

Foreign Currency Risk

We operate in several countries across the world. Our international sales are primarily denominated in foreign currencies, and any unfavorable movement in the exchange rate between U.S. dollars and the currencies in which we conduct sales in foreign countries could have an adverse impact on our revenues. A portion of our operating expenses are incurred outside the United States and are denominated in foreign currencies, which are also subject to fluctuations due to changes in foreign currency exchange rates. In addition, our suppliers incur many costs, including labor and supply costs, in other currencies. While we are not currently contractually obligated to pay increased costs due to changes in exchange rates, to the extent that exchange rates move unfavorably for our suppliers, they may seek to pass these additional costs on to us, which could have a material impact on our gross margins. Our operating results and cash flows are, therefore, subject to fluctuations due to changes in foreign currency exchange rates. However, we believe that the exposure to foreign currency fluctuation from operating expenses is relatively small at this time as the related costs do not constitute a significant portion of our total expenses. We have generally not entered into derivatives or hedging transactions, as our exposure to foreign currency exchange rates has historically been partially hedged as our foreign currency denominated inflows have covered our foreign currency denominated expenses. However, we may enter into derivative or hedging transactions in the future if our exposure to foreign currency should become more significant.

In 2022, our revenues denominated and recorded in currencies other than U.S. dollars amounted to 63% of our total revenues. A hypothetical 10% increase or decrease in the value of the U.S. dollar against the principal foreign currencies in which our revenues are measured (namely, the Australian dollar, Brazilian Real, British Pound, Canadian Dollar, Chilean Peso, Chinese Yuan, Euro, Indian Rupee and Singapore Dollar) would have caused our revenues to decrease or increase, respectively, by approximately $79.9 million.

Inflation Risk

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. If our costs become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition and operating results.

Item 8. *Financial Statements and Supplementary Data*

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of Thoughtworks Holding, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Thoughtworks Holding, Inc. (the Company) as of December 31, 2022 and 2021, the related consolidated statements of (loss) income, comprehensive (loss) income, changes in redeemable convertible preferred stock and stockholders' equity and cash flows for each of the three years in the period ended December 31, 2022, the related notes and financial statement schedules listed in the index at Item 15(1) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 28, 2023 expressed an unqualified opinion thereon.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company has elected to change its method of accounting for stock-based compensation expense in 2022.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below providing a separate opinion on the critical audit matter or on the account or disclosure to which it relates.

	Revenue Recognition for Fixed-Price Contracts
Description of the Matter	As discussed in Note 2 to the consolidated financial statements, the Company generates revenue from a variety of professional service arrangements. Fees for these contracts may be in the form of time-and-materials or fixed-price revenues. Fixed-price contracts include application development arrangements, where progress towards satisfaction of the performance obligation is measured using costs incurred to date relative to total estimated costs at completion. Assumptions, risks and uncertainties inherent in the estimates used to measure progress for in-process fixed price contracts could affect the amount and timing of revenues, receivables and deferred revenues at each reporting period. Auditing the Company's revenue for in-process fixed-price contracts was challenging given the significant audit effort including the evaluation of assumptions used to determine the accuracy of total estimated costs upon completion.
How We Addressed the Matter in Our Audit	We obtained an understanding, evaluated the design and tested the operating effectiveness of internal controls over the Company’s processes to determine the total estimated costs for in-process fixed-price contracts, including management’s review of the underlying calculation performed to recognize revenue for such in-process fixed-price contracts and the look-back analysis performed subsequent to period-end to evaluate any changes in the total estimated costs. To test the Company’s accounting for the in-process fixed-price contract revenue recognized, we performed audit procedures that included, among others, testing the accuracy and completeness of the actual costs incurred through year-end. We tested the look-back analysis performed by the Company subsequent to year-end to evaluate any changes in the total estimated costs. We compared the Company’s original or prior period estimate of total contract costs to be incurred to the actual costs incurred for completed contracts to assess the Company’s ability to accurately estimate costs. We interviewed operational personnel of the Company to evaluate progress to date and the estimate of remaining costs to be incurred, including the amount of time and cost to complete, for a sample of customer contracts. We also assessed the appropriateness of the related disclosures in the consolidated financial statements.

/s/ Ernst & Young LLP

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

Chicago, Illinois

February 28, 2023

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of Thoughtworks Holding, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Thoughtworks Holding, Inc.'s (the Company's) internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2022 and 2021, the related consolidated statements of (loss) income, comprehensive (loss) income, changes in redeemable convertible preferred stock and stockholders' equity and cash flows for each of the three years in the period ended December 31, 2022, the related notes and financial statement schedules listed in the index at Item 15(1) and our report dated February 28, 2023 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ Ernst & Young LLP

Chicago, Illinois

February 28, 2023

THOUGHTWORKS HOLDING, INC.
CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share data)

	December 31, 2022	December 31, 2021
Assets		
Current assets:		
Cash and cash equivalents	$ 194,294	$ 368,209
Trade receivables, net of allowance of $9,531 and $8,916, respectively	201,695	145,874
Unbilled receivables	122,499	104,057
Prepaid expenses	19,353	15,994
Other current assets	18,849	44,805
Total current assets	556,690	678,939
Property and equipment, net	38,798	34,500
Right-of-use assets	43,123	—
Intangibles and other assets:		
Goodwill	405,017	346,719
Trademark	273,000	273,000
Customer relationships, net	124,047	125,867
Other non-current assets	21,175	22,838
Total assets	$ 1,461,850	$ 1,481,863
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	$ 5,248	$ 4,773
Long-term debt - current	7,150	7,150
Income taxes payable	22,781	15,693
Accrued compensation	85,477	87,059
Deferred revenue	5,167	13,807
Value-added tax and sales tax payable	7,526	7,954
Accrued expenses	30,227	44,094
Lease liabilities, current	15,994	—
Total current liabilities	179,570	180,530
Lease liabilities, non-current	29,885	—
Long-term debt, less current portion	391,856	497,380
Deferred tax liabilities	62,555	83,191
Other long-term liabilities	19,762	18,805
Total liabilities	683,628	779,906
Commitments and contingencies		
Stockholders' equity:		
Convertible preferred stock, $0.001 par value; 100,000,000 shares authorized, zero issued and outstanding at December 31, 2022 and December 31, 2021, respectively	—	—
Common stock, $0.001 par value; 1,000,000,000 shares authorized, 366,306,970 and 356,117,752 issued, 315,681,987 and 305,132,181 outstanding at December 31, 2022 and December 31, 2021, respectively	366	356
Treasury stock, 50,624,983 and 50,985,571 shares at December 31, 2022 and December 31, 2021, respectively	(624,934)	(629,424)
Additional paid-in capital	1,565,514	1,359,149
Accumulated other comprehensive loss	(39,210)	(10,844)
Retained deficit	(123,514)	(17,280)
Total stockholders' equity	778,222	701,957
Total liabilities and stockholders' equity	$ 1,461,850	$ 1,481,863

The accompanying notes form an integral part of the consolidated financial statements.

THOUGHTWORKS HOLDING, INC.
CONSOLIDATED STATEMENTS OF (LOSS) INCOME AND COMPREHENSIVE (LOSS) INCOME
(In thousands, except share and per share data)

	Year Ended December 31,		
	2022	**2021**	**2020**
Revenues	$ 1,296,238	$ 1,069,945	$ 803,375
Operating expenses:			
Cost of revenues	950,305	669,681	475,560
Selling, general and administrative expenses	372,761	333,904	189,850
Depreciation and amortization	20,484	17,599	17,479
Total operating expenses	1,343,550	1,021,184	682,889
(Loss) income from operations	(47,312)	48,761	120,486
Other (expense) income:			
Interest expense	(22,461)	(25,456)	(25,767)
Net realized and unrealized foreign currency (loss) gain	(5,405)	(5,469)	7,175
Other income (expense), net	610	(1,671)	185
Total other (expense) income	(27,256)	(32,596)	(18,407)
(Loss) income before income taxes	(74,568)	16,165	102,079
Income tax expense	30,825	16,740	23,106
Net (loss) income	$ (105,393)	$ (575)	$ 78,973
Other comprehensive (loss) income, net of tax:			
Foreign currency translation adjustments	(28,366)	(9,270)	8,493
Comprehensive (loss) income	$ (133,759)	$ (9,845)	$ 87,466
Net (loss) earnings per common share:			
Basic (loss) earnings per common share	$ (0.34)	$ (0.24)	$ 0.26
Diluted (loss) earnings per common share	$ (0.34)	$ (0.24)	$ 0.26
Weighted average shares outstanding:			
Basic	310,911,526	254,271,997	278,225,009
Diluted	310,911,526	254,271,997	284,615,995

The accompanying notes form an integral part of the consolidated financial statements.

THOUGHTWORKS HOLDING, INC.
CONSOLIDATED STATEMENTS OF CHANGES IN REDEEMABLE CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY
(In thousands, except share data)

	Redeemable, Convertible Preferred Stock		Common Stock		Treasury		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Retained Earnings (Deficit)	Total
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance as of December 31, 2019	—	—	278,193,711	$ 279	572,711	$ (1,608)	$ 379,209	$ (10,067)	$ 27,175	$ 394,988
Cumulative effect from change in accounting principle	—	—	—	—	—	—	(2,190)	—	2,190	—
Net income	—	—	—	—	—	—	—	—	78,973	78,973
Other comprehensive income, net of tax	—	—	—	—	—	—	—	8,493	—	8,493
Issuance of common stock on exercise of options, net of withholding taxes	—	—	129,005	—	—	—	296	—	—	296
Issuance of Series A Redeemable Convertible Preferred Stock, net of issuance costs of $7.2 million	23,493,546	322,800	—	—	—	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	—	—	2,020	—	—	2,020
Balance as of December 31, 2020	23,493,546	$ 322,800	278,322,716	$ 279	572,711	$ (1,608)	$ 379,335	$ (1,574)	$ 108,338	$ 484,770
Net income	—	—	—	—	—	—	—	—	(575)	(575)
Other comprehensive loss, net of tax	—	—	—	—	—	—	—	(9,270)	—	(9,270)
Issuance of common stock upon initial public offering, net of issuance costs of $30.3 million	—	—	16,429,964	16	—	—	314,700	—	—	314,716
Issuance of redeemable convertible preferred stock, net of issuance costs of $11.8 million	35,996,412	503,222	—	—	—	—	—	—	—	—
Conversion of redeemable convertible preferred stock to common stock	(59,489,958)	(826,022)	59,489,958	60	—	—	825,962	—	—	826,022
Issuance of common stock on exercise of options, net of withholding taxes	—	—	1,169,090	1	—	—	(852)	—	—	(851)
Issuance of common stock	—	—	133,313	—	—	—	1,873	—	—	1,873
Dividends	—	—	—	—	—	—	(279,191)	—	(45,821)	(325,012)
Tender Offer	—	—	(50,412,860)	—	50,412,860	(627,816)	(10,391)	—	(79,222)	(717,429)
Stock-based compensation expense	—	—	—	—	—	—	127,713	—	—	127,713
Balance as of December 31, 2021	—	$ —	305,132,181	$ 356	50,985,571	$ (629,424)	$ 1,359,149	$ (10,844)	$ (17,280)	$ 701,957
Net loss	—	—	—	—	—	—	—	—	(105,393)	(105,393)
Other comprehensive loss, net of tax	—	—	—	—	—	—	—	(28,366)	—	(28,366)
Issuance of common stock for equity incentive awards, net of withholding taxes	—	—	10,189,218	10	—	—	(40,086)	—	—	(40,076)
Reissuance of treasury shares for equity incentive awards	—	—	360,588	—	(360,588)	4,490	(4,054)	—	—	436
Stock-based compensation expense	—	—	—	—	—	—	250,505	—	—	250,505
Cumulative effect related to adoption of ASU 2016-13	—	—	—	—	—	—	—	—	(841)	(841)
Balance as of December 31, 2022	—	$ —	315,681,987	$ 366	50,624,983	$ (624,934)	$ 1,565,514	$ (39,210)	$ (123,514)	$ 778,222

The accompanying notes form an integral part of the consolidated financial statements.

THOUGHTWORKS HOLDING, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,		
	2022	**2021**	**2020**
Cash flows from operating activities:			
Net (loss) income	$ (105,393)	$ (575)	$ 78,973
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation and amortization expense	34,446	29,528	26,528
Bad debt expense (recovery)	2,002	(601)	7,685
Deferred income tax (benefit) expense	(19,425)	(22,369)	2,085
Stock-based compensation expense	250,505	127,713	2,020
Unrealized foreign currency exchange loss (gain)	10,106	5,028	(5,336)
Non-cash lease expense on right-of-use assets	18,597	—	—
Other operating activities, net	3,300	3,642	1,831
Changes in operating assets and liabilities:			
Trade receivables	(61,877)	(32,139)	3,977
Unbilled receivables	(20,711)	(16,733)	(16,794)
Prepaid expenses	(3,567)	(6,542)	308
Other assets	2,657	(31,111)	(5,742)
Lease liabilities	(16,721)	—	—
Accounts payable	144	309	(700)
Accrued expenses and other liabilities	(4,674)	62,154	30,461
Net cash provided by operating activities	89,389	118,304	125,296
Cash flows from investing activities:			
Purchase of property and equipment	(24,505)	(26,068)	(15,125)
Proceeds from disposal of fixed assets	571	518	132
Acquisitions, net of cash acquired	(70,011)	(44,759)	—
Net cash used in investing activities	(93,945)	(70,309)	(14,993)
Cash flows from financing activities:			
Proceeds from initial public offering, net of issuance costs and underwriting discounts	—	314,716	—
Proceeds from issuance of Series A redeemable convertible preferred stock, net of issuance costs	—	380,994	322,800
Proceeds from issuance of Series B redeemable convertible preferred stock, net of issuance costs	—	122,228	—
Payments of obligations of long-term debt	(107,150)	(336,709)	(4,565)
Payments of debt issuance costs	(3,635)	(7,098)	(111)
Proceeds from borrowings on revolving credit facility	—	—	29,000
Payments on revolving credit facility	—	—	(29,000)
Proceeds from borrowings on long-term debt	—	401,285	—
Proceeds from issuance of common stock on exercise of options, net of employee tax withholding	6,766	(851)	296
Shares and options purchased under tender offer	—	(701,960)	—
Proceeds from issuance of common stock	—	1,873	—
Dividends paid	—	(315,003)	—
Withholding taxes paid on tender offer	(15,469)	—	—
Withholding taxes paid on dividends previously declared	(10,009)	—	—
Withholding taxes paid related to net share settlement of equity awards	(45,643)	—	—
Other financing activities, net	15	(105)	(223)
Net cash (used in) provided by financing activities	(175,125)	(140,630)	318,197

THOUGHTWORKS HOLDING, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended December 31,		
	2022	2021	2020
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(19,697)	(4,622)	6,543
Net (decrease) increase in cash, cash equivalents and restricted cash	(199,378)	(97,257)	435,043
Cash, cash equivalents and restricted cash at beginning of the period	394,942	492,199	57,156
Cash, cash equivalents and restricted cash at end of the period	$ 195,564	$ 394,942	$ 492,199
Supplemental disclosure of cash flow information:			
Interest paid	$ 20,984	$ 23,611	$ 23,861
Income taxes paid	$ 30,283	$ 33,344	$ 13,909
Supplemental disclosures of non-cash financing activities:			
Withholding taxes payable included within accrued expenses	$ —	$ 25,956	$ —
Withholding taxes payable included within accrued compensation	$ 1,020	$ —	$ —
Option costs receivable included within other current assets	$ 257	$ —	$ —
Conversion of convertible preferred stock to common stock	$ —	$ 826,022	$ —
Net settlement on exercise of shares	$ —	$ 3,611	$ —
Reconciliation of cash, cash equivalents and restricted cash:			
Cash and cash equivalents	$ 194,294	$ 368,209	$ 490,841
Restricted cash included in other current assets	—	25,478	—
Restricted cash included in other non-current assets	1,270	1,255	1,358
Total cash, cash equivalents and restricted cash	$ 195,564	$ 394,942	$ 492,199

The accompanying notes form an integral part of the consolidated financial statements.

