

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, 2020

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934
for the transition period from _____ to _____
Commission file number: 001-36153

Criteo S.A.

(Exact name of registrant as specified in its charter)

France **Not Applicable**
(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification Number)

32 Rue Blanche, 75009 Paris—France

(Address of principal executive offices including zip code)

Registrant's telephone number, including area code: **+33 1 40 40 22 90**

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

(Title of class)	(Trading Symbol(s))	(Name of exchange on which registered)
American Depositary Shares, each representing one ordinary share, nominal value €0.025 per share	CRTO	Nasdaq Global Select Market
Ordinary shares, nominal value €0.025 per share	*	Nasdaq Global Select Market *

* Not for trading, but only in connection with the registration of the American Depositary Shares.

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 during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

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

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

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

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

The aggregate market value of voting stock held by non-affiliates of the registrant as of the last business day of the registrant's most recently completed second fiscal quarter was \$754 million, based on the closing sale price of the American Depositary Shares as reported by the Nasdaq Global Select Market on June 30, 2020. Ordinary shares, nominal value €0.025 per share, held by each officer and director and by each person who owns or may be deemed to own 10% or more of the outstanding ordinary shares have been excluded since such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of February 26, 2021, the registrant had 60,761,359 ordinary shares, nominal value €0.025 per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates certain information by reference from the registrant's proxy statement for the 2021 Annual Meeting of Shareholders. Such proxy statement will be filed no later than 120 days after the close of the registrant's fiscal year ended December 31, 2020.

CRITEO S.A.
ANNUAL REPORT ON FORM 10-K
For The Fiscal Year Ended December 31, 2020

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General

Except where the context otherwise requires, all references in this Annual Report on Form 10-K ("Form 10-K") to the "Company," "Criteo," "we," "us," "our" or similar words or phrases are to Criteo S.A. and its subsidiaries, taken together. In this Form 10-K, references to "\$" and "US\$" are to United States dollars. Our audited consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP. Unless otherwise indicated, the statistical and financial data contained in this Form 10-K are presented as of December 31, 2020.

Trademarks

"Criteo," the Criteo logo and other trademarks or service marks of Criteo S.A. appearing in this Form 10-K are the property of Criteo S.A. Trade names, trademarks and service marks of other companies appearing in this Form 10-K are the property of their respective holders.

Special Note Regarding Forward-Looking Statements

This Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that are based on our management's beliefs and assumptions and on information currently available to our management. All statements other than present and historical facts and conditions contained in this Form 10-K, including statements regarding our future results of operations and financial position, business strategy, plans and our objectives for future operations, are forward-looking statements. When used in this Form 10-K, the words "anticipate," "believe," "can," "could," "estimate," "expect," "intend," "is designed to," "may," "might," "plan," "potential," "predict," "objective," "should," or the negative of these and similar expressions identify forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- the ongoing effect of the novel coronavirus pandemic ("COVID-19"), including its macroeconomic effects, on our business, operations, and financial results; and the effect of governmental lockdowns, restrictions and new regulations on our operations and processes;
 - the ability of the Criteo Artificial Intelligence (AI) Engine to accurately predict engagement by a user;
 - our ability to predict and adapt to changes in widely adopted industry platforms and other new technologies;
 - our ability to continue to collect and utilize data about user behavior and interaction with advertisers and publishers;
 - our ability to acquire an adequate supply of advertising inventory from publishers on terms that are favorable to us;
 - our ability to meet the challenges of a growing and international company in a rapidly developing and changing industry, including our ability to forecast accurately;
 - our ability to maintain an adequate rate of revenue growth and sustain profitability;
 - our ability to manage our international operations and expansion and the integration of our acquisitions;
 - the effects of increased competition in our market;
 - our ability to adapt to regulatory, legislative or self-regulatory developments regarding internet privacy matters;
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- our ability to protect users' information and adequately address privacy concerns;
- our ability to enhance our brand;
- our ability to enter new industry verticals, new marketing channels and new geographies;
- our ability to effectively scale our technology platform;
- our ability to attract and retain qualified employees and key personnel;
- our ability to maintain, protect and enhance our brand and intellectual property; and
- failures in our systems or infrastructure.

You should refer to Item 1A "Risk Factors" of this Form 10-K for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this Form 10-K will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

You should read this Form 10-K and the documents that we reference in this Form 10-K and have filed as exhibits to this Form 10-K completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

This Form 10-K contains market data and industry forecasts that were obtained from industry publications. These data and forecasts involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such information. We have not independently verified any third-party information. While we believe the market position, market opportunity and market size information included in this Form 10-K is generally reliable, such information is inherently imprecise.

Summary Risk Factors

Investing in our securities involves a high degree of risk. You should carefully consider the information in “Item 1A. Risk Factors”, which are summarized below:

- If we fail to innovate, enhance our brand, adapt and respond effectively to rapidly changing technology, our offerings may become less competitive or obsolete. Our investments in new solutions and technologies to address new marketing goals for our clients are inherently risky and may not be successful.
 - We face intense and increasing competition for employee talent, and if we do not retain and continue to attract highly skilled talent or retain our senior management team and other key employees, we may not be able to sustain our growth or achieve our business objectives.
 - The market in which we participate is intensely competitive, and we may not be able to compete successfully with our current or future competitors.
 - If we fail to access a consistent supply of advertising inventory and expand our access to such inventory, our business and results of operations could be harmed.
 - The failure by Criteo AI Engine to accurately predict engagement by users could result in significant costs to us, lost revenue and diminished advertising inventory.
 - Regulatory, legislative or self-regulatory developments regarding internet privacy matters could adversely affect our ability to conduct our business.
 - Our success depends on our ability to implement our business transformation and achieve our global business strategies.
 - Our international operations and expansion expose us to several risks.
 - Our future success will depend in part on our ability to expand into new industry verticals.
 - We are a company operating in a rapidly evolving industry, which makes it difficult to evaluate our future prospects and may increase the risk that we will not be successful. Our historical growth rates may not be indicative of our future growth, and we expect our operating and capital investments to continue to increase in the foreseeable future. Accordingly, we may have difficulty sustaining profitability.
 - We derive a significant portion of our revenue from companies in the retail, travel and classified industries, and any downturn in these industries or any changes in regulations affecting these industries could harm our business.
 - Our ability to generate revenue depends on our collection of significant amounts of data from various sources, which may be restricted by consumer choice, imposed by clients, publishers and browsers or other software, changes in technology, and new developments in laws, regulations and industry standards.
 - Our business involves the use, transmission and storage of personal data and confidential information, and the failure to properly safeguard such information could result in significant reputational harm and monetary damages.
 - Failures in the systems and infrastructure supporting our solutions and operations, including as we scale our offerings, could significantly disrupt our operations and cause us to lose clients.
 - If we are unable to protect our proprietary information or other intellectual property, our business could be adversely affected.
 - Our business may suffer if it is alleged or determined that our technology or another aspect of our business infringes the intellectual property rights of others.
 - The market price for the ADSs have been and may continue to be volatile or may decline regardless of our operating performance.
 - ADS holders may be subject to limitations on the transfer of their ADSs and the withdrawal of the underlying ordinary shares.
 - The rights of shareholders in companies subject to French corporate law differ in material respects from the rights of shareholders of corporations incorporated in the United States.
 - We have significant global sales and operations and face risks related to health epidemics that could impact our sales and operating results. In particular, our business has been and we expect will continue to be negatively impacted by the ongoing COVID-19 pandemic and the global attempt to contain it.
 - In periods of economic uncertainty, businesses may delay or reduce their spending on advertising, and we are exposed to the credit risk of some of our clients and customers, which could materially harm our business.
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PART I

Item 1. Business

History and Development of the Company

Criteo S.A. was initially incorporated as a *société par actions simplifiée*, or S.A.S., under the laws of the French Republic on November 3, 2005, for a period of 99 years and subsequently converted to a *société anonyme*, or S.A. We are registered at the Paris Commerce and Companies Register under the number 484 786 249. Our agent for service of process in the United States is National Registered Agents, Inc.

Business Overview

We are a global technology company powering the world's marketers with trusted and impactful advertising. We operate at the intersection of ecommerce, digital marketing and media monetization. We enable brands' and retailers' growth by providing best-in-class marketing and monetization services on the open Internet. We do this by activating commerce data through artificial intelligence ("AI") technology, reaching consumers on an extensive scale across all stages of the consumer journey, and generating advertising revenues from consumer brands for large retailers. Our vision is to build the world's leading Commerce Media Platform to deliver measurable business outcomes at scale for global brands, agencies and retailers across multiple marketing goals. Our data is pooled among our clients and publishers and offers deep insights into consumer intent and purchasing habits. To drive trusted and impactful advertising, we activate our data assets in a privacy-by-design way through proprietary AI technology to engage consumers in real time with highly relevant digital advertisements ("ads") across devices and environments.

Our focus is on ecommerce. Our clients include some of the largest and most sophisticated ecommerce companies in the world, along with world-class consumer brands. We partner with them to capture user activity on their websites and mobile applications ("apps"), which we define as digital properties, and optimize the performance of their ads based on that activity and other data. Demonstrating the depth and scale of our data, we collected data on over \$950 billion in online sales transactions¹ on our clients' digital properties in the year ended December 31, 2020. Based on this data and other assets, we delivered 1.6 trillion targeted ads in the year ended December 31, 2020. As of December 31, 2020, we served more than 21,000 clients and, in each of the last three years, our average client retention rate, as measured on a quarterly basis, was approximately 90%.

We have established our leading market position by focusing on three pillars: actionable commerce data, predictive technology to activate this data for multiple marketing goals, and large consumer reach through our extensive direct publisher network. While continuously improving our technology and broadening our reach, we leverage and strengthen Criteo Shopper Graph, a highly differentiated group of data collectives built through collaboration and data pooling within our open ecosystem of commerce and consumer brand clients and publishers. Criteo Shopper Graph is one of the world's biggest data sets focused on shoppers, retailers and brands.

Each day, we are presented with billions of opportunities to connect consumers with relevant advertising messages from our commerce and consumer brand clients. For each of these opportunities, our algorithms analyze massive volumes of shopping data to predict consumer preferences and intent, and deliver specific messaging for products or services that are likely to engage that particular consumer. The accuracy of our algorithms improves with every ad we deliver, as they incorporate new data while continuing to learn from prior interactions.

Historically, the Criteo model had focused solely on converting our clients' website visitors into customers, enabling us to charge our clients when users engage with an ad we deliver, usually by clicking on it. This pay-for-performance pricing model clearly links the cost of an advertising campaign to its effectiveness in driving conversions, and continues to be valued as such by our clients. We have since expanded our solutions to address a broader range of marketing and monetization goals for our clients, including audience targeting and brand awareness. We leverage pricing models consistent with industry standards that include cost-per click, cost-per-impression and cost-per-install, as well as volume-based fees for brands and large retailers using Retail Media, and, in certain cases, a set fee for the use of our platform capability.

During 2020 we operated in 104 countries.

¹ Excluding Criteo Retail Media.

Our financial results include:

- Revenue of \$2,072.6 million, \$2,261.5 million and 2,300.3 million for the years ended December 31, 2020, 2019 and 2018, respectively;
- Revenue excluding Traffic Acquisition Costs, or Revenue ex-TAC, which is a non-U.S. GAAP financial measure, of \$825.0 million, \$946.6 million and \$966.0 million for the years ended December 31, 2020, 2019 and 2018, respectively;
- Net income of \$74.7 million, \$96.0 million and \$95.9 million for the years ended December 31, 2020, 2019 and 2018, respectively; and
- Adjusted EBITDA, which is a non-U.S. GAAP financial measure, of \$251.0 million, \$299.0 million and \$321.1 million for the years ended December 31, 2020, 2019 and 2018, respectively.

Please see footnotes 3, 4 and 5 to the "Other Financial and Operating Data" table in "Item 6. Selected Financial Data" in this Form 10-K for a reconciliation of revenue to Revenue ex-TAC, net income to Adjusted EBITDA and net income to Adjusted Net Income, respectively, in each case the most directly comparable financial measures calculated and presented in accordance with accounting principles generally accepted in the United States or "U.S. GAAP".

The Criteo Commerce Media Platform

Our offering, the Criteo Commerce Media Platform, is powered by AI technology and provides marketing and monetization services for brands and retailers. Our technology is optimized to drive trusted and impactful business outcomes for our retailer and brand clients, including, for example, consumer visits to a client website, installations of an app, product sales and monetization of retailers' inventory with consumer brands. We deliver these measurable results by efficiently and effectively driving engagement for our clients' brand, shops, apps, products and services, and generating advertising revenue for retailers by monetizing their data and audiences with consumer brands.

Criteo solutions work seamlessly across digital devices (desktops, laptops, smartphones and tablets), commerce and advertising environments (browsers, apps, connected TV and physical retail stores), platforms and operating systems, advertising channels (display, including social and native, video, and ads on retailers' properties) and publisher environments (thousands of direct publishers and mobile app developers in the open Internet, and all major real-time bidding exchanges).

The Criteo Commerce Media Platform is made available as individual products and services as part of our offering.

The Criteo Commerce Media Platform is comprised of:

- Criteo Shopper Graph
- Criteo AI Engine
- Criteo Solutions: Criteo Marketing Solutions and Criteo Retail Media

In addition, the Criteo Commerce Media Platform leverages the extensive scale and user reach of our **first-party media network** across the open Internet.

Criteo Shopper Graph

Our data assets include all insights derived from our clients' proprietary **commerce data**, such as transaction activity on their digital properties, representing over \$950 billion in online sales on a combined basis in 2020, representing approximately 48% of the global retail ecommerce sales excluding China¹, or \$2.6 billion worth of transactions per day on average.

Through direct integration with our clients' digital properties, we obtain large volumes of first-party data, expressed consumer shopping intent and engagement, and transactional data at individual product or service levels, which do not rely on cross-site tracking technologies, such as third-party cookies. The information we collect is anonymized and does not enable us to personally identify any particular consumer.

Our high quality **first-party data assets** fuel the accuracy of our algorithms, which improves with the increasing quantity and quality of data we obtain from our clients and publisher partners, as well as insights gained through our own extensive operational history. The combination of advertiser data, publisher data and proprietary metadata gives us powerful insights into consumer purchasing habits that we use to price inventory and create the most relevant ads to drive user engagement and impactful results for our clients. In addition to commerce data at the granular product SKU level, we seek to use as much relevant information as possible about the context and intent of a given user, collected from clients and publisher partners, to further refine our prediction accuracy.

We believe our access to highly granular first-party commerce data validates **the trust that our clients place in us**. Most of our clients typically provide real-time access to the products or services a visitor has viewed, researched, added to their shopping cart, or bought from them, and continuously receive updated information on over 4 billion products or services³ across 3,500 product categories, including pricing, images and descriptions, which are typically characterized as non-Personally Identifiable Information ("non-PII"). A large number of our clients also provide us with their customers' purchase history data in formats that are also non-PII.

Over the past few years, we have built **data collectives through data pooling among our clients and publishers**. The combination of these data collectives forms Criteo Shopper Graph. For each of these data collectives, we ask our clients to grant us the permission to mutualize a significant portion of their proprietary data in an anonymized way with other clients who also contribute data to this collective data pool. With Criteo Shopper Graph, we have built one of the world's largest and most open data sets focused on shoppers and their commerce activity across retailers and brands, and their activity on publisher properties.

Criteo Shopper Graph is comprised of the following **data collectives**:

- The **Identity Graph** allows us to match user identifiers provided by clients and publishers across devices and environments, both online and offline. Our algorithms link user identifiers together when they are deemed to belong to the same user. Examples of user identifiers in the Identity Graph are: hashed customer logins and hashed emails, first-party and third-party cookies, app identifiers such as Apple's IDFA and Android's AAID, in addition to linkages such as the Trade Desk's Unified ID 2.0 or LiveRamp's IdentityLink. The graph has billions of identifiers, which we believe cover about 2.5 billion unique users globally. With Criteo's reach, we collect commerce data in real time on an estimated 500 million Daily Active Users, half of which are identifiable by a hashed email. As of December 31, 2020, over two third of our clients grant us access to some of their first-party identity data to enable us to match users across multiple digital devices or environments. In addition, the Identity Graph allows us to leverage offline CRM data of our clients' physical stores to match it with online user profiles, based on their offline shopping history. The Identity Graph supports and benefits the entire suite of solutions of our Commerce Media Platform.
- The **Interest Map** collects and organizes consumer intent and purchasing data across the products available in our network of commerce clients, in order to build a comprehensive and accurate non-identifying shopper profile for all consumers on whom we have collected data. Our Interest Map applications include the *Universal Catalog*, which provides category and/or brand enrichment, as well as a unified view of the 4 billion products SKUs, across 3,500 product categories, available across the combined catalogs of our 21,000 commerce clients². Every day, we collect data on over \$2.5 billion in online sales on average through 75 million buyer journeys. With the Interest Map, we seek our clients' permission to use their data, on an aggregated and anonymized basis, to power products that are jointly offered to our clients in the collective.

¹ Source: eMarketer.

² Products are not unique and may appear in different retailer catalogs.

The design and governance of Criteo Shopper Graph are based on **strict and differentiated guiding principles**:

- **Openness**: we commit to a two-way exchange of data with our clients and publishers, whereby all parties contributing data to the collectives, in return for their contribution, benefit from the collective dataset via the Commerce Media Platform, and access cross-device user IDs and relevant Key Performance Indicators to better inform and optimize their advertising.
- **Transparency**: our clients' contribution and sharing of data within the data pools are based on a clear and permission-based usage by Criteo for the mutual benefits of all participants in the data collectives.
- **Security**: we apply the highest data security and user privacy standards to our data collectives.
- **Fairness**: our data collectives are designed and governed in ways such that the value gained by each participating client largely exceeds the individual client's contribution to the collectives, irrespective of its size.

Consistent with our *data minimization* principles, our technologies only rely on categories of data that are strictly necessary for the purpose of our services. The user information we collect relates primarily to purchase intent and is therefore not considered as information that can directly identify a user. In addition, we provide consumers with easy-to-use and easy-to-access mechanisms to control their advertising experience and opt out of receiving targeted ads we deliver. This transparent, consumer-centric, and controllable approach to privacy empowers consumers to make better-informed decisions about our use of their data. We also actively encourage our clients and publisher partners to provide transparent and clear information to consumers about our collection and use of data relating to the ads we deliver and monitor.

Criteo AI Engine

Criteo AI Engine consists of multiple artificial intelligence algorithms, and the proprietary global hardware and software infrastructure that enables the Commerce Media Platform to operate in real time at significant scale, and activate our datasets for effective advertising.

Criteo AI Engine leverages the Shopper Graph, with the goal of **maximizing consumer engagement to drive impactful business results for clients** through the delivery of highly relevant and personalized ads in real time.

Criteo AI Engine consists of:

- **Lookalike finder algorithms**. These algorithms create user audiences, or groups of consumers likely to be interested in and engage with a specific category of our clients' products or services, from a predetermined audience seed based on other clients' audiences that were already targeted and exposed to similar products or services in the context of previous advertising campaigns. Once created, these audiences are used by Criteo AI Engine as targets to reach and be exposed to tailored ads for relevant products or services for the purpose of a dedicated campaign. This set of algorithms typically supports campaign types addressing Audience Targeting objectives, i.e. driving new prospects to consider products or services with which they have not yet engaged in the past.
- **Recommendation algorithms**. These algorithms create ads tailored to specific consumer interest and intent by determining the specific products or services to include in the ad. These products and services may be ones that the consumer has already been exposed to, or that the algorithms predict the customer could be interested in. Alternatively, these may be products and services that other consumers within Criteo Shopper Graph have been interested in.
- **Dynamic Creative Optimization+ (DCO+)**. Based on the results of our dynamic creative algorithms, Criteo AI Engine automatically and dynamically assembles customized creative ad content on an impression-per-impression basis in real time, by optimizing each individual creative component in the ad, from the font, color, size and format of product images to the "call to action" or price discount. Our patented *Dynamic Creative Optimization+* technology offers virtually unlimited personalization, with up to 17 trillion visual ad variations, without the need to define ad sizes or layouts upfront, while always maintaining the consistency of our clients' brand image.
- **Predictive bidding algorithms**. These algorithms predict the probability and nature of a user's engagement with a given ad. Such predicted user engagement can take the form of, for example, retailer site visits, clicks, conversions, shopping basket value, specific product categories purchased, or even the gross margin of the purchased product or service that our client generates from such purchase. This prediction of engagement incorporates data from our clients, publishers and third-party sources, including user intent, who the client is, the products offered in the ad, as well as data on the creative content of the ad and the publisher context in which the ad is displayed.

Together with our recommendation algorithms, the prediction algorithms allow us to determine the most appropriate price to pay for an ad impression, based on an individual user's predicted engagement, what the client is willing to pay for that engagement, as well as Criteo's own target Revenue ex-TAC margin from placing that individual ad. Our bidding engine executes campaigns based on certain objectives set by our clients (such as cost-per-click, cost-per-order, cost-of-sales, cost-per-visit, cost-per-impression, cost-per-install or total campaign budget). After a bid for an ad impression is placed and won, Criteo AI Engine assembles and delivers individualized ads, and provides campaign reporting in near-real time.

- **Software systems and processes.** Our algorithms are supported by robust software infrastructure that allows us to operate seamlessly at a very large scale, through our network of more than 49,000 servers as of the end of 2020. The architecture and processing capabilities of this technology have been designed to match the massive computational demands and complexity of our algorithms in real time. This technology enables data synchronization, storage and analysis across a large-scale distributed computing infrastructure in multiple geographies, as well as fast data collection and retrieval using multi-layered caching infrastructure.
- **Experimentation platform.** We use an online/offline testing platform to improve the capabilities and effectiveness of our prediction models by measuring the correlation of specific parameters with user engagement, usually measured by consumer visits, clicks and conversions, typically in the form of sales. A dedicated team is constantly testing new types and sources of data, as well as new variables, to determine whether they help diminish the gap between, for example, predicted visits, click-throughs and conversions, and actual visits, click-throughs and conversions over the course of a live campaign.

A key attribute of Criteo AI Engine is the vast **metadata of learnings on advertising and commerce effectiveness** that we have accumulated from having delivered and measured responses to over 9 trillion advertising impressions since our Company's inception. Our Research & Development team constantly tunes Criteo AI Engine via experimentation and A/B tests. For example, in 2020, we performed about 1,000 online A/B tests and over 70,000 offline experiments and tests.

In addition, we have long established and adopted **Privacy-by-design** as a central element of our technology and product design and development cycles, with a strong commitment to ensuring best practices in privacy, security and safety for consumers and our retailer and brand clients. Since 2013, we have had a designated Data Privacy Officer along with a team of privacy experts. These experts are integrated within our R&D and Product organizations and processes, and consider all facets of user privacy as key elements in the very design of any new technology, solution or feature of the Commerce Media Platform. They also perform ongoing Privacy Impact Assessments to monitor potential risks during the product lifecycle and proactively mitigate those risks. The Data Privacy team delivers company-wide privacy training, enforces our privacy policies and is integral to ensuring that we build the best solutions and services. We regularly review and document our internal privacy policies, amend existing policies as necessary and enforce these policies with our clients, publisher partners and vendors.

Our Solutions

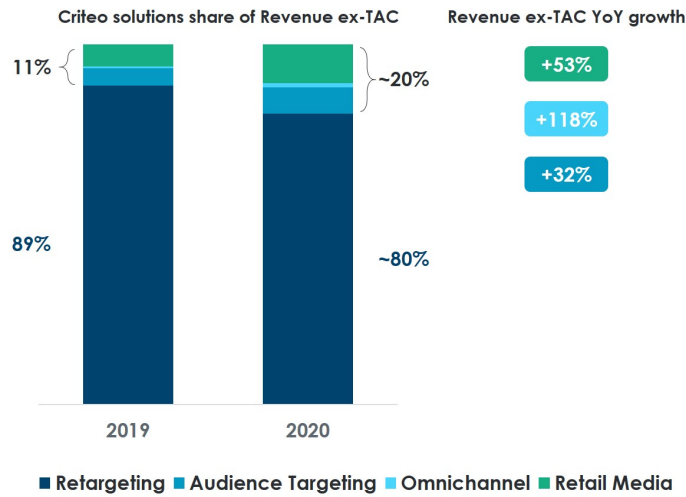
Our marketing and monetization solutions for retailers and brands are grouped under two families:

- **Criteo Marketing Solutions** allow commerce companies to engage consumers with personalized ads across the full marketing funnel, leveraging online and offline store data.
 - Examples of expected business outcomes include:
 - **Awareness: creating and building brand awareness** for a client's existing or new product or service, by targeting relevant high-quality consumer audiences showing intent for that particular product or service and reaching these audiences, for example, through video ads across the breadth of our premium publisher network on the open Internet;
 - **Audience Targeting: driving visits from new prospects** on the website of our clients, or **driving installations of our clients' apps** by new customers, by engaging such prospect visitors online (either on the web, in apps or on connected TV), with personalized ads offering products or services tailored to their predicted interest through our audience targeting capabilities, based on our Shopper Graph data and/or contextual signals;
 - **Conversion: driving sales** for commerce clients by engaging consumers online, with personalized ads offering products or services for which they have already expressed shopping intent; or **driving more sales from existing customers** of our commerce clients, by accurately targeting and re-engaging these existing customers online with personalized ads offering new products or services that they have not yet purchased nor been exposed to.

- Our clients' use and consumption of Criteo Marketing Solutions is made flexible through a set of tools and services:
 - Our clients have access to an integrated self-service customer interface, called the **Management Center**, providing transparency, control and visibility over their marketing investments and campaigns with us, whatever their business and marketing goals may be. This interface enables the flexible and modular consumption of our various solutions directly by our clients, as well as the execution and management of their campaigns through a suite of software and services that automates key campaign processes, and a high level of control over the objectives, parameters and performance of their various campaigns with us. Criteo Management Center reduces unnecessary complexity and cost associated with manual processes of having to use multiple Demand-Side Platforms ("DSPs") and sources of inventory supply, delivering efficiencies across the marketing funnel, even as campaigns grow in size, complexity and mix of marketing goals.
 - In addition to self-service access to Criteo Management Center, we also offer a **managed-service approach to our larger clients**, providing deep business intelligence and analytics services. Our teams of advisers aid our larger clients in setting goals for, extracting insights from, and evaluating trends and performance of their various advertising campaigns with us across multiple marketing goals, sources of inventory, advertising channels, and the multiple digital devices that consumers may use.
 - In addition, we offer multiple **API integrations** for certain partners and clients to enable the management of our clients' advertising investments with us in a unified and integrated way with some of their other advertising or marketing technology partners which makes Criteo solutions directly available in their back-office.
 - In parallel with accessing transparent reporting and **measurement** from Criteo Management Center, a large proportion of our clients regularly use their own attribution tools and solutions from **third-party vendors** (such as, for example, Nielsen's Digital Ad Ratings, Google Analytics, IBM Coremetrics or Adobe Analytics) to independently measure and assess the performance of the results that Criteo delivers, including visits, sales and other key metrics.
- **Criteo Retail Media** allows retailers to generate high-margin advertising revenues from consumer brands looking to address multiple marketing goals, and/or to drive sales for themselves, by monetizing their audiences through personalized ads, either on their own digital property or on the open Internet.
 - Examples of expected business outcomes include:
 - **generating advertising revenue for retailers** on their online store, by providing retailers with self-service access to our technology platform for them to monetize their commerce data, traffic and audiences directly with consumer brands across various marketing goals;
 - **driving sales for consumer brand clients** on the site of retailer partners, by connecting consumer brands and retailers and engaging consumers **on** the retailer's digital property with personalized ads offering specific brand products available on the retailer's digital store and for which consumers have expressed interest;
 - **driving sales for consumer brand clients** on the site of retailer partners, by connecting consumer brands and retailers and engaging consumers **outside** of the retailer property on the open Internet with personalized ads offering specific brand products available on the retailer's digital store and for which consumers have expressed interest;
 - Our retailer and brand clients respectively manage their Retail Media revenues and budgets using a self-service interface called the Retail Media Platform. The Retail Media Platform provides flexible pricing options to brands: guaranteed placement (cost-per-impression) and auction-based (cost-per-click). We charge retailers a negotiated supply-side platform fee and sometimes a technology fee, while brands pay us a negotiated demand-side platform fee. In addition, we may charge brands a managed-service fee and other fees for accessing additional insights.

In 2020, Criteo Retail Media accounted for more than 10% of our total consolidated revenue.

The below chart shows the product mix evolution of Criteo's business and the year-over-year growth in new solutions in fiscal 2020.



Our Publisher Network

We provide our clients with extensive real-time access to advertising inventory through **direct relationships** with thousands of publisher partners, as well as real-time bidding (or "RTB") Display Advertising exchanges. We define inventory as the combination of desktop web, mobile web, mobile in-app display, including social, native, and video displays, connected TV, and ad inventory on major retail ecommerce properties, including standard banners, native and sponsored product formats.

In some cases, we have negotiated **direct and privileged access** with publishers, giving us the opportunity to select, buy and price, on an impression-per-impression basis and in real time: (1) inventory that a publisher might otherwise only sell subject to minimum volume commitments; and/or (2) particular ad impressions before such impressions are made available to other potential buyers. Among their multiple benefits, these direct relationships give us access to first-party publisher data which allow us to bid on impressions without using third-party cookies. We call this network of direct publisher relationships, together with direct integrations with retailers, our **First-Party Media Network**.

We believe that many of our direct publisher partners have granted us preferred access to portions of their inventory as a result of our ability to effectively monetize that inventory. For example, within Criteo Retail Media, we access inventory and first-party data from ecommerce sites that are generally not available to traditional advertising demand. We believe this inventory and data from ecommerce retailers is particularly valuable for consumer brands looking to advertise their products in a multi-brand retail environment. In addition, in Japan, we have entered into a strategic relationship with Yahoo! Japan, that grants us preferred access to its advertising inventory for delivering personalized display ads.

We **price and buy inventory in real time** and typically do not pre-buy any impression. In addition, in some instances, we may commit to buying minimum volumes of impressions to certain publishers partners for our Marketing Solutions and Retail Media solutions. Across both our direct publisher relationships and inventory purchasing done on RTB exchanges, we leverage Criteo AI Engine's ability to quickly and accurately value available advertising inventory, and utilize that information to bid for inventory on a programmatic, automated basis.