THOUGHTWORKS HOLDING, INC.
Notes to the Consolidated Financial Statements

Note 1 – Business and Summary of Significant Accounting Policies

Thoughtworks Holding, Inc. (together with its subsidiaries, the “Company”) develops, implements, and services complex enterprise application software and provides business technology consulting. The Company conducts business in Australia, Brazil, Canada, Chile, China, Ecuador, Finland, Germany, Hong Kong, India, Italy, the Netherlands, Romania, Singapore, Spain, Thailand, the United Kingdom, the United States and Vietnam. Thoughtworks Holding, Inc. is the ultimate parent holding company of Thoughtworks, Inc. among other subsidiaries.

Basis of Presentation and Consolidation

The accompanying consolidated financial statements include the accounts of Thoughtworks Holding, Inc. and its subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Certain amounts in the prior period consolidated financial statements and notes have been reclassified to conform to the 2022 presentation. These reclassifications had no effect on results of operations previously reported.

Preparation of Financial Statements and Use of Estimates

The preparation of these consolidated financial statements is in conformity with generally accepted accounting principles in the United States (“GAAP”) and applicable rules and regulations of the SEC. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. On an ongoing basis, the Company evaluates its estimates, including those related to allowance for credit losses, valuation and impairment of goodwill and long-lived assets, income taxes, accrued bonus, contingencies, stock-based compensation and litigation costs. The Company bases its estimates on current expectations and historical experience and on other assumptions that its management believes are reasonable under the circumstances. These estimates form the basis for making judgments about the carrying value of assets and liabilities when those values are not readily apparent from other sources. Actual results can differ from those estimates, and such differences may be material to the consolidated financial statements in the future. In management’s opinion, all adjustments considered necessary for a fair presentation of the accompanying consolidated financial statements have been included, and all adjustments are of a normal and recurring nature.

Segments

The Company operates as one operating segment. Operating segments are defined as components of an enterprise for which separate financial information is evaluated regularly by the chief operating decision maker (“CODM”), in deciding how to allocate resources and assess performance.

While the Company has offerings in multiple modern digital businesses and operates in multiple countries, the Company’s business operates in one operating segment because most of the Company's service offerings are delivered and supported on a global basis and are deployed in a nearly identical way. The Company’s CODM evaluates the Company’s financial information, allocates resources and assesses the performance of these resources on a consolidated basis.

Long-Lived Assets

The North America geographic region encompasses the Company’s country of domicile (United States) and Canada, of which long-lived assets including property and equipment, net of depreciation, are principally held within the United States. Canadian long-lived assets were determined to be immaterial given property, and equipment was less than 10% of the Company's long-lived assets as of December 31, 2022 and 2021. The Company holds material long-lived assets in the foreign geographic locations of Brazil, China, and India.

The following table presents long-lived assets by location (in thousands):

	As of December 31,			
	2022		2021	
United States	$ 8,774	22.6 %	$ 7,920	23.0 %
Brazil	5,732	14.8 %	5,100	14.8 %
China	6,725	17.4 %	7,321	21.2 %
India	8,010	20.6 %	7,477	21.7 %
All other (1)	9,557	24.6 %	6,682	19.3 %
Total long-lived assets	$ 38,798	100.0 %	$ 34,500	100.0 %

(1) All other foreign geographic locations hold long-lived assets of less than 10% of the Company's consolidated total.

Revenue Recognition

The Company recognizes revenues when control of services is passed to a customer in an amount that reflects the consideration the Company expects to be entitled to in exchange for those services. Such control may be transferred over time or at a point in time, depending on satisfaction of obligations stipulated by the contract. The Company records sales and other taxes collected from customers and remitted to governmental authorities on a net basis.

The Company generates revenue from a variety of professional service arrangements. Fees for these contracts may be in the form of time-and-materials and fixed price. The Company also reports gross reimbursable expenses incurred as both revenue and cost of revenues in the consolidated statements of (loss) income and comprehensive (loss) income.

Revenue is measured based on consideration specified in a contract with a customer, which may consist of both fixed and variable components, and the consideration expected to be received is allocated to each separately identifiable performance obligation based on the performance obligation's relative stand-alone selling price. The standalone selling prices are generally determined based on the prices at which the Company separately sells the services.

Contracts may include variable consideration, which usually takes the form of volume-based discounts, service level credits, price concessions, or incentives. To the extent that variable consideration is not constrained, the Company includes the expected amount within the total transaction price and updates its assumptions over the duration of the contract. Determining the estimated amount of such variable consideration involves assumptions and judgment that can have an impact on the amount of revenues reported. The amount of variable consideration is estimated utilizing the expected value or most likely amount method, depending on the facts and circumstances relative to the contract.

Time-and-Material Revenue

The Company generates the majority of its revenues 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. Revenue from time-and-material contracts is based on the number of hours worked and at contractually agreed-upon hourly rates and is recognized as those services are rendered as control of the services passes to the customer over time.

Fixed-Price Revenue

Fixed-price contracts include application development arrangements, where progress towards satisfaction of the performance obligation is measured using input methods as there is a direct correlation between hours incurred and the end product delivered to the customer. Assumptions, risks, and uncertainties inherent in the estimates used to measure progress could affect the amount of revenues, receivables, and deferred revenues at each reporting period. Revenues under these contracts are recognized using costs incurred to date relative to total estimated costs at completion to measure progress toward satisfying performance obligations.

Principal vs Agent Consideration

From time to time, the Company may enter into arrangements with third-party suppliers to sell services. In such cases, the Company evaluates whether it is the principal (i.e., reports revenues on a gross basis) or the agent (i.e., reports revenues on a net basis). In doing so, the Company first evaluates whether it has control of the service before it is transferred to the customer. If the Company controls the service before it is transferred to the customer, the Company is the principal; if not, the Company is the agent. Determining whether the Company controls the service before it is transferred to the customer may require judgment.

Contract Balances

A contract asset is a right to consideration that is conditional upon factors other than the passage of time. Contract assets primarily relate to unbilled amounts on fixed-price contracts. Contract assets are recorded when services have been provided but the Company does not have an unconditional right to receive consideration. Professional services performed on or prior to the balance sheet date, but invoiced thereafter, are reflected in unbilled receivables.

Contract liabilities, or deferred revenue, consist of advance payments from clients and billings in excess of revenues recognized. The Company classifies deferred revenue as current on the consolidated balance sheet and is recognized as revenue as the Company performs under the contract. These balances are generally short-term in nature and are recognized as revenue within one year.

Costs to Obtain a Customer Contract

The Company incurs certain incremental costs to obtain a contract that the Company expects to recover. The Company applies a practical expedient and recognizes the incremental costs of obtaining contracts as an expense when incurred if the amortization period of the assets that the Company otherwise would have recognized is one year or less. The Company capitalizes incremental costs of obtaining contracts where the contract term is greater than one year. These costs primarily relate to commissions paid to the account executives and are included in SG&A expenses in the consolidated statements of (loss) income and comprehensive (loss) income for contracts one year or less and other current assets and other non-current assets on the consolidated balance sheets for contracts greater than one year.

Costs capitalized are amortized on a straight-line basis over the period of benefit. Amortization of capitalized costs to obtain contracts is included in SG&A expenses in the consolidated statements of (loss) income and comprehensive (loss) income. The Company determined the period of benefit by taking into consideration standard contract terms, renewals and amendments, if applicable. The capitalized amounts are recoverable through future revenue streams under all non-cancelable customer contracts. The Company periodically evaluates whether there have been any changes in its business, the market conditions in which it operates or other events which would indicate that its amortization period should be changed or if there are potential indicators of impairment.

The following table is a summary of the Company's costs to obtain contracts and related amortization where the amortization period of the assets is greater than one year (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Balance at beginning of period	$ 2,039	$ —	$ —
Costs to obtain contracts capitalized	811	2,318	—
Amortization of capitalized costs	(1265)	(277)	—
Changes due to exchange rates	3	(2)	—
Balance at end of period	$ 1,588	$ 2,039	$ —

Cost of Revenues

Consists primarily of personnel and related costs directly associated with professional services, including salaries, bonuses, fringe benefits, stock-based compensation, project related travel costs, and costs of contracted third-party vendors. Also included in cost of revenues is depreciation attributable to the portion of our property and equipment utilized in the delivery of services to our clients.

Selling, General and Administrative Expenses

Consists of expenses associated with promoting and selling the Company's services and general and administrative functions of the business. These expenses include the costs of salaries, bonuses, fringe benefits, commissions, stock-based compensation, severance, bad debt, travel, legal and accounting services, insurance, facilities including operating leases, advertising and other promotional activities.

Advertising costs consist of marketing, advertising through print and other media, professional event sponsorship, and public relations. These costs are expensed as incurred. Advertising costs totaled $4.1 million, $2.3 million and $0.9 million for the years ended December 31, 2022, 2021 and 2020, respectively, and are included in SG&A expenses in the consolidated statements of (loss) income and comprehensive (loss) income.

Other (Expense) Income

Other (expense) income consists of interest expense, impacts from foreign exchange transactions, gains (losses) on the sale of assets, gains related to the sale and settlement of trade receivables, change in fair value of contingent consideration and the write-off of deferred financing fees.

Cash and Cash Equivalents

Cash equivalents are short-term, highly liquid investments and deposits that are readily converted into cash, with maturities of three months or less.

Restricted Cash

Restricted cash is included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. Restricted cash is restricted as to withdrawal or use. The Company has restricted cash held on deposit at various financial institutions. The amounts are held in escrow for income tax withholdings, to secure bank guarantees of amounts related to government requirements, and as collateral for a corporate credit card.

Accounts Receivable and Allowance for Credit Losses

Accounts receivable are uncollateralized customer obligations due under normal trade terms. Payment terms with customers are generally 30 to 90 days from the invoice date. Accounts receivable are recorded at the invoiced amount net of an allowance for credit loss. The Company analyzes its historical credit loss experience and considers current conditions and reasonable and supportable forecasts in developing the expected credit loss rates. Interest is not generally accrued on outstanding balances as the balances are considered short-term in nature.

Activity related to the Company's allowance for credit losses is as follows (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Allowance for credit losses, beginning balance	$ (8,916)	$ (10,385)	$ (2,733)
Impact of accounting standard adoption (1)	(841)	—	—
Current provision for expected credit losses	(2,002)	(281)	(8,305)
Write-offs charged against allowance	2,351	882	620
Changes due to exchange rates	(123)	868	33
Allowance for credit losses, ending balance	$ (9,531)	$ (8,916)	$ (10,385)

(1) The Company adopted ASU 2016-13, Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, in the first quarter of 2022. See *Recently Adopted Accounting Standards* below for further discussion.

Business Combinations

The Company accounts for business combinations using the acquisition method of accounting which requires it to allocate the fair value of purchase consideration to the assets acquired and liabilities assumed based on the estimated fair values at the acquisition date. The fair value of the net assets acquired for the business is determined utilizing expectations and assumptions believed reasonable by management. The excess of the purchase consideration transferred over the fair values of assets acquired and liabilities assumed is recorded as goodwill. As additional information is obtained about the assets and liabilities of the acquisition during the measurement period, not to exceed one year from the date of acquisition, the Company may record adjustments to the assets acquired and liabilities assumed with an offset to goodwill. After the measurement period, any adjustments are recorded in the consolidated statements of (loss) income and comprehensive (loss) income. Acquisition costs are expensed as incurred.

Some business combinations may include a contingent consideration agreement. The Company determines the fair value of the contingent consideration liability using a Monte Carlo Simulation. The liability is remeasured to fair value at each reporting date with adjustments recorded within other income (expense), net in the consolidated statements of (loss) income and comprehensive (loss) income.

Government Assistance

The Company has historically received government subsidies in the form of cash in China and Singapore related to expenses such as rent, wages, training benefits and taxes. The subsidies are recorded against the related expense within SG&A expense or cost of revenues in the consolidated statements of (loss) income and comprehensive (loss) income. The Company recorded $1.3 million to cost of revenues and $0.7 million to SG&A expense for the year ended December 31, 2022.

Property and Equipment, net

Property and equipment are stated at cost, net of accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the respective assets. The estimated useful lives, by asset class, are as follows:

Office furniture and equipment	7 years
Computer equipment	3 years
Software, including internal-use software	3 to 5 years
Automobiles	7 years

Leasehold improvements are amortized using the straight-line method over the shorter of their estimated useful lives or the terms of the related leases.

The Company reviews long-lived assets, including property and equipment and finite-lived intangible assets, for realizability on an ongoing basis. Changes in depreciation, generally accelerated depreciation, are determined and recorded when estimates of the remaining useful lives or residual values of long-term assets change. The Company also reviews for impairment when conditions exist that indicate the carrying amount of the asset group may not be fully recoverable. In those circumstances, the Company performs an undiscounted operating cash flow analysis to determine if an impairment exists. When testing for asset impairment, the Company groups assets and liabilities at the lowest level for which cash flows are separately identifiable. Any impairment loss is calculated as the excess of the asset's carrying value over its estimated fair value. Fair value is estimated based on the discounted cash flows for the asset group over the remaining useful life or based on the expected cash proceeds for the asset less costs of disposal.

Internal-Use Software

In accordance with ASC 350-40, Internal-Use Software, certain costs incurred in the planning and evaluation stage of internal-use computer software are expensed as incurred. Certain costs incurred during the application development stage are capitalized and included in property and equipment. Capitalized costs are depreciated over the expected economic useful life of three to five years using the straight-line method.

Capitalized internal-use software asset depreciation expense for the years ended December 31, 2022, 2021 and 2020 was $4.7 million, $2.2 million and $3.5 million, respectively, and is included in depreciation and amortization in the consolidated statements of (loss) income and comprehensive (loss) income. As of December 31, 2022 and 2021, the net book value of internal-use software was $6.5 million and $5.6 million, respectively.

Goodwill

Goodwill represents the excess of cost over the fair value of the net assets acquired in a business combination. When the Company acquires a business, the purchase price is allocated to the assets acquired and liabilities assumed based on their estimated fair values as of the acquisition date. During the measurement period, which may be up to one year from the acquisition date, adjustments to the fair value of assets acquired and liabilities assumed may be recorded, with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the fair value of assets acquired and liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the consolidated statement of operations.

The Company performs an annual impairment review of goodwill in its fiscal fourth quarter and additional impairment reviews when events and circumstances indicate it is more likely than not that an impairment may have occurred. The Company assesses goodwill for impairment at the reporting unit level.

In evaluating goodwill for impairment, the Company has the option to first perform a qualitative assessment to determine whether further impairment testing is necessary or to perform a quantitative assessment by comparing the fair value of the reporting units to their carrying amount, including goodwill. Under the qualitative assessment, an entity is not required to calculate the fair value of a reporting unit unless the entity determines that it is more likely than not that its fair value is less than its carrying amount. Qualitative factors include macroeconomic conditions, industry and market conditions, cost factors, and overall financial performance, among others.

Under a quantitative assessment, fair value of the Company's reporting units are estimated using a weighted methodology considering the output from both the income and market approaches. The income approach incorporates the use of a discounted cash flow (DCF) analysis. A number of judgments are involved in the application of the DCF model, including projections of business performance, weighted average cost of capital, and terminal values. The market approach is performed using the Guideline Public Companies method which is based on earnings multiple data derived from publicly traded peer group companies. The Company elected to perform a qualitative assessment during fiscal 2022 and 2021 and determined for both periods that the fair value of the Company's respective reporting units exceeded their carrying amounts.

Other Intangible Assets

In accordance with ASC 350, Intangibles – Goodwill and Other, the Company amortizes its finite-lived intangible assets over their respective estimated useful lives. The Company reviews both indefinite-lived intangibles and finite-lived intangibles for impairment on an annual basis, or more frequently if events or changes in circumstances indicate that they may be impaired. Impairment indicators could include significant under-performance relative to the historical or projected future operating results, significant changes in the manner of use of assets, significant negative industry or economic trends or significant changes in the Company's market capitalization relative to net book value. Any changes in key assumptions used by the Company, including those set forth above, could result in an impairment charge and such a charge could have a material adverse effect on the Company's consolidated statements of (loss) income and comprehensive (loss) income. The Company's other intangible assets consist of indefinite-lived trademarks and finite-lived customer relationships. Customer relationships have an estimated useful life of 15 years and are being amortized using the straight-line method.

Income Taxes

The Company is subject to both the United States of America (U.S.) and foreign income taxes. A current tax asset or liability is recognized for the estimated taxes payable or refundable on tax returns for the year.

Deferred income taxes are recorded to reflect the tax consequences on future years of the difference between the tax bases of assets and liabilities for income taxes and for financial reporting purposes using enacted tax rates in effect for the year in which differences are expected to reverse. The Company nets the deferred tax assets and deferred tax liabilities from temporary differences arising within the same tax jurisdiction and presents the net asset or liability as long term.

The Company assesses the need to account for deferred taxes on unremitted earnings of its foreign subsidiaries on an individual country basis according to management's assertions regarding repatriation or permanent investment of each country's accumulated earnings.

A valuation allowance is established when necessary to reduce deferred income tax assets to the amounts expected to be realized.

The Company classifies interest and penalties associated with tax liabilities as income tax expense in the consolidated statements of (loss) income and comprehensive (loss) income.

The Company provides for tax expense related to Global Intangible Low-Tax Income ("GILTI") in the year the tax is incurred.

The Company's provision for income taxes includes the impact of provisions established for uncertain income tax positions, as well as any related interest and penalties. These reserves are adjusted given changing facts and circumstances, such as the closing of a tax audit, statute of limitation lapse or the refinement of an estimate. To the extent the final outcome of an uncertain income tax position differs from the amounts recorded, such differences will impact the provision for income taxes in the period in which such determination is made.

Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss consists solely of foreign currency translation adjustments.

Foreign Currency

Assets and liabilities of consolidated foreign subsidiaries whose functional currency is not the U.S. dollar are translated into U.S. dollars at period-end exchange rates and revenues and expenses are translated into U.S. dollars at average exchange rates for the applicable period. The adjustment resulting from translating the financial statements of such foreign subsidiaries into U.S. dollars is reflected as a cumulative translation adjustment and reported as a component of accumulated other comprehensive income.

For consolidated foreign subsidiaries whose functional currency is the U.S. dollar, transactions and balances denominated in the local currency are foreign currency transactions. Foreign currency transactions and balances related to non-monetary assets and liabilities are remeasured to the functional currency of the subsidiary at historical exchange rates while monetary assets and liabilities are remeasured to the functional currency of the subsidiary at period-end exchange rates. Foreign currency exchange gains or losses from remeasurement are included in income in the period in which they occur.

Commitments and Contingencies

Certain conditions may exist as of the date of the consolidated financial statements which may result in a loss to the Company but will only be resolved when one or more future events occur or fail to occur. Such liabilities for loss contingencies arising from claims, assessments, litigation, fines, penalties, and other sources, are recorded when the Company assesses that it is probable that a future liability has been incurred and the amount can be reasonably estimated. Recoveries of costs from third parties, which the Company assesses as being probable of realization, are recorded to the extent of related contingent liabilities accrued. Legal costs incurred in connection with matters relating to contingencies are expensed in the period incurred. The Company records gain contingencies when realized.

Deferred Financing Fees

Deferred financing fees represent third-party debt issuance costs associated with the related debt facility. Deferred financing fees associated with the Company’s debt agreements are treated as a discount on the outstanding debt balance and amortized over the term of the respective debt facility, using the effective interest rate method and reported as a component of interest expense. Debt discounts on the Company’s debt are reflected as a direct deduction from the carrying amount of the long-term portion of the related debt liability.

The Company recorded interest expense as it relates to deferred financing fees of $1.6 million, $1.6 million and $1.8 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Fair Value Measurements

The Company determines the fair values of its financial instruments based on the fair value hierarchy. ASC 820, Fair Value Measurement, includes a fair value hierarchy that is intended to increase consistency and comparability in fair value measurements and related disclosures. The fair value hierarchy is based on observable or unobservable inputs to valuation techniques that are used to measure fair value. Observable inputs reflect assumptions market participants would use in pricing an asset or liability based on market data obtained from independent sources while unobservable inputs reflect a reporting entity’s pricing based upon its own market assumptions.

The fair value hierarchy consists of the following three levels:

- Level 1: Inputs are quoted prices in active markets for identical assets or liabilities.
- Level 2: Inputs are quoted prices for similar assets or liabilities in an active market, quoted prices for identical or similar assets or liabilities in markets that are not active and inputs other than quoted prices that are observable and market-corroborated inputs, which are derived principally from or corroborated by observable market data.
- Level 3: Inputs that are derived from valuation techniques in which one or more significant inputs or value drivers are unobservable.

The fair value of certain assets, such as nonfinancial assets, primarily long-lived assets, goodwill, intangible assets and certain other assets, are recognized or disclosed in connection with impairment evaluations. All non-recurring valuations use significant unobservable inputs and therefore fall under Level 3 of the fair value hierarchy.

The carrying amounts of financial instruments including cash and cash equivalents, accounts receivable, and accounts payable approximated fair value as of December 31, 2022 and 2021, because of the relatively short maturity of these instruments. Additionally, the Company estimates the fair value of the Term Loan, discussed in Note 12, *Credit Agreements*, using current market yields. These current market yields are considered Level

2 inputs. The fair value of the Term Loan was $392.0 million and $485.0 million at December 31, 2022 and 2021, respectively.

Stock-Based Compensation

The Company accounts for employee and Director equity-based compensation in accordance with ASC 718, *Compensation* – Stock Compensation. Accordingly, compensation expense is based on the grant date fair value of those awards and is recognized over the requisite service period for the respective award. The Company's equity-based awards granted to employees include service-based stock option awards, RSUs and PSUs, both market and non-market based.

In April 2022, the Board approved the grant of EBITDA PSUs and rTSR PSUs to certain executives and employees under the Omnibus Plan. The EBITDA PSUs are earned based on the Company's achievement of specified adjusted EBITDA targets. The rTSR PSUs are earned based on the Company's achievement of specified rTSR targets. Both types of PSUs vest over a three-year service period, subject to the participant's continued employment with us or our affiliate, as applicable.
The fair value of the options, RSUs, and EBITDA PSUs is determined using the grant date stock price of the Company's common stock. The fair value for the rTSR PSUs is determined using a Monte-Carlo simulation. Compensation expense for awards solely subject to time-based vesting conditions (i.e., options and RSUs), will be recognized over their requisite service period (typically one to four years) on a straight-line amortization basis. Compensation expense for PSUs is recognized over their requisite service period on an accelerated amortization basis, from the date of grant through the last day of the requisite service period. The expense for the EBITDA PSUs is adjusted based on an estimate of awards ultimately expected to vest. The expense for the rTSR PSUs awards will be fully recognized over the service period, regardless if the targets are met. The Company records forfeitures as they occur. The compensation expense is recognized in the Company's consolidated statements of (loss) income and comprehensive (loss) income.

At the time of grant, the Company takes into consideration the timing of the equity award and evaluates for conditions that could result in the award being considered spring loaded awards. The Company did not grant equity awards that would be considered spring loaded awards in 2022.

Refer to Note 10, *Stock-Based Compensation*, for more information on equity-based awards.

Recently Adopted Accounting Standards

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2016-02, Leases (Topic 842), which amends existing accounting standards for lease accounting and requires lessees to recognize virtually all leases on the balance sheet by recording a right-of-use asset and a lease liability (for other than short term leases). The Company early adopted the standard effective January 1, 2022. The Company elected the modified retrospective transition method, and as a result, the Company did not adjust its comparative period financial information or make the new required lease disclosures for periods before the date of adoption. The Company elected to use the package of practical expedients, which permits the Company to not reassess: (i) whether a contract is or contains a lease, (ii) lease classification, and (iii) initial direct costs resulting from the lease. The Company did not elect the hindsight practical expedient, which permits the use of hindsight when determining lease term and impairment of operating lease assets. The Company is electing not to apply the recognition requirements to short-term leases of 12 months or less and instead will recognize lease payments as expense on a straight-line basis over the lease term. The Company also elected the option to combine lease and non-lease components as a single component for the Company's entire population of lease assets. Upon adoption, the Company recorded $40.9 million of right-of-use assets ("ROU") and $43.7 million of lease liabilities. Refer to Note 8, *Leases*, for further discussion.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which amends the accounting guidance and requires the measurement of all expected losses based on historical experience, current conditions, and reasonable and supportable forecasts, or a current expected credit loss ("CECL") model. For trade receivables, loans, and other financial instruments, companies are required to use a forward-looking expected loss model rather than the incurred loss model for recognizing credit losses which reflects losses that are probable. In November 2019, the FASB issued ASU 2019-10 which delayed the effective date for the CECL standard. The guidance and related amendments are effective for the Company for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, with early adoption permitted. Application of the amendments is through a cumulative-effect adjustment to retained earnings as of the effective date.

The Company early adopted the accounting standard by recording a cumulative effect adjustment to retained earnings as of January 1, 2022 using a modified retrospective approach. The adoption mainly impacts trade receivables and unbilled receivables. The Company analyzed its historical credit loss experience and considered current conditions and reasonable forecasts in developing the expected credit loss rates. The adoption of this new standard did not have a material impact on the Company's consolidated financial statements.

In November 2021, the FASB issued ASU 2021-10, Disclosures by Business Entities About Government Assistance (Topic 832), which requires business entities to provide certain disclosures when they (1) have received government assistance and (2) use a grant or contribution accounting model by analogy to other accounting guidance. The guidance is effective for all entities for fiscal years beginning after December 15, 2021. Entities may apply the ASU’s provisions either (1) prospectively to all transactions within the scope of Accounting Standards Codification ("ASC") 832 that are reflected in the financial statements as of the adoption date and all new transactions entered into after the date of adoption or (2) retrospectively. The Company adopted the standard on January 1, 2022 on a prospective basis. The adoption of this standard did not have a material impact on the Company's consolidated financial statements.

Recently Issued Accounting Pronouncements Not Yet Adopted

In March 2020, the FASB issued ASU 2020-04, Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting, which provides temporary optional expedients and exceptions for applying generally accepted accounting principles to contracts, hedging relationships, and other transactions to ease the financial reporting burdens related to the expected market transition from LIBOR and other interbank offered rates to alternative reference rates. The optional amendments are effective as of March 12, 2020 through December 31, 2024, and upon adoption may be applied prospectively through December 31, 2024. The Company is currently assessing the impact of this ASU on the consolidated financial statements.

In October 2021, the FASB issued ASU 2021-08, which amends ASC 805 to require acquiring entities to apply ASU 2014-09, Revenue from Contracts with Customers (Topic 606), to recognize and measure contract assets and contract liabilities in a business combination. The guidance is effective for public entities for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. Entities should apply the ASU’s provisions prospectively to business combinations occurring on or after the effective date of the amendments. The Company does not expect the ASU to have a material impact on the consolidated financial statements and will adopt this new standard in the fiscal year beginning January 1, 2023.

Concentration of Credit Risk and Other Risks and Uncertainties

Revenue generated from the Company's operations outside of the United States for the years ended December 31, 2022, 2021 and 2020 was 63%, 65% and 61%, respectively.

As of December 31, 2022 and 2021, approximately 69% and 73%, respectively, of trade accounts receivable and unbilled accounts receivable was due from customers located outside the United States. At December 31, 2022 and 2021, the Company had net fixed assets of $30.0 million and $26.6 million, respectively, outside the United States.