Alongside our existing technologies to integrate directly with publishers, we have developed **Criteo Direct Bidder**, our header-bidding technology. Header-bidding allows publishers to make their inventory simultaneously available for public auction to several competitive bidders, including RTB exchanges. Thanks to our large scale, Criteo Direct Bidder allows us to connect directly to the ad server of publishers in situations where publishers use header bidding to monetize their inventory, allowing us, among other advantages, to bypass RTB exchanges in the bidding process and to save publishers the take-rate RTBs would typically charge them. As a result, Criteo Direct Bidder helps publishers increase the average monetization of their inventory sold through Criteo Direct Bidder, relative to our overall spend through all channels. Using Criteo Direct Bidder, we were connected to approximately 5,000 large publishers globally, on both web and apps, as of December 31, 2020, including: IBM Watson Advertising, Globo, OLX, NBC, Forbes, Wall Street Journal, Leboncoin, Daily Mail, Viber, Axel Springer's websites, Marktplaats, M6, AJA Japan and EstSoft.

We take a variety of **brand safety** measures to ensure that the brand equity of our clients is preserved at all possible times. These measures include determining that each publisher's inventory meets our content requirements and those of our clients to ensure that their ads are not shown in inappropriate content categories, such as, for example, adult, violent or sensitive political content. In addition, we are an active member of the *Coalition for Better Ads*, supported by Google, and are compliant with their recommendations for the most user-friendly advertising formats. In 2020, we entered into a partnership with Oracle Data Cloud to strengthen our existing brand safety offering. Criteo's AI Engine is now integrated with Oracle Contextual Intelligence, a solution providing real-time content review and pre-bid classification to clients across brand-suitable categories.

For Criteo Marketing Solutions, we typically purchase inventory programmatically on a **CPM basis** from our direct publisher partners and RTBs, through standard terms and conditions for the purchase of advertising inventory. This means that inventory purchased for Criteo Marketing Solutions is paid to the publisher irrespective of whether the user engages, in whatever form, with the advertisement delivered on that publisher's digital property. Pursuant to such arrangements, we purchase impressions for users that Criteo recognizes on these publishers' digital properties. Such arrangements are cancellable upon short notice and without penalty.

For Criteo Retail Media, we may pay for the inventory of retailer partners based on a **revenue share**, effectively paying the retailer a portion of the click-based revenue generated by customers clicking on the ads displaying the products of our consumer brand clients. This means that, with these Criteo Retail Media solutions, retailer publishers only get paid if a user effectively clicks on the ad that is displayed on their site. We may also buy inventory on a **CPM basis** or do **not incur any media cost at all** when we provide retailers with access to our Retail Media Platform for them to sell their inventory directly to consumer brands.

We believe that our ability to efficiently access, value and monetize inventory at scale results in a **deeply liquid marketplace** for both buyers and sellers of advertising, allowing us to deliver effective ads at the right price for our clients, even as the size and complexity of the marketing campaign increases.

Industry Trends

The ability to engage customers across the various steps of the consumer journey is critical for businesses in the broader commerce and consumer brand sectors, who often dedicate a significant portion of their cost base to developing such an ability. We believe the following trends are relevant in assessing our current and future business.

E-commerce is Booming: According to GroupM, global retail ecommerce (excluding food and delivery services) amounted to close to \$4 trillion in 2020 or 17% of global retail sales in 2020 and is forecast to represent 25% by 2024, or \$7 trillion. The COVID-19 pandemic accelerated the boom of ecommerce, and we saw brands and retailers rapidly transform their ecommerce presence, and gain share from ecommerce giants. With lockdown restrictions imposed by the COVID-19 pandemic, U.S. online product searches on retailers' websites in the open Internet increased by 21 percentage points to close to 30% of total shares, while the share of searches on Amazon properties declined from 66% to 43%¹. As a result of new habits developed by consumers, and as the pandemic has brought in older and less tech-savvy demographics to online shopping, we expect this trend to continue. 81% of online buyers who tried a new retailer indicate that they expect to continue to shop with them in the future², creating a shift in brand loyalty towards open Internet retailers, which today represent approximately 40% of global e-commerce sales³.

Trade Marketing Shifts to Digital: Taking advantage of this surge in ecommerce, brands accelerate the shift of their trade marketing budgets to online. We believe digital trade marketing already exceeded \$23 billion in global spend in 2020, after growing by an average 82% each year since 2016.

¹ Question Asked: "When you want to buy a new product online, where do you typically start your search?"

^{1,2} Sources: Activate Consumer Tech & Media Viewpoint Study April 14, 2020 (n = 2,027), ComScore, Freedive, Marketing Dive, Activate analysis

³ Source: 451 Research, China Internet Watch, Company filings, Company press releases, Company sites, Digital Commerce 360, eMarketer, Forbes, GeekWire, Internet Retailer, Marketplace Pulse, Retail Dive, TechCrunch, UBS, Activate analysis

Brands, Retailers and Publishers Increasingly Depend on AdTech Partners: In today's highly competitive environment, commerce companies and consumer brands increasingly focus on profitably reaching, engaging and converting consumers. In addition, we believe they increasingly look at diversifying their significant reliance on walled-garden digital advertising partners. On the other hand, consumers' shopping journeys have become increasingly fragmented between various websites, apps, devices, and physical stores. Consumers' time is increasingly spent online, creating a new environment for advertising, such as Connected TV. The ability for publishers, retailers, brands and agencies to identify users, given restrictions in some environments, to create and monetize audiences, and to drive sales and customer loyalty, today relies on having the right technology partner, able to activate the right data in an efficient way and to measure results in a transparent way across channels.

Addressable Market

We estimate that the total addressable market for the marketing and monetization services provided by our Commerce Media Platform on the open Internet represents \$61 billion in ad spend or revenue opportunity for us.

Our Competitive Strengths

We believe the Commerce Media Platform is transforming digital marketing and media monetization for our ecommerce and brand clients. We enable brands' and retailers' growth by making their marketing and monetization efforts more efficient, effective and measurable by driving trusted and impactful business outcomes across multiple marketing goals. We believe the following competitive strengths have enabled us and will continue to enable us to capture a significant share of the digital marketing and monetization opportunity:

Shopper Data. Our Shopper Graph leverages massive amounts of granular and first-party data focused on commerce and shopping behaviors, through data sharing among our clients. With an estimated 2.5 billion unique users in our Identity Graph, we are building one of the largest data sets focused on shoppers, with a scope and scale among the largest in the industry. Over \$2.5 billion worth of daily transactions across 4 billion product SKUs from 3,500 product categories are ingested by our graph, which allows us to analyze about 75 million daily buyer journeys. Our Interest Map offers a comprehensive, accurate and non-identifying shopper profile for all consumers on whom we have collected information, and is the foundation for the development of compelling advertising solutions - existing and new - that help our clients span the full marketing funnel, across brand awareness, audience targeting and conversion marketing goals. Importantly, we believe the guiding principles of Criteo Shopper Graph - in particular its open, transparent and fair approach to sharing and leveraging data within collectives -, highly differentiate it from the proprietary data management approaches of most of the large Internet platforms and Walled Gardens, and therefore represent attractive guarantees for marketers willing to protect and control their data.

Reach, Scale and Network Effects. Our large and loyal base of clients and first-party publisher partners provide for stability and positive network effects. As of December 31, 2020, we had over 21,000 clients, including some of the largest ecommerce companies in the world, and our client retention rate was approximately 90%. In parallel, as of the same date, we were working with approximately 5,000 direct publishers on both web and apps, in addition to all of our large global and local RTB partners. These direct integrations on both the demand and supply sides ensure access to data in privacy-compliant ways, shielding from the consequences of third-party cookie limitations. As we continue to grow our client base, we continue to grow the number of users who interact with our ads, allowing us to benefit from greater scale when buying inventory from publisher partners, many of whom have granted us preferred access to portions of their advertising inventory. We believe this large and loyal base of clients and publisher partners provides for stability in our business, as well as for significant opportunities to cross-sell and up-sell our product portfolio within our large existing client base. As clients spend more with us and we attract more publisher inventory and deliver more ads, our data assets grow, enabling us to deliver even more precisely targeted and personalized ads and generate a greater impact for our clients. As a result, we believe more commerce and consumer brand clients may use our offering and potentially increase their spend with us. This, in turn, may enable us to increase monetization for publishers and retailers, further expanding our publisher network and enhancing our ability to drive performance for all clients. This cycle of self-reinforcing network effects, based on our large scale and loyal base of clients and publishers, may continue to fuel our business in the future.

Retail Media. Our Retail Media offering provides unique opportunities to both brands and retailers. Our Retail Media value proposition, helping retailers to monetize their data and inventory with brands, is quite unique in the marketplace outside of Amazon. It provides opportunities for brands to advertise on retailers' on-site media, while creating a new source of profitable revenues for large retailers. Criteo's Retail Media Platform is the industry's first self-service and transparent software providing an easy way for brands to manage their online marketing budgets to drive immediate, measurable commerce outcome directly where shoppers search and buy their products. We enable brands, agencies, and multiple retailers to buy and sell retail media using a common platform, thus benefiting

from meaningful network effects due to our unique position as the technology supporting a multi-retailer ecosystem, whereas most competitors in the retail media space focus on supporting siloed retailer Walled Gardens. Brands and their agencies use this platform to access unique inventory at meaningful scale, and retailers get access to brand marketing budgets at a scale they would not be able to access on their own. This creates a network effect where the value for customers only increases as more brand and retailer participants join the ecosystem. In addition, our deep technical integrations with retailers, requiring meaningful engineering investment from the retailer, make us very sticky with them and enable us to offer preferred or exclusive inventory to brands and agencies, as well as a superior shopper experience to consumers. We primarily use a server-side technology to integrate our platform with retailer sites and apps. In addition, we require multi-year commitments and product ads exclusivity as part of our standard retailer services agreements. Both our unique inventory access and increasingly deep technical integrations with other advertising technology and reporting platforms provide defensible relationships with brands and agencies. For example, our recently launched API partner program embeds our technology into ad platforms that brands and agencies already use to buy search, social, and other large platforms' ad inventory. Additionally, with many major brand and agency clients, we directly connect our reporting data directly into client analytics and reporting platforms via our APIs.

Superior Insights and Measurement. We believe we have superior capabilities for Commerce Insights and measurement. Our technology provides our clients with the unique ability to measure against product sales at the product SKU level. For example, our commerce insights can bring together organic shopping data with paid media metrics for brands.

Scaled Global Presence. We do business in 104 countries and have a direct operating presence through 29 offices in 19 countries. We have achieved this global presence by replicating and scaling our effective business model across all geographic markets. Large businesses are increasingly seeking global advertising partners able to provide comprehensive offerings that are effective across multiple geographies. We believe we are able to meet this demand by leveraging our scalable AI technology and global network of relationships and are well positioned to serve our clients in virtually every market in which they seek to drive trusted, impactful and measurable business results.

Strong Financial Model. Our profitable, cash-generative financial model allows us to invest for growth while maintaining healthy profitability. Our company has a sustainable, robust profitability margin. In the year ended December 31, 2020, our operating profit margin was 5.3% of revenue and our Adjusted EBITDA as a percentage of Revenue ex-TAC was 30.4%. In addition, we manage our expense base in a disciplined way and focus on driving productivity through operational excellence and automation across the organization. Productivity and efficiency gains enable us to reinvest into strategic growth areas, while maintaining healthy profitability. Our financial model generates a sustainable and significant amount of free cash flow. For the year ended December 31, 2020, we generated free cash flow of \$120 million, despite the negative economic conditions triggered by the COVID-19 pandemic. In addition, our company maintains a comfortable cash position, standing at \$488 million at the end of fiscal 2020, which, together with marketable securities and our Revolving Credit Facility, provides for financial liquidity of about \$960 million, offering ample flexibility. We believe having a profitable, cash-generative financial model providing for financial flexibility and allowing for an investment capacity is a competitive advantage, in particular compared to multiple sub-scale companies in our industry.

Our Business & Growth Opportunities

Our mission is to power the world's marketers, brands, retailers, publishers, content creators and agencies with trusted and impactful advertising. We enable brand and retailers' business growth by providing best-in-class marketing and monetization services and driving measurable business outcomes at scale through Commerce Media. As described throughout, our vision is to build the world's leading Commerce Media Platform for brands, agencies and retailers.

We are currently strengthening the Criteo Commerce Media Platform and expanding our business through several opportunities, both within our existing suite of solutions and in new areas, always focused on driving trusted and impactful business outcomes for clients. One key priority is to drive sustainable and profitable growth for our business. This involves increasing our focus even more on the fast-growing ecommerce space and broadening our value proposition to cover all Commerce Media marketing goals in a holistic way, while always driving measurable business outcomes to clients, including sales. In parallel, we are focused on investing into our strategic growth priorities and self-funding for these investments by driving efficiency across the organization. The core elements of our business strategy include:

Strengthen the Core. We intend to strengthen our *retargeting* product, aimed at converting our clients' customers in both the web and apps. We intend to achieve this by strengthening our strong differentiators, including around Criteo Shopper Graph and user identification thanks to our first-party media network, continuously improving Criteo's AI Engine technology and the strong performance of our core product in all environments, providing more transparency on our value proposition, and adding new clients and publishers. We are also adding multiple capabilities, like third-party measurement, through industry partnerships to enhance our core solution.

Over the past three years, the growth of *retargeting* has been slowing down and turned negative since 2019. Over the period, cookie restrictions on several browsers have had a significant negative impact on our business on the web, including on *retargeting*. The COVID-19 pandemic was an additional headwind to this business in 2020, impacting in particular our clients in the Travel and Classifieds verticals, as well as some large brick-and-mortar retailers. Beyond these headwinds, and while *retargeting* continued to grow in the midmarket, the softness has been more pronounced with large customers.

We are taking several measures to stabilize our *retargeting* business over time, including:

- Maintaining a high level of preferred direct publishers relationships, allowing us to grow our first-party media network and reduce our exposure to third-party cookies. We expect to continue to expand our first-party media network, sheltered from cookie restriction, by increasing the deployment of Criteo Direct Bidder with large publishers, both on the web and on mobile apps;
- Encouraging our clients and publishers to adopt Unified ID 2.0, an open-sourced identity framework dedicated to digital advertising and respectful of users' privacy, providing a replacement to third-party cookie bearing users' consent;
- Growing our capabilities as a differentiated Demand-Side-Platform specifically for commerce, including for upper-funnel marketing on top of our strengths in lower funnel, offering more flexibility throughout the stack, and adjusting our pricing model to increase the transparency of our value proposition for our core product;
- Further expanding our global client base across customer categories. We have a track-record of entering new geographic markets, adding new clients successfully and rapidly gaining commercial traction. We intend to continue to grow our client base, both in the large customer and midmarket categories. In particular, we continue to build and roll out our self-registration sales channel for smaller clients, and to expand our partnerships with Ecommerce Platform Partners, to increase our penetration of the large opportunity we see in the low end of the midmarket. We believe opportunities also remain to grow our business with large customers in markets where we already operate, including in Western Europe, the U.S. and Japan; and
- Providing even more transparency and control to advertisers and their agencies through our self-service platform.

Expand Our Product Portfolio. We intend to continue to leverage our existing assets to strengthen our business outside of *retargeting*, continue to build and expand our suite of fast-growing marketing and monetization solutions, and build further competitive moats around our core assets.

In fiscal year 2020, our new solutions outside of *retargeting* already represented close to 20% of our total business, as measured on a Revenue ex-TAC basis, including 24% in the fourth quarter 2020. We are investing in the growth of these new solutions and expect them to represent close to 30% of our overall business in 2021.

Our new solutions are focused on the following areas:

- **Retail Media:** We believe Criteo Retail Media is a particularly differentiated offering in the marketplace and offers significant growth opportunities for us. We will continue to roll out the Retail Media Platform to new markets and move all our Retail Media campaigns to the platform, making the digital stores of large retailers a key advertising channel to generate high gross margin revenue from consumer brands. In addition, we intend to grow the number of retailers we work with in the U.S. and Europe, deepen our share of wallets with existing retailer and brand customers, accelerate our geographic expansion in Europe and enter new markets in the APAC region, grow our offsite advertising capabilities for brands across our premium publisher network on the open Internet, potentially enter Retail Media for retailer marketplaces, bring more commerce insights to brands as a key value-added service and provide brands with an integrated view on the Retail Media spend on Walled Garden retailers
- **Brand awareness:** We are extending our offering to allow for more brand awareness campaigns for both brands and retailers on the open Internet, including in video formats and through the Connected TV channel.
- **Audience Targeting:** We already address customer acquisition as a marketing objective and intend to continue growing it, along with similar use cases building on audiences based on our shopper data. In addition, we are investing resources in enhancing the efficacy and impact of cohort advertising on our ecosystem and help shape the end solution which will replace third-party cookies in the Google Chrome browser environment.

- **Contextual advertising:** We are also developing new solutions for contextual advertising to accompany our clients in the fast-changing identity landscape. We believe our approach to contextual advertising is different from what currently exists in the market as we are using first-party data to add a commerce “signature” to the content consumers are reading and watching across the Open Internet. This enables us to go beyond traditional contextual inferences of interest and intent to indicate what combinations of content are actually driving purchases.
- **Omnichannel:** Within Criteo Marketing Solutions, we also intend to grow our Omnichannel capabilities. A large portion of our commerce client base operates physical stores and still generates a significant percentage of their sales from these stores. While retailers extract massive amounts of sales data from their physical stores, they often lack the sophisticated technology necessary to activate this dataset for sales generation, both online and offline. As a result, retailers are increasingly interested in omnichannel advertising solutions that allow them to target their customers everywhere and bridge the gap between online and offline. Omnichannel is one of the fastest-growing opportunities for Criteo: in fiscal year 2020, our Omnichannel business grew close to 120% on a Revenue ex-TAC basis. We intend to further expand our solutions for omnichannel advertising, including by feeding our clients’ offline CRM data into our Identity Graph, in order to further grow the match rate of offline consumers with their online profile.

Explore Strategic Game Changers. We look for opportunities to extend and accelerate the growth of our business by exploring and bringing strategic assets and capabilities through **partnerships** and **M&A**, in addition to executing organically.

For example, in 2020, we entered and expanded a number of partnerships.

- We joined the open-source Unified ID 2.0 initiative, a new approach to identity that represents an upgrade to third-party cookies, preserves the value exchange of advertising on the open Internet, while providing improved consumer controls;
- We launched the Criteo Partners program, helping our ad agency channel partners, to better utilize Criteo Marketing Solutions and shopper data, in particular by accessing training and certification programs;
- We launched the Criteo Product Ads module in ecommerce platform PrestaShop, allowing PrestaShop merchants to attract users to visit their online stores and buy from them. The Criteo Product Ads module enhances customer experience through relevant product ads while helping merchants automate their efforts to attract new visitors for their site and encourage them to complete their purchase;
- We integrated Nielsen’s Digital Ad Ratings (DAR), the industry standard for digital ad measurement, and Digital Brand Effect to help advertisers better measure and optimize brand lift metrics with Criteo solutions;
- And we partnered with Oracle Data Cloud to strengthen our existing brand safety offering. Criteo’s AI Engine is now integrated with Oracle Contextual Intelligence, a solution providing real-time content review and pre-bid classification to clients across brand-suitable categories.

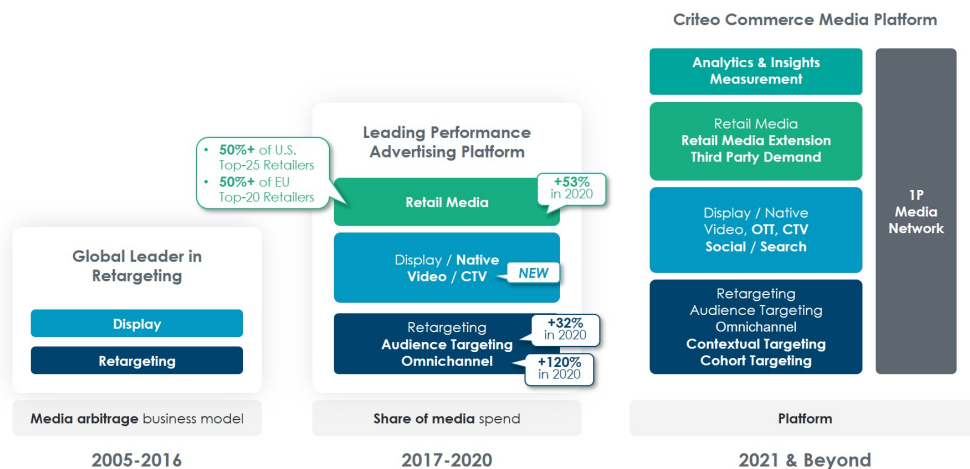
In the future, we intend to continue to collaborate with existing and new industry partners to extend the capabilities and functionalities of the Criteo Commerce Media Platform, beyond what we currently offer on a standalone basis. This may include partnerships with other Demand-Side-Platforms or other ecosystem players to extend our customer reach to new client categories or agencies. In addition, we may look at further expanding our access to video inventory, both in the Web and mobile apps, as well as extending our access to Connected TV inventory on a much larger scale.

We continue to evaluate and execute on M&A transactions, with a critical assessment on technologies and businesses that have the potential to enhance, complement or expand our strategic capabilities, including our technology, our marketing and monetization solutions, go-to-market, or R&D team. We target acquisitions that, over time, can be efficiently integrated into the Criteo Commerce Media Platform, including into our AI technology, global operations and company culture, while preserving the quality and performance of our offering. Key criteria for acquisitions include demonstrated revenue traction and a proven value proposition for clients and partners and are easy to integrate. Our entrepreneurial culture, growth opportunity, global scale, financial profile, strong brand and market position enable us to be an attractive acquirer.

Drive Technology and Operations Excellence. We take a Portfolio Management approach to managing our business, organization and expense base: right-sizing or streamlining the parts of the business with declining revenue in order to enable investments on the growing parts of our business into technology innovation and other strategic priorities. We intend to continue to invest in the growth of our business, while driving productivity and efficiency gains through operational excellence across the company and maintaining healthy profitability. We believe these investments will feed the long-term sustainable growth of our business.

We intend to continue to make investments in our technology innovation and new product development, including in Retail Media, our first-party media network, Contextual advertising, video, Connected TV and Commerce Insights. We expect these investments to further strengthen our Commerce Media Platform. Driving operational excellence through the company to self-fund for our investments involves increasing automation and the scalability of our operations, as well as having a responsible and effective approach to expense management, across all teams, functions and global offices.

The below graphic illustrates where Criteo stands in 2020 in executing on its strategy to build the Commerce Media Platform.



Strategic Relationship with Yahoo! Japan

In August 2012, we entered into a strategic relationship with Yahoo! Japan, a leading provider of advertising inventory in Japan, which grants us preferred access to their performance-based display inventory. In connection with this strategic relationship, Yahoo! Japan invested in our subsidiary, Criteo K.K. We retain 66% ownership of Criteo K.K. and Yahoo! Japan holds a 34% ownership. Yahoo! Japan has the right to require us to buy back its interest upon the occurrence of certain events (such as bankruptcy or breach of obligations), and we have the right to require them to sell their interest in Criteo K.K. under specified circumstances, such as a termination of the commercial relationship.

This strategic relationship may be terminated by either party for material breach or other customary events. The term of this strategic relationship was renewed to August 2021 and will continue to renew automatically thereafter for one-year terms if neither party provides advance written notice of its intent not to renew within a specified period of time.

Infrastructure

Our ability to execute depends on our highly sophisticated global technology software and hardware infrastructure. As of December 31, 2020, our global infrastructure included over 49,000 servers through a global network of nine data centers, including two Hadoop clusters, that comprise to 10,350 servers hosting 200,000 processing cores, providing a storage capacity exceeding 750,000 terabytes and 2,000 terabytes of random-access memory. Our global infrastructure is divided into three independent geographic zones in the Americas, Asia-Pacific and EMEA. In each of these geographic zones, our services are delivered through data centers that support this particular zone. We generally rely on more than one data center in any given zone. Within large zones, the data centers are strategically placed to be close to our clients, publishers and users. This provides the benefit of minimizing the impact of network latency within a particular zone, especially for time-constrained services such as RTB. In addition, we replicate data across multiple data centers to maximize availability and performance. We also generally seek to distribute workload across multiple locations to avoid overloads in our systems and increase reliability through redundancy.

Within each data center, computing power is provided by horizontal build-outs of commodity servers arranged in multiple, highly redundant pools. Some of these pools are dedicated to handling incoming traffic and delivering ads while others are devoted to the data analytics involved in creating these ads. In particular, we use software specifically designed for processing large data sets, such as Hadoop, to run offline data analyzes and to train our AI and Machine Learning models. The results are then fed back to refresh and improve our prediction and recommendation algorithms.

We use multiple-layered security controls to protect Criteo AI Engine and our data assets, including hardware- and software-based access controls for our source code and production systems, segregated networks for different components of our production systems and centralized production systems management.

Our Clients

Our client base for Criteo Marketing Solutions consists primarily of companies in the retail, travel and classifieds verticals, which we refer to as "commerce companies" or "commerce clients", and includes some of the largest and most sophisticated commerce companies in the world. These companies range from large, global, diversified commerce companies to mid-sized regional companies. With Criteo Retail Media, we also serve consumer brand manufacturers, which we refer to as "consumer brands" or "consumer brand clients". As of December 31, 2020, we had more than 21,000 clients (both commerce and consumer brand clients combined).

In 2020, approximately 68% of our client relationships were held directly with the client, whereby there was no advertising agency or any other third-party involved in our client relationship on the Criteo Marketing Solutions side of the business, whereas 49% of our Criteo Retail Media revenue comes from agencies.

We believe our business is not substantially dependent on any particular client or group of clients. In 2020, 2019 and 2018, our largest client represented 3.5%, 2.8% and 2.0% of our revenue, respectively, and in 2020, 2019 and 2018, our largest 10 clients represented 13.7%, 11.4% and 11.7% of our revenue in the aggregate, respectively.

There is no group of customers under common control or customers that are affiliates of each other constituting an aggregate amount equal to 10% or more of our consolidated revenues, the loss of which would have a material adverse effect on Criteo.

We define a client to be a unique party from whom we have received a signed contract or an insertion order and for whom we have delivered an advertisement or monetized an advertising inventory during the previous 12 months. We count specific brands or divisions within the same business as distinct clients so long as those entities have separately signed insertion orders with us. In the case of some solutions within Criteo Retail Media, we count the parent company of the brands as an individual client, even if several distinct brands pertaining to the same parent company have signed separate contracts or insertion orders with us. On the other hand, we count a client who runs campaigns in multiple geographies as a single client, even though multiple insertion orders may be involved. When the insertion order is with an advertising agency, we generally consider the client on whose behalf the advertising campaign is conducted as the "client" for purposes of this calculation. In the event a client has its advertising spend with us managed by multiple agencies, that client is counted as a single client.

Our client base is composed of two client categories: the large customer category and the midmarket category. We define large customers as the top-50 or the top-100 commerce websites per vertical in a given geographic market, depending on the depth of that market, based on the number of monthly unique visitors as measured by comScore or other third-party providers of such information. We define a midmarket client as any client outside of the large customer category per vertical in a given geographic market, depending on the depth of that market, and with a certain minimum threshold number of unique monthly visitors to their digital property, as measured by comScore or other third-party providers of such information. This minimum threshold varies by market, but is generally around 40,000 unique monthly visitors for our more developed markets. The delineation between the large customer and midmarket categories is fluid and the Company may decide, from time to time, to move some clients from one category to another. We may segment our client base in different ways in the future and adjust our go-to-market strategy accordingly.

Research and Development

We invest substantial resources in research and development to conduct fundamental research on artificial intelligence, machine-learning models, enhance the algorithms in Criteo AI Engine, develop new features and solutions, conduct quality assurance testing, improve our core technology and enhance our technology infrastructure. Our engineering group is primarily located in research and development centers in Paris, France, Grenoble, France and Ann Arbor, Michigan. We expect to continue to expand capabilities of our technology in the future and to invest significantly in continued research and development and new solutions efforts. We had 624 employees primarily engaged Research and Development and Product as of December 31, 2020. Research and development expenses, including expenses related to the Product group, totaled \$132.5 million, \$172.6 million and \$179.3 million for 2020, 2019 and 2018, respectively.

Intellectual Property

Our intellectual property rights are a key component of our success. We rely on a combination of patent, trademark, copyright and trade secret laws, as well as confidentiality procedures and contractual restrictions, to establish, maintain and protect our proprietary rights. We generally require employees, consultants, clients, publishers, suppliers and partners to execute confidentiality agreements with us that restrict the disclosure of our intellectual property. We also generally require our employees and consultants to execute invention assignment agreements with us that protect our intellectual property rights.

Intellectual property laws, together with our efforts to protect our proprietary rights, provide only limited protection, and any of our intellectual property rights may be challenged, invalidated, circumvented, infringed or misappropriated. The laws of certain countries do not protect proprietary rights to the same extent as the laws of France and the United States and, therefore, in certain jurisdictions, we may be unable to protect our proprietary technology.

Agreements with our employees and consultants may also be breached, and we may not have adequate remedies to address any breach. Further, to the extent that our employees or consultants use intellectual property owned by others in their work for us, disputes may arise as to the rights to know-how and inventions relating thereto or resulting therefrom. Finally, our trade secrets may otherwise become known or be independently discovered by competitors and unauthorized parties may attempt to copy aspects of the Criteo Commerce Media Platform or obtain and use information that we regard as proprietary.

As of December 31, 2020, we held sixteen patents issued by the U.S. Patent and Trademark Office, one patent issued by the French Patent Office, one patent issued by the European Patent Office, one patent issued by the Japan Patent Office and one patent issued by the Korean Intellectual Property Office, and had filed 10 non-provisional U.S. patent applications and four European patent applications. We also own and use registered and unregistered trademarks on or in connection with our products and services in numerous jurisdictions. In addition, we have also registered numerous internet domain names.

Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patent and other intellectual property rights. In particular, leading companies in the technology industry have extensive patent portfolios. From time to time, third parties, including certain of these leading companies, have asserted and may assert patent, copyright, trademark and other intellectual property rights against us, our clients or our publishers. Litigation and associated expenses may be necessary to enforce our proprietary rights.

Privacy, Data Protection and Content Control

Legal and Regulatory

Privacy and data protection laws play a significant role in our business. The regulatory environment for the collection and use of consumer data by advertising networks, advertisers and publishers is frequently evolving in the United States, Europe and elsewhere. The United States and foreign governments have enacted, considered or are considering legislation or regulations that could significantly restrict industry participants' ability to collect, augment, analyze, use and share personal data, such as by regulating the level of consumer notice and consent required before a company can utilize cookies or other tracking technologies.