Change in Accounting Principle - Stock-Based Compensation

In the fourth quarter of 2022, the Company changed its stock-based compensation policy for recognizing expense for graded vesting awards with only service conditions from the accelerated attribution method to the straight-line attribution method. The Company believes the straight-line attribution method for stock-based compensation expense for awards solely subject to time-based vesting conditions is the preferable accounting policy in accordance with ASC 250, Accounting Changes and Error Corrections, because it more accurately reflects how the award is earned over the service period and is the predominant method used in its industry. The Company applied the change retrospectively adjusting all periods presented and recorded a cumulative effect adjustment to Additional paid-in capital and Retained earnings as of January 1, 2020, resulting in a decrease to Additional paid-in capital of $2.2 million and an increase to Retained earnings of $2.2 million.

The following tables present the effect of the change in accounting policy and the impact on the Company's consolidated financial statements (in thousands, except per share data):

	As of December 31, 2022		
	As Computed Under Accelerated Attribution Method	As Computed Under Straight-line Attribution Method	Effect of Change
Other non-current assets	$ 22,992	$ 21,175	$ (1,817)
Deferred tax liabilities	57,923	62,555	4,632
Additional paid-in capital	1,597,654	1,565,514	(32,140)
Accumulated other comprehensive loss	(37,321)	(39,210)	(1,889)
Retained deficit	(151,094)	(123,514)	27,580

	As of December 31, 2021		
	As Computed Under Accelerated Attribution Method	As Computed Under Straight-line Attribution Method	Effect of Change
Other non-current assets	$ 25,125	$ 22,838	$ (2,287)
Deferred tax liabilities	78,944	83,191	4,247
Additional paid-in capital	1,390,630	1,359,149	(31,481)
Accumulated other comprehensive loss	(10,863)	(10,844)	19
Retained deficit	(42,208)	(17,280)	24,928

	Year Ended December 31, 2022		
	As Computed Under Accelerated Attribution Method	As Computed Under Straight-line Attribution Method	Effect of Change
Cost of revenues	$ 947,464	$ 950,305	$ 2,841
Selling, general and administrative expenses	376,261	372,761	(3,500)
Loss from operations	(47,971)	(47,312)	659
Net realized and unrealized foreign currency loss	(7,624)	(5,405)	2,219
Income tax expense	30,599	30,825	226
Net loss	$ (108,045)	$ (105,393)	$ 2,652
Other comprehensive loss, net of tax:			
Foreign currency translation adjustments	$ (26,458)	$ (28,366)	$ (1,908)
Comprehensive loss	$ (134,503)	$ (133,759)	$ 744
Net loss per common share:			
Basic and diluted loss per common share	$ (0.35)	$ (0.34)	$ 0.01

	Year Ended December 31, 2021		
	As Computed Under Accelerated Attribution Method	As Computed Under Straight-line Attribution Method	Effect of Change
Cost of revenues	$ 689,443	$ 669,681	$ (19,762)
Selling, general and administrative expenses	343,786	333,904	(9,882)
Income from operations	19,117	48,761	29,644
Net realized and unrealized foreign currency loss	(5,465)	(5,469)	(4)
Income tax expense	10,148	16,740	6,592
Net (loss) income	$ (23,623)	$ (575)	$ 23,048
Other comprehensive loss, net of tax:			
Foreign currency translation adjustments	$ (9,274)	$ (9,270)	$ 4
Comprehensive loss	$ (32,897)	$ (9,845)	$ 23,052
Net loss per common share:			
Basic and diluted loss per common share	$ (0.33)	$ (0.24)	$ 0.09
Net loss allocated to common shareholders	$ (83,265)	$ (60,217)	$ 23,048

	Year Ended December 31, 2020		
	As Computed Under Accelerated Attribution Method	As Computed Under Straight-line Attribution Method	Effect of Change
Selling, general and administrative expenses	$ 189,497	$ 189,850	$ 353
Income from operations	120,839	120,486	(353)
Net realized and unrealized foreign currency gain	7,190	7,175	(15)
Income tax expense	23,164	23,106	(58)
Net income	$ 79,283	$ 78,973	$ (310)
Other comprehensive income, net of tax:			
Foreign currency translation adjustments	$ 8,478	$ 8,493	$ 15
Comprehensive income	$ 87,761	$ 87,466	$ (295)
Net earnings per common share:			
Basic earnings per common share	$ 0.26	$ 0.26	$ —
Diluted earnings per common share	$ 0.26	$ 0.26	$ —
Earnings allocated to Preferred Stock	(6,171)	(6,150)	21
Net income allocated to common shareholders	$ 73,112	$ 72,823	$ (289)

	Year Ended December 31, 2022		
	As Computed Under Accelerated Attribution Method	As Computed Under Straight-line Attribution Method	Effect of Change
Cash flows from operating activities:			
Net loss	$ (108,045)	$ (105,393)	$ 2,652
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation and amortization expense	34,446	34,446	—
Bad debt expense	2,002	2,002	—
Deferred income tax benefit	(19,651)	(19,425)	226
Stock-based compensation expense	251,164	250,505	(659)
Unrealized foreign currency exchange loss	12,325	10,106	(2,219)
Non-cash lease expense on right-of-use assets	18,597	18,597	—
Other operating activities, net	3,300	3,300	—
Changes in operating assets and liabilities:			—
Trade receivables	(61,877)	(61,877)	—
Unbilled receivables	(20,711)	(20,711)	—
Prepaid expenses	(3,567)	(3,567)	—
Other assets	2,657	2,657	—
Lease liabilities	(16,721)	(16,721)	—
Accounts payable	144	144	—
Accrued expenses and other liabilities	(4,674)	(4,674)	—
Net cash provided by operating activities	$ 89,389	$ 89,389	$ —

	Year Ended December 31, 2021		
	As Computed Under Accelerated Attribution Method	As Computed Under Straight-line Attribution Method	Effect of Change
Cash flows from operating activities:			
Net (loss) income	$ (23,623)	$ (575)	$ 23,048
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation and amortization expense	29,528	29,528	—
Bad debt recovery	(601)	(601)	—
Deferred income tax benefit	(28,961)	(22,369)	6,592
Stock-based compensation expense	157,357	127,713	(29,644)
Unrealized foreign currency exchange loss	5,024	5,028	4
Other operating activities, net	3,642	3,642	—
Changes in operating assets and liabilities:			
Trade receivables	(32,139)	(32,139)	—
Unbilled receivables	(16,733)	(16,733)	—
Prepaid expenses	(6,542)	(6,542)	—
Other assets	(31,111)	(31,111)	—
Accounts payable	309	309	—
Accrued expenses and other liabilities	62,154	62,154	—
Net cash provided by operating activities	$ 118,304	$ 118,304	$ —

	Year Ended December 31, 2020		
	As Computed Under Accelerated Attribution Method	As Computed Under Straight-line Attribution Method	Effect of Change
Cash flows from operating activities:			
Net income	$ 79,283	$ 78,973	$ (310)
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization expense	26,528	26,528	—
Bad debt expense	7,685	7,685	—
Deferred income tax benefit	2,143	2,085	(58)
Stock-based compensation expense	1,667	2,020	353
Unrealized foreign currency exchange gains	(5,351)	(5,336)	15
Other operating activities, net	1,831	1,831	—
Changes in operating assets and liabilities:			
Trade receivables	3,977	3,977	—
Unbilled receivables	(16,794)	(16,794)	—
Prepaid expenses	308	308	—
Other assets	(5,742)	(5,742)	—
Accounts payable	(700)	(700)	—
Accrued expenses and other liabilities	30,461	30,461	—
Net cash provided by operating activities	$ 125,296	$ 125,296	$ —

Note 2 – Revenue Recognition

The Company disaggregates revenues from contracts with customers by geographic customer location, industry vertical and revenue contract types. Geographic customer location is pertinent to understanding the Company's revenues, as the Company generates its revenues from providing professional services to customers in various regions across the world. The Company groups customers into one of five industry verticals. Revenue contract types are differentiated by the type of pricing structure for customer contracts, which is predominantly time-and-materials, but also includes fixed price contracts.

Disaggregation of Revenues

The following table presents the disaggregation of the Company’s revenues by customer location (in thousands):

	Year Ended December 31,		
	2022	2021	2020
North America (1)	$ 503,948	$ 396,491	$ 321,237
APAC (2)	419,982	358,596	248,776
Europe (3)	315,875	267,121	195,372
LATAM	56,433	47,737	37,990
Total revenues	$ 1,296,238	$ 1,069,945	$ 803,375

(1) For the years ended December 31, 2022, 2021 and 2020, the United States represented 36.6%, or $474.3 million; 34.8%, or $372.8 million; and 38.2%, or $307.2 million, respectively, of the Company’s total revenues. Canadian operations were determined to be immaterial given the revenues as a percentage of total North America revenues was less than 10% for each of the years.

(2) For the years ended December 31, 2022 and 2021, Australia represented 11.4%, or $148.3 million, and 10.9%, or $116.5 million, respectively, of the Company's total revenues. For the year ended December 31, 2020, the revenues in Australia as a percentage of the Company's total revenues was less than 10%. For the years ended December 31, 2022 and 2021, revenues in China as a percentage of the Company's total revenues was less than 10%. For the year ended December 31, 2020, revenues in China were 10.4%, or $83.5 million, respectively, of the Company's total revenues.

(3) For the years ended December 31, 2022, 2021 and 2020, the United Kingdom represented 10.2%, or $132.6 million; 10.8%, or $115.2 million; and 11.1%, or $89.2 million, respectively, of the Company's total revenues. For the year ended December 31, 2022, revenues in Germany as a percentage of the Company's total revenues was less than 10%. For the years ended December 31, 2021 and 2020, revenues in Germany represented 10.6%, or $113.8 million, and 10.1%, or $81.5 million, respectively, of the Company's total revenues.

Other foreign countries were determined to be immaterial given the revenues as a percentage of the Company's total revenues was less than 10% for the years ended December 31, 2022, 2021 and 2020.

The following table presents the disaggregation of the Company's revenues by industry vertical (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Technology and business services	$ 360,117	$ 288,709	$ 228,514
Energy, public and health services	316,478	275,279	200,785
Retail and consumer	236,731	203,193	141,729
Financial services and insurance	221,748	170,492	123,291
Automotive, travel and transportation	161,164	132,272	108,656
Other	—	—	400
Total revenues	$ 1,296,238	$ 1,069,945	$ 803,375

The following table presents the disaggregation of the Company's revenues by contract type (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Time-and-material	$ 1,085,533	$ 872,271	$ 675,715
Fixed-price	210,705	197,674	127,313
Licensing	—	—	347
Total revenues	$ 1,296,238	$ 1,069,945	$ 803,375

Contract Balances

The following table is a summary of the Company's contract assets and contract liabilities (in thousands):

	As of December 31,	
	2022	2021
Contract assets included in unbilled receivables	$ 39,941	$ 25,408
Contract liabilities included in deferred revenue	$ 5,167	$ 13,807

Contract assets primarily relate to unbilled amounts on fixed-price contracts. Contract assets are recorded when services have been provided but the Company does not have an unconditional right to receive consideration. Professional services performed on or prior to the balance sheet date, but invoiced thereafter, are reflected in unbilled receivables.

Contract liabilities represent amounts collected from the Company's customers for revenues not yet earned. Such amounts are anticipated to be recorded as revenues when services are performed in subsequent periods. For the years ended December 31, 2022 and 2021, the Company recognized $13.7 million and $11.4 million, respectively, of revenues that were included in current liabilities at the prior year end.

Transaction Price Allocated to Remaining Performance Obligations

The Company does not have material future performance obligations that extend beyond one year. Accordingly, the Company has applied the optional exemption for contracts that have an original expected duration of one year or less.

Note 3 – Acquisitions

On April 26, 2022, the Company completed the acquisition of Connected Lab Inc. ("Connected"), an end-to-end product design and development firm that partners with their clients to discover and deliver products that drive business impact, in an all-cash transaction for a gross purchase price of $83.8 million, or $79.4 million net of cash acquired of $4.4 million, which is inclusive of a $14.0 million contingent consideration liability as discussed below and other adjustments. Connected is now wholly owned by the Company. The acquisition will advance the Company's capabilities in solving business problems through product-led design processes, from defining the strategy to discovery and delivery and enhance the Thoughtworks customer experience, product and design service line in North America.

In connection with the acquisition, the Company recorded a liability of $14.0 million of contingent consideration, which is included within the total purchase price and classified within accrued expenses in the consolidated balance sheet. The present value of the contingent consideration liability was determined using a Monte Carlo Simulation that calculated the average present value of the earnout payment. The fair value measurement of the earnout includes a performance metric which is an unobservable Level 3 input. The contingent consideration is payable in cash dependent upon achievement of the performance metric. The liability is remeasured to fair value at each reporting date with adjustments recorded within other income (expense), net in the consolidated statements of (loss) income and comprehensive (loss) income. The final payout amount of $14.3 million was determined as of December 31, 2022 and is expected to occur in the second quarter of 2023.

The following table presents the change in the contingent consideration liability (in thousands):

	Year Ended December 31,	
	2022	
Balance at beginning of period	$	—
Additions in the period		13,996
Change in fair value		1,027
Change due to exchange rates		(768)
Balance at end of period	$	14,255

The Company accounted for the acquisition under ASC 805, *Business Combinations*. The goodwill recognized in connection with the acquisition reflects the benefits expected to be derived from certain operational synergies. The fair value of the net assets acquired for the business was determined using Level 3 inputs, for which little or no market data exists, requiring the Company to develop assumptions regarding future cash flow projections. The results of operations of the acquired business have been included in the consolidated statements of (loss) income and comprehensive (loss) income from the acquisition date. Pro forma results of operations for the acquisition are not presented because the pro forma effects were not material to the Company's consolidated results of operations.

Aggregate acquisition-related costs related to Connected of $3.4 million for the year ended December 31, 2022 were included within SG&A expenses in the consolidated statements of (loss) income and comprehensive (loss) income.

The Company's final allocation of the fair value of underlying assets acquired and liabilities assumed as of the acquisition date is as follows (in thousands):

	Total
Cash and cash equivalents	$ 4,394
Trade receivables, net of allowance	3,678
Unbilled receivables	2,594
Customer relationships, net	15,800
Goodwill	66,191
Accrued compensation	(1,364)
Accrued expenses	(3,733)
Other assets/liabilities, net	(3,759)
Total gross purchase price	$ 83,801
Cash consideration paid	$ 69,805
Fair value of contingent consideration	13,996
Total gross purchase price	$ 83,801

Goodwill represents the excess of the purchase price over the fair values of assets acquired and liabilities assumed. The changes in fair value allocated to goodwill, tangible and intangible assets are not deductible for tax purposes.