In the United States, at both the federal and state level, there are laws that govern activities such as the collection and use of data by companies like us. At the federal level, online advertising activities in the United States have primarily been subject to regulation by the Federal Trade Commission, or the FTC, which has regularly relied upon Section 5 of the Federal Trade Commission Act, or Section 5, to enforce against unfair and deceptive trade practices, including alleged violations of consumer privacy interests. Various states have also enacted legislation that governs these practices. For example, on September 27, 2013, the governor of California signed into law AB 370, an amendment to the California Online Privacy Protection Act of 2003, or CalOPPA. This amendment requires that we disclose in our privacy policy how we respond to web browser "do not track" signals. Our current privacy policy discloses that we do not respond to web browser "do not track" signals but that we do respond to opt-out requests made through our proprietary opt-out button or through industry opt-out platforms (namely Network Advertising Initiative and Digital Advertising Alliance). However, the US privacy law framework may be subject to significant evolutions in the near future both at a federal and at a state level. At a federal level, lawmakers are currently considering the possibility of adopting a federal privacy law. In 2018, the State of California adopted the California Consumer Privacy Act, or the CCPA. The CCPA has been characterized as the first "GDPR-like" privacy statute to be enacted in the U.S. because its scope, and a number of the key provisions, resemble the GDPR. The CCPA establishes a new privacy framework for covered businesses by, among other requirements, creating an expanded definition of personal information, establishing new data privacy rights for consumers in the State of California, imposing special rules on the collection of personal data from minors, creating new notice obligations and new limits on the sale of personal information, and creating a new and potentially severe statutory damages framework for violations of the CCPA and for businesses that fail to implement reasonable security procedures and practices to prevent data breaches. As currently enacted, we and partners in our industry have been required to comply with these requirements since January 1, 2020, when the CCPA became effective. As with GDPR, the advertising technology marketplace may have to adapt to operating under the CCPA where it applies. Our advertising or publishing partners may impose new CCPA restrictions with which we must adapt and comply. This past November, the voters in California voted to pass the California Privacy Rights Act ("CPRA"), an Act that both amends and expands the scope of the CCPA. The CPRA will become effective on January 1, 2023, with a look back period to January 1, 2022. The CPRA creates new criteria by which businesses can be regulated, expands the definition of "personal information" to more closely match Europe, a new audit requirement, and the creation of an agency to oversee enforcement of the CPRA. The CPRA also explicitly provides an opt-out right for cross-contextual behavioral advertising. We cannot predict the timing or outcome of this adaptation or the effect on our business. Adapting our business to the CCPA and the forthcoming new requirements under the CPRA could involve substantial resources and expense, and may cause us to divert resources from other aspects of our business, all of which may adversely affect our business.

In addition, the Criteo Commerce Media Platform reaches users throughout the world, including in Europe, Australia, Canada, South America and Asia-Pacific. As a result, some of our activities may also be subject to the laws of foreign jurisdictions. In particular, data protection laws in Europe can be more restrictive regarding the collection and use of data than those in U.S. jurisdictions.

In the European Union, the two main pillars of the data protection legal framework are the E-Privacy Directive (Directive on Privacy and Electronic Communications) and the General Data Protection Regulation (GDPR), which was implemented in May 2018.

The E-Privacy Directive directs EU member states to ensure that accessing information on an Internet user's computer, such as through a cookie and other similar technologies, is allowed only if the Internet user has been informed about such access and given his or her consent. A recent ruling by the Court of Justice of the European Union clarified that such consent must be reflected by an affirmative act of the user, and European regulators are increasingly agitating for more robust forms of consent. These developments may result in decreased reliance on implied consent mechanisms that have been used to meet requirements of the E-Privacy Directive in some markets. A replacement for the E-Privacy Directive is currently under discussion by EU member states to complement and bring electronic communication services in line with the GDPR and force a harmonized approach across EU member states. It is possible that the proposed e-privacy regulation could further raise the bar for the use of cookies and the fines and penalties for breach could be significant.

In December 2016, the EU institutions reached an agreement on the GDPR. The GDPR has updated principles drawn from the 1995 Data Protection Directive while imposing new levels of sanctions for non-compliance. The EU data protection authorities have also been granted power to impose administrative fines of up to a maximum of €20 million or 4% of the data controller's or data processor's global turnover for the preceding financial year, whichever is higher.

We believe that the regulation has no material impact on our business or the way our technologies operate. However, GDPR is still a relatively recent regulation with no established case law. Therefore interpretations of the GDPR may vary, especially with respect to the articulation between GDPR (*lex generalis*) and E-Privacy Directive (*lex specialis*) and the conditions for the collection of a valid "cookie" consent, and thus there can be no assurance that this will not have any particular impact on our business, technologies or practices in the medium to long term.

On October 1, 2020, the French data protection authority (*Commission Nationale de l'Informatique et des Libertés*, or CNIL) issued the final version of its guidelines on the use of cookies and other trackers and its final recommendations on modalities for obtaining users' consent to store or read non-essential cookies and similar technologies on their devices. The recommendations provide that, when required, consent must be indicated by a clear and positive action of the data subject, such as by clicking on an "accept all" button on the first layer of the consent management platform. CNIL also noted that it should be as easy to refuse consent to the use of cookies as it is to accept consent, and a "refuse all" button should be present on the first layer of the consent management platform, equivalent to the "accept all" button in terms of size, position and color. Further, the ability to withdraw consent must be readily available at all times. The recommendations are not binding, nor are they intended to be prescriptive and exhaustive. Companies have until March 2021 to ensure compliance with these guidelines.

As we continue to expand into other foreign jurisdictions, we may be subject to additional laws and regulations that may affect how we conduct business.

Self-Regulation

In addition to complying with extensive government regulations, we voluntarily and actively participate in several trade associations and industry self-regulatory groups that promulgate best practices or codes of conduct relating to targeted advertising. For example, the Internet Advertising Bureau EU & US, the Network Advertising Initiative, the European Digital Advertising Alliance and the Digital Advertising Alliance have developed and implemented guidance for companies to provide notice and choice to users regarding targeted advertising.

In addition to complying with such guidance, we provide consumers with notice about our use of cookies and our collection and use of data in connection with the delivery of targeted advertising, and allow them to opt out from the use of such data for the delivery of targeted advertising. In an effort to harmonize the industry's approach to internet-based advertising, these programs facilitate a user's ability to disable services of integrated providers, but also educate users on the potential benefits of online advertising, including access to free content and display of more relevant advertisements to them. The rules and policies of the self-regulatory programs that we participate in are updated from time to time and may impose additional restrictions upon us in the future.

Criteo became one of the first companies to broadly include an "Ad Choices" link in all the advertisements we deliver, which gives users access to clear, transparent, detailed and user-friendly information about personalized advertisements and the data practices associated with the advertisements they receive. In addition, we provide consumers with an easy-to-use and easy-to-access mechanism to control their advertising experience and opt out of receiving targeted advertisements we deliver.

We believe that this transparent consumer-centric approach to privacy empowers consumers to make better-informed decisions about our use of their data. We also actively encourage our clients and publishers to provide information to consumers about our collection and use of data relating to the advertisements we deliver and monitor.

Content Control and Brand Safety

To protect against unlawful advertiser and publisher content, we include restrictions on content in our terms and conditions. We also take a large variety of brand safety measures to ensure that the brand equity of our clients is preserved as much as possible. These measures include determining that each publisher's inventory meets our content requirements and those of our clients to ensure that their display advertisements are not shown in inappropriate content categories. For that purpose, we use numerous internal systems and processes to filter out inventory in real time, including the list of suspect IP addresses from the *Trustworthy Accountability Group* and the lists of invalid traffic from several specialized external vendors. With respect to our inventory purchased through RTB exchanges, we utilize a mix of proprietary methodologies as well as third-party software to verify that inventory where the advertisement placement is shown conforms to our advertising guidelines and the content expectations and branding guidelines of our clients.

Government Regulation

In addition to the laws and regulations governing privacy and data protection described above, we are subject to numerous domestic and foreign laws and regulations covering a wide variety of subject matters. New laws and regulations (or new interpretations of existing laws and regulations) may also impact our business. The costs of compliance with these laws and regulations are high and are likely to increase in the future and any failure on our part to comply with these laws may subject us to significant liabilities and other penalties.

Competition

We compete in the broader market for digital marketing and media monetization, primarily through Display Advertising. Our market is complex, rapidly evolving, highly competitive, still fragmented and yet rapidly consolidating. We face significant competition in this market, which we expect to intensify in the future, partially as a result of potential new entrants in our market, including but not limited to large well-established internet publishers and players, in particular as we continue to expand the breadth of the Criteo Commerce Media Platform. We currently compete with large, well-established companies, such as Amazon, Facebook, Google, and Microsoft, independent Demand-Side Platforms ("DSPs"), such as The Trade Desk or MediaMath, as well as smaller, privately held companies. Potential competition could emerge from large enterprise marketing platforms, like Adobe Systems Inc. ("Adobe"), Oracle Corporation ("Oracle") and Salesforce.com, Inc. ("Salesforce"), or public and private companies specialized in the Marketing Technology ("MarTech") space. In addition, web browsers, and desktop and mobile operating systems developed by large software companies like Google and Apple Inc. ("Apple") can have a significant influence and impact on the way we operate. We believe the principal competitive factors in our industry include:

- access to granular commerce data on a large scale;
- technology-based ability to activate data, in particular commerce data, for multiple digital marketing and media monetization goals, along the entire consumer journey;
- technology-based ability to generate advertisers' desired business outcomes, including, but not limited to, high return on advertising spend at scale;
- relevance and breadth of solutions to address numerous digital marketing and media monetization goals;
- breadth and depth of consumer reach, including across the open Internet;
- marketer and publisher control over the objectives, parameters and performance of their advertising campaigns through modular, flexible and easy-to-use tools and services available on a self-service interface;
- measurability of the advertising spend performance, based on clear and transparent measurement metrics;
- completeness and effectiveness of solutions across digital devices, commerce and advertising environments, platforms and operating systems, advertising channels and publisher environments;
- transparency of pricing models, aligning with the value propositions provided to marketers;
- openness, transparency, security and fairness of data sharing and data management practices;
- client trust;
- global presence;
- client service and detailed, transparent client reporting available on a self-service basis;
- commitment to data protection and user privacy; and
- ease of use.

We believe that we are well positioned with respect to all of these factors and expect to continue to capture an increasing share of digital marketing and media monetization budgets worldwide.

Seasonality

Our client base consists primarily of commerce of companies in the Retail, Travel and Classifieds industries, which we refer to as “commerce companies” or “commerce clients”. In the digital Retail industry and the consumer brand verticals in particular, many businesses devote the largest portion of their advertising spend to the fourth quarter of the calendar year, to coincide with increased holiday spending by consumers. With respect to Criteo Retail Media, the concentration of advertising spend in the fourth quarter of the calendar year may be particularly pronounced. Our Retail clients typically conduct fewer advertising campaigns in the first and second quarters than they do in other quarters, while our Travel clients typically increase their travel campaigns in the first and third quarters and conduct fewer advertising campaigns in the second quarter. As a result, our revenue tends to be seasonal in nature. If the seasonal fluctuations become more pronounced, our operating cash flows could fluctuate materially from period to period.

Employees and Human Capital Management

As of December 31, 2020, we had 2,594 employees. Our employees employed by French entities (1,006 employees) are represented by a labor union and employee representative bodies (works' council, employee delegates and a health and safety committee) and covered by collective bargaining agreements. We consider labor relations to be good and have not experienced any work stoppages, slowdowns or other serious labor problems that have materially impeded our business operations.

We have a demonstrated history of commitment to the well-being and success of our workforce, and our company is driven by our core values of “open, together and impactful”. Attracting and retaining top talent is a key objective at Criteo, and we invest significantly in talent acquisition. Employee health and safety is a priority for Criteo. We devote time and efforts across all of our locations to provide positive working conditions, work-life balance and the healthiest office environment for our employees.

We value diversity in the workforce. For example, as of December 31, 2020, 41% of our 2,594 employees were female. Further, we have a global roadmap for gender equality and have internal dashboards dedicated to that purpose. We also have a diversity and inclusion roadmap, focused on areas such as social diversity, disability and ethnic diversity. We also have seven Employees Resource Groups who carry out awareness projects around diversity & inclusion and environmental topics.

Additionally, we strive to provide exceptional training opportunities and development programs for our employees. In 2020, over 30,000 training hours were delivered to our employees. To assess and improve employee retention and engagement, we periodically survey employees, and take action to address areas of employee concern. In 2020, we carried out two employee surveys specific to COVID-19 concerns, soliciting feedback on a wide range of topics from well-being to productivity to social links with other employees.

Financial Information about Segments and Regions

We manage our operations as a single reportable segment. For information about revenues, net income and total assets of our reporting segment, please see our audited consolidated financial statements included elsewhere in this Form 10-K. For a breakdown of our revenue and non-current assets by region, please see Note 25 to our audited consolidated financial statements included elsewhere in this Form 10-K. For information regarding risks associated with our international operations, please refer to the section entitled “Risk Factors” in Item 1A of Part I in this Form 10-K.

Available Information

Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act are made available, free of charge on our website, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the U.S. Securities and Exchange Commission (the “SEC”). These documents may be accessed through our website at www.criteo.com under “Investors.” Information contained on, or that can be accessed through, our website does not constitute a part of this Form 10-K. We have included our website address in this Form 10-K solely as an inactive textual reference.

The SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements and other information regarding registrants, such as Criteo, that file electronically with the SEC. With respect to references made in this Form 10-K to any contract or other document of Criteo, such references are not necessarily complete and you should refer to the exhibits attached or incorporated by reference to this Form 10-K for copies of the actual contract or document.

Item 1A Risk Factors

Investing in our ADSs involves a high degree of risk. You should carefully consider the following risks and all other information contained in this Form 10-K, including our consolidated financial statements and the related notes thereto, before investing in our ADSs. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, also may become important factors that affect us. If any of the following risks materialize, our business, financial condition and results of operations could be materially harmed. In that case, the trading price of our ADSs could decline, and you may lose some or all of your investment.

Risks Related to Our Business and Industry

If we fail to innovate, enhance our brand, adapt and respond effectively to rapidly changing technology, our offerings may become less competitive or obsolete. Our investments in new solutions and technologies to address new marketing goals for our clients are inherently risky and may not be successful.

Our industry and business are subject to rapid and frequent changes in technology, evolving client needs and the frequent introduction by our competitors of new and enhanced offerings. Our future success will depend on our ability to continuously enhance and improve our offerings to meet client needs, add functionality to and improve the performance of the Criteo Commerce Media Platform, and address technological and industry advancements. If we are unable to enhance our solutions to meet market demand in a timely manner, we may not be able to maintain our existing clients or attract new clients.

Our investments into new solutions and technologies are inherently risky and may not be successful. Addressing broader marketing and monetization goals, in particular customer acquisition and brand awareness, is relatively new to us, and we have had to invest substantial resources to adapt our model, pricing and organization to support this expansion. It also implies investing in new advertising formats like video for Connected TV. Similarly, we do not have a long or established track record of competing successfully in this space. If we are not successful in expanding our solutions along broader marketing goals, our results of operations could be adversely affected. Furthermore, we believe that the importance of brand recognition will increase as competition in our market increases.

In addition, we have made, and intend to continue to make, substantial investments in order to further build our brand, strengthen the Criteo Commerce Media Platform and scale our technology capabilities. However, if we are unable to continuously enhance and improve our offerings, we may be unable to respond effectively to changes in our industry, technology or user preferences, and our solutions may become less competitive or obsolete. Furthermore, brand promotion activities may not yield any increased revenue, and even if they do, any increased revenue may not offset the expenses we incurred in building our brand.

We have significant global sales and operations and face risks related to health epidemics that could impact our sales and operating results. In particular, our business has been and we expect will continue to be negatively impacted by the ongoing COVID-19 pandemic and the global attempt to contain it.

We face various risks related to health epidemics, pandemics and similar outbreaks, including the ongoing COVID-19 pandemic. Any outbreak of contagious diseases, and other adverse public health developments, could have a material adverse effect on our business operations. The spread of COVID-19 and the various attempts to contain it have created significant volatility, uncertainty and economic disruption to our clients' businesses. Certain of our customers, especially those in the Travel and Classified verticals, as well as traditional brick-and-mortar retailers, have seen their businesses and revenues negatively impacted by the COVID-19 pandemic. As a result, we have seen a continued negative impact on our revenues tied to COVID-19 since March 2020. We expect that the negative impact of the COVID-19 pandemic on our revenues will continue until economic conditions durably improve and stabilize.

The impact of the ongoing pandemic has adversely impacted and may continue to adversely impact our business, financial position and results of operations in several ways, including, but not limited to:

- Significant reductions or volatility in demand for our services as customers pause their campaigns with us, decrease advertiser spend, decide not to enter into new purchase commitments, enter bankruptcy proceedings, or otherwise decrease investment in their business due to financial downturns or general economic uncertainty. This would result in a significant decline in our revenues, which could persist through and beyond the pandemic period.
- A hindrance on our ability to operate, as well as our partners' and/or customers' ability to operate, in affected areas, which may cause our business and operating results to decline.

- A significant decrease in our operating cash flows due to deterioration in the credit quality and liquidity of our customers and their ability to meet their payment obligations to us, which could adversely affect our accounts receivable.
- The shift to a remote working environment may negatively impact our productivity, connectivity, and oversight, and may increase our expenses. It is not clear when a return to worksite locations or travel will be permitted or what restrictions will be in place in those environments. The extent and/or duration of ongoing workforce restrictions and limitations could impact our ability to enhance, develop and support existing products and services, hold sales and marketing events, and generate new sales leads.

To the extent the COVID-19 pandemic or any other health epidemic or outbreak adversely impacts our business, operations and financial results, it may also result in the heightening the other risks described in “Item 1A. Risk Factors” and elsewhere in this Form 10-K.

We face intense and increasing competition for employee talent, and if we do not retain and continue to attract highly skilled talent or retain our senior management team and other key employees, we may not be able to sustain our growth or achieve our business objectives.

Our future success depends on our ability to continue to attract, retain and motivate highly skilled employees, particularly AI experts, software engineers, product managers and other employees with the technical skills that enable us to deliver effective advertising solutions, client sales and publisher partnership representatives with experience in digital advertising. Competition for highly skilled employees in our industry is intense, in particular in the fields of AI and data science, and we expect certain of our key competitors, who generally are larger than us and have access to more substantial resources, to pursue top talent aggressively on a global basis.

Our future success also depends on the continued service of our senior management team. Our management team has been and may again be spread across multiple physical locations and geographies, which can strain the organization and make coordinated management more challenging. We have recently experienced several changes to senior management, and we are in the process of deeply transforming our business, including through certain cost reduction activities. Transition periods accompanying changes in leadership and changes due to business reorganization may result in uncertainty, impact business performance and strategies, and retention of key personnel. We may be unable to attract or retain the management and highly skilled personnel who are critical to our success, which could hinder our ability to keep pace with innovation and technological change in our industry or result in harm to our key client and publisher relationships, loss of key information, expertise or proprietary knowledge and unanticipated recruitment and training costs.

In addition, we believe that our corporate culture fosters teamwork, impactful results and an open environment. As our organization grows and evolves, we may need to implement more complex organizational management structures or adapt our corporate culture and work environments to changing circumstances, such as during times of a natural disaster or pandemic (including COVID-19). These changes could impact our ability to compete effectively, or could have an adverse impact on our corporate culture.

The market in which we participate is intensely competitive, and we may not be able to compete successfully with our current or future competitors.

The market for internet advertising solutions is highly competitive and rapidly changing. New technologies and methods of buying advertising present a dynamic competitive challenge as market participants develop and offer multiple new products and services aimed at facilitating and/or capturing advertising spend. With the introduction of new technologies and the influx of new entrants to the market, including large established companies and companies that we do not yet know about or do not yet exist, we expect competition to persist and intensify in the future, which could harm our ability to increase sales and maintain our profitability.

Large and established internet and technology companies may have the power to significantly change the very nature of the digital advertising marketplaces in ways that could materially disadvantage us. These companies could leverage their positions to make changes to their web browsers, mobile operating systems, platforms, exchanges, networks or other solutions or services that could be significantly harmful to our business and results of operations. These companies also have significantly larger resources than we do, and in many cases have advantageous competitive positions in popular products and services like Gmail, YouTube, Chrome, Facebook and Instagram, which they can use to their advantage. Furthermore, our competitors include large and established internet and technology companies that have invested substantial resources in innovation, which could lead to technological advancements that change the competitive dynamics of our business in ways that we may not be able to predict.

In addition to competing for advertising spend, we compete with many companies for advertising inventory, some of whom also operate their own advertising networks or exchanges from which we buy advertising inventory. Some of these companies that we compete with, either for advertising spend or for advertising inventory, may also be our clients or affiliated with our clients or important sources of advertising inventory. Competitive pressure may incentivize such companies to cease to be our clients or cease to provide us with access to their advertising inventory. If this were to occur, our ability to place advertisements would be significantly impaired and our results of operations would be adversely affected. We also face competition for advertising spend from within our own clients. Some large advertisers are increasingly developing in-house advertising technologies, facilitated by self-service tools offered by internet and technology companies like Adobe and Google. Similarly, large enterprise marketing platforms, like Adobe, Oracle, and Salesforce.com, Inc., could create tools that offer our clients additional opportunities to allocate advertising dollars to in-house campaigns. Competition could also hinder the success of new advertising solutions that we offer in the future.

If any of these risks were to materialize, our ability to compete effectively could be significantly compromised and our results of operations could be harmed. Any of these developments would make it more difficult for us to sell our offerings and could result in increased pricing pressure, reduced gross margins, increased sales and marketing expense and/or the loss of market share.

If we fail to access a consistent supply of advertising inventory and expand our access to such inventory, our business and results of operations could be harmed.

Essentially all of our revenue is derived from placing advertisements on publisher digital properties that we do not own. As a result, we do not own or control the advertising inventory upon which our business depends. We currently access advertising inventory through various channels, including through direct relationships with publishers and large retailers, advertising exchange platforms and other platforms that aggregate the supply of advertising inventory.

Since many widely used aggregators of advertising inventory are owned by companies that may compete with us for clients, competitive pressure may incentivize these companies to limit our access to advertising inventory available through their platforms. For example, in September 2019 we filed a complaint with the French Competition Authority against Facebook, due to Facebook's gradual exclusion of companies including Criteo from the Facebook platform. The fact that advertising inventory available within "walled-garden" publisher environments tends to grow faster than other advertising inventory available on the market may limit the growth of our access to advertising inventory or our mere access to it overall. In addition, industry or technological changes may affect our access to inventory or the price we pay for inventory.

Similarly, our ability to continue to purchase inventory from many of the publishers and large retailers with whom we have direct relationships depends in part on our ability to consistently pay sufficiently competitive CPMs for their advertising inventory, or in the case of some Criteo Retail Media solutions, to generate sufficient advertising revenue for retailers, as well as our ability to offer advertisements from high quality companies. As more companies compete for advertising impressions on advertising exchange platforms and other platforms that aggregate supply of advertising inventory, advertising inventory may become more expensive, which may adversely affect our ability to acquire it and to deliver advertisements on a profitable basis. We may in the future have to increasingly rely on direct relationships with strong publisher partners in order to maintain the necessary access to quality advertising inventory, and we may not be able to do so on terms that are favorable to us. In addition, to support the growth of our solutions for the Awareness and Consideration marketing goals—aimed at generating brand awareness for clients and driving new visitors or prospective customers for clients—we will need to expand our access to video and connected TV inventory, both in the web and in mobile applications, the price of which may not be available on terms that are favorable to us.

Additionally, we are party to certain agreements with partners that provide us with preferred access to inventory. If the terms of those agreements change and we lose our preferred access, then our financial results could be adversely affected.

If we are not successful in these endeavors, our business and results of operations could be harmed.

The failure by Criteo AI Engine to accurately predict engagement by users could result in significant costs to us, lost revenue and diminished advertising inventory.

The effective delivery of our digital advertising solution depends on the ability of Criteo AI Engine to predict the likelihood that a consumer will engage with any given internet display advertisement with a sufficient degree of accuracy that our clients can achieve desirable returns on their advertising spend. We historically charged our clients primarily based on a cost-per-click pricing model, and our clients only paid us when a user engaged with the advertisement, usually by clicking on it. Although we have started evolving our pricing models alongside our broader suite of solutions, the majority of our revenue is generated through cost-per-click pricing models or equivalent.

Our agreements with clients are open-ended and often do not include a spending minimum. Similarly, our contracts with publishers generally do not include long-term obligations requiring them to make their inventory available to us over long periods of time. Therefore, we need to continuously deliver satisfactory results for our clients and publishers in order to maintain and increase revenue, which in turn depends in part on the optimal functioning of Criteo AI Engine.

In addition, as we have increased the number of clients and publishers that use our offerings on a global basis, we have experienced significant growth in the amount and complexity of data processed by Criteo AI Engine and the number of advertising impressions we deliver. As the amount of data and number of variables processed by Criteo AI Engine increase, and the calculations that the algorithms must compute become increasingly complex, the risk of errors in the type of data collected, stored, generated or accessed also increases.

Fraudulent or malicious activity, including non-human traffic, could also impair the proper functioning of Criteo AI Engine. For example, the use of bots or other automated or manual mechanisms to generate fraudulent clicks or misattribute clicks on advertisements we deliver could overstate the performance of our advertising. Due to the higher CPM paid for video and connected TV advertisements, the risk of fraudulent traffic may increase as we increase our purchasing of video and connected TV inventory.

If we were to experience significant errors, defects, or fraudulent or malicious activity in Criteo AI Engine, our solution could be impaired or stop working altogether, which could prevent us from purchasing any advertising inventory and generating any revenue until the errors, defects or fraudulent or malicious activity were detected and corrected. Other negative consequences from significant errors, defects or fraudulent or malicious activity in Criteo AI Engine could include:

- a loss of clients and publishers or a decrease in inventory purchased by clients;
- fewer consumer visits to our client websites or mobile applications;
- lower click-through rates or conversion rates;
- lower profitability per impression, up to and including negative margins;
- faulty inventory purchase decisions for which we may need to bear the cost;
- lower return on advertising spend for our clients;
- lower price for the advertising inventory we are able to offer to publishers;
- delivery of advertisements that are less relevant or irrelevant to users;
- refusals to pay, demands for refunds, loss of confidence, withdrawal of future business and potential liability for damages or regulatory inquiries or lawsuits; and
- negative publicity or harm to our reputation.

As a result, the failure by Criteo AI Engine to accurately predict engagement of users and to continue to do so over time could result in significant costs to us, lost revenue and diminished advertising inventory.

Regulatory, legislative or self-regulatory developments regarding internet privacy matters could adversely affect our ability to conduct our business.

Governmental authorities around the world have enacted, considered or are considering legislation or regulations that could significantly restrict our ability to collect, process, use, transfer and pool data collected from and about consumers and devices. Trade associations and industry self-regulatory groups have also promulgated best practices and other industry standards relating to targeted advertising.

In the European Union, the two main pillars of the data protection legal framework are the Directive on Privacy and Electronic Communications (E-Privacy Directive) and the GDPR. The E-Privacy Directive directs EU member states to ensure that accessing information on an Internet user's computer, such as through a cookie and other similar technologies, is allowed only if the Internet user has been informed about such access and given his or her consent. A recent ruling by the Court of Justice of the European Union clarified that such consent must be reflected by an affirmative act of the user, and European regulators are increasingly agitating for more robust forms of consent. These developments may result in decreased reliance on implied consent mechanisms that have been used to meet requirements of the E-Privacy Directive in some markets. A replacement by an e-privacy regulation for the E-Privacy Directive is currently under discussion by EU member states to complement and bring electronic communication services in line with the GDPR and force a harmonized approach across EU member states. It is possible that the proposed e-privacy regulation could further impede the use of cookies and the fines and penalties for breach could be significant.

Under GDPR, data protection authorities have the power to impose administrative fines of up to a maximum of €20 million or 4% of the data controller's or data processor's total worldwide turnover of the preceding financial year. Similarly, the e-privacy regulation, once enacted, could result in new rules and mechanisms for "cookie" consent.

Further, on October 1, 2020, the French data protection authority (*Commission Nationale de l'Informatique et des Libertés*, or CNIL) issued the final version of its guidelines on the use of cookies and other trackers and its final recommendations on modalities for obtaining users' consent to store or read non-essential cookies and similar technologies on their devices. The recommendations provide that, when required, consent must be indicated by a clear and positive action of the data subject, such as by clicking on an "accept all" button on the first layer of the consent management platform. CNIL also noted that it should be as easy to refuse consent to the use of cookies as it is to accept consent, and a "refuse all" button should be present on the first layer of the consent management platform, equivalent to the "accept all" button in terms of size, position and color. Further, the ability to withdraw consent must be readily available at all times. The recommendations are not binding, nor are they intended to be prescriptive and exhaustive. Companies have until March 2021 to ensure compliance with these guidelines.

In 2018, the State of California adopted the California Consumer Privacy Act of 2018, or the CCPA. The CCPA has been characterized as the first "GDPR-like" privacy statute to be enacted in the U.S. because its scope, and a number of the key provisions, resemble the GDPR. The CCPA establishes a new privacy framework for covered businesses by, among other requirements, creating an expanded definition of personal information, establishing new data privacy rights for consumers in the State of California, imposing special rules on the collection of personal data from minors, creating new notice obligations and new limits on the sale of personal information, and creating a new and potentially severe statutory damages framework for violations of the CCPA and for businesses that fail to implement reasonable security procedures and practices to prevent data breaches. As currently enacted, we and partners in our industry have been required to comply with these requirements since January 1, 2020, when the CCPA became effective. As with GDPR, the advertising technology marketplace may have to adapt to operating under the CCPA where it applies. Our advertising or publishing partners may impose new CCPA restrictions with which we must adapt and comply. This past November, voters in California voted to pass the California Privacy Rights Act ("CPRA"), which both amends and expands the scope of the CCPA. The CPRA will become effective on January 1, 2023, with a look back period to January 1, 2022. The CPRA creates new criteria by which businesses can be regulated, expands the definition of "personal information" to more closely match European regulations, a new audit requirement, and the creation of an agency to oversee enforcement of the CPRA. The CPRA also explicitly provides an opt-out right for cross-contextual behavioral advertising. We cannot predict the timing or outcome of this adaptation or the effect on our business. Adapting our business to the CCPA and the forthcoming new requirements under the CPRA could involve substantial resources and expense, and may cause us to divert resources from other aspects of our business, all of which may adversely affect our business.

Clarifications of and changes to these existing and proposed laws, regulations, judicial interpretations and industry standards can be costly to comply with, and we may be unable to pass along those costs to our clients in the form of increased fees, which may negatively affect our operating results.

Such changes can also delay or impede the development of new solutions, result in negative publicity and reputational harm, require significant management time and attention, increase our risk of non-compliance and subject us to claims or other remedies, including fines or demands that we modify or cease existing business practices, including our ability to charge per click or the scope of clicks for which we charge. Additionally, any perception of our practices or solutions as an invasion of privacy, whether or not such practices or solutions are consistent with current or future regulations and industry practices, may subject us to public criticism, private class actions, reputational harm or claims by regulators, which could disrupt our business and expose us to increased liability.

Finally, our legal and financial exposure often depends in part on our clients' or other third parties' adherence to privacy laws and regulations and their use of our services in ways consistent with visitors' expectations.

If our clients fail to adhere to our contracts in this regard, or a court or governmental agency determines that we have not adequately, accurately or completely described our own solutions, services and data collection, use and sharing practices in our own disclosures to consumers, then we and our clients and publisher partners may be subject to potentially adverse publicity, damages and related possible investigation or other regulatory activity in connection with our privacy practices or those of our clients.

In November 2018, Privacy International filed a complaint with relevant data protection authorities against Criteo and a number of other similarly situated advertising technology companies, arguing that certain of these companies' practices do not comply with the GDPR. In January 2020, CNIL opened a formal investigation into Criteo in response to this complaint. There can be no assurance that action will not be required as a result.

Our business depends on our ability to maintain the quality of content for our clients and publishers.

Our clients' satisfaction depends on our ability to place advertisements with publisher content that is well-suited to the client's product or service. If we are unable to keep our clients' advertisements from being placed in unlawful or inappropriate content, our reputation and business may suffer. In particular, we could be treated as a spammer and blocked by internet service providers or regulators. In addition, if we place advertisements on websites containing content that is not permitted under the terms of the applicable agreements with a client, we may be unable to charge the client for impressions or clicks generated on those sites, the client may terminate their campaign, the client may require us to indemnify them for any resulting third party claims, or the client may allege breach of contract. Further, our publishers and exchange partners rely upon us not to place advertisements with inappropriate or unlawful content on their websites. As we grow our business to serve a larger number of smaller clients using self-service tools with less intervention by us, it could become more challenging to prevent inappropriate or unlawful advertisements from being shown. If we are unable to maintain the quality of our client and publisher content as the number of clients and publishers we work with continues to grow, our reputation and business may suffer and we may not be able to retain or secure additional clients or publisher relationships.

Our success depends on our ability to implement our business transformation and achieve our global business strategies.

Our business has recently undergone, and continues to undergo, a significant transformation, partially in response to major changes in the advertising technology industry driven by, but not limited to, regulations such as the GDPR and restrictions on data collection and use. The components of our transformation include diversification of our services as we shift away from third-party cookies, focus on opportunities for growth and investment, and certain organization adjustments and cost-saving initiatives. Our future performance and growth depends on the success of this transformation and our new business strategies, including our management team's ability to successfully implement them.

The multi-year implementation of our transformation is expected to result in changes to business priorities and operations, capital allocation priorities, operational and organizational structure, and increased demands on management. Such changes could result in short-term and one-time costs, lost customers, reduced sales volume, higher than expected restructuring costs, loss of key personnel and other negative impacts on our business. We may also become subject to the risks of labor unrest, negative publicity and business disruption in connection with these initiatives.

Implementation of our business transformation may take longer than anticipated, and, once implemented, we may not realize, in full or in part, the anticipated benefits or such benefits may be realized more slowly than anticipated. The failure to realize benefits or savings, which may be due to our inability to execute plans, delays in the implementation of the transformation, global or local economic conditions, competition, changes in the advertising technology industry and the other risks described herein, could have a material adverse effect on our business, financial condition and results of operations, as well as the trading price of our securities.

We may not be able to effectively integrate the businesses we acquire, which may adversely affect our ability to achieve our growth and business objectives.

We explore, on an ongoing basis, potential acquisitions of additional businesses, products, solutions, technologies or teams. If we identify an appropriate acquisition candidate, we may not be successful in negotiating the terms and/or financing of the acquisition, and our due diligence may fail to identify all of the problems, liabilities or other shortcomings or challenges of an acquired business, product, solution or technology, including issues related to intellectual property, product quality or architecture, employees or clients, regulatory compliance practices or revenue recognition or other accounting practices.

Any acquisition or investment may require us to use significant amounts of cash, issue potentially dilutive equity securities or incur debt, contingent liabilities or amortization of expenses, or impairment of goodwill and/or purchased long-lived assets, and restructuring charges, any of which could harm our financial condition or results. In addition, acquisitions, including our recent acquisitions, involve numerous risks, any of which could harm our business, including:

- difficulties in integrating the operations, technologies, services and personnel of acquired businesses, especially if those businesses operate outside of our core competency;
- the need to integrate operations across different geographies, cultures and languages and to address the particular economic, currency, political and regulatory risks associated with specific countries;
- cultural challenges associated with integrating employees from the acquired company into our organization;
- ineffectiveness, lack of scalability, or incompatibility of acquired technologies or services;
- potential loss of key employees of acquired businesses;
- inability to maintain the key business relationships and the reputation of acquired businesses;
- failure to successfully further develop the acquired technology in order to recoup our investment;
- unfavorable reputation and perception of the acquired product or technology by the general public;
- diversion of management's attention from other business concerns;
- liability or litigation for activities of the acquired business, including claims from terminated employees, clients, former shareholders or other third parties;
- implementation or remediation of controls, practices, procedures and policies at acquired businesses, including the costs necessary to establish and maintain effective internal controls; and
- increased fixed costs.

There can be no assurance that we will be able to successfully integrate the businesses that we acquire or that we will be able to leverage the acquired commercial relationships, products or technologies in the manner we anticipate. If we are unable to successfully integrate the businesses we have acquired or any business, product, solution or technology we acquire in the future, our business and results of operations could suffer, and we may not be able to achieve our business and growth objectives.

Our international operations and expansion expose us to several risks.

As of December 31, 2020, we had a direct operating presence through 29 offices located in 19 countries and did business in 104 countries. Our current global operations and future initiatives involve a variety of risks, including, in addition to risks described elsewhere in this section:

- operational and execution risk, including localization of the product interface and systems, translation into foreign languages, adaptation for local practices, adequate coordination of timing to onboard local clients and publishers, difficulty of maintaining our corporate culture, challenges inherent to hiring and efficiently managing an increased number of employees over large geographic distances, and the increasing complexity of the organizational structure required to support expansion and operations into multiple geographies and regulatory systems;
- insufficient, or insufficiently coordinated, demand for and supply of advertising inventory in specific geographic markets processed through Criteo AI Engine, which could impair its ability to accurately predict user engagement in that market;
- compliance with (and liability for failure to comply with) applicable local laws and regulations, including, among other things, laws and regulations with respect to data protection and user privacy, tax and withholding, labor regulations, anti-corruption, consumer protection, spam and content, which laws and regulations may be inconsistent across jurisdictions;
- intensity of local competition for digital advertising budgets and internet display inventory;
- changes in a specific country's or region's political or economic conditions;

- risks related to pricing structure, payment and currency, including aligning our pricing model and payment terms with local norms, higher levels of credit risk and payment fraud, difficulties in invoicing and collecting in foreign currencies and associated foreign currency exposure, restrictions on foreign ownership and investments, and difficulties in repatriating or transferring funds from or converting; currencies; and
- limited or unfavorable intellectual property protection;

We have one U.K. subsidiary, some of our operations are in the U.K., and some of our customers and partners pay us in British Pounds and Euros. It remains unclear what impact Brexit will have on our business in the U.K., EU and elsewhere globally. Brexit may adversely affect economic conditions in the U.K., EU and elsewhere across the globe, and could contribute to volatility in foreign exchange markets with respect to the British Pound and Euro, which we may not be able to effectively manage, and our financial results could be adversely affected. Further, Brexit may add additional complexity to our European operations, which are headquartered in Paris, France. Accordingly, we cannot predict the additional expense, impact on revenue, or other business impact that may stem from Brexit.

Additionally, operating in international markets also requires significant management attention and financial resources. We cannot be certain that the investment and additional resources required in establishing operations in other countries will produce desired levels of revenue or profitability.

Because our functional currency is the euro, while our reporting currency is the U.S. dollar, we face exposure to fluctuations in foreign currency exchange rates. Foreign currency exchange risk exposure also arises from intra-company transactions and financing with subsidiaries that have a functional currency different than the euro. While we are engaging in hedging transactions to minimize the impact of uncertainty in future exchange rates on intra-company transactions and financing, we may not hedge all of our foreign currency exchange rate risk. In addition, hedging transactions carry their own risks and costs, and could expose us to additional risks that could harm our financial condition and operating results.

If we fail to manage our growth and the shift in our client portfolio toward the midmarket effectively, we may be unable to execute our business plan or maintain high levels of client and publisher satisfaction.

We have experienced, and may in the future experience, rapid growth and changes in our client portfolio, which have created, and may continue to create, challenges to the quality of our service to our clients, and which have placed, and may continue to place, significant demands on our management and our operational and financial resources.

For example, over the past few years, the size of our midmarket business has grown significantly as a proportion of our overall business, and we expect it to continue to do so in the future. As our business shifts toward the midmarket category, there are several additional risks to our business, including risks relating to the financial stability of our clients and our ability to collect accounts receivable from such clients. In addition, since our midmarket business is comprised of thousands of smaller clients that require significant resources to support, it is currently less profitable than our large client business, and overall there may not be a direct correlation between a change in the number of clients in a particular period and an increase or decrease in our revenue. In 2018, we started to implement a new go-to-market strategy, aimed at maximizing our commercial opportunity for our multi-solution offering, by providing the right level of services to each our client segments and scaling our midmarket operations more efficiently and profitably. However, we will need to continue automating certain of our processes to service the midmarket category as it continues to grow globally. There can be no assurance that we will be able to successfully adjust to these shifting dynamics and remain profitable, while maintaining a high level of service to ensure client and publisher satisfaction.

If we fail to successfully manage the anticipated changes in our client portfolio and the associated changes in employee headcount and our organizational structure, our brand and reputation may suffer, which would in turn impair our ability to attract and retain clients and publishers and our results of operations.

The development and deployment of the self-registration and onboarding module of the Criteo Commerce Media Platform and associated processes may be delayed or may experience technical issues.

In 2018, we started undertaking a transformation of our go-to-market model, aimed at maximizing the commercial opportunity for our multi-solution offering, by providing the right level of services to each of our client segments - based on their size and business potential with us - and by scaling our midmarket operations more efficiently and profitably. This includes the roll out of a self-registration and onboarding module for lower segments of midmarket clients to sign up and be self-served in an automated, scalable and profitable way.

If our ability to develop the right capabilities internally, planning for roles and responsibilities, redeployment of resources, or training of teams fails or is lacking, then we may not be able to operate our self-registration and onboarding module in an effective manner. Further, if we lack coordination in anticipating project dependencies or lack project management and change management skills, the deployment and adoption of this self-registration and onboarding module may be delayed or may experience technical issues. As a result, we may not be able to timely leverage our self-registration and onboarding module to profitability scale, which could result in significant costs to us, lost revenue and reputational harm.

Our future success will depend in part on our ability to expand into new industry verticals.

As we market our offering to a wider group of consumer brands and companies outside of our historical three key industry verticals of retail, travel and classifieds, as well as mobile app-first verticals such as gaming, ride sharing and food delivery, we will need to adapt our solutions and effectively market our value to businesses in these new industry verticals. Our successful expansion into new industry verticals will depend on various factors, including our ability to:

- accumulate sufficient data sets relevant for those industry verticals to ensure that Criteo AI Engine has sufficient quantity and quality of information to deliver efficient and effective internet display advertisements within the relevant industry;
- design solutions that are attractive to businesses in such verticals;
- work with clients in new industry verticals through the advertising agencies that manage their advertising budgets
- hire personnel with relevant industry vertical experience to lead sales and product teams
- provide high returns on advertising spend in such industries and maintain such high returns on advertising spend at scale; and
- transparently measure the performance of such advertising spend based on clear, measurable metrics.

If we are unable to successfully adapt our offering to appeal to businesses in industries other than our core verticals, or are unable to effectively market such solutions to businesses in such industries, we may not be able to achieve our growth or business objectives. Further, as we expand our client base and offering into new industry verticals, we may be unable to maintain our current client retention rates.

As we expand the market for our solutions, we may become more dependent on advertising agencies as intermediaries, which may adversely affect our ability to attract and retain business, or exert downward pressure on our margins.

As we market our solutions, we may increasingly need advertising agencies to work with us in assisting businesses in planning and purchasing for broader marketing goals. In particular, many of our Criteo Retail Media clients work with us through advertising agencies: 49%, 62% and 66% of Criteo sponsored products revenue for 2020, 2019 and 2018, respectively, relied on advertising agencies.

Overall, we believe that accessing broader advertising budgets by partnering with advertising agencies represents a significant incremental business opportunity for us. However, an increasing exposure to advertising agencies may also represent significant risks. For example, if we have an unsuccessful engagement with an advertising agency on a particular advertising campaign, we risk losing the ability to work not only for the client for whom the campaign was run, but also for other clients represented by that agency. Further, if our business evolves such that we are increasingly working through advertising agency intermediaries, we would have less of a direct relationship with our clients. This may drive our clients to attribute the value we provide to the advertising agency rather than to us, further limiting our ability to develop long-term relationships directly with our clients. Additionally, our clients may move from one advertising agency to another, and, accordingly, even if we have a positive relationship with an advertising agency, we may lose the underlying client's business when the client switches to a new agency.

The presence of advertising agencies as intermediaries between us and our clients thus creates a challenge to building our own brand awareness and maintaining an affinity with our clients, who are the ultimate sources of our revenue. In the event we were to become more dependent on advertising agencies as intermediaries, this may adversely affect our ability to attract and retain business. In addition, an increased dependency on advertising agencies may harm our results of operations, as a result of the increased agency fees we may be required to pay and/or as a result of longer payment terms from agencies.

Our future success will depend in part on our ability to expand into new advertising channels.

We define an advertising channel as a specific advertisement medium to engage with a user or a consumer for which we currently purchase inventory through a specific source. We started delivering elements of our offering through internet display advertisements in desktop browsers. Since then, we have expanded into mobile in-browser and in-app, native display, including on social media platforms, and video inventory.

In the future, we may decide to broaden the spectrum of our advertising channels further, including connected TV and Digital Out of Home, if we believe that doing so would significantly increase the value we can offer to clients. However, any future attempts to enter new advertising channels may not be successful.

Our success in expanding into any additional advertising channels will depend on various factors, including our ability to:

- identify additional advertising channels where our solutions could perform;
- accumulate sufficient data sets relevant for those advertising channels to ensure that Criteo AI Engine has a sufficient quantity and quality of information to deliver relevant personalized advertisements through those additional advertising channels;
- adapt our solutions to additional advertising channels and effectively market it for such additional advertising channels to our existing and prospective clients;
- integrate newly developed or acquired advertising channels into our pricing and measurement models, with a clear and measurable performance attribution mechanism that works across all channels, and in a manner that is consistent with our privacy standards;
- achieve client performance levels through the new advertising channels that are similar to those delivered through existing advertising channels, and in any case that are not dilutive to the overall client performance;
- identify and establish acceptable business arrangements with inventory partners and platforms to access inventories in sufficient quality and quantity for these new advertising channels;
- maintain our gross margin at a consistent level upon entering one or more additional advertising marketing channels;
- compete with new market participants active in these additional advertising channels; and
- hire and retain key personnel with relevant technology and product expertise to lead the integration of additional advertising channels onto our platform, and sales and operations teams to sell and integrate additional advertising channels.

If we are unable to successfully adapt our solutions to additional advertising channels and effectively market such offerings to our existing and prospective clients, or if we are unable to maintain our pricing and measurement models in these additional advertising channels, we may not be able to achieve our growth or business objectives.

We operate in a rapidly evolving industry, which makes it difficult to evaluate our future prospects and may increase the risk that we will not be successful. Our historical growth rates may not be indicative of our future growth, and we expect our operating and capital investments to continue to increase in the foreseeable future. Accordingly, we may have difficulty sustaining profitability.

We operate in a rapidly evolving industry. Our ability to forecast our future operating results is subject to a number of uncertainties, including our ability to plan for and model future growth in both our business and the digital advertising market generally. We are subject to risks and uncertainties frequently experienced by growing companies in rapidly evolving industries, including challenges in forecasting accuracy, determining appropriate nature and levels of investments, assessing appropriate returns on investments, achieving market acceptance of our existing and future offerings, managing client implementations and developing new solutions. If our assumptions regarding these uncertainties, which we regularly use and update to plan our business, are incorrect or change in reaction to changes in our markets, or if we do not address these risks successfully, our operating and financial results could differ materially from our expectations and our business could suffer.

You should not consider our revenue growth in past periods to be indicative of our future performance. In future periods, our revenue could decline or grow more slowly than we expect. We believe the growth of our revenue depends on a number of factors, including our ability to:

- attract new clients, and retain and expand our relationships with existing clients;
- maintain the breadth of our publisher network and attract new publishers, including publishers of web content, mobile applications and video and social games, in order to grow the volume and breadth of advertising inventory available to us;
- broaden our solutions portfolio to include additional marketing and monetization goals (including Awareness and Consideration) for commerce companies and consumer brands across the open Internet, including web, apps and stores;
- adapt our offering to meet evolving needs of businesses, including to address market trends such as (i) the migration of consumers from desktop to mobile and from websites to mobile applications, (ii) the increasing percentage of sales that involve multiple digital devices, (iii) the growing adoption by consumers of “ad-blocking” software on web browsers on desktop and/or on mobile devices and use or consumption by consumers of advertising-free services such as Netflix, (iv) changes in the marketplace for and supply of advertising inventory, including the shift toward header bidding, and (v) changes in the overall ecosystem such as Apple's introduction of its *Intelligent Tracking Prevention* feature into its Safari browser, Microsoft's *Tracking Prevention* feature in its Edge browser, and Mozilla's introduction of *Enhanced Tracking Protection* into its Firefox browser; and (vi) changes in consumer acceptance of tracking technologies for targeted or behavioral advertising purposes;
- maintain and increase our access to data necessary for the performance of Criteo AI Engine;
- continuously improve the algorithms underlying Criteo AI Engine and apply state-of-the-art Machine Learning approaches and hardware; and
- continue to adapt to a changing regulatory landscape governing data protection and privacy matters.

We also anticipate continuing to invest in our business to increase the scale of our solutions, existing and new, grow our headcount and expand our operations. In particular, we plan to continue to focus on maximizing our revenue after traffic acquisition costs on an absolute basis, or the revenue we derive after deducting the costs we incur to purchase advertising inventory, which we call Revenue ex-TAC, as we believe this focus fortifies a number of our competitive strengths. Our focus on maximizing Revenue ex-TAC on an absolute basis may have an adverse impact on our gross margin and we cannot be certain that this strategy will be successful or result in increased liquidity or long-term value for our shareholders.

We derive a significant portion of our revenue from companies in the retail, travel and classified industries, and any downturn in these industries or any changes in regulations affecting these industries could harm our business.

A significant portion of our revenue is derived from companies in the Retail, Travel and Classifieds industries. For example, in 2020, 2019 and 2018, 75.6%, 68.9% and 69.1%, respectively, of our combined revenue for Criteo Marketing Solutions was derived from advertisements placed for Retail commerce businesses. Any downturn or increased competitive pressure in any of our core industries, or other industries we may target in the future, may cause our clients to reduce their spending with us, or delay or cancel their advertising campaigns with us.

We have substantial client concentration in certain local markets and solutions, with a limited number of clients accounting for a substantial portion of our revenues in those areas.

Although our overall customer base is well-diversified, in certain of our local markets and specific solutions we derive a substantial portion of revenues from a limited number of clients. There are inherent risks whenever a large percentage of revenues within any specific market or solution are concentrated within a limited number of clients. We cannot predict the future level of demand for our services and products that will be generated by these clients. In addition, revenues from these clients may fluctuate from time to time. Further, some of our contracts with these clients may permit them to terminate use of our products at any time (subject to notice and certain other provisions). If any of these clients terminate or reduce use of our products, our revenues within local markets or specific solutions may be negatively impacted.

We experience fluctuations in our results of operations due to a number of factors, which make our future results difficult to predict and could cause our operating results to fall below expectations or our guidance.

Our quarterly and annual results of operations fluctuate due to a variety of factors, many of which are outside of our control. As a result, comparing our results of operations on a period-to-period basis may not be meaningful. Fluctuations in our results of operations could cause our performance to fall below the expectations of analysts and investors, and adversely affect the price of our ADSs. You should not rely on our past results as an indication of our future performance. Factors that may affect our quarterly results of operations include:

- the nature of our clients' products or services, including the seasonal nature of our clients' advertising spending;
- lengthy implementation cycles resulting in substantial expenses incurred without any guarantee of revenue generation;
- demand for our offering and the size, scope and timing of digital advertising campaigns;
- the relative lack of long-term agreements with our clients and publishers;
- client and publisher retention rates;
- market acceptance of our offering and future solutions and services (i) in current industry verticals and new industry verticals, (ii) in new geographic markets, (iii) in new advertising channels, or (iv) for broader marketing goals;
- the timing of large expenditures related to expansion into new solutions, new geographic markets, new industry verticals, acquisitions and/or capital projects;
- the timing of adding support for new digital devices, platforms and operating systems;
- the amount of inventory purchased through direct relationships with publishers versus internet advertising exchanges or networks;
- our clients' budgeting cycles;
- changes in the competitive dynamics of our industry, including consolidation among competitors;
- consumers' response to our clients' advertisements, to online advertising in general and to tracking technologies for targeted or behavioral advertising purposes;
- our ability to control costs, including our operating expenses;
- network outages, errors in our technology or security breaches and any associated expense and collateral effects;
- foreign currency exchange rate fluctuations, as some of our foreign sales and costs are denominated in their local currencies;
- failure to successfully manage any acquisitions; and
- general economic and political conditions in our domestic and international markets.

As a result, we may have a limited ability to forecast the amount of future revenue and expense, and our results of operations may from time to time fall below our estimates or the expectations of public market analysts and investors.

Risks Related to Data Privacy, Intellectual Property and Cybersecurity

Our ability to generate revenue depends on our collection of significant amounts of data from various sources, which may be restricted by consumer choice, clients, publishers and browsers or other software, changes in technology, and new developments in laws, regulations and industry standards.

Our ability to optimize the delivery of internet advertisements for our clients depends on our ability to successfully leverage data, including data that we collect from our clients, data we receive from our publisher partners and third parties, and data from our own operating history. Using cookies and non-cookie based mechanisms, such as hashed emails, hashed customer log-ins or mobile advertising identifiers, we collect information about the interactions of users with our clients' and publishers' digital properties (including, for example, information about the placement of advertisements and users' shopping or other interactions with our clients' websites or advertisements). Our ability to successfully leverage such data depends on our continued ability to access and use such data, which could be restricted by a number of factors, including consumer choice, restrictions imposed by counterparties (such as clients, supply sources and publishers, who may also compete with us for advertising spend and inventory) and web browser developers or other software developers, changes in technology, including changes in web browser technology, increased visibility of consent or "do not track" mechanisms or "ad-blocking" software, and new developments in, or new interpretations of, laws, regulations and industry standards. These types of restrictions could materially impair the results of our operations.

Web browser developers, such as Apple, Mozilla Foundation, Microsoft or Google, have implemented or may implement changes in browser or device functionality that impair our ability to understand the preferences of consumers, including by limiting the use of third-party cookies or other tracking technologies or data indicating or predicting consumer preferences. Today, three major web browsers — Apple’s Safari, Mozilla’s Firefox and Microsoft’s Edge — block third party cookies by default. Internet users can also delete cookies from their computers at any time. In January 2020, Google announced that it plans to phase out support for third-party cookies in Chrome by early 2022. Google controls more than 60% of the browser market and has an even more dominant position in the digital advertising market. These web browser developers have significant resources at their disposal and command substantial market share, and any restrictions they impose could foreclose our ability to understand the preferences of a substantial number of consumers. Although we are actively in the process of moving our business away from third-party cookies, if we are blocked from serving advertisements to a significant portion of internet users, our business could suffer and our results of operations could be harmed.

Similarly, Internet users are increasingly able to download free or paid “ad-blocking” software, including on mobile devices, which prevent third-party cookies from being stored on a user’s computer and block advertisements from being displayed to such user. In addition, Google has introduced ad blocking software in its Chrome browser that blocks certain ads based on quality standards established under a multi-stakeholder coalition. If such a feature inadvertently or mistakenly blocks ads that are not within the established blocking standards, or if such capabilities become widely adopted and the advertising technology industry does not collaboratively develop alternative technologies, our business could be harmed. The Interactive Advertising Bureau and Digital Advertising Alliance have also developed frameworks that allow users to opt out of the “sale” of their personal information under the CCPA, in ways that stop or severely limit the ability to show targeted ads.

In addition, search engines and other service providers that explicitly do not allow the tracking of data, such as DuckDuckGo, Inc., may be growing in popularity. If a significant number of web browser users switch to advertising-free services or platforms, our business could be materially impacted. Further, mobile devices allow users to opt out of the use of mobile device IDs for targeted advertising. For in-app advertising, data regarding interactions between users and devices are tracked mostly through stable, pseudonymous mobile device identifiers that are built into the device operating system with privacy controls that allow users to express a preference with respect to data collection for advertising, including to disable the identifier. These identifiers and privacy controls are defined by the developers of the mobile platforms and could be changed by the mobile platforms in a way that may negatively impact our business. For example, Apple announced in June 2020 that it will require user opt-in before permitting access to Apple’s unique identifier, or IDFA. Apple initially targeted September 2020 for implementing these changes but has pushed that date out until early Spring 2021. This shift from enabling user opt-out to an opt-in requirement is likely to have a substantial impact on the mobile advertising ecosystem and could harm our growth in this channel.

User privacy features of other channels of programmatic advertising, such as Connected TV or over-the-top video, are still developing. Technical or policy changes, including regulation or industry self-regulation, could harm our growth in those channels.

The data we gather is important to the continued development and success of Criteo Shopper Graph, which is a key element of the Criteo Commerce Media Platform. If too few of our clients provide us with the permission to share their data or if our clients choose to stop sharing their data, or if regulatory or other factors inhibit or restrict us from maintaining the data collectives underlying Criteo Shopper Graph, the value of Criteo Shopper Graph could be materially diminished, which could impact the performance of our products and materially impact our business.

In addition, our ability to collect and use data may be restricted or prevented by a number of other factors, including:

- the failure of our network, hardware, or software systems, or the network, hardware, or software systems of our clients;
- our inability to grow our client and publisher base in new industry verticals and geographic markets in order to obtain the critical mass of data necessary for Criteo AI Engine to perform optimally in such new industry verticals or geographic markets;
- malicious traffic (such as non-human traffic) that introduces “noise” in the information that we collect from clients and publishers; and
- interruptions, failures or defects in our data collection, mining, analysis and storage systems.

Any of the above described limitations could also harm our business and adversely impact our future results of operations.

The third parties upon which we rely for access to data and revenue opportunities may implement technical restrictions that impede our access to such data and revenue opportunities, which could materially impact our business and results of operations.

A substantial portion of the data we rely on comes from our publisher partners and other third parties, including advertising exchange platforms (including supply-side platforms, or “SSPs”, such as Google’s Ad Manager). Similarly, we rely on our publisher partners, advertising exchange platforms and other third parties for opportunities to serve advertisements through which we generate our revenue. Our ability to successfully leverage such data and successfully generate revenue from such opportunities could be impacted by restrictions imposed by or on our publisher partners or other third parties, including restrictions on our ability to use or read cookies or other tracking features or our ability to use real-time bidding networks or other bidding networks.

For example, in light of the GDPR, some SSPs imposed restrictions on our ability to bid on opportunities to serve ads. Third-party publishers are responsible under GDPR for gathering necessary user consents and indicating to SSPs that Criteo has been approved by the applicable users. As part of their efforts to comply with their understanding of the requirements of the GDPR, which are subject to interpretation, certain SSPs that run advertising exchanges have required actions from such third party publishers with respect to such consents that appear to be stricter than what the regulations require. Similarly, SSPs and other relevant third parties may take similar actions in response to any new legislation or regulatory developments or interpretations in the future, in response to perceived user preferences, or for other reasons.

If third parties on which we rely for data or opportunities to serve advertisements impose similar restrictions or are not able to comply with restrictions imposed by other ecosystem participants, we may lose the ability to access data, bid on opportunities, or purchase digital ad space, which could have a substantial impact on our revenue.

Our business involves the use, transmission and storage of personal data and confidential information, and the failure to properly safeguard such information could result in significant reputational harm and monetary damages.

Our business involves the use, storage and transmission of confidential consumer, client and publisher information and personal data, including certain purchaser data, as well as proprietary software and financial, employee and operational information. Security breaches could expose us to unauthorized disclosure of this information, litigation and possible liability, as well as damage to our relationships with our clients and publishers. If our security measures are breached as a result of third-party action, employee or contractor error, malfeasance or otherwise and, as a result, someone obtains unauthorized access to our data or the data of consumers, our clients, publishers, employees or other third parties, our reputation could be damaged, our business may suffer and we could incur significant liability.

Our industry is prone to cyber-attacks by third parties seeking unauthorized access to our data or users’ data or to disrupt our ability to provide service. As a result of our prominence, the size of our user base, and the types and volume of personal data on our systems, we believe that we are a particularly attractive target for such breaches and attacks. Any failure to prevent or mitigate security breaches and improper access to or disclosure of our data or user data, including personal information and intellectual property, or information from marketers, could result in the loss or misuse of such data, which could harm our business and reputation and diminish our competitive position. In addition, computer malware, viruses, unauthorized access or system compromises and hacking by sophisticated actors have become more prevalent in our industry. Security incidents have occurred on our systems in the past, and will likely occur on our systems in the future.

Techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until launched against a target. As a result, we are unable to anticipate some of these techniques or to implement adequate preventative measures for such techniques. In addition, the perpetrators of such activity often are very sophisticated, and can include foreign governments and other parties with significant resources at their disposal. Cyber-attacks continue to evolve in sophistication and volume, and inherently may be difficult to detect for long periods of time. Although we have developed systems and processes that are designed to protect our data and user data, to prevent data loss, and to prevent or detect security breaches, such measures have not provided, and cannot be expected to provide, absolute security, and we may incur significant costs in protecting against and remediating cyber-attacks. We may also have to expend considerable resources on determining the nature and extent of such attacks.

If an actual or perceived security breach occurs, the market perception of our security measures could be harmed and we could lose both clients and revenue. Any significant violations of data privacy or other security breaches could result in the loss of business, litigation and regulatory investigations and penalties that could damage our reputation and adversely impact our results of operations and financial condition. Moreover, if a high profile security breach occurs with respect to another provider of digital advertising solutions, our clients and potential clients may lose trust in the security of providers of digital advertising in general, and Display Advertising solutions in particular, which could adversely impact our ability to retain existing clients or attract new ones.

Additionally, third parties may attempt to fraudulently induce employees, consumers, our clients, our publishers or third-party providers into disclosing sensitive information such as user names, passwords or other information in order to gain access to our data, our clients' data or our publishers' data, which could result in significant legal and financial exposure and a loss of confidence in the security of our offering and, ultimately, harm to our future business prospects. A party who is able to compromise the security of our facilities, including our data centers or office facilities, or any device, such as a smartphone or laptop, connected to our systems could misappropriate our proprietary information or the proprietary information of consumers, our clients and/or our publishers, or cause interruptions or malfunctions in our operations or those of our clients and/or publishers. We have expended significant resources to protect against such threats and to alleviate problems caused by breaches in security and may have to expend additional resources for such purposes in the future. Our errors and omissions insurance may be inadequate or may not be available in the future on acceptable terms, or at all. In addition, our policy may not cover any claim against us for loss of data or other indirect or consequential damages and defending a suit, regardless of its merit, could be costly and divert management's attention.

Our efforts to address undesirable activity on our platform may also increase the risk of retaliatory attacks. As a result, we may suffer significant legal, reputational, or financial exposure, which could adversely affect our business and results of operations.

Failures in the systems and infrastructure supporting our solutions and operations, including as we scale our offerings, could significantly disrupt our operations and cause us to lose clients.

In addition to the optimal performance of Criteo AI Engine, our business relies on the continued and uninterrupted performance of our software and hardware infrastructures. We currently place close to four billion advertisements per day and each of those advertisements can be placed in under 100 milliseconds.

Sustained or repeated system failures of our software or hardware infrastructures (such as massive and sustained data center outages) or of the software or hardware infrastructures of our third-party providers, which interrupt our ability to deliver advertisements quickly and accurately, our ability to serve and track advertisements, our ability to process consumers' responses to those advertisements or otherwise disrupt our internal operations, could significantly reduce the attractiveness of our offering to clients and publishers, reduce our revenue or otherwise negatively impact our financial situation, impair our reputation and subject us to significant liability.

Additionally, if, for any reason, our arrangement with one or more data centers is terminated, we could experience additional expense in arranging for new facilities and support. Any steps we take to increase the security, reliability and redundancy of our systems supporting the Criteo technology or operations may be expensive and may not be successful in preventing system failures. Similarly, advancements in machine learning approaches and other technology may require us to upgrade or replace essential hardware (such as graphics processing units), which could involve substantial resources and could be difficult to implement.

In addition, while we seek to maintain excess capacity to facilitate the rapid provision of new client deployments and the expansion of existing client deployments, we may need to increase data center hosting capacity, bandwidth, storage, power or other elements of our system architecture and our infrastructure as our client base and/or our traffic continues to grow. The expansion and improvement of our systems and infrastructure may require us to commit substantial financial, operational and technical resources, with no assurance our business will increase. Our existing systems may not be able to scale up in a manner satisfactory to our existing or prospective clients, and may not be adequately designed with the necessary reliability and redundancy of certain critical portions of our infrastructure to avoid performance delays or outages that could be harmful to our business. Our failure to continuously upgrade or increase the reliability and redundancy of our infrastructure to meet the demands of a growing base of global clients and publishers could adversely affect the functioning and performance of our technology and could in turn affect our results of operations.

Finally, our systems and the systems of our third-party providers are vulnerable to damage from a variety of sources, some of which are outside of our control, including telecommunications failures, natural disasters, terrorism, power outages, a variety of other possible outages affecting data centers, a decision to close any data center or the facilities of any other third-party provider without adequate notice, and malicious human acts, including hacking, computer viruses, malware and other security breaches. Techniques used to obtain unauthorized access or to sabotage systems change frequently and generally are not recognized until launched against a target. As a result, we may be unable to anticipate some of these techniques or to implement adequate preventive measures. If we are unable to prevent system failures, the functioning and performance of our solutions could suffer, which in turn could interrupt our business and harm our results of operations.

If we are unable to protect our proprietary information or other intellectual property, our business could be adversely affected.

Our patents, trademarks, trade secrets, copyrights, and other intellectual property rights are important assets for us. Various events outside of our control pose a threat to our intellectual property rights, as well as to our products, services, and technologies. For example, effective intellectual property protection may not be available in every country in which we operate or intend to operate our business. Third parties may knowingly or unknowingly infringe our proprietary rights or challenge proprietary rights held by us, and our pending and future trademark and patent applications may not be approved. Although we seek to obtain patent protection for our innovations, it is possible we may not be able to protect some of these innovations in a sufficient or effective manner. Moreover, we may not have adequate patent or copyright protection for certain innovations that later turn out to be important. Furthermore, there is always the possibility, despite our efforts, that the scope of the protection gained will be insufficient or that an issued patent may be deemed invalid or unenforceable.

Breaches of the security of our data center systems and infrastructure or other IT resources could also result in the exposure of our proprietary information. Additionally, our trade secrets may be independently developed by competitors. We cannot be certain that the steps we have taken to protect our trade secrets and proprietary information will prevent unauthorized use or reverse engineering of our trade secrets or proprietary information.

To protect or enforce our intellectual property rights, we may initiate litigation against third parties. Any lawsuits that we initiate could be expensive, take significant time and divert management's attention from other business concerns. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially valuable. Any increase in the unauthorized use of our intellectual property may adversely affect our business, financial condition and results of operations.

Our business may suffer if it is alleged or determined that our technology or another aspect of our business infringes the intellectual property rights of others.

The online and mobile advertising industries are characterized by the existence of large numbers of patents, copyrights, trademarks, trade secrets and other intellectual property and proprietary rights. Our success depends, in part, upon non-infringement of intellectual property rights owned by others and being able to resolve claims of intellectual property infringement or misappropriation without major financial expenditures or adverse consequences. From time to time, we may be the subject of claims that our solutions and underlying technology infringe or violate the intellectual property rights of others, particularly as we expand the scope and complexity of our business.

Regardless of whether claims that we are infringing patents or other intellectual property rights have any merit, these claims are time-consuming and costly to evaluate and defend, and the outcome of any litigation is inherently uncertain. Some of our competitors have substantially greater resources than we do and are able to sustain the costs of complex intellectual property litigation to a greater degree and for longer periods of time than we could. Claims that we are infringing patents or other intellectual property rights could subject us to significant liabilities for monetary damages, interfere with or delay our development, commercialization or provision of our offerings on acceptable terms, harm our reputation or require us to make technology or branding changes to our offerings. In addition, we may be exposed to claims that the content contained in advertising campaigns violates the intellectual property or other rights of third parties. Such claims could be made directly against us or against the advertising agencies we work with, and media networks and exchanges and publishers from whom we purchase advertising inventory.

Generally, under our agreements with advertising agencies, media networks and exchanges and publishers, we are required to indemnify the advertising agencies, media networks and exchanges and publishers against any such claim with respect to an advertisement we served. We generally require our clients to indemnify us for any damages from any such claims. There can be no assurance, however, that our clients will have the ability to satisfy their indemnification obligations to us, and pursuing any claims for indemnification may be costly or unsuccessful. As a result, we may be required to satisfy our indemnification obligations to advertising agencies, media networks and exchanges and publishers or claims against us with our assets. This result could harm our reputation, business, financial condition and results of operations, and could impact our relationships with advertising agencies, media networks and exchanges, or clients.

Our inability to use software licensed from third parties, or our use of open source software under license terms that interfere with our proprietary rights, could disrupt our business.

Our technology platform and internal systems incorporate software licensed from third parties, including some software, known as open source software, which we use without charge. Although we monitor our use of open source software, the terms of many open source licenses to which we are subject have not been interpreted by U.S. or foreign courts, and there is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to provide our technology offering to our clients. In the future, we could be required to seek licenses from third parties in order to continue offering our solutions, which licenses may not be available on terms that are acceptable to us, or at all.

Alternatively, we may need to re-engineer our offering or discontinue using portions of the functionality provided by our technology. In addition, the terms of open source software licenses may require us to provide software that we develop using such software to others on unfavorable terms, such as by precluding us from charging license fees or by requiring us to disclose our source code. Any such restriction on the use of our own software, or our inability to use open source or third-party software, could result in disruptions to our business or operations, or delays in our development of future offerings or enhancements of our existing platform, which could impair our business.

Risks Related to Ownership of Our Shares and the ADSs and the Trading of the ADSs

The market price for the ADSs have been and may continue to be volatile or may decline regardless of our operating performance.

The trading price of the ADSs has significantly fluctuated, and is likely to continue to fluctuate, substantially. The trading price of the ADSs depends on a number of factors, including those described in this “Risk Factors” section, many of which are beyond our control and may not be related to our operating performance. Since the ADSs were sold at our initial public offering in October 2013 at a price of \$31.00 per share, the price per ADS has ranged as low as \$5.89 and as high as \$60.95 through December 31, 2020. The market price of the ADSs has fluctuated and may fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- actual or anticipated fluctuations in our revenue and other results of operations;
- the guidance we may provide to the public, any changes in this guidance or our failure to meet this guidance;
- investor perception of risks in our industry, including but not limited to the competitive concentration of supply inventory or risks of fraudulent or malicious activity;
- failure of securities analysts to initiate or maintain coverage of us and our securities, changes in financial estimates by any securities analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- announcements by us, our competitors or large influential technology companies of significant technical innovations or changes, acquisitions, strategic partnerships, joint ventures or capital commitments;
- changes in operating performance and stock market valuations of advertising technology or other technology companies, or those in our industry in particular;
- investor sentiment with respect to our competitors, our business partners or our industry in general;
- price and volume fluctuations in the overall stock market, including as a result of trends in the economy as a whole;
- additional ADSs being sold into the market by us or the Company's insiders;
- media coverage of our business and financial performance;
- developments in anticipated or new legislation or new or pending lawsuits or regulatory actions;
- other events or factors, including those resulting from war, incidents of terrorism or responses to these events; and
- any other risks identified in this Form 10-K.

In addition, stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many technology companies. Stock prices of many technology companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. In the past, shareholders have instituted securities class action litigation following periods of market volatility. Because of the past and the potential future volatility of our stock price, we may become the target of securities litigation in the future. If we were to become involved in securities litigation, it could subject us to substantial costs, divert resources and the attention of management from our business and adversely affect our business.

Our business could be negatively impacted by the activities of predatory hedge funds or short sellers.

There is the risk that we may be subject, from time to time, to challenges arising from the activities of predatory hedge funds, short sellers or similar individuals who do not have the best interests of shareholders or the Company in mind. Reports or other publications prepared and disseminated by such hedge funds or short sellers may cause significant fluctuations in our stock price based on temporary or speculative market perceptions or other factors that do not necessarily reflect the underlying fundamentals and prospects of our business, and could cause the price of our ADSs or trading volume to decline. Furthermore, responding to such activities could be costly and time-consuming and may be intended to, and may in fact, divert the attention of our board of directors and senior management from the pursuit of our business strategies and adversely affect our business.

We may need additional capital in the future to meet our financial obligations and to pursue our business objectives. Additional capital may not be available on favorable terms, or at all, which could compromise our ability to meet our financial obligations and grow our business.

We currently have a senior unsecured revolving credit facility under which we may borrow up to €350 million (or its equivalent in U.S. dollars or, subject to the satisfaction of certain conditions, other optional currencies) for general corporate purposes, including the funding of business combinations (the "General RCF"). While we anticipate that our existing cash and cash equivalents and short-term investments will be sufficient to fund our operations for at least the next 12 months, we may need to raise additional capital to fund operations in the future or to finance acquisitions. If adequate funds are not available on acceptable terms, we may be unable to fund the expansion of our research and development and sales and marketing efforts, increase working capital, take advantage of acquisition or other opportunities, or adequately respond to competitive pressures which could seriously harm our business and results of operations.

Furthermore, if we issue additional equity securities, shareholders will experience dilution, and the new equity securities could have rights senior to those of our ordinary shares. Because our decision to issue securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of our future offerings. As a result, our shareholders bear the risk of our future securities offerings reducing the market price of the ADSs and diluting their interest.

We do not currently intend to pay dividends on our securities and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of the ADSs. In addition, French law may limit the amount of dividends we are able to distribute.

We have never declared or paid any cash dividends on our ordinary shares and do not currently intend to do so for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth, both organic and inorganic. In addition, we have used a portion of our available liquidity to repurchase our Company's shares in the past, and may continue to do so from time to time in the future.

In addition, to the extent any dividends are paid in the future, under French law, payment of such dividends may subject us to additional taxes, and the determination of whether we have been sufficiently profitable to pay dividends is made on the basis of our statutory financial statements prepared and presented in accordance with accounting principles generally accepted in France. Therefore, we may be more restricted in our ability to declare dividends than companies not based in France. Please see the section entitled "Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities-Taxation-French Tax Consequences" in Item 5 of Part II in this Form 10-K for further details on the limitations on our ability to declare and pay dividends and the taxes that may become payable by us if we elect to pay a dividend.

Finally, exchange rate fluctuations may affect the amount of euros that we are able to distribute, and the amount in U.S. dollars that our shareholders receive upon the payment of cash dividends or other distributions we declare and pay in euros, if any. These factors could harm the value of the ADSs, and, in turn, the U.S. dollar proceeds that holders receive from the sale of the ADSs.

Because you are not likely to receive any dividends on your ADSs for the foreseeable future, the success of an investment in ADSs will depend upon any future appreciation in their value. Consequently, investors may need to sell all or part of their holdings of ADSs after price appreciation, which may never occur, as the only way to realize any future gains on their investment.

Our credit agreement contains, and future debt agreements may contain, restrictions that may limit our flexibility in operating our business.

The credit agreement for the General RCF contains, and documents governing our future indebtedness may contain, numerous covenants that limit the discretion of management with respect to certain business matters. These covenants place restrictions on, among other things, our ability and the ability of our subsidiaries to incur or guarantee additional indebtedness, pay dividends and make other distributions and restricted payments, make certain acquisitions and other investments, sell certain assets or engage in mergers, acquisitions and other business combinations, and create liens. Our credit agreement also requires, and documents governing our future indebtedness may require, us or our subsidiaries to meet certain financial ratios and tests in order to incur certain additional debt, make certain loans, acquisitions or other investments, or pay dividends or make other distributions or restricted payments. To the extent we draw on the General RCF or incur new debt, the debt holders have rights senior to shareholders to make claims on our assets.

Our ability and the ability of our subsidiaries to comply with these and other provisions of our debt agreements are dependent on our future performance, which will be subject to many factors, some of which are beyond our control. The breach of any of these covenants or noncompliance with any of these financial ratios and tests could result in an event of default under the applicable debt agreement, which, if not cured or waived, could result in acceleration of the related debt and the acceleration of debt under other instruments evidencing indebtedness that may contain cross-acceleration or cross-default provisions.

Our by-laws and French corporate law contain provisions that may delay or discourage a sale of the Company.

Provisions contained in our by-laws and the corporate laws of France, the country in which we are incorporated, could make it more difficult for a third party to acquire us, even if doing so might be beneficial to our shareholders. In addition, provisions of our by-laws impose various procedural and other requirements, which could make it more difficult for shareholders to effect certain corporate actions. These provisions include, but are not limited to, the following:

- our ordinary shares are in registered form only and we must be notified of any transfer of our shares in order for such transfer to be validly registered;
- under French law, any individual or entity located outside of the European Union may need to seek the authorization of the French Minister of Economy prior to acquiring the control of, all or part of a business of, or more than 33.33% of the share capital or voting rights of the Company (see the section entitled "Exchange Controls & Ownership by Non-French Residents" in Item 5 to Part II in this Form 10-K);
- provisions of French law allowing the owner of 95% of the share capital or voting rights of a public company to force out the minority shareholders following a tender offer made to all shareholders are only applicable to companies listed on a stock exchange of the European Union and will therefore not be applicable to us;
- a merger (i.e., in a French law context, a stock-for-stock exchange following which our company would be dissolved into the acquiring entity and our shareholders would become shareholders of the acquiring entity) of our company into a company incorporated outside of the European Union would require the unanimous approval of our shareholders;
- a merger of our company into a company incorporated in the European Union would require the approval of our board of directors as well as a two-thirds majority of the votes held by the shareholders present, represented by proxy or voting by mail at the relevant extraordinary shareholders' meeting;
- under French law, a cash merger is treated as a share purchase and would require the consent of each participating shareholder; and
- our shareholders have preferential subscription rights proportionally to their shareholding in our company on the issuance by us of any additional securities for cash or a set-off of cash debts, which rights may only be waived by the extraordinary general meeting (by a two-thirds majority vote) of our shareholders or on an individual basis by each shareholder.

You may not be able to exercise your right to vote the ordinary shares underlying your ADSs.

Holders of ADSs may exercise voting rights with respect to the ordinary shares represented by the ADSs only in accordance with the provisions of the deposit agreement. The deposit agreement provides that, upon receipt of notice of any meeting of holders of our ordinary shares, the depositary will fix a record date for the determination of ADS holders who shall be entitled to give instructions for the exercise of voting rights. Upon timely receipt of notice from us, if we so request, the depositary shall distribute to the holders as of the record date (1) the notice of the meeting or solicitation of consent or proxy sent by us and (2) a statement as to the manner in which instructions may be given by the holders.

You may instruct the depositary of your ADSs to vote the ordinary shares underlying your ADSs. Otherwise, you will not be able to exercise your right to vote, unless you withdraw the ordinary shares underlying the ADSs you hold. However, you may not know about the meeting far enough in advance to withdraw those ordinary shares. If we ask for your instructions, the depositary, upon timely notice from us, will notify you of the upcoming vote and arrange to deliver our voting materials to you. We cannot guarantee you that you will receive the voting materials in time to ensure that you can instruct the depositary to vote your ordinary shares or to withdraw your ordinary shares so that you can vote them yourself.

If the depositary does not receive timely voting instructions from you, it may give a proxy to a person designated by us to vote the ordinary shares underlying your ADSs. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. This means that you may not be able to exercise your right to vote, and there may be nothing you can do if the ordinary shares underlying your ADSs are not voted as you requested.

Your right as a holder of ADSs to participate in any future preferential subscription rights or to elect to receive dividends in shares may be limited, which may cause dilution to your holdings.

According to French law, if we issue additional securities for cash, current shareholders will have preferential subscription rights for these securities proportionally to their shareholding in our company unless they waive those rights at an extraordinary meeting of our shareholders (by a two-thirds majority vote) or individually by each shareholder.

However, our ADS holders in the United States will not be entitled to exercise or sell such rights unless we register the rights and the securities to which the rights relate under the Securities Act or an exemption from the registration requirements is available.

In addition, the deposit agreement provides that the depositary will not make rights available to you unless the distribution to ADS holders of both the rights and any related securities are either registered under the Securities Act or exempted from registration under the Securities Act.

Further, if we offer holders of our ordinary shares the option to receive dividends in either cash or shares, under the deposit agreement the depositary may require satisfactory assurances from us that extending the offer to holders of ADSs does not require registration of any securities under the Securities Act before making the option available to holders of ADSs. We are under no obligation to file a registration statement with respect to any such rights or securities or to endeavor to cause such a registration statement to be declared effective. Moreover, we may not be able to establish an exemption from registration under the Securities Act.

Accordingly, ADS holders may be unable to participate in our rights offerings or to elect to receive dividends in shares and may experience dilution in their holdings. In addition, if the depositary is unable to sell rights that are not exercised or not distributed or if the sale is not lawful or reasonably practicable, it will allow the rights to lapse, in which case you will receive no value for these rights.

You may be subject to limitations on the transfer of your ADSs and the withdrawal of the underlying ordinary shares.

Your ADSs, which may be evidenced by ADRs, are transferable on the books of the depositary. However, the depositary may close its books at any time or from time to time when it deems expedient in connection with the performance of its duties. The depositary may refuse to deliver, transfer or register transfers of your ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary think it is advisable to do so because of any requirement of law, government or governmental body, or under any provision of the deposit agreement, or for any other reason subject to your right to cancel your ADSs and withdraw the underlying ordinary shares.

Temporary delays in the cancellation of your ADSs and your withdrawal of the underlying ordinary shares may arise because the depositary has closed its transfer books or we have closed our transfer books, the transfer of ordinary shares is blocked to permit voting at a shareholders' meeting or we are paying a dividend on our ordinary shares.

In addition, you may not be able to cancel your ADSs and withdraw the underlying ordinary shares when you owe money for fees, taxes and similar charges and when it is necessary to prohibit withdrawals in order to comply with any laws or governmental regulations that apply to ADSs or to the withdrawal of ordinary shares or other deposited securities.

U.S. investors may have difficulty enforcing civil liabilities against our company and directors and senior management.

Certain of our directors and members of senior management, and those of certain of our subsidiaries, are non-residents of the United States, and all or a substantial portion of our assets and the assets of such persons are located outside the United States.

As a result, it may not be possible to serve process on such persons or us in the United States or to enforce judgments obtained in U.S. courts against them or us based on civil liability provisions of the securities laws of the United States. Additionally, it may be difficult to assert U.S. securities law claims in actions originally instituted outside of the United States.

Foreign courts may refuse to hear a U.S. securities law claim because foreign courts may not be the most appropriate forums in which to bring such a claim. Even if a foreign court agrees to hear a U.S. securities law claim, it may determine that the law of the jurisdiction in which the foreign court resides, and not U.S. law, is applicable to the claim.

Further, if U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact, which can be a time-consuming and costly process, and certain matters of procedure would still be governed by the law of the jurisdiction in which the foreign court resides. In particular, there is some doubt as to whether French courts would recognize and enforce certain civil liabilities under U.S. securities laws in original actions or judgments of U.S. courts based upon these civil liability provisions. In addition, awards of punitive damages in actions brought in the United States or elsewhere may be unenforceable in France.

The enforceability of any judgment in France will depend on the particular facts of the case as well as the laws and treaties in effect at the time. The United States and France do not currently have a treaty providing for recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters; therefore the recognition and enforcement of any such judgment would be subject to French procedural law and may not be granted.

The rights of shareholders in companies subject to French corporate law differ in material respects from the rights of shareholders of corporations incorporated in the United States.

We are a French company with limited liability. Our corporate affairs are governed by our by-laws and by the laws governing companies incorporated in France. The rights of shareholders and the responsibilities of members of our board of directors are in many ways different from the rights and obligations of shareholders in companies governed by the laws of U.S. jurisdictions.

For example, in the performance of its duties, our board of directors is required by French law to consider the interests of our company, its shareholders, its employees and other stakeholders, rather than solely our shareholders and/or creditors. It is possible that some of these parties will have interests that are different from, or in addition to, your interests as a shareholder.

General Risk Factors

In periods of economic uncertainty, businesses may delay or reduce their spending on advertising, and we are exposed to the credit risk of some of our clients and customers, which could materially harm our business.

General worldwide economic conditions have been significantly unstable in recent years, especially in the European Union where we generated 30% of our revenue for 2020. Unstable conditions make it difficult for our clients and us to accurately forecast and plan future business activities, and could cause our clients to reduce or delay their advertising spending with us. Historically, economic downturns have resulted in overall reductions in advertising spending, and businesses may curtail spending both on advertising in general and on a solution such as ours. We cannot predict the timing, strength or duration of any economic slowdown or recovery. Any macroeconomic deterioration in the future, especially further deterioration in the European Union and some emerging markets, such as Brazil and Russia, could impair our revenue and results of operations.

Furthermore, we have expanded our offerings to serve a larger number of smaller clients, and have expanded into emerging markets such as Brazil, India, Russia and Turkey. Our changing client portfolio exposes us to additional credit risk, which could result in further exposure in the event of economic uncertainty or an economic downturn.

Additionally, our exposure to credit risks relating to our financing activities may increase if our customers are adversely affected by periods of economic uncertainty or a global economic downturn. For instance, due to the impact of the COVID-19 pandemic, certain of our customers have had and may continue to have difficulty meeting their payment obligations to us, resulting in late or non-payment of amounts owed. These losses have significantly impacted, and could continue to significantly impact, our operating results and financial condition.

If we fail to maintain an effective system of internal controls, we may be unable to accurately report our financial results or prevent fraud, and investor confidence and the market price of the ADSs may, therefore, be adversely impacted.

As a public company, we are required to maintain internal control over financial reporting and to report any material weaknesses in such internal control. In addition, we are required to submit a report by management to the Audit Committee and external auditors on the effectiveness of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act and our independent registered public accounting firm is required to attest to the effectiveness of our internal controls over financial reporting. If we identify material weaknesses in our internal controls over financial reporting, if we are unable to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner or assert that our internal controls over financial reporting are effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal controls over financial reporting when required, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of the ADSs may be adversely impacted, and we could become subject to investigations by the stock exchange on which our securities are listed, the SEC, or other regulatory authorities, which could require additional financial and management resources.

Our failure to maintain certain tax benefits applicable to French technology companies may adversely affect our results of operations.

As a French technology company, we have benefited from certain tax advantages, including, for example, a reduced tax rate in France on technology royalty income received from global subsidiaries and the French research tax credit (*crédit d'impôt recherche*), or CIR. The French tax authority may audit these tax incentives and challenge the benefits. Therefore, we could be liable for additional corporate tax, and penalties and interest related thereto, which could have a significant impact on our results of operations and future cash flows. Furthermore, the tax laws may change, and could remove these incentives in the future or reduce their benefits.

We are a multinational organization faced with increasingly complex tax issues in many jurisdictions, and we could be obligated to pay additional taxes in various jurisdictions as a result of new taxes or laws, or revised interpretations thereof, which may negatively affect our business.

As a multinational organization operating in multiple jurisdictions we are subject to taxation in several jurisdictions around the world with increasingly complex tax laws, the application of which can be uncertain. The amount of taxes we pay in these jurisdictions could increase substantially as a result of changes in the applicable tax principles, including increased tax rates, new tax laws or revised interpretations of existing tax laws and precedents, which could have a material adverse effect on our liquidity and results of operations.

U.S. holders of our ADSs may suffer adverse tax consequences if we are characterized as a passive foreign investment company.

A non-U.S. corporation will be considered a passive foreign investment company, or PFIC, for U.S. federal income tax purposes, any taxable year if either (1) at least 75% of its gross income for such year is passive income or (2) at least 50% of the value of its assets (based on an average of the quarterly values of the assets during such year) is attributable to assets that produce or are held for the production of passive income. Based on the value and composition of our assets, although not free from doubt, we do not believe we were a PFIC for the taxable year ended December 31, 2020, and we do not expect to be a PFIC in the current taxable year or the foreseeable future. Since a separate factual determination as to whether we are or have become a PFIC must be made each year (after the close of such year), we cannot assure you that we will not be or become a PFIC in the current year or any future taxable year. If we are a PFIC for any taxable year during which a U.S. holder holds ADSs, the U.S. holder may be subject to adverse tax consequences, including (1) the treatment of all or a portion of any gain on disposition as ordinary income, (2) the application of an interest charge with respect to such gain and certain dividends and (3) compliance with certain reporting requirements. Each U.S. holder is strongly urged to consult its tax advisor regarding the application of these rules and the availability of any potential elections.

If a United States person is treated as owning at least 10% of our ADSs, such person may be subject to adverse U.S. federal income tax consequences.

If a United States person is treated as owning (directly, indirectly, or constructively) at least 10% of the value or voting power of our ADSs, such person may be treated as a “United States shareholder” with respect to each “controlled foreign corporation” in our group (if any). Because our group includes one or more U.S. subsidiaries, certain of our non-U.S. subsidiaries could be treated as controlled foreign corporations (regardless of whether or not we are treated as a controlled foreign corporation). A United States shareholder of a controlled foreign corporation may be required to report annually and include in its U.S. taxable income its pro rata share of “Subpart F income,” “global intangible low-taxed income,” and investments in U.S. property by controlled foreign corporations, regardless of whether we make any distributions. Failure to comply with such reporting requirements could result in adverse tax effects for United States shareholders and potentially significant monetary penalties. An individual that is a United States shareholder with respect to a controlled foreign corporation generally would not be allowed certain tax deductions or foreign tax credits that would be allowed to a United States shareholder that is a U.S. corporation. We cannot provide any assurances that we will assist investors in determining whether any of our non-U.S. subsidiaries is treated as a controlled foreign corporation or furnish to any United States shareholders information that may be necessary to comply with the aforementioned obligations. A United States investor should consult its advisors regarding the potential application of these rules to an investment in our ADSs.

Item 1B. Unresolved Staff Comments

We do not have any unresolved comments from the SEC staff.

Item 2. Properties

Our headquarters are located in Paris, France, in an approximately 16,000 square meter facility, under a lease agreement expiring on June 14, 2023. In addition, we had 29 offices as of December 31, 2020. We currently lease space in data centers from third-party hosting providers to operate our servers located in the United States (Texas, Virginia), France, the Netherlands, Hong Kong, and Japan. We believe that our facilities are adequate for our current needs.

Item 3. Legal Proceedings

From time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, results of operations, financial condition or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

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

Our ADSs have been listed on the Nasdaq Global Select Market under the symbol "CRTO" since October 30, 2013. Prior to that date, there was no public trading market for ADSs or our ordinary shares.

Holdings

As of January 31, 2021, there were 36 holders of record of our ordinary shares and 129 participants in DTC that held our ADSs. The actual number of holders is greater, and includes beneficial owners whose ADSs are held in street name by brokers and other nominees. This number of holders of record and DTC participants also does not include holders whose shares may be held in trust by other entities.

ADS Performance Graph

The following graph matches our cumulative five-year total shareholder return on our ADSs with the cumulative total returns of the Russell 2000 Index and the Nasdaq Internet Index. The graph tracks the performance of a \$100 investment in our ADSs and in each index (with the reinvestment of all dividends) from December 31, 2015 to December 31, 2020. The returns shown are based on historical results and are not intended to suggest future performance.