Note 4 – Goodwill and Other Intangible Assets

The following is a summary of the changes in the carrying value of goodwill (in thousands):

	Total
Balance as of December 31, 2020	$ 318,151
Additions due to acquisitions	32,615
Changes due to exchange rates	(4,047)
Balance as of December 31, 2021	346,719
Additions due to acquisitions	71,700
Changes due to exchange rates	(13,402)
Balance as of December 31, 2022	$ 405,017

The following is a summary of other intangible assets (in thousands):

	As of December 31,	
	2022	2021
Customer relationships	$ 193,447	$ 177,100
Less accumulated amortization	(59,369)	(46,184)
Customer relationships, net	134,078	130,916
Trademark	273,000	273,000
Total other intangible assets, after amortization	407,078	403,916
Changes due to exchange rates	(10,031)	(5,049)
Other intangible assets, net	$ 397,047	$ 398,867

Other than indefinite-lived trademarks, the Company's intangible assets have finite lives and, as such, are subject to amortization. The weighted average remaining useful life of the Company's finite-lived intangible assets was 9.2 years and 10.6 years as of December 31, 2022 and 2021, respectively. Amortization expense related to these intangible assets was $13.1 million, $12.0 million and $10.5 million for the years ended December 31, 2022, 2021 and 2020, respectively.

As of December 31, 2022, estimated amortization expense for the next five years and thereafter is as follows (in thousands):

	Total
2023	$ 14,635
2024	14,635
2025	14,635
2026	14,635
2027	14,635
Thereafter	60,903
	$ 134,078

Note 5 – Income Taxes

(Loss)/Income Before Provision for Income Taxes

(Loss)/income before provision for income taxes based on geographic location is as follows (in thousands):

	Year Ended December 31,		
	2022	2021	2020
(Loss)/income before provision for income taxes:			
United States	$ (48,578)	$ (27,630)	$ 45,393
Foreign	(25,990)	43,795	56,686
Total	$ (74,568)	$ 16,165	$ 102,079

Provision for Income Taxes

The provision/(benefit) for income taxes is as follows (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Current:			
Federal	$ 32,746	$ 9,839	$ 704
State	9,259	5,071	2,316
Foreign	8,245	24,199	18,001
Total current	50,250	39,109	21,021
Deferred:			
Federal	(15,379)	(9,088)	5,914
State	(3,228)	(2,457)	862
Foreign	(818)	(10,824)	(4,691)
Total deferred	(19,425)	(22,369)	2,085
Total income tax expense	$ 30,825	$ 16,740	$ 23,106

As part of the U.S. Tax Act, beginning in 2022, IRC §174 research and experimental expenditures are to be capitalized and amortized over a period of 5 and 15 years for US and non-US expenditures. This change unfavorably impacts the Company's GILTI inclusion, resulting in a $12.5 million tax expense recorded for the year ended December 31, 2022 as compared to tax expense of $9.0 million and $6.7 million recorded for the years ended December 31, 2021 and 2020, respectively.

On February 25, 2022, the Company granted 4.4 million RSUs that were contingent upon the successful and active registration with the State Administration of Foreign Exchange of the People's Republic of China ("China SAFE RSUs"). As tax deductibility is contingent upon reimbursement and local regulations do not specifically allow for recharge payments, the Company recorded a $15.3 million tax expense for the year ended December 31, 2022.

On June 10, 2021, the United Kingdom enacted legislation increasing its corporate income tax rate from 19% to 25% beginning April 1, 2023. As a change in tax law is accounted for in the period of enactment, the Company recorded a $(0.3) million tax benefit and $0.9 million tax expense on the remeasurement of the Company’s United Kingdom net deferred tax liabilities for the years ended December 31, 2022 and 2021, respectively.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (“CARES”) Act was enacted and signed into law. The CARES Act, among other things, permits U.S. federal net operating loss (“NOL”) carryovers and carrybacks to offset 100% of taxable income for taxable years beginning before 2021. In addition, the CARES Act allows NOLs incurred in 2018, 2019, and 2020 to be carried back to each of the five preceding taxable years to generate a refund of previously paid income taxes. Further, the CARES Act permits modifications to the limitation of business interest (“Section 163(j)”) for tax years beginning in 2019 and 2020. The modifications to Section 163(j) increase the allowable business interest deduction from 30% of adjusted taxable income to 50% of adjusted taxable income. In 2020, the Company completed its analysis to determine the effect of the CARES Act and recorded a $4.2 million tax benefit as of December 31, 2020 from the carryback of 2018 U.S. federal net operating losses to the 2014 taxable year. The Company recorded the refund as an income tax receivable, of which $1.9 million was received in 2022.

Effective Tax Rate Reconciliation

A reconciliation of the Company’s provision for income taxes to income taxes computed at the U.S. federal statutory income tax rate of 21% is as follows (in thousands):

	Year Ended December 31,		
	2022	**2021**	**2020**
Provision for income taxes at federal statutory rate	$ (15,659)	$ 3,395	$ 21,437
Increase/(decrease) in taxes resulting from:			
Non deductible expenses	4,713	3,008	1,297
Research and development and foreign tax credits	(9,419)	(16,311)	(13,251)
Effect of foreign taxes and foreign exchange rates	81	5,695	4,082
GILTI and related international adjustments	12,528	8,972	6,714
§162(m) limitation on executive compensation	2,759	7,396	—
Stock compensation excess tax benefits	2,739	(8,206)	(22)
China non-deductible stock compensation expense	15,329	—	—
US state income taxes, net of federal tax benefit	3,811	1,072	2,892
Change in deferred tax valuation allowance	11,919	10,060	4,145
CARES Act US federal net operating loss carryback benefit	—	—	(4,188)
U.K. rate change	(313)	855	—
Adjustments of prior year estimates and other	(1,044)	(2,330)	(1,566)
Adjustments associated with income tax uncertainties	3,381	3,134	1,566
Total income tax expense	$ 30,825	$ 16,740	$ 23,106

Deferred Income Taxes

The components of the Company's deferred tax assets and liabilities include the following (in thousands):

	As of December 31,	
	2022	2021
Deferred tax assets:		
Accrued expenses	$ 23,572	$ 6,650
Goodwill	850	1,305
Net operating loss carryforwards	20,409	6,492
Research and development and foreign tax credit carryforwards	1,350	1,505
Allowance for doubtful accounts	2,772	2,717
Fixed assets	2,526	1,817
Stock-based compensation	22,533	30,322
Business interest	9,685	6,727
Other assets	4,790	1,768
Total deferred tax assets	88,487	59,303
Total valuation allowance	(28,510)	(16,703)
Total deferred tax assets	$ 59,977	$ 42,600

	As of December 31,	
	2022	2021
Deferred tax liabilities:		
Unremitted earnings of subsidiaries and unrealized translation gains	$ (2,793)	$ (3,877)
Prepaid expenses	(3,545)	(2,597)
Fixed assets	(649)	(1,071)
Deferred revenue	(460)	—
Customer relationships	(32,844)	(33,500)
Trademark	(73,028)	(73,028)
Internally developed software	(1,565)	(1,280)
Other liabilities	(192)	(932)
Total deferred tax liabilities	(115,076)	(116,285)
Total deferred tax liabilities, net	$ (55,099)	$ (73,685)

Management believes that it is more likely than not that certain deferred tax assets will not be realized. At December 31, 2022 and 2021, the Company established a full valuation allowance for deferred tax assets in select non-US jurisdictions of approximately $14.5 million and $7.1 million, respectively. The Company established a valuation allowance of approximately $13.1 million and $8.9 million at December 31, 2022 and 2021, respectively, for a separate company U.S. federal net operating loss carryforward and separate company U.S. federal limitation of business interest. The Company established a valuation allowance of approximately $1.0 million and $0.8 million for certain foreign tax credits at December 31, 2022 and 2021, respectively.

At December 31, 2022 and 2021, the Company had U.S. state net operating loss carryforward benefits of $0.1 million and $0.5 million, respectively. The majority of U.S. state net operating loss carryforwards have expiration periods that range from 10 to 20 years.

At December 31, 2022 and 2021, the Company had foreign net operating loss carryforwards of approximately $68.2 million and $15.6 million, respectively. For material APAC jurisdictions, the net operating loss carryforward period is 5 years, and for all other material jurisdictions, the net operating loss carryforward period is indefinite.

As of December 31, 2022 and 2021, the Company does not assert permanent reinvestment on previously taxed foreign earnings with the exception of India, where the Company is permanently reinvested. Deferred tax liabilities of $2.1 million and $3.0 million, respectively, have been accrued on the foreign withholding taxes due upon repatriation. At December 31, 2022 and 2021 a deferred tax asset of $3.3 million and $0.1 million, respectively, has been accrued and recorded to other comprehensive income for cumulative foreign currency translation on previously-taxed earnings and profits of the Company's controlled foreign corporations. Additional tax implications of future repatriations were considered and deemed immaterial.

For share-based payment awards that are expected to result in a tax deduction, the Company records a deferred tax asset related to the compensation expense that is recognized. In adjusting the compensation expense in the retrospective application of the straight-line method, the Company appropriately adjusted related deferred tax assets. Further, the Company considered whether adjustments to deferred tax assets would require adjustments to valuation allowances and concluded that there were no material valuation allowance adjustments to be recorded.

Unrecognized Tax Benefits

As of December 31, 2022, 2021 and 2020, the Company recorded $14.5 million, $11.3 million and $8.1 million, respectively, of unrecognized tax benefits, which if recognized, would favorably affect the Company's effective tax rate.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits is as follows (in thousands):

	Year Ended December 31,		
	2022	**2021**	**2020**
Balance, beginning of year	$ 11,609	$ 8,123	$ 6,557
Additions for tax positions related to the current year	—	2,068	1,219
Additions for tax positions related to prior years	3,424	1,923	706
Reductions for tax positions related to prior years	(43)	(505)	(316)
Statute of limitations expirations	—	—	(43)
Settlements with tax authorities	—	—	—
Balance, end of year	$ 14,990	$ 11,609	$ 8,123

The Company recognizes interest and penalties related to unrecognized tax benefits as income tax expense. For the years ended December 31, 2022, 2021 and 2020, the income tax expense/(benefit) recognized for interest and penalties related to unrecognized tax benefits was $0.4 million, $0.3 million and $0.1 million, respectively. At December 31, 2022, 2021 and 2020, the Company had cumulative liabilities for penalties and interest related to unrecognized tax benefits of approximately $2.0 million, $1.6 million and $1.3 million, respectively. There were no tax positions for which it was reasonably possible that unrecognized tax benefits will significantly increase or decrease within twelve months of the reporting date.

The Company files tax returns in the U.S. federal, various U.S. states, and various foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal or state income tax examinations by tax authorities for years before 2019. The Company's India subsidiary is no longer subject to income tax examinations by tax authorities in India for years before 2005. For the remaining foreign tax jurisdictions, with few exceptions, the Company is no longer subject to income tax examinations by tax authorities for years before 2017.

Note 6 – Property and Equipment, net

Property and equipment consisted of the following (in thousands):

	As of December 31,	
	2022	2021
Automobiles	$ 5	$ 38
Computer equipment	46,300	37,847
Software, including internal-use	19,170	13,575
Leasehold improvements	22,245	20,425
Office furniture and equipment	6,561	7,968
	94,281	79,853
Less: accumulated depreciation and amortization	(55,483)	(45,353)
Property and equipment, net	$ 38,798	$ 34,500

Depreciation and amortization expense for property and equipment was $21.3 million, $17.5 million and $16.0 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Note 7 – (Loss) Earnings Per Common Share

Basic (loss) earnings per common share is computed by dividing the net (loss) income allocated to common shareholders by the weighted average common shares outstanding for the period.

Diluted (loss) earnings per common share is computed by giving effect to all potential shares of common stock, including outstanding stock options, unvested RSUs and unvested PSUs, to the extent the shares are dilutive. PSU shares are not included in dilution during the performance period. Once the performance period is complete, the PSU shares are included in dilution during the remaining service period, to the extent they are dilutive. Basic and diluted loss per common share are the same for the years ended December 31, 2022 and 2021, as the inclusion of all potential shares of common stock outstanding would have been anti-dilutive. The dilutive effect of potentially dilutive securities is reflected in diluted earnings per common share by application of the treasury stock method.

The components of basic and diluted (loss) earnings per common share are as follows (in thousands, except share and per share data):

	Year Ended December 31,		
	2022	2021	2020
Basic (loss) earnings per common share:			
Net (loss) income	$ (105,393)	$ (575)	$ 78,973
Preferred stock dividends	—	(59,642)	—
Earnings allocated to Preferred Stock	—	—	(6,150)
Net (loss) income allocated to common shareholders – Basic	$ (105,393)	$ (60,217)	$ 72,823
Weighted average common shares outstanding – Basic	310,911,526	254,271,997	278,225,009
Basic (loss) earnings per common share	$ (0.34)	$ (0.24)	$ 0.26
Diluted (loss) earnings per common share:			
Net (loss) income allocated to common shareholders – Basic	$ (105,393)	$ (60,217)	$ 72,823
Weighted average shares outstanding – Basic	310,911,526	254,271,997	278,225,009
Dilutive effect of:			
Employee stock options, RSUs and PSUs (1)	—	—	6,390,986
Weighted average common shares outstanding – Diluted	310,911,526	254,271,997	284,615,995
Diluted (loss) earnings per common share	$ (0.34)	$ (0.24)	$ 0.26

(1) Reflects the dilutive effects of applying the treasury stock method to all potential common shares. For periods where the Company was in a net loss, the potential common shares were excluded but would have been dilutive if the Company was not in a net loss.

The following potentially dilutive securities were excluded from the computation of diluted (loss) earnings per common share because the impact of including them would have been anti-dilutive:

	Year Ended December 31,		
	2022	2021	2020
Employee stock options, RSUs and PSUs	26,802,540	23,435,860	444,215

Note 8 – Leases

The Company leases facilities (office space and corporate apartments) and equipment (IT equipment) under various non-cancelable operating leases that expire through September 2032, some of which include one or more options to extend the leases, generally at rates to be determined in accordance with the agreements. The Company's facility leases generally provide for periodic rent increases and may contain escalation clauses and renewal options. The Company's lease terms include options to extend the lease if they are reasonably certain of being exercised.

The Company recognizes operating lease expense on a straight-line basis over the lease term and variable lease payments are expensed as incurred. Operating lease expense and the related variable lease expense is recorded within SG&A expenses in the Company's consolidated statements of (loss) income and comprehensive (loss) income. As of December 31, 2022, the Company's finance leases were immaterial.

The Company determines if a contract contains a lease at lease inception. If the borrowing rate implicit in the lease is not determinable, the Company uses its incremental borrowing rate ("IBR") based on information available at lease commencement including prevailing financial market conditions to determine the present value of future lease payments. The Company has elected the option to combine lease and non-lease components as a single component for the Company's entire population of lease assets.