The foregoing performance graph and related information shall not be deemed "soliciting material" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filings under the Securities Act or the Exchange Act, except to the extent we specifically incorporate it by reference into such filing.

Dividends

We have never declared or paid any cash dividends on our ordinary shares. We do not anticipate paying cash dividends on our equity securities in the foreseeable future and intend to retain all available funds and any future earnings to fund our growth.

Subject to the requirements of French law and our by-laws, dividends may only be distributed from our statutory retained earnings. Dividend distributions, if any, will be made in euros and converted into U.S. dollars with respect to the ADSs, as provided in the deposit agreement. In addition, under the General RCF, we may not declare, make or pay dividends if our net debt to Adjusted EBITDA leverage ratio exceeds 2.0x.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

We completed two ADS repurchase programs in 2020: our July 2019 program of up to \$80 million, which was completed in February 2020, and our April 2020 program of up to \$30 million, which was completed in July 2020. We did not have any share repurchase activity for the three months ended December 31, 2020.

Recent Sales of Unregistered Securities and Use of Proceeds

There were no unregistered sales of equity securities during 2020.

Exchange Controls & Ownership by Non-French Residents

Under current French foreign exchange control regulations there are no limitations on the amount of cash payments that we may remit to residents of foreign countries. Laws and regulations concerning foreign exchange controls do, however, require that all payments or transfers of funds made by a French resident to a non-resident, such as dividend payments, be handled by an accredited intermediary. All registered banks and substantially all credit institutions in France are accredited intermediaries.

Neither the French Commercial Code nor our by-laws presently impose any restrictions on the right of non-French residents or non-French shareholders to own and vote shares. However, non-French residents must file a declaration for statistical purposes with the Bank of France (*Banque de France*) within 20 working days following the date of certain direct foreign investments in us, including any purchase of our ADSs. In particular, such filings are required in connection with investments exceeding €15,000,000 that lead to the acquisition of at least 10% of our outstanding ordinary shares or voting rights or the crossing of either such 10% threshold. Violation of this filing requirement may be sanctioned by five years of imprisonment and a fine of up to twice the amount of the relevant investment. This amount may be increased fivefold if the violation is made by a legal entity.

Further, any investment (i) by an individual or entity located in a country that is not a member State of the European Union or of a member State of the European Economic Area having entered into a convention on administrative assistance against tax evasion and fraud with France, or by a French citizen not residing in France, and (ii) that will result in the relevant investor acquiring the control of, all or part of a business of, or more than 33.33% of the share capital or voting rights of, a company registered in France and developing activities in certain strategic industries, such as telecommunications, cybersecurity or data collection, is subject to the prior authorization by the French Minister of Economy. In the absence of such authorization, the relevant investment shall be deemed null and void.

Taxation

French Tax Consequences

The following describes the material French income tax consequences to U.S. Holders (as defined below) of purchasing, owning and disposing of the ADSs and ordinary shares, or the Securities as in force on the date of this Form 10-K.

This discussion does not purport to be a complete analysis or listing of all potential tax effects of the acquisition, ownership or disposition of our securities to any particular investor, and does not discuss tax considerations that arise from rules of general application or that are generally assumed to be known by investors. All of the following is subject to change. Such changes could apply retroactively and could affect the consequences described below.

For the purposes of this discussion, the term "U.S. Holder" means a beneficial owner of securities that is (1) an individual who is a U.S. citizen or resident for U.S. federal income tax purposes, (2) a U.S. domestic corporation or certain other entities created or organized in or under the laws of the United States or any state thereof, including the District of Columbia, or (3) otherwise subject to U.S. federal income taxation on a net income basis in respect of securities.

If a partnership (or any other entity treated as a partnership for U.S. federal income tax purposes) holds securities, the tax treatment of a partner generally will depend upon the status of the partner and the activities of the partnership. If a U.S. Holder is a partner in a partnership that holds securities, such holder is urged to consult its own tax adviser regarding the specific tax consequences of acquiring, owning and disposing of securities.

This discussion applies only to investors that hold our securities as capital assets that have the U.S. dollar as their functional currency, that are entitled to treaty benefits under the "Limitation on Benefits" provision contained in the treaty, and whose ownership of the securities is not effectively connected to a permanent establishment or a fixed base in France.

Certain U.S. Holders (including, but not limited to, U.S. expatriates, partnerships or other entities classified as partnerships for U.S. federal income tax purposes, banks, insurance companies, regulated investment companies, tax-exempt organizations, financial institutions, persons subject to the alternative minimum tax, persons who acquired the securities pursuant to the exercise of employee share options or otherwise as compensation, persons that own (directly, indirectly or by attribution) 5% or more of our voting stock or 5% or more of our outstanding share capital, dealers in securities or currencies, persons that elect to mark their securities to market for U.S. federal income tax purposes and persons holding securities as a position in a synthetic security, straddle or conversion transaction) may be subject to special rules not discussed below.

U.S. Holders are urged to consult their own tax advisers regarding the tax consequences of the purchase, ownership and disposition of securities in light of their particular circumstances, especially with regard to the "Limitations on Benefits" provision. Furthermore, in 2011, France introduced a comprehensive set of new tax rules applicable to French assets that are held by or in foreign trusts. These rules, among other things, provide for the inclusion of trust assets in the settlor's net assets for purpose of applying the French wealth tax, for the application of French gift and inheritance tax to French assets held in trust, for a specific tax on capital on the French assets of foreign trusts not already subject to the French wealth tax and for a number of French tax reporting and disclosure obligations. The following discussion does not address the French tax consequences applicable to securities held in trusts. If securities are held in trust, the grantor, trustee and beneficiary are urged to consult their own tax adviser regarding the specific tax consequences of acquiring, owning and disposing of securities.

Purchasing Consequences

Financial Transactions Tax

Pursuant to Article 235 ter ZD of the French Tax Code ("FTC"), purchases of shares or ADSs (of a French company listed on a regulated market of the European Union or an exchange formally acknowledged by the French Financial Market Authority (AMF)) are subject to a 0.3% French tax on financial transactions provided that the issuer's market capitalization exceeds €1 billion as of December 1 of the year preceding the taxation year.

A list of companies whose market capitalization exceeds €1 billion as of December 1 of the year preceding the taxation year within the meaning of Article 235 ter ZD of the French Tax Code is published annually by the French tax authorities. Pursuant to Regulations BOI-ANNX-000467-20201223 issued on December 23, 2020, Criteo is currently not included in such list. Please note that such list may be updated from time to time, or may not be published anymore in the future. Nasdaq is not currently acknowledged by the French AMF but this may change in the future. Consequently, Criteo's securities should not fall within the scope of the tax on financial transactions described above.

Registration Duties

In the case where Article 235 ter ZD of the FTC is not applicable, transfers of shares which are not listed on a regulated market of the European Union or an exchange formally acknowledged by the French Financial Market Authority (AMF) are subject to uncapped registration duties at the rate of 0.1%. As ordinary shares of Criteo are not listed on an exchange formally acknowledged by the French Financial Market Authority (AMF), their transfer should be subject to uncapped registration duties at the rate of 0.1%. However, although the official guidelines published by the French tax authorities are silent on this point, ADSs should remain outside of the scope of the aforementioned 0.1% registration duties as they cannot be considered as French shares.

Ownership Consequences

Taxation of Dividends

Dividends paid by a French corporation to non-residents of France are generally subject to French withholding tax at a rate of 28% for corporate bodies or other legal entities (which is expected to be progressively decreased to 25% in 2022) or 12.8% for individuals. Dividends paid by a French corporation in a non-cooperative State or territory, as set out in the list referred to in Article 238-0 A of the FTC, will generally be subject to French withholding tax at a rate of 75%. However, eligible U.S. Holders entitled to Treaty benefits under the "Limitation on Benefits" provision contained in the Treaty who are U.S. tax residents, as defined pursuant to the provisions of the Treaty may be subject to the withholding tax at a reduced rate (as described below).

Under the tax treaty between the Government of the United States and the Government of the French Republic for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and Capital dated August 31, 1994, as amended by additional protocols of December 8, 2004 and January 13, 2009, the rate of French withholding tax on dividends paid to an eligible U.S. Holder who is a U.S. tax resident as defined pursuant to the provisions of the Treaty and whose ownership of the ordinary shares or ADSs is not effectively connected with a permanent establishment or fixed base that such U.S. Holder has in France, is generally reduced to 15%, or to 5% if such U.S. Holder is a corporation and owns directly or indirectly at least 10% of the share capital of the issuer; such U.S. Holder may claim a refund from the French tax authorities of the amount withheld in excess of the Treaty rates of 15% or 5%, if any.

For U.S. Holders that are not individuals but are U.S. residents, as defined pursuant to the provisions of the Treaty, the requirements for eligibility for Treaty benefits, including the reduced 5% or 15% withholding tax rates contained in the "Limitation on Benefits" provision of the Treaty, are complicated, and certain technical changes were made to these requirements by the protocol of January 13, 2009. U.S. Holders are advised to consult their own tax advisers regarding their eligibility for Treaty benefits in light of their own particular circumstances.

Dividends paid to an eligible U.S. Holder may immediately be subject to the reduced rates of 5% or 15% provided that such holder establishes before the date of payment that it is a U.S. resident under the Treaty by completing and providing the depositary with a treaty form (Form 5000).

Dividends paid to a U.S. Holder that has not filed the Form 5000 before the dividend payment date will be subject to French withholding tax at the rate of 12.8%, 28% in 2020, or 75% if paid in a non-cooperative State or territory (as defined in Article 238-0 A of the FTC), and then reduced at a later date to 5% or 15%, provided that such holder duly completes and provides the French tax authorities with the treaty forms Form 5000 and Form 5001 before December 31 of the second calendar year following the year during which the dividend is paid. Certain qualifying pension funds and certain other tax-exempt entities are subject to the same general filing requirements as other U.S. Holders except that they may have to supply additional documentation evidencing their entitlement to these benefits.

Form 5000 and Form 5001, together with instructions, will be provided by the depositary to all U.S. Holders registered with the depositary. The depositary will arrange for the filing with the French Tax authorities of all such forms properly completed and executed by U.S. Holders of ordinary shares or ADSs and returned to the depositary in sufficient time so that they may be filed with the French tax authorities before the distribution in order to obtain immediately a reduced withholding tax rate. The withholding tax refund, if any, ordinarily occurs within 12 months from filing the applicable French Treasury Form, but not before January 15 of the year following the calendar year in which the related dividend was paid.

At last, please note that subject to certain conditions, corporations can obtain a full refund of the withholding tax if they are in loss-making position. In such case, the taxation is deferred and will occur if and when profits will be made.

Wealth Tax

As from January 1, 2018, French wealth tax has been replaced by a new real estate wealth tax which applies only to individuals owning French real estate assets or rights, directly or indirectly through one or more legal entities and whose net taxable assets amount to at least 1,300,000 euros. Real estate assets allocated to an operational activity are excluded from the scope of the real estate wealth tax. Shares of an operating company holding French real estate assets in which the relevant individual holds, directly and indirectly, less than 10% of the share capital or voting rights, are also exempt from real estate wealth tax.

The tax treaty between the Government of the United States and the Government of the French Republic for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and Capital dated August 31, 1994, as amended by additional protocols of December 8, 2004 and January 13, 2009, does not prevent the application of real estate wealth tax to a US Holder who would be a US tax resident. However, based on the above domestic provisions and considering that Criteo SA is an operating company, the owning of ADSs or ordinary shares should not be subject to real estate wealth tax.

Disposal Consequences

Taxation on sale or assimilated

As a matter of principle, under French tax law, a foreign shareholder should be subject to French tax on any capital gain from the sale, exchange, repurchase or redemption by us of ordinary shares or ADSs, provided that the foreign shareholder is not a French tax resident for French tax purposes; and either has not held more than 25% of our dividend rights, at any time during the preceding five years, either directly or indirectly, and, as relates to individuals, alone or with relatives (as an exception, a foreign shareholder established, domiciled or incorporated in a non-cooperative State or territory as defined in Article 238-0 A of the FTC should be subject to a 75% withholding tax in France on any such capital gain, regardless of the fraction of the dividend rights it holds) or holds French real estate assets or shares, units or rights in a company at least 50% of the assets of which consist of real estate located in France, or derives at least 50% of its value, directly or indirectly, from real estate located in France.

However, based on the tax treaty between the Government of the United States and the Government of the French Republic for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and Capital dated August 31, 1994, as amended by additional protocols of December 8, 2004 and January 13, 2009, a U.S. Holder who is a U.S. tax resident for purposes of the treaty, has no permanent establishment or fixed base in France and is entitled to treaty benefit will only be subject to French tax on capital gain resulting from the sale of shares, units or rights in a company at least 50% of the assets of which consist of real estate located in France, or derives at least 50% of its value, directly or indirectly, from real estate located in France. Based on these provisions, capital gain resulting from the sale or assimilated of ADSs and ordinary shares should not be subject to taxation in France. U.S. Holders who own ordinary shares or ADSs through U.S. partnerships that are not residents for Treaty purposes are advised to consult their own tax advisors regarding their French tax treatment and their eligibility for Treaty benefits in light of their own particular circumstances.

Gift and inheritance Tax

Under French tax law, the following assets are subject to gift and inheritance tax :

- all movable or immovable property located in France or outside France when the donor or the deceased had his tax residence in France within the meaning of Article 4 B of the FTC;
- movable or immovable property located in France (Included French real estate assets held indirectly), when the donor or the deceased is not domiciled for tax purposes in France;
- movable and immovable property located in France or outside France received from a donor or deceased domiciled outside France by the heir, donee or legatee who is domiciled for tax purposes in France within the meaning of Article 4 B of the CGI and has been so domiciled for at least six years during the last ten years preceding the year in which he receives the property

However, based on the article 5 of the tax treaty between the Government of the United States and the Government of the French Republic for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Inheritances and Gifts, dated November 24, 1978 (as amended by the protocol of December 8, 2004), if the US Holder is domiciled in US and has no permanent establishment or fixed base in France , only the French real estate assets and shares, units or other interests in a company or legal entity whose assets consist, directly or through one or more other companies or legal entities, of at least 50% of real property located in France or of rights relating to such property, can be subject to gift and inheritance tax. Based on these provisions, ADSs or ordinary shares should not be subject to gift and inheritance tax.

Item 6. Selected Financial Data

Our audited consolidated financial statements have been prepared in accordance with U.S. GAAP. We derived the selected consolidated statements of income data for the years ended December 31, 2018, 2019 and 2020 and selected consolidated statements of financial position data as of December 31, 2019 and 2020 from our audited consolidated financial statements included in Part IV, Item 15 “Exhibits and Financial Statements” of this Form 10-K. The selected consolidated statements of income data for the years ended December 31, 2016 and 2017 and the selected consolidated financial position data as of December 31, 2016, 2017 and 2018 have been derived from our audited consolidated financial statements and notes thereto which are not included in this Form 10-K. This data should be read together with Part II, Item 7, “Management’s Discussion and Analysis of Financial Condition and Results of Operations” as well as our audited consolidated financial statements and notes thereto appearing elsewhere in this Form 10-K. Our historical results are not necessarily indicative of the results to be expected in the future.

Consolidated Statements of Income Data:

	Year Ended December 31,				
	2020	2019	2018	2017	2016
	(in thousands, except share and per share data)				
Revenue	\$ 2,072,617	\$ 2,261,516	\$ 2,300,314	\$ 2,296,692	\$ 1,799,146
Cost of revenue ⁽¹⁾:					
Traffic acquisition costs	(1,247,571)	(1,314,947)	(1,334,334)	(1,355,556)	(1,068,911)
Other cost of revenue	(137,028)	(117,533)	(131,744)	(121,641)	(85,260)
Gross profit	688,018	829,036	834,236	819,495	644,975
Operating expenses					
Research and development expenses ⁽¹⁾	(132,513)	(172,591)	(179,263)	(173,925)	(123,649)
Sales and operations expenses ⁽¹⁾	(330,285)	(375,477)	(372,707)	(380,649)	(282,853)
General and administrative expenses ⁽¹⁾	(116,395)	(139,754)	(135,159)	(127,077)	(117,469)
Total operating expenses	(579,193)	(687,822)	(687,129)	(681,651)	(523,971)
Income from operations	108,825	141,214	147,107	137,844	121,004
Financial expense	(1,939)	(5,749)	(5,084)	(9,534)	(546)
Income before taxes	106,886	135,465	142,023	128,310	120,458
Provision for income taxes	(32,197)	(39,496)	(46,144)	(31,651)	(33,129)
Net income	\$ 74,689	\$ 95,969	\$ 95,879	\$ 96,659	\$ 87,329
Net income available to shareholders of Criteo S.A. ⁽²⁾	\$ 71,679	\$ 90,745	\$ 88,644	\$ 91,214	\$ 82,272
Net income available to shareholders per share:					
Basic	\$ 1.18	\$ 1.41	\$ 1.33	\$ 1.40	\$ 1.30
Diluted	\$ 1.16	\$ 1.38	\$ 1.31	\$ 1.34	\$ 1.25
Weighted average shares outstanding used in computing per share amounts:					
Basic	60,876,480	64,305,965	66,456,890	65,143,036	63,337,792
Diluted	61,818,593	65,598,588	67,662,904	67,851,971	65,633,470

⁽¹⁾ Cost of revenue and operating expenses include equity awards compensation expense, pension service costs, depreciation and amortization expense, acquisition-related costs, restructuring and transformation related costs and deferred price consideration as follows:

	Year Ended December 31,				
	2020	2019	2018	2017	2016
	(in thousands)				
Equity awards compensation expense					
Research and development expenses	\$ 10,253	\$ 15,036	\$ 21,232	\$ 21,093	\$ 12,108
Sales and operations expenses	12,042	19,301	29,244	31,386	16,838
General and administrative expenses	9,130	14,795	16,600	19,872	14,313
Total equity awards compensation expense ^(a)	31,425	49,132	67,076	72,351	43,259
Pension service costs					
Research and development expenses	1,114	760	844	621	211
Sales and operations expenses	394	283	325	247	144
General and administrative expenses	724	513	522	363	169
Total pension service costs	2,232	1,556	1,691	1,231	524
Depreciation and amortization expense					
Cost of revenue	55,935	44,866	67,347	53,988	38,469
Research and development expenses ^(b)	10,741	16,508	10,602	11,226	7,211
Sales and operations expenses ^(c)	16,770	24,914	18,245	19,844	7,757
General and administrative expenses	4,792	7,200	7,306	5,738	3,342
Total depreciation and amortization expense	88,238	93,488	103,500	90,796	56,779
Acquisition-related costs					
General and administrative expenses	286	—	1,738	6	2,921
Total acquisition-related costs	286	—	1,738	6	2,921
Acquisition-related deferred price consideration					
Research and development expense	—	—	—	—	85
Sales and operations expenses	—	—	—	—	—
General and administrative expenses	—	—	—	—	—
Total acquisition-related deferred price considerations	—	—	—	—	85
Restructuring related and transformation costs					
Cost of revenue	—	—	—	2,497	—
Research and development expenses	4,240	2,000	(332)	2,911	—
Sales and operations expenses	9,398	8,810	290	1,825	—
General and administrative expenses	6,351	2,772	(11)	123	—
Total Restructuring related and transformation costs ^(d)	\$ 19,989	\$ 13,582	\$ (53)	\$ 7,356	\$ —

^(a) Excludes \$(2.7) million, \$(8.1) million, and \$(0.5) million, disclosed as restructuring and transformation related costs as of December 31, 2020, 2019 and 2018 respectively.

^(b) Includes acquisition-related amortization of intangible assets of \$ 6.8 million, \$12.3 million, \$15.8 million, \$ 17.7 million and \$4.1 million, (including the accelerated amortization for Manage technology due to a revised useful life for \$4.0 million) as of December 31, 2020, 2019, 2018, 2017 and 2016, respectively.

^(c) Includes acquisition-related amortization of intangible assets of \$8.7 million, \$15.6 million, \$9.1 million, \$10.0 million and \$0.8 million, (including an impairment loss on Manage customers relationships for \$6.9 million) as of December 31, 2020, 2019, 2018, 2017 and 2016, respectively.

^(d) The Company recognized restructuring related and transformation charges following its new organizational structure implemented to support its multi-product platform strategy and office right sizing policy as detailed below as of December 31, 2020 and 2019:

	Year Ended December 31, 2020	Year Ended December 31, 2019
(Gain) from forfeitures of share-based compensation awards	(2,655)	(8,133)
Depreciation and amortization expense	—	1,161
Facilities and impairment related costs	12,975	11,080
Payroll related costs	5,911	9,474
Consulting costs related to transformation	3,758	—
Total restructuring related and transformation costs	\$ 19,989	\$ 13,582

⁽²⁾ For the years ended December 31, 2020, 2019, 2018, 2017 and 2016, this excludes \$3.0 million, \$5.2 million, \$7.2 million, \$5.4 million and \$5.1 million, respectively, of net income available to non-controlling interests in our Japanese subsidiary held by Yahoo! Japan.

Reconciliation from Non-GAAP Operating Expenses to Operating Expenses under GAAP:

	Year Ended December 31,				
	2020	2019	2018	2017	2016
	(in thousands)				
Research and development expenses	\$ (132,513)	\$ (172,591)	\$ (179,263)	\$ (173,925)	\$ (123,649)
Equity awards compensation expense	10,253	15,036	21,232	21,093	12,108
Depreciation and amortization expense	10,741	16,508	10,602	11,226	7,211
Pension service costs	1,114	760	844	621	211
Acquisition-related deferred price consideration	—	—	—	—	85
Restructuring related and transformation costs	4,240	2,000	(332)	2,911	—
Non-GAAP - Research and development expenses	\$ (106,165)	\$ (138,287)	\$ (146,917)	\$ (138,074)	\$ (104,034)
Sales and operations expenses	(330,285)	(375,477)	(372,707)	(380,649)	(282,853)
Equity awards compensation expense	12,042	19,301	29,244	31,386	16,838
Depreciation and amortization expense	16,770	24,914	18,245	19,844	7,757
Pension service costs	394	283	325	247	144
Restructuring related and transformation costs	9,398	8,810	290	1,825	—
Non-GAAP - Sales and operations expenses	(291,681)	(322,169)	(324,603)	(327,347)	(258,114)
General and administrative expenses	(116,395)	(139,754)	(135,159)	(127,077)	(117,469)
Equity awards compensation expense	9,130	14,795	16,600	19,872	14,313
Depreciation and amortization expense	4,792	7,200	7,306	5,738	3,342
Pension service costs	724	513	522	363	169
Acquisition-related costs	286	—	1,738	6	2,921
Restructuring related and transformation costs	6,351	2,772	(11)	123	—
Non-GAAP - General and administrative expenses	(95,112)	(114,474)	(109,004)	(100,975)	(96,724)
Total Operating expenses	(579,193)	(687,822)	(687,129)	(681,651)	(523,971)
Equity awards compensation expense	31,425	49,132	67,076	72,351	43,259
Depreciation and Amortization expense	32,303	48,622	36,153	36,808	18,310
Pension service costs	2,232	1,556	1,691	1,231	524
Acquisition-related costs	286	—	1,738	6	2,921
Acquisition-related deferred price consideration	—	—	—	—	85
Restructuring related and transformation costs	19,989	13,582	(53)	4,859	—
Total Non-GAAP Operating expenses	\$ (492,958)	\$ (574,930)	\$ (580,524)	\$ (566,396)	\$ (458,872)

Non-GAAP Operating Expenses are our consolidated operating expenses adjusted to eliminate the impact of depreciation and amortization, equity awards compensation expense, pension service costs, restructuring related and transformation costs, acquisition-related costs and deferred price consideration. The Company uses Non-GAAP Operating Expenses to understand and compare operating results across accounting periods, for internal budgeting and forecasting purposes, for short-term and long-term operational plans, and to assess and measure our financial performance and the ability of our operations to generate cash. We believe Non-GAAP Operating Expenses reflects our ongoing operating expenses in a manner that allows for meaningful period-to-period comparisons and analysis of trends in our business. As a result, we believe that Non-GAAP Operating Expenses provides useful information to investors in understanding and evaluating our core operating performance and trends in the same manner as our management and in comparing financial results across periods. In addition, Non-GAAP Operating Expenses is a key component in calculating Adjusted EBITDA, which is one of the key measures we use to provide our quarterly and annual business outlook to the investment community.

Consolidated Statements of Financial Position Data:

	Year Ended December 31,					
	2020	2019	2018	2017	2016	
	(in thousands)					
Cash and cash equivalents	\$ 488,011	\$ 418,763	\$ 364,426	\$ 414,111	\$ 270,317	
Total assets	\$ 1,853,410	\$ 1,790,384	\$ 1,597,135	\$ 1,531,300	\$ 1,211,186	
Trade receivables, net of allowances for doubtful accounts	\$ 474,055	\$ 481,732	\$ 473,901	\$ 484,101	\$ 397,244	
Total financial liabilities	\$ 3,275	\$ 4,405	\$ 3,508	\$ 3,657	\$ 85,580	
Total liabilities	\$ 700,723	\$ 752,396	\$ 629,244	\$ 633,602	\$ 601,309	
Total equity	\$ 1,152,687	\$ 1,037,988	\$ 967,891	\$ 897,698	\$ 609,877	

Other Financial and Operating Data:

	Year Ended December 31,					
	2020	2019	2018	2017	2016	
	(in thousands, except number of clients)					
Number of clients	21,460	20,247	19,419	18,118	14,468	
Revenue ex-TAC ⁽³⁾	\$ 825,046	\$ 946,569	\$ 965,980	\$ 941,136	\$ 730,235	
Adjusted net income ⁽⁴⁾	\$ 134,171	\$ 175,399	\$ 168,738	\$ 183,311	\$ 136,777	
Adjusted EBITDA ⁽⁵⁾	\$ 250,995	\$ 298,972	\$ 321,059	\$ 309,584	\$ 224,572	

⁽³⁾ We define Revenue ex-TAC as our revenue excluding traffic acquisition costs, or TAC, generated over the applicable measurement period. Revenue ex-TAC is not a measure calculated in accordance with U.S. GAAP. We have included Revenue ex-TAC in this Form 10-K because it is a key measure used by our management and board of directors to evaluate operating performance, generate future operating plans and make strategic decisions regarding the allocation of capital. In particular, we believe that the elimination of TAC from revenue can provide a useful measure for period-to-period comparisons of our core business. Accordingly, we believe that Revenue ex-TAC provides useful information to investors and others in understanding and evaluating our results of operations in the same manner as our management and board of directors. Revenue ex-TAC has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our financial results as reported under U.S. GAAP. Some of these limitations are: (a) other companies, including companies in our industry which have similar business arrangements, may address the impact of TAC differently; and (b) other companies may report Revenue ex-TAC or similarly titled measures but calculate them differently, which reduces their usefulness as a comparative measure. Because of these and other limitations, you should consider Revenue ex-TAC alongside our U.S. GAAP financial results, including revenue. The following table presents a reconciliation of Revenue ex-TAC to revenue, the most directly comparable U.S. GAAP measure, for each of the periods indicated:

	Year Ended December 31,					
	2020	2019	2018	2017	2016	
	(in thousands)					
Revenue	\$ 2,072,617	\$ 2,261,516	\$ 2,300,314	\$ 2,296,692	\$ 1,799,146	
Adjustment:						
Traffic acquisition costs	(1,247,571)	(1,314,947)	(1,334,334)	(1,355,556)	(1,068,911)	
Revenue ex-TAC	\$ 825,046	\$ 946,569	\$ 965,980	\$ 941,136	\$ 730,235	

⁽⁴⁾ We define Adjusted Net Income as our net income adjusted to eliminate the impact of equity awards compensation expense, amortization of acquisition-related intangible assets, restructuring related and transformation costs, acquisition-related costs and deferred price consideration and the tax impact of the foregoing adjustments. Adjusted Net Income is not a measure calculated in accordance with U.S. GAAP. We have included Adjusted Net Income in this Form 10-K because it is a key measure used by our management and board of directors to evaluate operating performance, generate future operating plans and make strategic decisions regarding the allocation of capital. In particular, we believe that the elimination of equity awards compensation expense, amortization of acquisition-related intangible assets, restructuring related and transformation costs, acquisition-related costs and deferred price consideration and the tax impact of the foregoing adjustments in calculating Adjusted Net Income can provide a useful measure for period-to-period comparisons of our core business. Accordingly, we believe that Adjusted Net Income provides useful information to investors and others in understanding and evaluating our results of operations in the same manner as our management and board of directors. Our use of Adjusted Net Income has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our financial results as reported under U.S. GAAP. Some of these limitations are: (a) Adjusted Net Income does not reflect the potentially dilutive impact of equity-based compensation or the impact of certain acquisition related costs; and (b) other companies, including companies in our industry, may calculate Adjusted Net Income or similarly titled measures differently, which reduces their usefulness as a comparative measure. Because of these and other limitations, you should consider Adjusted Net Income alongside our U.S. GAAP financial results, including net income. The following table presents a reconciliation of Adjusted Net Income to net income, the most directly comparable U.S. GAAP measure, for each of the periods indicated:

	Year Ended December 31,				
	2020	2019	2018	2017	2016
	(in thousands)				
Net income	\$ 74,689	\$ 95,969	\$ 95,879	\$ 96,659	\$ 87,329
Adjustments:					
Equity awards compensation expense ^(a)	31,425	49,132	67,076	72,351	43,259
Amortization of acquisition-related intangible assets	15,520	27,906	15,821	17,731	4,131
Acquisition-related costs	286	—	1,738	6	2,921
Acquisition-related deferred price consideration	—	—	—	—	85
Restructuring and transformation related costs	19,989	13,582	(53)	7,356	—
Tax impact of the above adjustments	(7,738)	(11,190)	(11,723)	(10,792)	(948)
Adjusted net income	\$ 134,171	\$ 175,399	\$ 168,738	\$ 183,311	\$ 136,777

^(a) Excludes \$(2.7) million, \$(8.1) million, and \$(0.5) million disclosed as restructuring costs as of December 31, 2020, 2019 and 2018, respectively.