Operating lease assets and lease liabilities are recognized at the lease commencement date. Operating lease liabilities represent the present value of lease payments not yet paid. Operating lease assets represent the right to use an underlying asset and are based upon the operating lease liabilities adjusted for prepayments or accrued lease payments, initial direct costs, and lease incentives. The Company’s lease agreements do not contain any material residual value guarantees or material restrictive covenants. Leased assets are presented net of accumulated amortization. Variable lease payment amounts that cannot be determined at the commencement of the lease, such as increases in lease payments based on changes in index rates or usage, are not included in the ROU assets or liabilities; instead, these are expensed as incurred and recorded as variable lease expense.

Adoption of Topic 842 resulted in the initial recognition of ROU assets of $40.9 million and lease liabilities of $43.7 million.

As of December 31, 2022, the Company does not have any leases that create significant rights and obligations that have not yet commenced.

The following table presents total lease cost (in thousands):

	Year Ended December 31, 2022
Operating lease cost	$ 19,818
Variable lease cost	2,908
Short-term lease cost	614
Total lease cost	$ 23,340

The following table presents supplemental cash flow information (in thousands):

	Year Ended December 31, 2022
Cash paid for amounts included in the measurement of operating lease liabilities	$ 19,779
ROU assets obtained in exchange for new operating lease liabilities	21,819

The following table presents average lease terms and discount rates:

	As of December 31, 2022
Weighted-average remaining lease term (years)	4.7
Weighted average discount rate	5.3 %

As of December 31, 2022, the aggregate future lease payments under all operating leases are as follows (in thousands):

	Operating
2023	$ 17,938
2024	10,763
2025	6,945
2026	5,506
2027	2,769
Thereafter	7,750
Total lease payments	51,671
Less: imputed interest	5,809
Present value of lease liabilities	$ 45,862

ASC 840 Disclosures

Prior to the adoption of Topic 842, aggregate future minimum lease payments, net of sublease income, under all operating leases were as follows as of December 31, 2021 (in thousands):

2022	$ 17,557
2023	11,690
2024	6,849
2025	3,955
2026	3,027
Thereafter	6,088
Total future minimum lease payments	$ 49,166

Total rent expense for all operating leases for the year ended December 31, 2021 was $19.4 million.

Note 9 – Stockholders' Equity

Redeemable Convertible Preferred Stock

In September 2021, upon the closing of the Company's IPO, all outstanding shares of redeemable convertible preferred stock were converted into an aggregate of 1,365,058 shares (pre-stock split) of common stock.

Further, in connection with the IPO, the Company's amended and restated certificate of incorporation became effective, which authorized the issuance of 100,000,000 shares of undesignated preferred stock with a par value of $0.001 per share with rights and preferences, including voting rights, designated from time to time by the Board of Directors.

Common Stock

In connection with the IPO, all classes of shares of the Company's common stock then outstanding were converted into 5,259,163 shares (pre-stock split) of common stock on a one-to-one basis. As a result, the securities of the Company are represented by shares of common stock with a par value of $0.001 per share. Each share of common stock is entitled to one vote. With respect to payment of dividends and distribution of assets upon liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, all shares of common stock will participate pro rata in such payment whenever funds are legally available and when declared by the Board, subject to the prior rights of holders of all classes of stock outstanding.

As of December 31, 2022, there were 1,000,000,000 shares of common stock authorized and 315,681,987 shares of common stock outstanding.

Note 10 – Stock-Based Compensation

Equity Incentive Plans

On October 12, 2017, the Company approved the 2017 Plan for the purpose of providing an incentive compensation structure to participants. Under the 2017 Plan, the Company may make awards to such present and future officers, directors, employees, consultants and advisors of the Company as may be selected at the sole discretion of the Board. The option awards gave the participant the right to purchase the Company's former Class C common stock for a prespecified exercise price. As a result of the IPO, the Company no longer grants awards under the 2017 Plan, and all previously awarded options can now be exercised for only the Company's current common stock when vested and exercisable.

In September 2021, the Board approved the Omnibus Plan to assist the Company in attracting, retaining, motivating, and rewarding certain employees, officers, directors, and consultants of the Company and its Affiliates and promoting the creation of long-term value for stockholders, which became effective in connection with the IPO. A total of 62,048,123 shares of the Company's common stock have been reserved for issuance under the Omnibus Plan.

The following is a summary of the components of stock-based compensation expense for the periods indicated (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Cost of revenues	$ 176,046	$ 60,678	$ —
Selling, general and administrative expenses	73,869	67,624	2,020
Total stock-based compensation expense	$ 249,915	$ 128,302	$ 2,020

The income tax expense/(benefit) recognized for the years ended December 31, 2022, 2021 and 2020 was $20.6 million, $(0.8) million and nil, respectively.

Stock Options

Under the 2017 Plan, eligible employees received non-qualified stock options as a portion of their total compensation. The options vest on a graded time vesting schedule ("Time Vesting Options") over a vesting term of four years and a contractual term of 10 years, with 37.5% vesting on the 18-month anniversary and 6.25% vesting every three months for the remainder of the 48-month period. Upon a change of control, 100% of the time-vesting options will vest immediately. Any unvested options will be forfeited upon termination of employment.

The Company's 2017 Plan permits imposing lock-up restrictions on participants in connection with the IPO. Pursuant to the 2017 Plan, the Company imposed a lock-up restriction, subject to limited exceptions, on selling, transferring or otherwise disposing of options and shares of common stock issuable pursuant to the exercise of options, for a period of one year following the consummation of the IPO, provided that such restriction will lapse as to 50% of such options and shares after six months following the consummation of the offering. The lockup period restrictions have ended as of September 17, 2022.

The following is a summary of performance and time vesting option activity for the year ended December 31, 2022 (in thousands, except share and per share data):

	Number of Stock Options	Weighted Average Exercise Price	Aggregate Intrinsic Value	Weighted-Average Remaining Contractual Term (years)
Balance at December 31, 2021	24,097,082	$ 3.79		
Granted	—	—		
Forfeited	(140,597)	10.77		
Exercised	(2,348,923)	2.99		
Cancelled	—	—		
Expired	—	—		
Balance at December 31, 2022	21,607,562	$ 3.83	$ 145,393	5.5
Exercisable at December 31, 2022	20,588,419	$ 3.54	$ 142,895	5.4

As of December 31, 2022, total compensation cost related to Time Vesting Options not yet recognized was $7.2 million, which will be recognized over a weighted-average period of 2.1 years. Unless otherwise prohibited by law in local jurisdictions, Time Vesting Options will continue to vest according to the 2017 Plan and the applicable award agreements.

The total intrinsic value of options exercised during the years ended December 31, 2022, 2021 and 2020 was $29.6 million, $24.9 million and $0.8 million, respectively. The weighted-average grant date fair value of options granted during the years ended December 31, 2021 and 2020 was $10.32 and $5.71, respectively. No options were granted during the year ended December 31, 2022.

The following table summarizes the weighted-average assumptions used in estimating the fair value of stock options granted to employees:

	Year Ended December 31,	
	2021 (1)	2020 (1)
Risk-free interest rate	0.1 %	0.1 %
Dividend yield	— %	— %
Expected volatility	55.0 %	55.0 %
Expected term (years)	1	2

(1) The risk-free interest rate is based on the rates of U.S. Treasury securities with a maturity similar to the term to liquidity, continuously compounded. The expected equity volatility is estimated based on an analysis of guideline public companies' historical volatility. As these stock options were awarded prior to the IPO, the expected term was estimated based on management's assumptions of time to a liquidity event.

Restricted Stock Units

In September 2021, the Board approved the Omnibus Plan. Under the Omnibus Plan, RSUs are awarded to eligible employees and entitle the grantee to receive shares of common stock at the end of a vesting period. Unvested RSUs as of December 31, 2022 have varying vesting schedules, with the majority of shares vesting evenly over four years.

All RSUs granted as a result of the IPO included a lock-up period of 6 months, ending March 17, 2022, before the participants could redeem the shares. Throughout the vesting period and the lock-up period, shareholders are subject to the market risk on the value of their shares.

The following is a summary of RSU activity for the year ended December 31, 2022:

	Number of RSUs	Weighted Average Grant Date Fair Value
Unvested balance at December 31, 2021	14,128,722	$ 23.39
Granted (1)	11,505,096	14.97
Forfeited	(1,622,736)	22.96
Vested (2)	(10,997,136)	21.77
Unvested balance at December 31, 2022	13,013,946	$ 17.37

(1) Includes 4.4 million RSUs that were contingent upon the successful and active registration with the State Administration of Foreign Exchange of the People's Republic of China (“China SAFE”), which occurred on February 25, 2022. The amount also includes 0.1 million RSUs granted in relation to the Connected acquisition.

(2) Includes 2.8 million shares that were net settled when released and returned to the share pool for future grants.

The total fair value of RSUs vested during the year ended December 31, 2022 was $189.6 million. No RSUs vested during the years ended December 31, 2021 and 2020.

As of December 31, 2022, total compensation cost related to all RSUs not yet recognized was $157.5 million, of which $114.3 million is IPO related or associated with one-time grants and considered nonrecurring. The remainder of $43.2 million is primarily related to the annual grant and considered recurring. The total unamortized expense is anticipated to be recognized over a weighted-average period of 2.7 years.

Performance Stock Units

In April 2022, the Board of Directors approved the grant of PSUs to certain executives and employees under the Omnibus Plan. Awards with a performance and time-based vesting as well as awards with market-based performance vesting components were granted. The performance and time-based PSUs, or non-market-based PSUs, are subject to the Company’s achievement of specified profit targets. The market-based awards are tied to the Company's performance against relative total shareholder return ("rTSR") targets. Both types of PSUs vest at the end of a three-year service period.

The following is a summary of PSU activity for the year ended December 31, 2022:

	Number of PSUs	Weighted Average Grant Date Fair Value
Unvested balance at December 31, 2021	—	$ —
Granted (1)	269,586	24.15
Adjustment for PSUs expected to vest as of current period end	(192,889)	25.76
Forfeited	—	—
Vested	—	—
Unvested balance at December 31, 2022	76,697	$ 20.11

(1) Reflects shares granted at 100%.

For compensation expense purposes, the fair value of the non-market-based PSUs was determined using the closing stock price on the grant date, and the fair value for the market-based PSUs was determined using a Monte-Carlo simulation.

As of December 31, 2022, total compensation cost related to PSUs not yet recognized was $4.1 million. The unamortized expense is anticipated to be recognized over a weighted-average period of 2.3 years.

Note 11 – Benefit Plans

The Company sponsors a 401(k) plan for substantially all U.S. employees. Employees are allowed to make contributions to the plan through withholdings of their salary. The plan provides for the Company to make a discretionary matching contribution. Contributions to the plan for the years ended December 31, 2022, 2021 and 2020, totaled $5.8 million, $4.5 million and $3.8 million, respectively. The Company also maintains similar defined contribution plans in the United Kingdom, Canada, Spain, Italy, Singapore, and Thailand. Total employer contributions under these plans for the years ended December 31, 2022, 2021 and 2020 were $11.0 million, $8.8 million and $7.3 million, respectively.

Note 12 – Credit Agreements

The Company entered into a Senior Secured Credit Facilities (the “Term Loan”), dated October 12, 2017, most recently amended as of December 9, 2022, among the Company, the syndicate lenders thereto and Credit Suisse, AG, Cayman Islands Branch, as administrative agent, to finance, in part, the acquisition of all of the outstanding common stock of the Company. The Term Loan and the Revolver, together with any subsequent amendments, are collectively referred to as the Credit Agreement.

On March 26, 2021, the Company amended and restated its credit agreement (the “Amendment and Restatement”) to increase the term loan facility to a total of $715.0 million. Also, as part of the facility, the aggregate revolving credit facility was increased to $165.0 million from $85.0 million.

On December 9, 2022, the Company amended and restated its credit agreement (the “Second Amendment and Restatement”) to (i) increase the amount of revolving credit commitments from $165.0 million to $300.0 million and (ii) transition the reference rate for the revolving borrowings under the Credit Agreement from LIBOR to SOFR and amend the applicable margins as specified therein.

Borrowings under the Term Loan bear interest at a rate per annum equal to an applicable margin based on the Company’s leverage ratio, plus either (a) a base rate or (b) a LIBOR rate, at the Company's option, subject to interest rate floors. For the first full quarter after the Amendment and Restatement date, the interest rate per annum is equal to (a) 3.25% for LIBOR based borrowings and (b) 2.25% for base rate borrowings, subject to interest rate floors. The interest rate reduced by 0.25% upon the completion of the IPO for both LIBOR and base rate borrowings. The interest rate was further reduced by 0.25% upon the change in corporate family rating in November 2022.

Borrowings under the Revolver bear interest at a rate per annum equal to an applicable margin based on the Company’s leverage ratio, plus either (a) a base rate or (b) the SOFR rate at the Company's option. In addition to paying interest on outstanding borrowings under the Revolver, the Company is required to pay a commitment fee to the lenders under the Revolver in respect of unutilized commitments thereunder and customary letter of credit fees.

All obligations of the Company under the Senior Secured Credit Facilities provided by any lender party to the Senior Secured Credit Facilities or any of its affiliates and certain other persons are unconditionally guaranteed by a wholly owned subsidiary of Thoughtworks Holding, Inc., and each existing and subsequently acquired or organized direct or indirect wholly owned domestic restricted subsidiary of the Company, with customary exceptions including, among other things, where providing such guarantees is not permitted by law, regulation or contract or would result in material adverse tax consequences. All obligations under the Senior Secured Credit Facilities provided by any lender party to the Senior Secured Credit Facilities or any of its affiliates and certain other persons, and the guarantees of such obligations, are secured, subject to permitted liens and other exceptions, as outlined in the Senior Secured Credit Facilities.

The Term Loans and borrowings under our Revolver contain a number of financial and non-financial covenants that, among other things, restrict, subject to certain exceptions, the Company’s ability and the ability of the Company’s restricted subsidiaries to engage in certain activities, such as incur indebtedness or permit to exist any lien on any property or asset now owned or hereafter acquired, as specified in the debt facility.

The Credit Agreement requires compliance with certain covenants customary for agreements of this type. As of December 31, 2022, the Company was in compliance with its debt covenants.

The Company incurred and capitalized deferred financing fees, or third-party debt issuance costs, of $3.6 million and $7.1 million related to the restated credit agreement for the years ended December 31, 2022 and 2021, respectively. The debt issuance costs are recorded as reductions of the outstanding long-term indebtedness. The Term Loan is paid in equal quarterly installments in aggregate annual amounts equal to 1% of the original principal amount of the Term Loan.

On July 21, 2022, the Company made a voluntary prepayment of $100.0 million on outstanding amounts owed on the Term Loan. As a result of the prepayment, the Company wrote off $0.9 million of deferred financing fees, which is reflected in other (expense) income, net in the consolidated statements of (loss) income and comprehensive (loss) income for the year ended December 31, 2022.

The following table presents the Company's outstanding debt and borrowing capacity (in thousands):

	As of December 31,	
	2022	2021
Availability under revolving credit facility (due March 26, 2026)	$ 300,000	$ 165,000
Borrowings under revolving credit facility	—	—
Long-term debt (due March 24, 2028), including current portion (1)	399,006	504,530
Interest rate	6.9 %	3.5 %

(1) The balance includes deferred financing fees. A reconciliation of gross to net amounts is presented below.

The carrying value of the Company's credit facilities (including current maturities) is as follows (in thousands):

	As of December 31,	
	2022	2021
Long-term debt, less current portion	$ 395,338	$ 502,488
Capitalized deferred financing fees	(3,482)	(5,108)
Long-term debt	391,856	497,380
Current portion of long-term debt	7,150	7,150
Total debt carrying value	$ 399,006	$ 504,530

As of December 31, 2022, the Company's future principal cash payments for the Term Loan are as follows (in thousands):

	Total
2023	$ 7,150
2024	7,150
2025	7,150
2026	7,150
2027	7,150
2028	366,738
Total future principal cash payments	$ 402,488

Note 13 – Accrued Expenses

The following is a summary of the Company's accrued expenses (in thousands):

	As of December 31,	
	2022	2021
Accrued interest expense	$ 221	$ 76
Accrued employee expense	2,016	2,320
Accrued travel expense	281	514
Operating lease expenses	425	262
Insurance charges	198	170
Professional fees	6,321	5,188
Withholding taxes payable	43	26,077
Other taxes payable	1,815	1,803
Rebates payable	1,168	943
Contingent consideration	14,255	—
Other accrued expenses	3,484	6,741
Accrued expenses	$ 30,227	$ 44,094

Note 14 – Accumulated Other Comprehensive Loss

The following table summarizes the changes in accumulated balance for each component of accumulated other comprehensive loss (in thousands):

	Year Ended December 31,		
	2022	2021	2020
Foreign currency translation:			
Beginning balance	$ (10,844)	$ (1,574)	$ (10,067)
Foreign currency translation (loss)/gain	(31,569)	(8,221)	8,743
Income tax benefit (expense)	3,203	(1,049)	(250)
Foreign currency translation, net of tax	(28,366)	(9,270)	8,493
Ending balance	(39,210)	(10,844)	(1,574)
Accumulated other comprehensive loss	$ (39,210)	$ (10,844)	$ (1,574)

Note 15 – Quarterly Selected Financial Data (unaudited)

The following tables include quarterly selected financial information for 2022 and 2021 (in thousands, except per share amounts) and reflect the retrospective adjustment for the change in accounting principle related to the recognition of stock-based compensation, as discussed in Note 1, *Business and Summary of Significant Accounting Policies*.

	For the Quarter Ended			
	March 31, 2022	June 30, 2022	September 30, 2022	December 31, 2022
Revenues	$ 320,940	$ 332,107	$ 332,447	$ 310,744
Cost of revenues	249,765	250,462	244,139	205,939
Selling, general and administrative expenses	104,765	99,352	91,682	76,962
(Loss) income from operations	(39,436)	(21,922)	(8,677)	22,723
Net (loss) income	(43,585)	(39,308)	(38,608)	16,108
Basic (loss) earnings per common share	$ (0.14)	$ (0.13)	$ (0.12)	$ 0.05
Diluted (loss) earnings per common share	$ (0.14)	$ (0.13)	$ (0.12)	$ 0.05

	For the Quarter Ended			
	March 31, 2021	June 30, 2021	September 30, 2021	December 31, 2021
Revenues	$ 237,662	$ 260,432	$ 285,051	$ 286,800
Cost of revenues	134,443	152,191	180,344	202,703
Selling, general and administrative expenses	66,511	68,514	111,289	87,590
Income (loss) from operations	32,362	35,239	(10,755)	(8,085)
Net income (loss)	18,790	18,326	(20,840)	(16,851)
Basic earnings (loss) per common share	$ 0.06	$ (0.18)	$ (0.09)	$ (0.06)
Diluted earnings (loss) per common share	$ 0.06	$ (0.18)	$ (0.09)	$ (0.06)

Note 16 – Subsequent Events

On February 24, 2023, the Company made a voluntary prepayment of $100.0 million on outstanding amounts owed on the Term Loan disclosed in Note 12, *Credit Agreements*.

Item 9. *Changes in and Disagreements With Accountants on Accounting and Financial Disclosure*

None.

Item 9A. *Controls and Procedures*

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act), as of the end of the period covered by this Annual Report.

Based on such evaluation, our principal executive officer and principal financial officer have concluded that as of such date, our disclosure controls and procedures are designed to, and are effective to, provide assurance at a reasonable level that the information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosures.

Management’s Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15(d)-15(f) under the Exchange Act). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the guidelines set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control - Integrated Framework (2013). Based on the evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2022. Our management's assessment of the effectiveness of our internal control over financial reporting as of December 31, 2022, has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (identified in management's evaluation pursuant to Rules 13a-15(d) and 15d-15(d) under the Exchange Act) that occurred during the quarter ended December 31, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Controls and Procedures

In designing and evaluating the disclosure controls and procedures and internal control over financial reporting, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures and internal control over financial reporting must reflect the fact that there are resource constraints and that management is required to apply judgment in evaluating the benefits of possible controls and procedures relative to their costs. 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. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the 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.

Item 9C. *Disclosure Regarding Foreign Jurisdictions that Prevent Inspections*

Not applicable.

PART III

Item 10. *Directors, Executive Officers and Corporate Governance*

The information required by this item will be filed (and is hereby incorporated by reference) by an amendment hereto or pursuant to a definitive proxy statement pursuant to Regulation 14A that will contain such information.

Item 11. *Executive Compensation*

The information required by this item will be filed (and is hereby incorporated by reference) by an amendment hereto or pursuant to a definitive proxy statement pursuant to Regulation 14A that will contain such information.

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

The information required by this item will be filed (and is hereby incorporated by reference) by an amendment hereto or pursuant to a definitive proxy statement pursuant to Regulation 14A that will contain such information.

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

The information required by this item will be filed (and is hereby incorporated by reference) by an amendment hereto or pursuant to a definitive proxy statement pursuant to Regulation 14A that will contain such information.

Item 14. *Principal Accounting Fees and Services*

The information required by this item will be filed (and is hereby incorporated by reference) by an amendment hereto or pursuant to a definitive proxy statement pursuant to Regulation 14A that will contain such information.

PART IV

Item 15. *Exhibits and Financial Statement Schedules*

The following documents are filed as part of this Annual Report on Form 10-K:

1. Financial Statements. Our consolidated financial statements are listed in the “Index to Consolidated Financial Statements” under Part II, Item 8 of this Annual Report on Form 10-K.

2. Financial Statement Schedules. The financial statement schedules have been omitted as they are either not applicable or the required information is otherwise included.

3. Exhibits. The exhibits included below are filed as part of this Annual Report on Form 10-K or are incorporated herein by reference.

			Incorporated by Reference			
Exhibit Number	**Description**	**Filed Herewith**	**Form**	**File No.**	**Filing Date**	**Exhibit Number**
3.1	Fourth Amended and Restated Certificate of Incorporation		8-K	001-40812	September 20, 2021	3.1
3.2	Third Amended and Restated Bylaws		8-K	001-40812	September 20, 2021	3.2
4.1	Description of Securities		10-K	001-40812	March 8, 2022	4.1
4.2	Amended and Restated Registration Rights Agreement		S-1/A	333-258985	August 25, 2021	4.1
4.3	Amendment No. 1 to Amended and Restated Registration Rights Agreement		S-1/A	333-258985	August 25, 2021	4.2
10.1	Amended and Restated Credit Agreement, dated as of March 26, 2021		S-1/A	333-258985	August 25, 2021	10.1
10.2+	Thoughtworks Holding, Inc. 2021 Omnibus Incentive Plan		S-8	333-259702	September 21, 2021	10.1
10.3+	Thoughtworks Holding, Inc. 2021 Employee Stock Purchase Plan		S-8	333-259702	September 21, 2021	10.2
10.4+	Form of Thoughtworks U.K. Share Incentive Plan		S-8	333-259702	September 21, 2021	10.3
10.5+	Turing Holding Corp. (n/k/a Thoughtworks Holding, Inc.) 2017 Stock Option Plan		S-8	333-259702	September 21, 2021	10.4
10.6+	Form of Stock Option Agreement		S-8	333-259702	September 21, 2021	10.5
10.7+	Form of Restricted Stock Unit Agreement		10-Q	001-40812	November 15, 2021	10.11
10.8+	Form of Performance Share Unit Agreement		10-Q	001-40812	August 15, 2022	10.1
10.9+	Form of Indemnification Agreement		S-1/A	333-258985	August 25, 2021	10.5
10.10+	Form of Thoughtworks Holding, Inc. Executive Severance Plan		S-1/A	333-258985	August 25, 2021	10.11
10.11+	Employment Agreement, dated as of October 12, 2017, by and between Thoughtworks, Inc. and Guo Xiao		S-1/A	333-258985	August 25, 2021	10.7
10.12+	Employment Agreement, dated as of October 12, 2017, by and between Thoughtworks, Inc. and Dr. Rebecca Parsons		S-1/A	333-258985	August 25, 2021	10.8

10.13+	Employment Agreement, dated as of October 19, 2017, by and between Thoughtworks, Ltd and Christopher Murphy		S-1/A	333-258985	August 25, 2021	10.9
10.14+	Letter Agreement, dated as of August 10, 2021, by and between Thoughtworks, Inc. and Christopher Murphy		S-1/A	333-258985	August 25, 2021	10.10
10.15	Director Nomination Agreement, dated as of September 17, 2021, by and among the Company and the other signatories party thereto.		10-Q	001-40812	November 15, 2021	10.10
10.16	Incremental Amendment, dated as of March 30, 2021, to the Amended and Restated Credit Agreement	X				
10.17	Amendment No. 2 and Incremental Amendment to Amended and Restated Credit Agreement		8-K	001-40812	December 12, 2022	10.1
18.1	Preferability Letter Regarding Change in Accounting Principle dated February 28, 2022 from Ernst & Young LLP	X				
21.1	List of Subsidiaries	X				
23.1	Consent of Ernst & Young LLP, independent registered public accounting firm	X				
24.1	Power of Attorney (included in signature page hereto)	X				
31.1	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a) under the Exchange Act, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X				
31.2	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a) under the Exchange Act, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X				
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	X				
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	X				
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document	X				
101.SCH	Inline XBRL Taxonomy Extension Schema Document	X				
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document	X				

101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document	X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document	X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document	X
104	Cover Page Interactive Data File - (formatted as inline XBRL and contained in Exhibit 101)	X
+	Indicates management contracts or compensatory plans or arrangements	

Item 16. *Form 10-K Summary*

None.

SIGNATURES

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

Date: February 28, 2023

THOUGHTWORKS HOLDING, INC.

By: /s/ Guo Xiao

Guo Xiao

Chief Executive Officer and Director

(Principal Executive Officer)

POWER OF ATTORNEY

Each person whose signature appears below constitutes and appoints Guo Xiao and Erin Cummins, and each one of them, as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her 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 he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed by the following persons on behalf of the registrant and in the capacities as of February 28, 2023.

Signature	Title
/s/ Guo Xiao	Chief Executive Officer and Director
Guo Xiao	*(Principal Executive Officer)*
/s/ Erin Cummins	Chief Financial Officer
Erin Cummins	*(Principal Financial Officer and Principal Accounting Officer)*
/s/ Ian Davis	Chairman of the Board of Directors
Ian Davis	
/s/ Robert Brennan	Director
Robert Brennan	
/s/ Jane Chwick	Director
Jane Chwick	
/s/ Rohan Haldea	Director
Rohan Haldea	
/s/ Gina Loften	Director
Gina Loften	
/s/ Salim Nathoo	Director
Salim Nathoo	
/s/ William Parrett	Director
William Parrett	
/s/ Roxanne Taylor	Director
Roxanne Taylor	

Exhibit 10.16

Execution Version

INCREMENTAL AMENDMENT TO CREDIT AGREEMENT

INCREMENTAL AMENDMENT, dated as of March 30, 2021 (this "Amendment"), to the Amended and Restated Credit Agreement, dated as of March 26, 2021 (as amended, restated, supplemented or otherwise modified prior to the date hereof), among TURING TOPCO LLC, a Delaware limited liability company ("Holdings"), TURING MIDCO LLC, a Delaware limited liability company ("Parent Borrower" and a "Co-Borrower"), TURING ACQUISITION LLC, a Delaware limited liability company ("AcquisitionCo" and a "Co-Borrower"), THOUGHTWORKS, INC., a Delaware corporation (the "Company" and a "Co-Borrower", and together with Parent Borrower and AcquisitionCo, the "Borrowers") and CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH ("Credit Suisse"), as Administrative Agent, Collateral Agent and L/C Issuer, and each lender from time to time party thereto (collectively, the "Lenders" and individually, a "Lender") (the "Credit Agreement"), by and among the Borrowers, Holdings, the other Loan Parties party hereto, the Lenders party hereto and the Administrative Agent. Terms defined in the Credit Agreement and used herein shall have the meanings given to them in the Credit Agreement unless otherwise defined herein.

W I T N E S S E T H:

WHEREAS, the Parent Borrower has requested the issuance of Incremental Revolving Commitments (the "Incremental Revolving Commitments") in the form of a Revolving Credit Commitment Increase pursuant to and on the terms set forth in Section 2.14(a) of the Credit Agreement; and

WHEREAS, the Additional Lender identified on Schedule 1 hereto has agreed, subject to the terms and conditions set forth herein and in the Credit Agreement, to provide a Revolving Credit Commitment Increase in the amount set forth opposite the Additional Lender's name on Schedule 1 hereto (and the total amount of Revolving Credit Commitment Increase made pursuant to this Amendment shall be $7,000,000);

WHEREAS, pursuant to Section 2.14 of the Credit Agreement, only the consent of the Administrative Agent and each L/C Issuer(in addition to the Borrowers) is required to enter into this Amendment;

NOW, THEREFORE, the parties hereto hereby agree as follows:

ARTICLE I

Incremental Amendment; Incremental Revolving Commitments

Section 1.1. (a) This Amendment is an Incremental Facility Amendment referred to in Section 2.14(d) of the Credit Agreement and is being incurred in reliance on the Unrestricted Incremental Amount. The Borrowers and the Additional Lender hereby agree that, subject to the satisfaction of the conditions in Article II hereof, on the Incremental Amendment Effective Date (as defined below), the Revolving Credit Commitment Increase of the Additional Lender shall become effective and the Revolving Credit Commitment of each Revolving Credit Lender shall be as set forth on Schedule 2 hereto (and such Schedule 2 shall supersede Schedule 2.01 to the Credit Agreement with respect to Revolving Credit Commitments). Subject to the satisfaction of the conditions set forth in Article II hereof, the Incremental Facility Closing Date with respect to the Revolving Credit Commitment Increase contemplated by this Amendment shall be the Incremental Amendment Effective Date.