⁽⁵⁾ We define Adjusted EBITDA as our consolidated earnings before financial income (expense), income taxes, depreciation and amortization, adjusted to eliminate the impact of equity awards compensation expense, pension service costs, restructuring related and transformation costs, acquisition-related costs and deferred price consideration. Adjusted EBITDA is not a measure calculated in accordance with U.S. GAAP. We have included Adjusted EBITDA in this Form 10-K because it is a key measure used by our management and board of directors to evaluate operating performance, generate future operating plans and make strategic decisions regarding the allocation of capital. In particular, we believe that the elimination of equity awards compensation expense, pension service costs, restructuring related and transformation costs, acquisition-related costs and deferred price consideration in calculating Adjusted EBITDA can provide a useful measure for period-to-period comparisons of our core business. Accordingly, we believe that Adjusted EBITDA provides useful information to investors and others in understanding and evaluating our results of operations in the same manner as our management and board of directors. Our use of Adjusted EBITDA has limitations as an analytical tool, and you should not consider it in isolation or as a substitute for analysis of our financial results as reported under U.S. GAAP. Some of these limitations are: (a) although depreciation and amortization are non-cash charges, the assets being depreciated and amortized may have to be replaced in the future, and Adjusted EBITDA does not reflect cash capital expenditure requirements for such replacements or for new capital expenditure requirements; (b) Adjusted EBITDA does not reflect changes in, or cash requirements for, our working capital needs; (c) Adjusted EBITDA does not reflect the potentially dilutive impact of equity-based compensation; (d) Adjusted EBITDA does not reflect tax payments that may represent a reduction in cash available to us; and (e) other companies, including companies in our industry, may calculate Adjusted EBITDA or similarly titled measures differently, which reduces their usefulness as a comparative measure. Because of these and other limitations, you should consider Adjusted EBITDA alongside our U.S. GAAP financial results, including net income. The following table presents a reconciliation of Adjusted EBITDA to net income, the most directly comparable U.S. GAAP measure, for each of the periods indicated:

	Year Ended December 31,				
	2020	2019	2018	2017	2016
	(in thousands)				
Net income	\$ 74,689	\$ 95,969	\$ 95,879	\$ 96,659	\$ 87,329
Adjustments:					
Financial expense	1,939	5,749	5,084	9,534	546
Provision for income taxes	32,197	39,496	46,144	31,651	33,129
Equity awards compensation expense ^(a)	31,425	49,132	67,076	72,351	43,259
Pension service costs	2,232	1,556	1,691	1,231	524
Depreciation and amortization expense	88,238	93,488	103,500	90,796	56,779
Acquisition-related costs	286	—	1,738	6	2,921
Acquisition-related deferred price consideration	—	—	—	—	85
Restructuring related and transformation costs	19,989	13,582	(53)	7,356	—
Total net adjustments	176,306	203,003	225,180	212,925	137,243
Adjusted EBITDA	\$ 250,995	\$ 298,972	\$ 321,059	\$ 309,584	\$ 224,572

^(a) Excludes \$(2.7) million, \$(8.1) million, and \$(0.5) million disclosed as restructuring costs as of December 31, 2020, 2019 and 2018, respectively.

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 Form 10-K.

Overview

We are a global technology company powering the world's marketers with trusted and impactful advertising. We operate at the intersection of ecommerce, digital marketing and media monetization. We enable brands' and retailers' growth by providing best-in-class marketing and monetization services on the open Internet. We do this by activating commerce data through artificial intelligence ("AI") technology, reaching consumers on an extensive scale across all stages of the consumer journey, and generating advertising revenues from consumer brands for large retailers. Our vision is to build the world's leading Commerce Media Platform to deliver measurable business outcomes at scale for global brands, agencies and retailers across multiple marketing goals. Our data is pooled among our clients and offers deep insights into consumer intent and purchasing habits. To drive trusted and impactful advertising, we activate our data assets in a privacy-by-design way through proprietary AI technology to engage consumers in real time with highly relevant digital advertisements ("ads") across devices and environments.

Our focus is on ecommerce. Our clients include some of the largest and most sophisticated ecommerce companies in the world, along with world-class consumer brands. We partner with them to capture user activity on their websites and mobile applications ("apps"), which we define as digital properties, and optimize the performance of their ads based on that activity and other data. Demonstrating the depth and scale of our data, we collected data on over \$950 billion in online sales transactions¹ on our clients' digital properties in the year ended December 31, 2020. Based on this data and other assets, we delivered 1.6 trillion targeted ads in the year ended December 31, 2020. As of December 31, 2020, we served more than 21,000 clients and, in each of the last three years, our average client retention rate, as measured on a quarterly basis, was approximately 90%.

We serve a wide range of clients and our revenue is not concentrated within any single client or group of clients. In 2020, 2019 and 2018, our largest client represented 3.5%, 2.8%, 2.0% of our revenue, respectively, and in 2020, 2019 and 2018, our largest 10 clients represented 13.7%, 11.4% and 11.7% of our revenue in the aggregate, respectively. There is no group of customers under common control or customers that are affiliates of each other constituting an aggregate amount equal to 10% or more of our consolidated revenues, the loss of which would have a material adverse effect on the Company.

We operate in 104 countries through a network of 29 offices located in Europe, Middle East, Africa (EMEA), the Americas and Asia-Pacific. As a result of our significant international operations, our revenue from outside of France, our home country, accounted for 93.6% of our revenue for year ended December 31, 2020.

The Company's foreign currency risk exposure to the British pound, the Japanese yen, the Brazilian real and the U.S. dollar against the euro (the euro still remains the Company's functional currency) is described in Item 7 note B. Liquidity and Capital Resources to our Management's Discussion and Analysis included elsewhere in this Form 10-K.

¹ Excluding Criteo Retail Media

Our financial results include:

- Revenue of \$2,072.6 million, \$2,261.5 million and \$2,300.3 million for the years ended December 31, 2020, 2019 and 2018, respectively;
- Revenue ex-TAC, which is a non-U.S. GAAP financial measure, of \$825.0 million, \$946.6 million and \$966.0 million for the years ended December 31, 2020, 2019 and 2018, respectively;
- Net Income of \$74.7 million, \$96.0 million and \$95.9 million for the years ended December 31, 2020, 2019 and 2018, respectively; and
- Adjusted EBITDA, which is a non-U.S. GAAP financial measure, of \$251.0 million, \$299.0 million and \$321.1 million for the years ended December 31, 2020, 2019 and 2018, respectively.

Please see footnotes 3, 4 and 5 to the Other Financial and Operating Data table in “Item 6. Selected Financial Data” in this Form 10-K for a reconciliation of Revenue to Revenue ex-TAC, Net Income to Adjusted EBITDA and Net Income to Adjusted Net Income respectively, in each case the most directly comparable financial measures calculated and presented in accordance with accounting principles generally accepted in the United States or "U.S. GAAP".

We are focused on maximizing Revenue ex-TAC. We believe this focus builds sustainable long-term value for our business and fortifies a number of our competitive strengths, including a highly liquid marketplace for digital advertising inventory. As part of this focus, we seek to maximize our percentage of overall marketing spend in the digital advertising market over the long-term. In addition, this focus enriches liquidity for both advertisers and publishers resulting in more effective advertising for clients, better monetization for publishers and more relevant advertisements for consumers. We believe our results of operations reflect this focus.

Acquisitions

On October 29, 2018, we acquired Manage, a Silicon Valley-based company with an attractive app install advertising solution.

On August 3, 2018, we acquired Storetail, a Paris-based pioneering retail media technology platform enabling retailers to monetize native placements on their ecommerce sites.

A. Operating Results.

Basis of Presentation

The key elements of our results of operations include:

Revenue

We sell personalized display advertisements featuring product-level recommendations either directly to clients or to advertising agencies. Historically, the Criteo model has focused solely on converting our clients' website visitors into customers, enabling us to charge our clients only when users engage with an ad we deliver, usually by clicking on it. More recently, we have expanded our solutions to address a broader range of marketing goals for our clients.

We offer two families of solutions to our commerce and brand clients:

- *Criteo Marketing Solutions* allow commerce companies to address multiple marketing goals by engaging their consumers with personalized ads across the web, mobile and offline store environments.
- *Criteo Retail Media* solutions allow retailers to generate advertising revenues from consumer brands, and/or to drive sales for themselves, by monetizing their data and audiences through personalized ads, either on their own digital property or on the open Internet, that address multiple marketing goals.

We also have multiple pricing models which now include cost plus margin models in addition to cost-per-click, cost-per-install and cost-per-impression pricing models.

We recognize revenues when we transfer control of promised services directly to our clients or to advertising agencies, which we collectively refer to as our clients, in an amount that reflects the consideration to which we expect to be entitled to in exchange for those services.

For campaigns priced on a cost-per-click, cost-per-install basis and cost plus margin basis, we bill our clients when a user clicks on an advertisement we deliver or installs an application by clicking on an advertisement we delivered, respectively. For these pricing models, we recognize revenue when a user clicks on an advertisement or installs an application.

For campaigns priced on a cost-per-impression basis, we bill our clients based on the number of times an advertisement is displayed to a user. For this pricing model, we recognize revenue when an advertisement is displayed.

For campaigns with a fixed pricing component, where fixed amounts are billed to the customer at various intervals, we recognize revenue on a ratable basis, based on our completion of our performance obligation to the customer.

We mainly act as principal in our arrangements because (i) we control the advertising inventory before it is transferred to our clients; (ii) we bear sole responsibility for fulfillment of the advertising promise and inventory risks and (iii) we have full discretion in establishing prices. Therefore, based on these factors, we report revenue earned and the related costs incurred on a gross basis.

Cost of Revenue

Our cost of revenue primarily includes traffic acquisition costs and other cost of revenue.

Traffic Acquisition Costs. Traffic acquisition costs consist primarily of purchases of impressions from publishers on a CPM basis. We purchase impressions directly from publishers or third-party intermediaries, such as advertisement exchanges. We recognize cost of revenue on a publisher by publisher basis as incurred. Costs owed to publishers but not yet paid are recorded in our Consolidated Statements of Financial Position as trade payables.

For some solutions within Criteo Retail Media, we pay for the inventory of our retailer partners on a revenue sharing basis, effectively paying the retailers a portion of the click-based revenue generated by user clicks on the sponsored products advertisements displaying the products of our consumer brand clients.

For a discussion of the trends we expect to see in traffic acquisition costs, see the section entitled " - Highlights and Trends - Revenue ex-TAC" in Item 7.D - Trend Information below.

Other Cost of Revenue. Other cost of revenue includes expenses related to third-party hosting fees, depreciation of data center equipment, the cost of data purchased from third parties and digital taxes. The Company does not build or operate its own data centers and none of its Research and Development employments are dedicated to revenue generating activities. As a result, we do not include the costs of such personnel in other cost of revenue.

Operating Expenses

Operating expenses consist of research and development, sales and operations, and general and administrative expenses. Salaries, bonuses, equity awards compensation, pension benefits and other personnel-related costs are the most significant components of each of these expense categories. The number of employees decreased from 2,764 employees at January 1, 2018 to 2,594 employees at December 31, 2020.

We include equity awards compensation expense in connection with grants of share options, warrants, and restricted share units ("RSUs") in the applicable operating expense category based on the respective equity award recipient's function (Research and development, Sales and operations, General and administrative).

Research and Development Expense. Research and development expense consists primarily of personnel-related costs for our employees working in the engine, platform, site reliability engineering, scalability, infrastructure, engineering program management, product, analytics and other teams, including salaries, bonuses, equity awards compensation and other personnel related costs. Our research and development function was supplemented in January 2013 to include a dedicated product organization following the appointment of a Chief Product Officer. Also included are non-personnel costs such as subcontracting, consulting and professional fees to third-party development resources, allocated overhead and depreciation and amortization costs. These expenses are partially offset by the French research tax credit that is conditional upon the level of our expenditures in research and development.

Our research and development efforts are focused on enhancing the performance of our solutions and improving the efficiency of the services we deliver to our clients and publisher partners. All development costs, principally headcount-related costs, are expensed until management determines that technological feasibility is reached and the preliminary project phase is completed. The Company capitalizes costs associated with software developed when the preliminary project stage is completed, management implicitly or explicitly authorizes and commits to funding the project and it is probable that the project will be completed and perform as intended. Capitalized costs mainly relates to internally developed internal-use software and IT licenses.

The number of employees in research and development functions decreased from 701 at January 1, 2018 to 624 at December 31, 2020. On October 7, 2019, in connection with the new organization structure, we announced a plan to restructure its R&D activities with the closing of our R&D operations in Palo Alto, and our headcount was slightly reduced in connection with the completion of this restructuring. Additionally, research and development expenses slightly decreased as a percentage of our revenue.

We believe our continued investment in research and development to be critical to maintaining and improving our technology within the Criteo Commerce Media Platform, our quality of service and our competitive position.

Sales and Operations Expense. Sales and operations expense consists primarily of personnel-related costs for our employees working in our sales, account strategy, sales operations, publisher business development, analytics, marketing, technical solutions, creative services and other teams, including salaries, bonuses, equity awards compensation, and other personnel-related costs. Additional expenses in this category include travel and entertainment, marketing and promotional events, marketing activities, provisions for doubtful accounts, subcontracting, consulting and professional fees paid to third parties, allocated overhead and depreciation and amortization costs. The number of employees in sales and operations functions declined from 1,595 at January 1, 2018 to 1,520 at December 31, 2020. In order to expand our business, we expect to make targeted investments in our resources in some areas of our sales and operations. Yet, we expect sales and operations expenses to remain fairly flat as a percentage of revenue over time as we increase the productivity of our sales and operations teams.

General and Administrative Expense. General and administrative expense consists primarily of personnel costs, including salaries, bonuses, equity awards compensation, pension benefits and other personnel-related costs for our administrative, legal, information technology, human resources, facilities and finance teams. Additional expenses included in this category include travel-related expenses, subcontracting and professional fees, audit fees, tax services and legal fees, as well as insurance and other corporate expenses, along with allocated overhead and depreciation and amortization costs. The number of employees in general and administrative functions decreased from 468 at January 1, 2018 to 450 at December 31, 2020. We expect our general and administrative expense to decrease as a percentage of revenue over time as we increase the productivity of our general and administrative teams.

Financial Income (Expense)

Financial income (expense) primarily consists of:

- exchange differences arising on the settlement or translation into local currency of monetary balance sheet items labeled in euros (the Company's functional currency). We are exposed to changes in exchange rates primarily in the United States, the United Kingdom, Japan, Korea and Brazil. The U.S. dollar, the British pound, the Korean won, the Japanese yen and the Brazilian real are our most significant foreign currency exchange risks. At December 31, 2020, our exposure to foreign currency risk was centralized at parent company level and hedged. These exchange differences in euro are then translated into U.S. dollars (the Company's reporting currency) according to the average euro/U.S. dollar exchange rate.
- interest received on our cash and cash equivalents and interest incurred on outstanding borrowings under our debt loan agreements and revolving credit facilities ("RCFs").

We monitor foreign currency exposure and look to mitigate exposures through normal business operations and hedging strategies.

Provision for Income Taxes

We are subject to potential income taxes in France, the United States and numerous other jurisdictions. We recognize tax liabilities based on estimates of whether additional taxes will be due. These tax liabilities are recognized when we believe that certain positions may not be fully sustained upon review by tax authorities, notwithstanding our belief that our tax return positions are supportable.

Our effective tax rates differ from the statutory rate applicable to us primarily due to valuation allowance on deferred tax assets, differences between domestic and foreign jurisdiction tax rates, Research Tax Credit offsets, which are non-taxable items, potential tax audit provision settlements, share-based compensation expenses that are non-deductible in some jurisdictions under certain circumstances, and transfer pricing adjustments. We license access to our technology to our subsidiaries and charge a royalty fee to these subsidiaries for such access. In France, we benefit from a reduced tax rate of 10% on a large portion of this technology royalty income.

On September 27, 2017, we received a draft notice of proposed adjustment (NOPA) from the Internal Revenue Service ("IRS") audit of Criteo Corp. for the year ended December 31, 2014, confirmed by the definitive notice dated February 8, 2018. We disagreed with the IRS's position and contested it. On August 24, 2020, the IRS and the Company agreed to a settlement and closed the income tax audit for the year ended December 31, 2014. The settlement provides for a disallowance of Criteo Corp's. Net Operating Losses (NOLs) amounting to \$9.2 million.

No uncertain tax positions were identified as of December 31, 2020.

Critical Accounting Policies and Significant Judgments and Estimates

Our consolidated financial statements are prepared in accordance with U.S. GAAP. The preparation of our consolidated financial statements requires us to make estimates, assumptions and judgments that affect the reported amounts of revenue, assets, liabilities, costs and expenses. We base our estimates and assumptions on historical experience and other factors that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates.

An accounting policy is deemed to be critical if it requires an accounting estimate to be made on assumptions about matters that are highly uncertain at the time the estimate is made, if different estimates reasonably could have been used, or if changes in the estimate that are reasonably possible could materially impact the financial statements. We believe estimates associated with (1) revenue recognition criteria (2) allowances for credit losses, (3) research tax credits (4) income taxes, including i) recognition of deferred tax assets arising from the subsidiaries projected taxable profit for future years, ii) evaluation of uncertain tax positions associated with our transfer pricing policy and iii) recognition of income tax position in respect with tax reforms recently enacted in countries we operate, (5) assumptions used in valuing acquired assets and assumed liabilities in business combinations, (6) assumptions used in the valuation of goodwill, intangible assets and right of use assets - operating lease, and (7) assumptions used in the valuation model to determine the fair value of share-based compensation plan. The severity, magnitude, duration and after effects of the COVID-19 pandemic on general economic conditions increase uncertainty associated with these estimates, in particular those related to allowance for credit losses, assumptions used in the valuation of goodwill and estimates relating to income taxes. Therefore, we consider these to be our critical accounting policies and estimates. See Note 1. Principles and Accounting Methods to our audited consolidated financial statements beginning on page F-1 for a description of our other significant accounting policies.

Revenue Recognition

We recognize revenues when we transfer control of promised services directly to our clients or to advertising agencies, which we collectively refer to as our clients, in an amount that reflects the consideration to which we expect to be entitled to in exchange for those services.

For campaigns priced on a cost-per-click, cost-per-install basis and cost plus margin basis, we bill our clients when a user clicks on an advertisement we deliver or installs an application by clicking on an advertisement we delivered, respectively. For these pricing models, we recognize revenue when a user clicks on an advertisement or installs an application.

For campaigns priced on a cost-per-impression basis, we bill our clients based on the number of times an advertisement is displayed to a user. For this pricing model, we recognize revenue when an advertisement is displayed.

For campaigns with a fixed pricing component, where fixed amounts are billed to the customer at various intervals, we recognize revenue on a ratable basis, based on our completion of our performance obligation to the customer.

We mainly act as principal in our arrangements because (i) we control the advertising inventory before it is transferred to our clients; (ii) we bear sole responsibility for fulfillment of the advertising promise and inventory risks and (iii) we have full discretion in establishing prices. Therefore, based on these factors, we report revenue earned and the related costs incurred on a gross basis..

Trade Receivables, Net of Allowances for Doubtful Accounts

We carry our accounts receivable at net realizable value. On a periodic basis, our management evaluates our accounts receivable and determines whether to provide an allowance or if any accounts should be written down and charged to expense as a bad debt. The evaluation is based on a past history of collections, current credit conditions, the length of time the trade receivable is past due and a past history of write downs. A trade receivable is considered past due if we have not received payments based on agreed-upon terms. A higher default rate than estimated or a deterioration in our major clients' creditworthiness could have an adverse impact on our future results. Given the global economic turmoil brought about by COVID-19, our estimates and judgments with respect to the collectability of our receivables are subject to greater uncertainty than in more stable periods. Allowances for doubtful accounts on trade receivables are recorded in "Sales and Operations" in our consolidated statements of income. We generally do not require any security or collateral to support our trade receivables. The amount of allowance for doubtful accounts charged to our consolidated statements of income for the years ended December 31, 2020, 2019 and 2018 was \$30.8 million, \$11.1 million and \$17.1 million, respectively and represented 6.5%, 2.3% and 3.7% of our trade receivables, net of allowances, as of December 31, 2020, 2019, and 2018, respectively. The amount charged to allowance for credit losses for the twelve months ended December 31, 2020 increased compared to the same period in the prior year due to the application of the expected credit loss model beginning on January 1, 2020 as well as an increase to the provision due to the expected impact of COVID-19 on the Company's future cash collections caused by the downturn in the economy which has led to financial difficulties for some of our customers, particularly those operating in the retail sector.

Deferred Tax Assets

Deferred taxes are recorded on all temporary differences between the financial reporting and tax bases of assets and liabilities, and on tax losses, using the liability method. Differences are defined as temporary when they are expected to reverse within a foreseeable future. We may only recognize deferred tax assets if, based on the projected taxable incomes within the next three years, we determine that it is probable that future taxable profit will be available against which the unused tax losses and tax credits can be utilized. As a result, the measurement of deferred income tax assets is reduced, if necessary, by a valuation allowance for any tax benefits which are not expected to be realized. If future taxable profits are considerably different from those forecasted that support recording deferred tax assets, we will have to revise downwards or upwards the amount of the deferred tax assets, which could have a significant impact on our financial results.

This determination requires many estimates and judgments by our management for which the ultimate tax determination may be uncertain.

Uncertain Tax Positions

We recognize tax benefits from uncertain tax positions only if we believe that it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. These uncertain tax positions include our estimates for transfer pricing that have been developed based upon analyses of appropriate arms-length prices. Similarly, our estimates related to uncertain tax positions concerning research tax credits are based on an assessment of whether our available documentation corroborating the nature of our activities supporting the tax credits will be sufficient. Although we believe that we have adequately reserved for our uncertain tax positions (including net interest and penalties), we can provide no assurance that the final tax outcome of these matters will not be materially different. We make adjustments to these reserves in accordance with the income tax accounting guidance when facts and circumstances change, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different from the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made, and could have a material impact on our financial condition and operating results.

Goodwill

Goodwill is not amortized and is tested for impairment at least annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. The Company has determined that it operates as a single reporting unit and has selected December 31 as the date to perform its annual impairment test. In the impairment assessment of its goodwill, the Company performs an impairment test, which involves assumptions regarding estimated future cash flows to be derived from the Company. The estimated future cash flows are used to derive the fair value of the reporting unit, which is then compared to its net book value, including goodwill. If these estimates or their related assumptions change in the future, the Company may be required to record impairment for these assets. If the net book value exceeds its fair value, then the Company would be required to recognize an impairment loss. The impairment loss to be recognized would be calculated by comparing the fair value of the Company to its net book value, including goodwill. An impairment loss would be recognized in the Consolidated Statement of Income when the carrying amount of goodwill exceeds its implied fair value.

There has been no impairment of goodwill during the years ended December 31, 2020, 2019 and 2018, as the Company's reporting unit's fair value was substantially in excess of the carrying value based on the annual goodwill impairment test.

Intangible assets

Acquired intangible assets are accounted for at acquisition cost, less accumulated amortization. Acquired intangible assets are composed of software, technology and customer relationships amortized on a straight-line basis over their estimated useful lives comprised between one and three years for the software, and three and nine years, for the technology and customer relationships. Intangible assets are reviewed for impairment whenever events or changes in circumstances such as, but not limited to, significant declines in revenue, earnings or cash flows or material adverse changes in the business climate indicate that the carrying amount of an asset may be impaired.

Software development costs also include costs to develop software to be used solely to meet internal needs and cloud based applications used to deliver our services. We capitalize development costs related to these software applications once the preliminary project stage is complete and it is probable that the project will be completed and the software will be used to perform the function intended. Amortization of these costs begins when assets are placed in service and is calculated on a straight-line basis over the assets' useful lives estimated at three to five years.

Cloud computing arrangements ("CCAs"), such as software as a service and other hosting arrangements, are evaluated for capitalized implementation costs in a similar manner as capitalized software development costs. If a CCA includes a software license, the software license element of the arrangement is accounted for in a manner consistent with the acquisition of other software licenses. If a CCA does not include a software license, the service element of the arrangement is accounted for as a service contract. The Company capitalized certain implementation costs for its CCAs that are service contracts, which are included in other current assets. The Company amortizes capitalized implementation costs in a CCA over the life of the service contract.

Equity Awards Compensation

We account for share-based compensation in accordance with ASC 718 - *Compensation - Stock Compensation*. Under the fair value recognition provisions of this guidance, share-based compensation is measured at the grant date based on the fair value of the award and is recognized as expense, over the requisite service period, which is generally the vesting period of the respective award.

Determining the fair value of share-based awards at the grant date requires judgment. The determination of the grant date fair value of RSUs is based on the share price on the grant date. We use the Black-Scholes option-pricing model to determine the fair value of share options. The determination of the grant date fair value of options using an option-pricing model is affected by our estimated ordinary share fair value as well as assumptions regarding a number of other complex and subjective variables.

These variables include the fair value of our ordinary shares, the exercise price of the option, the expected term of the options, our expected share price volatility, risk-free interest rates, and expected dividends, which are estimated as follows:

- *Fair value of our ordinary shares.* Following our initial public offering, we established a policy of using the closing sales price per ADS as quoted on the Nasdaq on the date of grant for purposes of determining the fair value of ordinary shares.
- *Exercise price of the option.* Following our initial public offering, we established a policy of using the closing sales price per ADS as quoted on the Nasdaq on the date of grant for purposes of determining the exercise price with a floor value of 95% of the average of the closing sales price per ADS for the 20 trading days preceding the grant.
- *Expected term.* The expected term represents the period that our share-based awards are expected to be outstanding. As we do not have sufficient historical experience for determining the expected term of the ordinary share option awards granted, we have based our expected term on the simplified method, which represents the average period from vesting to the expiration of the award.
- *Expected volatility.* Prior to our initial public offering, as we did not have a trading history for our ordinary shares, the expected share price volatility for our ordinary shares was estimated by taking the average historic price volatility for industry peers based on daily price observations over a period equivalent to the expected term of the ordinary share option grants. From the initial public offering, the expected share price volatility takes into account the Criteo closing share price from the initial public offering date to the grant date and closing share price of industry peers for the remaining expected term of the ordinary share option grant.
- *Risk-free rate.* The risk-free interest rate is based on the yields of France Treasury securities with maturities similar to the expected term of the options for each option group.
- *Dividend yield.* We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, we use an expected dividend yield of zero.

If any of the assumptions used in the Black-Scholes model changes significantly, share-based compensation for future awards may differ materially compared with the awards granted previously.

The following table presents the range of assumptions used to estimate the fair value of options granted during the periods presented:

	Year Ended December 31,		
	2020	2019	2018
Volatility	39.2% - 39.9%	39.2% - 41.2%	40.7% - 41.5%
Risk-free interest rate	0.00% - 0.25%	0.00% - 0.10%	0.60% - 0.90%
Expected life (in years)	6 years	6 years	6 years
Dividend yield	—%	—%	—%

Recent Accounting Pronouncements

For a discussion of recent accounting pronouncements applicable to us, see Note 1 to our audited consolidated financial statements beginning on page F-1.

Results of Operations for the Years Ended December 31, 2020, 2019 and 2018

Revenue

Information in this Form 10-K with respect to results presented on a constant currency basis was calculated by applying prior period average exchange rates to current period results. Management reviews and analyzes business results excluding the effect of foreign currency translation because they believe this better represents our underlying business trends. Below is a table which reconciles the actual results presented in this section with the results presented on a constant currency basis.

	Year Ended December 31,			% change	
	2020	2019	2018	2020 vs 2019	2019 vs 2018
	(in thousands)				
Revenue as reported	\$ 2,072,617	\$ 2,261,516	\$ 2,300,314	(8)%	(2)%
Conversion impact U.S. dollar/other currencies	\$ 3,239	\$ 51,373	(19,118)		
Revenue at constant currency ^(*)	2,075,856	2,312,889	2,281,196	(8)%	1 %
Americas					
Revenue as reported	\$ 894,854	\$ 952,154	\$ 954,073	(6)%	(0.2)%
Conversion impact U.S. dollar/other currencies	12,770	4,584	7,693		
Revenue at constant currency ^(*)	\$ 907,624	\$ 956,738	\$ 961,766	(5)%	0.3 %
EMEA					
Revenue as reported	\$ 749,672	\$ 806,197	\$ 839,825	(7)%	(4)%
Conversion impact U.S. dollar/other currencies	(4,528)	44,478	(21,553)		
Revenue at constant currency ^(*)	\$ 745,144	\$ 850,675	\$ 818,272	(8)%	1 %
Asia-Pacific					
Revenue as reported	\$ 428,091	\$ 503,165	\$ 506,416	(15)%	(1)%
Conversion impact U.S. dollar/other currencies	(5,003)	2,311	(5,258)		
Revenue at constant currency ^(*)	\$ 423,088	\$ 505,476	\$ 501,158	(16)%	(0.2)%

^(*) Revenue at constant currency excludes the impact of foreign currency fluctuations and is computed by applying the average exchange rates for the prior year to the following year figures.

2020 Compared to 2019

Revenue in 2020 decreased \$(188.9) million, or (8)% (or (8)% on a constant currency basis) to \$2,072.6 million compared to 2019.

The COVID-19 pandemic impacted our business during most of the year, with an estimated net negative impact on revenue of approximately \$262 million for the twelve months ended December 31, 2020, or approximately 12 points of year-over-year growth, as some clients decided to temporarily pause or reduce their campaigns with us. The COVID-19 headwind impacted our large customers in our Marketing Solutions business, in particular in the Travel, Classifieds verticals and some large brick-and-mortar Retail clients. However, we believe that client spending from Retail clients in the midmarket and in our Retail Media solutions was supported by stronger ecommerce shopping trends emerging from the COVID-19 pandemic.

The year-over-year decrease in revenue was driven by the lower contribution from our existing clients and some churning clients, both of which we largely attribute to the COVID-19 outbreak, offsetting the positive contribution from new clients. We added 1,213 net new clients year-over-year across regions.

Our revenue in the Americas region decreased \$(57.3) million, or (6)% (or (5)% on a constant currency basis) to \$894.9 million for 2020 compared to 2019. This decline was driven by an estimated revenue impact from COVID-19 of approximately \$90 million, in particular with large customers in the broader Classifieds vertical and some large brick-and-mortar Retail clients in the U.S.

Our revenue in the EMEA region decreased \$(56.5) million, or (7)% (or (8)% on a constant currency basis) to \$749.7 million for 2020 compared to 2019. This decrease at constant currency includes an estimated \$96 million revenue impact from the COVID-19 pandemic, in part due to the fact that the EMEA region had the highest exposure to the Travel vertical prior to the pandemic, which was most impacted by COVID-19.