(b) Except as otherwise expressly set forth herein, the Incremental Revolving Commitments shall have terms that are identical to those of the Revolving Credit Loans and Revolving

Credit Commitments existing immediately prior to the Incremental Amendment Effective Date, including, without limitation, with respect to the maturity date, weighted average life, interest rate margins, amortization, commitment reductions, prepayments, and, after giving effect to this Amendment, the Incremental Revolving Commitments shall be considered the same Class as the existing Revolving Credit Loans and Revolving Credit Commitments, in each case, in accordance with Section 2.14(c) of the Credit Agreement. The Borrowers shall pay the commitment fees and any other fees or other amounts payable to or for the account of the Additional Lender at the times and in the manner set forth in the Credit Agreement.

ARTICLE II

Conditions to Effectiveness

Section 1.1. Effective Date. This Amendment shall become effective on the date (the "Incremental Amendment Effective Date") on which:

(a) The Administrative Agent shall have received:

(i) counterparts to this Amendment duly executed and delivered by the Borrowers and, with respect to Section 4.5, the Subsidiary Guarantors, Holdings, the Administrative Agent, each L/C Issuer and the Additional Lender;

(ii) all documentation and other information (x) about the Borrowers and the other Loan Parties party hereto as has been reasonably requested in writing by the Administrative Agent and/or the Lenders party hereto that they reasonably determine is required by regulatory authorities under applicable "know your customer" and anti-money laundering rules and regulations, including without limitation the USA PATRIOT Act and (y) with respect to the Borrowers, as required by regulatory authorities under 31 C.F.R. § 1010.230.

(b) At the time of and immediately after giving effect to this Amendment, no Event of Default has occurred and is continuing.

(c) The representations and warranties in Article 3 of this Amendment shall be true and correct in all material respects.

(d) The Parent Borrower shall have paid or caused to be paid to the Additional Lender, for its own account, such upfront fee as is set forth in the Fee Letter, dated as of the date hereof, between the Company and the Additional Lender.

Section 2.1. Notification. This Amendment constitutes notice to the Administrative Agent as required by Sections 2.14(a) and 2.14(d) of the Credit Agreement. Promptly following the Incremental Effective Date, the Administrative Agent shall notify the Borrowers and the Lenders of the Incremental Amendment Effective Date.

ARTICLE III

Representation and Warranties

Section 2.1. The Borrowers hereby represent and warrant as of the Incremental Amendment Effective Date that this Amendment has been, or when executed and delivered will be, duly executed and delivered by the Borrowers. The execution, delivery and performance by each of the Borrowers of this Amendment, and the consummation of the transactions herein contemplated, (a) have been duly authorized by all necessary corporate or other organizational action and (b) do not and will not (i) contravene the terms of the Borrowers' Organization Documents, (ii) conflict with or result in any breach or contravention of, or require any payment to be made under (A) any Contractual Obligation exceeding the Threshold Amount to which such Borrower is a party or affecting such Borrower or the properties of such Borrower or any of its Subsidiaries or (B) any material order, injunction, writ or decree of any Governmental Authority or any arbitral award to which such Borrower or its property is subject, (iii) result in the creation of any Lien (other than under the Loan Documents) or (iv) violate any material Law; except (in the case of clauses (b)(ii) and (b)(iv)), to the extent that such conflict, breach, contravention, payment or violation could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

Section 2.2. No approval, consent, exemption, authorization, or other action by, or notice to, or filing with, any Governmental Authority or any other Person is necessary or required in connection with the execution, delivery or performance by, or enforcement against, any Loan Party of this Amendment, except for (i) the approvals, consents, exemptions, authorizations, actions, notices and filings which have been duly obtained, taken, given or made and are in full force and effect and (ii) those approvals, consents, exemptions, authorizations or other actions, notices or filings, the failure of which to obtain or make could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

Section 2.3. This Amendment has been duly executed and delivered by each Loan Party that is party hereto. This Amendment constitutes a legal, valid and binding obligation of such Loan Party, enforceable against each Loan Party that is party hereto in accordance with its terms, except as such enforceability may be limited by Debtor Relief Laws and by general principles of equity.

Section 2.4. Immediately after giving effect to this Amendment, the representations and warranties of each Loan Party set forth in Article V of the Credit Agreement and the Loan Documents are true and correct in all material respects on and as of the Incremental Amendment Effective Date; provided that, to the extent that such representations and warranties specifically refer to an earlier date, they shall be true and correct in all material respects as of such earlier date; provided further that any representation and warranty that is qualified as to "materiality," "Material Adverse Effect" or similar language are true and correct (after giving effect to any qualification therein) in all respects on and as of the Incremental Amendment Effective Date or such earlier date, as the case may be.

Section 2.5. At the time of and immediately after giving effect to this Amendment, Holdings and its Subsidiaries, on a consolidated basis, are Solvent.

Section 2.6. At the time of and immediately after giving effect to this Amendment, no Default or Event of Default has occurred and is continuing.

ARTICLE IV
Miscellaneous

Section 2.1. Counterparts. This Amendment may be executed in counterparts, each of which when so executed shall be deemed to be an original and all of which when taken together shall constitute one and the same instrument. Any signature to this Amendment may be delivered by facsimile, electronic mail (including pdf) or any electronic signature complying with the U.S. federal ESIGN Act of 2000 or the New York Electronic Signature and Records Act or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes to the fullest extent permitted by applicable law. For the avoidance of doubt, the foregoing also applies to any amendment, extension or renewal of this Amendment. Each of the parties hereto represents and warrants to the other parties that it has the corporate capacity and authority to execute the Amendment through electronic means and there are no restrictions for doing so in that party's constitutive documents.

Section 2.2. Applicable Law. THIS AMENDMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK.

Section 2.3. Waiver of Right to Trial by Jury. SECTION 10.15 OF THE CREDIT AGREEMENT IS INCORPORATED HEREIN BY REFERENCE, MUTATIS MUTANDIS.

Section 2.4. Headings. The headings of this Amendment are for purposes of reference only and shall not limit or otherwise affect the meaning hereof.

Section 2.5. Acknowledgement and Reaffirmation of Guarantors. The Guarantors acknowledge and agree that this Amendment and all documents executed in connection herewith do not operate to reduce or discharge the Guarantors' obligations under the Loan Documents. Each Guarantor hereby ratifies and confirms its obligations under the Loan Documents, including the Collateral and Guarantee Requirement and including, without limitation, its guarantee of the Obligations (including the Revolving Credit Commitment Increase) and its grant of the security interest in the Collateral (as defined in the Collateral Documents) to secure the Obligations (including the Revolving Credit Commitment Increase).

Section 2.6. Costs and Expenses. Subject to the limitations set forth in Section 10.04 of the Credit Agreement, the Borrowers agree to pay all reasonable and documented out of pocket costs and expenses of the Administrative Agent in connection with the preparation, execution and delivery of this Amendment (including, without limitation, the reasonable fees and out of pocket expenses of one counsel for the Administrative Agent with respect thereto).

Section 2.7. Effect of Amendment. On and after the Incremental Amendment Effective Date, each reference to the Credit Agreement in any Loan Document (including to any Exhibit or Schedule attached thereto) shall be deemed to be a reference to the Credit Agreement as amended by this Amendment. As of the Incremental Amendment Effective Date, each reference in the Credit Agreement to "this Agreement," "hereunder," "hereof," "herein," or words of like import, and each reference in the other Loan Documents to the Credit Agreement (including, without limitation, by means of words like "thereunder," "thereof" and words of like import), shall mean and be a reference to the Credit Agreement, as amended by this Amendment, and this Amendment and the Credit Agreement shall be read together and construed as a single instrument. Each reference to (a) a "Lender" or "Lenders" or "Revolving Credit Lender" or "Secured Party" or any similar term in the Credit Agreement or the other Loan Documents shall be deemed to include the Additional Lender. Except as expressly set forth in this Amendment, nothing herein shall be deemed to entitle any Loan Party to a consent to, or a waiver, amendment, modification or other change of, any of the terms, conditions, obligations, covenants or agreements contained in the Credit Agreement as in effect immediately prior to the Incremental Amendment Effective Date or any other Loan Document in similar or different circumstances. Except as expressly amended hereby or specifically waived above, (i) all of the terms and provisions of the Credit Agreement and all other Loan Documents are and shall remain in full force and effect and are hereby ratified and confirmed, and (ii) nothing contained herein shall be construed as a substitution or novation of the obligations outstanding under the Credit Agreement or any other Loan Document, which obligations shall remain in full force and effect, except in each case as amended, restated, replaced and superseded hereby or by any instruments executed in connection herewith or therewith. Except as provided in Article II of this Amendment, this Amendment shall become effective when it is executed by each Borrower and, with respect to Section 4.5, the Subsidiary Guarantors, Holdings, the Administrative Agent, each L/C Issuer and the Additional Lender. This Amendment shall constitute a "Loan Document" for all purposes of the Credit Agreement and the other Loan Documents.

[Remainder of this page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed and delivered by their respective duly authorized officers as of the date first above written.

TURING TOPCO LLC, as Holdings

By: /s/ Ramona Mateiu
Name: Ramona Mateiu
Title: Secretary

TURING MIDCO LLC, as the Parent Borrower and a Co-Borrower

By: /s/ Ramona Mateiu
Name: Ramona Mateiu
Title: Secretary

TURING ACQUISITION LLC, as a Co-Borrower

By: /s/ Ramona Mateiu
Name: Ramona Mateiu
Title: Secretary

THOUGHTWORKS, INC., as a Co-Borrower

By: /s/ Ramona Mateiu
Name: Ramona Mateiu
Title: Vice President and Secretary

And with respect to Section 4.5 of this Amendment,

THOUGHTWORKS FEDERAL, LLC
GEMINI SOLUTIONS, LLC, each as a
Subsidiary Guarantor

By: /s/ Ramona Mateiu
Name: Ramona Mateiu
Title: Vice President and Secretary

[Signature Page to Incremental Amendment to Credit Agreement]

Credit Suisse AG, Cayman Islands Branch
as, as Administrative Agent and as L/C Issuer

By: /s/ William O’Daly
Name: William O’Daly
Title: Authorized Signatory

By: /s/ Andrew Griffin
Name: Andrew Griffin
Title: Authorized Signatory

[Signature Page to Incremental Amendment to Credit Agreement]

[*Lender Signature Pages on File with Registrant*]

Schedule 1

Revolving Credit Commitment Increase

Additional Lender	Revolving Credit Commitment Increase
[ ]	[ ]
Total	$7,000,000.00

Schedule 2

Revolving Credit Commitments

Lender	Revolving Credit Commitments
[ ]	[ ]
[ ]	[ ]
[ ]	[ ]
[ ]	[ ]
[ ]	[ ]
Total	$165,000,000.00

Exhibit 18.1

February 28, 2023

Board of Directors

Thoughtworks Holding, Inc.
200 E Randolph St
Chicago, IL 60601

Ladies and Gentlemen:

Note 1 of Notes to the consolidated financial statements of Thoughtworks Holding, Inc. included in its Form 10-K for the year ended December 31, 2022, describes a change in the method of accounting for recognizing stock-based compensation expense for graded vesting awards with only service conditions from the accelerated attribution method to the straight-line attribution method. There are no authoritative criteria for determining a 'preferable' stock-based compensation expense attribution method based on the particular circumstances; however, we conclude that such change in the method of accounting is to an acceptable alternative method which, based on your business judgment to make this change and for the stated reasons, is preferable in your circumstances.

Very truly yours,

/s/ Ernst & Young LLP

Chicago, Illinois

Exhibit 21.1

List of Subsidiaries

Name of Subsidiary	Jurisdiction of Organization
ThoughtWorks Australia Pty Ltd	Australia
ThoughtWorks Brasil Software LTDA.	Brazil
ThoughtWorks Software Technologies (Beijing) Ltd.	China
ThoughtWorks Software Technologies (Chengdu) Ltd.	China
ThoughtWorks Software Technologies (Wuhan) Ltd.	China
ThoughtWorks Software Technologies (Xi'an) Ltd.	China
ThoughtWorks, Inc.	Delaware
Turing Topco LLC	Delaware
ThoughtWorks, Ltd.	England & Wales
ThoughtWorks Deutschland GmbH	Germany
ThoughtWorks Technologies (India) Private Limited	India
ThoughtWorks Pte. Ltd.	Singapore

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-259702) pertaining to the Thoughtworks Holding, Inc. 2021 Omnibus Incentive Plan, the Thoughtworks Holding, Inc. 2021 Employee Stock Purchase Plan and the Turing Holding Corp. (n/k/a Thoughtworks Holding, Inc.) 2017 Stock Option Plan, of our reports dated February 28, 2023, with respect to the consolidated financial statements of Thoughtworks Holding, Inc. and the effectiveness of internal control over financial reporting of Thoughtworks Holding, Inc., included in this Annual Report (Form 10-K) for the year ended December 31, 2022.

/s/ Ernst & Young LLP

Chicago, Illinois

February 28, 2023

EXHIBIT 31.1

Certification by Chief Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Guo Xiao, certify that:

1. I have reviewed this Annual Report on Form 10-K of Thoughtworks Holding, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the

audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2023

/s/ Guo Xiao

Guo Xiao

Chief Executive Officer and Director
(Principal Executive Officer)

EXHIBIT 31.2

Certification by Chief Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Erin Cummins, certify that:

1. I have reviewed this Annual Report on Form 10-K of Thoughtworks Holding, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the

audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 28, 2023

/s/ Erin Cummins

Erin Cummins

Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

EXHIBIT 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Thoughtworks Holding, Inc. (the "Company") for the period ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Guo Xiao, as Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his knowledge:

i. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

ii. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

Date: February 28, 2023

/s/ Guo Xiao

Guo Xiao

Chief Executive Officer and Director

(Principal Executive Officer)

EXHIBIT 32.2

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Thoughtworks Holding, Inc. (the "Company") for the period ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Erin Cummins, as Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to her knowledge:

i. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

ii. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods expressed in the Report.

Date: February 28, 2023

/s/ Erin Cummins
Erin Cummins

Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)