Our revenue in the Asia-Pacific region decreased \$(75.1) million, or (15)% (or (16)% on a constant currency basis) to \$428.1 million for 2020 compared to 2019. The decrease at constant currency included an estimated \$76 million revenue impact from the COVID-19 pandemic, mostly in the Travel and Classifieds verticals, and was also driven by a weak economic climate in Japan, our largest market in the region.

Additionally, \$2,073 million of revenue for 2020 was negatively impacted by \$ 3.2 million of currency fluctuations, particularly as a result of the depreciation of the Turkish Lira, Russian Ruble, the Brazilian real, partially offset by the appreciation of the Japanese Yen and the Euro, compared to the U.S. dollar.

The year-over-year decrease in revenue on a constant currency basis is entirely attributable to the decrease in the average price charged to advertisers, partly driven by the evolution of our revenue mix over the period, and partially offset by the increased number of impressions delivered by us and the increased number of clicks delivered on the advertising banners displayed by us.

2019 Compared to 2018

Revenue for 2019 decreased \$(38.8) million, or (2)% (or increased 1% on a constant currency basis) to \$2,261.5 million, compared to 2018. The year-over-year increase in revenue at constant currency was entirely driven by new clients, offsetting the decrease in our business with existing clients. We added 828 net new clients across regions and client sizes over the period, a lower volume than the prior year. This was primarily driven by focused execution and productivity improvements in the midmarket category leading to higher additions of higher-value midmarket clients. Contribution from existing clients was impacted by lower retargeting spend from large clients, as well as by a general softness in the web environment, where users tend to progressively spend less time than in apps, where our solutions do not yet contribute significantly to our revenue growth, despite continued adoption of our new products.

Our revenue in the Americas region decreased (0.2)% (or increased 0.3% on a constant currency basis) to \$952.2 million for 2019 compared to 2018. Growth was driven by the acceleration of our midmarket business driven by larger midmarket clients, as well as continued traction in our Criteo Retail Media business in the U.S., partly offset by lower retargeting spend by large clients.

Our revenue in the EMEA region decreased (4)% (or increased 1% on a constant currency basis) to \$806.2 million for 2019 compared to 2018. This increase at constant currency was largely driven by accelerated growth in our midmarket business and by the positive traction of our new solutions, including Retail Media, partly offset by softer business with large customers.

Our revenue in the Asia-Pacific region decreased (1)% (or (0.2)% on a constant currency basis) to \$503.2 million for 2019 compared to 2018. This slight decrease at constant currency was driven by a slow-down in our large customer business in Japan, South-East Asia and Australia, despite strong growth across client categories in Korea and our growing midmarket business across the region. Additionally, our \$2,261.5 million of revenue for 2019 was negatively impacted by \$(51.4) million of currency fluctuations, particularly as a result of the depreciation of the Japanese yen, the British pound, the Korean won, the Brazilian real and the Euro, compared to the U.S. dollar. The year-over-year growth in revenue on a constant currency basis was entirely attributable to an increased number of clicks delivered on the advertising banners displayed by us and the increased number of impressions delivered by us, offsetting the decrease in the average cost-per-click charged to advertisers.

Cost of Revenue

	Year Ended December 31,			% change	
	2020	2019	2018	2020 vs 2019	2019 vs 2018
	(in thousands, except percentages)				
Traffic acquisition costs	\$ (1,247,571)	\$ (1,314,947)	\$ (1,334,334)	(5)%	(1)%
Other cost of revenue	(137,028)	(117,533)	(131,744)	17%	(11)%
Total cost of revenue	\$ (1,384,599)	\$ (1,432,480)	\$ (1,466,078)	(3)%	(2)%
% of revenue	(67)%	(63)%	(64)%		
Gross profit %	33 %	37 %	36 %		

2020 Compared to 2019

Cost of revenue for 2020 decreased \$(47.9) million, or (3)%, compared to 2019. This decrease was primarily the result of a \$(67.4) million, or (5)% decrease in traffic acquisition costs (or (5)% on a constant currency basis), partially offset by a \$19.5 million, or 17% (or 18% on a constant currency basis), increase in other cost of revenue.

The decrease in traffic acquisition costs on a constant currency basis related primarily to the (13)% decrease (and (13)% decrease on a constant currency basis) in the average CPM for inventory purchased. This was partly driven by lower global demand for advertising inventory, despite the increase in online traffic globally caused by the lockdown imposed in COVID-19 affected areas, making the unit price of inventory relatively cheaper than in the pre-pandemic period. This was also driven by the effectiveness of our Criteo Direct Bidder, which allows us to buy quality inventory directly from large publishers and remove intermediary fees in the process. This decrease was not entirely offset by the 10% increase in the number of impressions we purchased, reflecting higher volumes of inventory available and our expanding relationships with existing and new publisher partners, in particular through direct connections, to support client demand for advertising campaigns.

The increase in other cost of revenue includes \$(11.1) million in the allocated depreciation and amortization expense, \$(4.2) million in hosting costs, \$(2.6) million in data acquisition and \$(1.6) million increase in other cost of sales.

2019 Compared to 2018

Cost of revenue for 2019 decreased \$(33.6) million, or (2)%, compared to 2018. This decrease was primarily the result of a \$(19.4) million, or (1)% decrease in traffic acquisition costs (or an increase of 1% on a constant currency basis), and a \$(14.2) million, or (11)% (or (9)% on a constant currency basis), decrease in other cost of revenue.

The increase in traffic acquisition costs on a constant currency basis related primarily to an increase of 9.2% in the total number of impressions we purchased, partly offset by a (10)% decrease (or (8)% decrease on a constant currency basis) in the average CPM for inventory purchased. The increase in the volume of purchased impressions reflects our expanding relationships with existing and new publisher partners to support the growth in our client demand for advertising campaigns. The year-over-year decrease in average CPM was driven by a combination of factors, including the effectiveness of our Criteo Direct Bidder, which allows us to buy quality inventory directly from large publishers and remove intermediary fees in the process, as well as of the growing share of in-app inventory in our business, which inventory cost tends to be slightly lower than that in the web browser environment.

The decrease in other cost of revenue includes a \$(22.5) million decrease in the allocated depreciation and amortization expense following the changes in our estimation of the useful life of the servers and other equipment used in our data centers from 3 to 5 years, partially offset by a \$5.9 million increase in other cost of sales and a \$2.4 million increase in hosting costs.

Revenue excluding Traffic Acquisition Costs

We consider Revenue ex-TAC as a key measure of our business activity. Our strategy focuses on maximizing our Revenue ex-TAC on an absolute basis over maximizing our near-term gross margin. We believe this focus builds sustainable long-term value for our business by fortifying a number of our competitive strengths, including access to advertising inventory, breadth and depth of data and continuous improvement of the Criteo AI Engine's performance, allowing it to deliver more relevant advertisements at scale. As part of this focus, we continue to invest in building preferred relationships with direct publishers and pursue access to leading advertising exchanges.

The following table sets forth our revenue, traffic acquisition costs and Revenue ex-TAC by region, including the Americas (North and South America), Europe, Middle East and Africa, or EMEA, and Asia-Pacific:

	Region	Year Ended December 31,		
		2020	2019	2018
		(in thousands)		
Revenue	Americas	\$ 894,854	\$ 952,154	\$ 954,073
	EMEA	749,672	806,197	839,825
	Asia-Pacific	428,091	503,165	506,416
	Total	\$ 2,072,617	\$ 2,261,516	\$ 2,300,314
Traffic acquisition costs	Americas	\$ (569,436)	\$ (579,175)	\$ (579,597)
	EMEA	(433,206)	(453,530)	(471,654)
	Asia-Pacific	(244,929)	(282,242)	(283,083)
	Total	\$ (1,247,571)	\$ (1,314,947)	\$ (1,334,334)
Revenue ex-TAC ⁽¹⁾	Americas	\$ 325,418	\$ 372,979	\$ 374,476
	EMEA	316,466	352,667	368,171
	Asia-Pacific	183,162	220,923	223,333
	Total	\$ 825,046	\$ 946,569	\$ 965,980

⁽¹⁾ We define Revenue ex-TAC as our revenue excluding traffic acquisition costs generated over the applicable measurement period. Revenue ex-TAC and Revenue ex-TAC by Region are not measures calculated in accordance with U.S. GAAP. We have included Revenue ex-TAC and Revenue ex-TAC by Region in this Form 10-K because they are key measures used by our management and board of directors to evaluate operating performance and generate future operating plans. In particular, we believe that the elimination of TAC from revenue and review of these measures by region can provide useful measures for period-to-period comparisons of our core business. Accordingly, we believe that Revenue ex-TAC and Revenue ex-TAC by Region provide useful information to investors and others in understanding and evaluating our results of operations in the same manner as our management and board of directors. Our use of Revenue ex-TAC and Revenue ex-TAC by Region has limitations as an analytical tool, and you should not consider them in isolation or as a substitute for analysis of our financial results as reported under U.S. GAAP. Some of these limitations are: (a) other companies, including companies in our industry which have similar business arrangements, may address the impact of TAC differently; (b) other companies may report Revenue ex-TAC and Revenue ex-TAC by Region or similarly titled measures but define the regions differently, which reduces their effectiveness as a comparative measure; and (c) other companies may report Revenue ex-TAC or similarly titled measures but calculate them differently, which reduces their usefulness as a comparative measure. Because of these and other limitations, you should consider Revenue ex-TAC and Revenue ex-TAC by Region alongside our other U.S. GAAP financial results, including revenue. The above table provides a reconciliation of Revenue ex-TAC by region to revenue by region. Please also refer to footnote 3 to the "Other Financial and Operating Data" table in "Item 6. Selected Financial Data" in this Form 10-K for a reconciliation of Revenue ex-TAC to revenue, the most directly comparable financial measure calculated and presented in accordance with U.S. GAAP.

Constant Currency Reconciliation

Information in this Form 10-K with respect to results presented on a constant currency basis was calculated by applying prior period average exchange rates to current period results. Management reviews and analyzes business results excluding the effect of foreign currency translation because they believe this better represents our underlying business trends. Below is a table which reconciles the actual results presented in this section with the results presented on a constant currency basis:

	Year Ended December 31,			% change	
	2020	2019	2018	2020 vs 2019	2019 vs 2018
	(in thousands)				
Revenue as reported	\$ 2,072,617	\$ 2,261,516	\$ 2,300,314	(8)%	(2)%
Conversion impact U.S. dollar/other currencies	3,239	51,373	(19,118)		
Revenue at constant currency	\$ 2,075,856	\$ 2,312,889	\$ 2,281,196	(8)%	1%
Traffic acquisition costs as reported	\$ (1,247,571)	\$ (1,314,947)	\$ (1,334,334)	(5)%	(1)%
Conversion impact U.S. dollar/other currencies	(1,605)	(28,831)	10,433		
Traffic acquisition cost at constant currency	\$ (1,249,176)	\$ (1,343,778)	\$ (1,323,901)	(5)%	1%
Revenue ex-TAC as reported	\$ 825,046	\$ 946,569	\$ 965,980	(13)%	(2)%
Conversion impact U.S. dollar/other currencies	1,634	22,542	(8,686)		
Revenue ex-TAC at constant currency	\$ 826,680	\$ 969,111	\$ 957,294	(13)%	0.3%
Other cost of revenue as reported	\$ (137,028)	\$ (117,533)	\$ (131,744)	17%	(11)%
Conversion impact U.S. dollar/other currencies	(1,167)	(1,856)	(114)		
Other cost of revenue at constant currency	\$ (138,195)	\$ (119,389)	\$ (131,858)	18%	(9)%

Research and Development Expenses

	Year Ended December 31,			% change	
	2020	2019	2018	2020 vs 2019	2019 vs 2018
	(in thousands, except percent of revenue)				
Research and development expenses	\$ (132,513)	\$ (172,591)	\$ (179,263)	(23)%	(4)%
% of revenue	(6)%	(8)%	(8)%		

2020 Compared to 2019

Research and development expenses for 2020 decreased \$(40.1) million, or (23)%, compared to 2019. This decrease mainly related to a decrease in headcount-related costs following the cessation of our R&D operations in Palo Alto in 2019 and lower amortization expense due to the Manage assets revised useful life in 2019.

2019 Compared to 2018

Research and development expenses for 2019 decreased \$(6.7) million, or (4)%, compared to 2018. This decrease mainly related to an increase in the French Research Tax Credit and a decrease of headcount-related costs due to a lower share-based compensation expense, partially offset by an increased amortization expense for Manage technology due to a revised useful life (see Note 8). On October 7, 2019, in connection with the new organization structure, the Company announced a plan to restructure its R&D activities with the cessation of its R&D operations in Palo Alto. The Company incurred net restructuring costs of \$0.7 million (see Note 2).

Sales and Operations Expenses

	Year Ended December 31,			% change	
	2020	2019	2018	2020 vs 2019	2019 vs 2018
	(in thousands, except percent of revenue)				
Sales and operations expenses	\$ (330,285)	\$ (375,477)	\$ (372,707)	(12)%	1%
% of revenue	(16)%	(17)%	(16)%		

2020 Compared to 2019

Sales and operations expenses for 2020 decreased \$(45.2) million, or (12)%, compared to 2019. This decrease mainly related to a reduction in headcount-related costs, a lower share-based compensation expense, the absence of Manage customer relationships amortization (as asset was fully impaired in 2019), discretionary spend measures on marketing and events, partially offset by an increase in the provision for credit losses.

2019 Compared to 2018

Sales and operations expenses for 2019 increased \$2.8 million, or 1%, compared to 2018. This increase mainly related to impairment of facilities following our offices right sizing policy implementation (see Note 2), the \$4.8 million impairment loss recognized on Manage customers relationships (see Note 8) and a \$5.0 million increase following an exceptional charge related to an invoicing dispute partially offset by a positive change in provisions for doubtful receivables.

General and Administrative Expenses

	Year Ended December 31,			% change	
	2020	2019	2018	2020 vs 2019	2019 vs 2018
	(in thousands, except percent of revenue)				
General and administrative expenses	\$ (116,395)	\$ (139,754)	\$ (135,159)	(17)%	3%
% of revenue	(6)%	(6)%	(6)%		

2020 Compared to 2019

General and administrative expenses for 2020 decreased \$(23.4) million, or (17)%, compared to 2019. This decrease was mostly driven by a decrease in headcount-related costs, a lower share-based compensation expense and a decrease in rent and facilities costs, following the right-sizing of our real estate footprint, partially offset by transformation fees.

2019 Compared to 2018

General and administrative expenses for 2019 increased \$4.6 million, or 3%, compared to 2018. This increase was mostly driven by an increase in consulting fees for process optimization projects and the proceeds from the disposal of the HookLogic travel business in March 31, 2018.

Financial Expense

	Year Ended December 31,			% change	
	2020	2019	2018	2020 vs 2019	2019 vs 2018
	(in thousands, except percent of revenue)				
Financial expense	\$ (1,939)	\$ (5,749)	\$ (5,084)	(66)%	13%
% of revenue	(0.1)%	(0.3)%	(0.2)%		

2020 Compared to 2019

Financial expense for 2020 decreased by \$(3.8) million, or (66)% compared to 2019. The \$1.9 million financial expense for the period ended December 31, 2020 was mainly driven by the financial expense relating to the €140 million drawing from May 2020 to November 2020 as part of our available Revolving Credit Facility (RCF) financing, the up-front fees amortization, and the non-utilization costs, partially offset by income from invested cash & cash equivalents. At December 31, 2020, our exposure to foreign currency risk was centralized at Criteo S.A. and hedged using foreign currency swaps or forward purchases or sales of foreign currencies.

2019 Compared to 2018

Financial expense for 2019 increased by \$0.7 million, or 13% compared to 2018. The \$5.7 million financial expense for the period ended December 31, 2019 was mainly driven by the non-utilization costs and up-front fees amortization incurred as part of our available RCF financing and the recognition of a negative impact of foreign exchange revaluations net of related hedging. At December 31, 2019, our exposure to foreign currency risk was centralized at Criteo S.A. and hedged using foreign currency swaps or forward purchases or sales of foreign currencies.

Provision for Income Taxes

	Year Ended December 31,			% change	
	2020	2019	2018	2020 vs 2019	2019 vs 2018
	(in thousands, except percent information)				
Provision for income taxes	\$ (32,197)	\$ (39,496)	\$ (46,144)	(18)%	(14)%
% of revenue	(2)%	(2)%	(2)%		
Effective tax rate	30.1 %	29.2 %	32.5 %		

2020 Compared to 2019

The provision for income taxes for 2020 decreased by \$(7.3) million, or 18%, compared to 2019. The annual effective tax rate for 2020 was 30.1%, compared to an annual effective tax rate of 29.2% for 2019. The annual effective tax rates differs from the statutory rates primarily due to the impact of the domestic tax deduction applicable to technology royalty income we received from our subsidiaries, differences in tax rates in foreign jurisdictions, tax loss carryforwards in certain foreign subsidiaries, non-recognition of deferred tax assets related to tax losses and temporary differences, recognition of previously unrecognized tax losses and equity awards compensation expense.

In 2020, our income before taxes decreased by \$28.6 million to \$106.9 million, compared to 2019, generating a \$34.2 million theoretical income tax expense at a nominal standard French tax rate of 32.02%. This theoretical tax expense is impacted primarily by the following items contributing to a \$32.2 million effective tax expense and a 30.1% effective tax rate: \$11.6 million of net effect of share-based compensation, \$6.0 million of deferred tax assets on which we recognized a valuation allowance, \$13.4 million resulting from the BEAT waiver election, \$3.5 million related to the French business tax, Cotisation sur la Valeur Ajoutée des Entreprises, or "CVAE", offset by a \$13.4 million tax deduction resulting from technology royalty income we received from our subsidiaries, \$5.3 million Research and Development tax credit, the recognition or reversal of valuation allowance on deferred tax assets of \$2.5 million and \$9.0 million of permanent differences (mainly based on employee costs, depreciation expenses and intercompany transactions). Please see Note 21 to our audited consolidated financial statements for more detailed information on the provision for income taxes.

Amounts recognized in our Consolidated Financial Statements are calculated at the level of each subsidiary within our Consolidated Financial Statements. As at December 31, 2020, 2019 and 2018, the valuation allowance against net deferred income taxes amounted to \$37.3 million, \$25.3 million and \$43.2 million, which related mainly to Criteo Corp. (\$13.3 million, \$12.8 million and \$18.6 million, respectively), Criteo do Brasil (\$2.8 million, \$3.2 million and \$3.6 million, respectively), Criteo Ltd (\$7.4 million, \$7.5 million and \$7.2 million, respectively), Criteo China (\$3.3 million, \$3.3 million and \$3.5 million, respectively), Criteo Singapore (\$3.3 million, \$3.6 million and \$2.9 million), Criteo Pty (\$2.8 million, \$2.6 million and \$2.5 million) and Criteo France (\$1.0 million, \$(7.7) million and \$3.9 million, respectively).

2019 Compared to 2018

The provision for income taxes for 2019 decreased by \$(6.6) million, or 14%, compared to 2018. The annual effective tax rate for 2019 was 29.2%, compared to an annual effective tax rate of 32.5% for 2018. The annual effective tax rates differ from statutory rates primarily due to the impact of the domestic tax deduction applicable to technology royalty income we received from our subsidiaries, differences in tax rates in foreign jurisdictions, tax loss carryforwards in certain of our foreign subsidiaries, non-recognition of deferred tax assets related to tax losses and temporary differences, recognition of previously unrecognized tax losses and equity awards compensation expense.

In 2019, our income before taxes decreased by \$(6.6) million to \$135.5 million, compared to 2018, generating a \$46.6 million theoretical income tax expense at a nominal standard French tax rate of 34.43%. This theoretical tax expense is impacted primarily by the following items contributing to a \$39.5 million effective tax expense and a 29.2% effective tax rate: \$13.4 million of net effect of share-based compensation, \$2.7 million of deferred tax assets on which we recognized a valuation allowance, \$16.0 million resulting from the BEAT waiver election issued by the United States Treasury and IRS in December 2019, \$7.7 million of permanent differences (mainly based on employee costs, depreciation expenses and intercompany transactions), \$3.6 million related to the French business tax Cotisation sur la Valeur Ajoutée des Entreprises, or "CVAE", offset by a \$15.9 million tax deduction resulting from technology royalty income we received from our subsidiaries, \$10.9 million Research and Development tax credit and the recognition or reversal of valuation allowance on deferred tax assets for \$20.6 million (mainly for Criteo Corp). Please see Note 21 to our audited consolidated financial statements for more detailed information on the provision for income taxes.

Amounts recognized in our consolidated financial statements are calculated at the level of each subsidiary within our consolidated financial statements. As at December 31, 2019, the valuation allowance against deferred tax assets amounted to \$25.3 million. It mainly related to Criteo Corp. (\$12.8 million), Criteo Ltd (\$7.5 million), Criteo China (\$3.3 million), Criteo Brazil (\$3.2 million), and Criteo France (\$7.7 million).

Net Income

	Year Ended December 31,			% change	
	2020	2019	2018	2020 vs 2019	2019 vs 2018
	(in thousands, except percent of revenue)				
Net income	\$ 74,689	\$ 95,969	\$ 95,879	(22)%	0.1%
% of revenue	4 %	4 %	4 %		

2020 Compared to 2019

Net income for 2020 decreased \$(21.3) million, or (22)% compared to 2019. This decrease was the result of the factors discussed above, in particular a \$(32.4) million decrease in income from operations, a \$3.8 million decrease in financial expense and a \$7.3 million decrease in the provision for income taxes compared to 2019.

2019 Compared to 2018

Net income for 2019 increased \$0.1 million, or 0.1% compared to 2018. This increase was the result of the factors discussed above, in particular a \$(5.9) million decrease in income from operations, a \$(0.7) million increase in financial expense offset by a \$6.7 million decrease in provision for income taxes compared to 2018.

Unaudited Quarterly Results of Operations

The following tables set forth our unaudited consolidated statement of income data for the last eight quarters, as well as the percentage of revenue for each line item shown. We derived this information from our unaudited interim consolidated financial information, which, in the opinion of management, includes all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of the information for the quarters presented. The quarterly results of operations have been prepared by, and are the responsibility of, our management and have not been audited or reviewed by our independent registered public accounting firm. You should read this information together with our audited consolidated financial statements and related notes beginning on page F-1.

	Three Months Ended							
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	(in thousands)							
Consolidated Statements of Income Data:								
Revenue	\$ 661,282	\$ 470,345	\$ 437,614	\$ 503,376	\$ 652,640	\$ 522,606	\$ 528,147	\$ 558,123
Cost of revenue ⁽¹⁾								
Traffic acquisition costs	(408,108)	(284,401)	(257,698)	(297,364)	(386,388)	(301,901)	(304,229)	(322,429)
Other cost of revenue	(34,700)	(34,608)	(33,914)	(33,806)	(31,328)	(31,101)	(29,059)	(26,045)
Gross profit	218,474	151,336	146,002	172,206	234,924	189,604	194,859	209,649
Operating expenses ⁽¹⁾								
Research and development expenses	(32,797)	(30,954)	(31,247)	(37,515)	(40,585)	(41,414)	(44,015)	(46,577)
Sales and operations expenses	(85,871)	(83,659)	(75,781)	(84,974)	(98,080)	(85,985)	(95,503)	(95,909)
General and administrative expenses	(32,623)	(28,672)	(29,185)	(25,915)	(37,382)	(32,835)	(35,767)	(33,770)
Total operating expenses	(151,291)	(143,285)	(136,213)	(148,404)	(176,047)	(160,234)	(175,285)	(176,256)
Income from operations	67,183	8,051	9,789	23,802	58,877	29,370	19,574	33,393
Financial income (expense)	(111)	(491)	(1,003)	(334)	(1,521)	(900)	(1,354)	(1,974)
Income before taxes	67,072	7,560	8,786	23,468	57,356	28,470	18,220	31,419
Provision for income taxes	(20,254)	(2,267)	(2,636)	(7,040)	(15,882)	(7,913)	(5,683)	(10,018)
Net income	\$ 46,818	\$ 5,293	\$ 6,150	\$ 16,428	\$ 41,474	\$ 20,557	\$ 12,537	\$ 21,401
Net income available to shareholders of Criteo S.A.	45,277	5,227	5,716	15,459	42,024	18,778	10,823	19,120
Other Financial Data:								
Revenue ex-TAC ⁽²⁾	\$ 253,174	\$ 185,944	\$ 179,916	\$ 206,012	\$ 266,252	\$ 220,705	\$ 223,918	\$ 235,694
Adjusted EBITDA ⁽³⁾	\$ 103,423	\$ 49,471	\$ 38,911	\$ 59,190	\$ 109,499	\$ 64,219	\$ 56,399	\$ 68,855

⁽¹⁾ Cost of revenue and operating expenses include equity awards compensation expense, pension service costs, depreciation and amortization expense and acquisition-related costs and deferred price consideration as follows:

	Three Months Ended							
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	(in thousands)							
Equity awards compensation expense								
Research and development expenses	2,482	3,333	2,068	2,370	3,578	3,230	4,203	4,025
Sales and operations expenses	3,662	3,190	1,572	3,618	3,009	4,398	5,693	6,201
General and administrative expenses	2,816	280	3,519	2,515	2,502	4,142	4,495	3,656
Total equity awards compensation expense ^(a)	8,960	6,803	7,159	8,503	9,089	11,770	14,391	13,882
Pension service costs								
Research and development expenses	290	286	269	269	188	188	191	193
Sales and operations expenses	103	101	95	95	69	71	71	72
General and administrative expenses	190	185	175	174	126	129	129	129
Total pension service costs	583	572	539	538	383	388	391	394
Depreciation and amortization expense								
Cost of revenue	15,354	14,712	13,098	12,771	12,691	12,193	10,847	9,135
Research and development expenses ^(b)	1,712	1,721	1,658	5,650	5,248	4,249	3,534	3,477
Sales and operations expenses ^(b)	4,033	4,176	4,221	4,340	10,763	4,178	5,109	4,864
General and administrative expenses	1,041	1,143	1,231	1,377	1,787	1,768	1,825	1,820
Total depreciation and amortization expense	22,140	21,752	20,208	24,138	30,489	22,388	21,315	19,296
Acquisition-related costs								
General and administrative expenses	174	112	—	—	—	—	—	—
Total acquisition-related costs	174	112	—	—	—	—	—	—
Restructuring related and transformation costs								
Cost of revenue	—	—	—	—	—	—	—	—
Research and development expenses	747	1,985	513	995	1,704	172	124	—
Sales and operations expenses	2,605	5,357	415	1,021	6,614	131	175	1,890
General and administrative expenses	1,031	4,839	288	193	2,343	—	429	—
Total restructuring related and transformation costs	\$ 4,383	\$ 12,181	\$ 1,216	\$ 2,209	\$ 10,661	\$ 303	\$ 728	\$ 1,890

^(a) Excludes \$(2.7) million, \$(4.8) million and \$(0.5) million disclosed as restructuring costs as of December 31, 2020, 2019 and 2018, respectively.

^(b) For the Three Months Ended December 31, 2019 the Company recognized accelerated amortization for Manage technology due to a revised useful life (\$4.0 million in Research and development) and an impairment loss for Manage customers relationships (\$6.9 million in Sales and operations).

^(c) For the Three Months Ended December 31, 2020 and 2019 the Company recognized restructuring charges for its new organizational structure implemented to support its multi-product platform strategy and office right sizing policy detailed below:

**Three Months Ended
December 31,**

	2020	2019
(Gain) from forfeitures of share-based compensation awards	(2,655)	(4,849)
Depreciation and amortization expense	—	(67)
Facilities and impairment related costs	4,158	9,432
Payroll related costs	1,422	6,145
Consulting costs related to transformation	1,458	—
Total restructuring related and transformation costs	\$ 4,383	\$ 10,661

⁽²⁾ We define Revenue ex-TAC as our revenue excluding traffic acquisition costs generated over the applicable measurement period. Revenue ex-TAC is not a measure calculated in accordance with U.S. GAAP. Please see footnote 3 to the "Other Financial and Operating Data" table in "Item 6. Selected Financial Data" in this Form 10-K for more information. Below is a reconciliation of Revenue ex-TAC to revenue, the most directly comparable financial measure calculated and presented in accordance with U.S. GAAP.

	Three Months Ended							
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	(in thousands)							
Reconciliation of Revenue ex-TAC to Revenue:								
Revenue	\$ 661,282	\$ 470,345	\$ 437,614	\$ 503,376	\$ 652,640	\$ 522,606	\$ 528,147	\$ 558,123
Adjustment:								
Traffic acquisition costs	(408,108)	(284,401)	(257,698)	(297,364)	(386,388)	(301,901)	(304,229)	(322,429)
Revenue ex-TAC	\$ 253,174	\$ 185,944	\$ 179,916	\$ 206,012	\$ 266,252	\$ 220,705	\$ 223,918	\$ 235,694

⁽³⁾ We define Adjusted EBITDA as our consolidated earnings before financial income (expense), income taxes, depreciation and amortization, adjusted to eliminate the impact of equity awards compensation expense, pension service costs, restructuring related and transformation costs, acquisition-related costs and deferred price consideration. Adjusted EBITDA is not a measure calculated in accordance with U.S. GAAP. Please see footnote 5 to the "Other Financial and Operating Data" table in "Item 6. Selected Financial Data" in this Form 10-K for more information. Below is a reconciliation of Adjusted EBITDA to net income, the most directly comparable financial measure calculated and presented in accordance with U.S. GAAP.

	Three Months Ended							
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	(in thousands)							
Reconciliation of Adjusted EBITDA to Net Income:								
Net Income	\$ 46,818	\$ 5,293	\$ 6,150	\$ 16,428	\$ 41,474	\$ 20,557	\$ 12,537	\$ 21,401
Adjustments:								
Financial (income) expense	111	491	1,003	334	1,521	900	1,354	1,974
Provision for income taxes	20,254	2,267	2,636	7,040	15,882	7,913	5,683	10,018
Equity awards compensation expense ^(a)	8,960	6,803	7,159	8,503	9,089	11,770	14,391	13,882
Pension service costs	583	572	539	538	383	388	391	394
Depreciation and amortization expense ^(b)	22,140	21,752	20,208	24,138	30,489	22,388	21,315	19,296
Acquisition-related costs	174	112	—	—	—	—	—	—
Restructuring costs ^(c)	4,383	12,181	1,216	2,209	10,661	303	728	1,890
Total net adjustments	56,605	44,178	32,761	42,762	68,025	43,662	43,862	47,454
Adjusted EBITDA	\$ 103,423	\$ 49,471	\$ 38,911	\$ 59,190	\$ 109,499	\$ 64,219	\$ 56,399	\$ 68,855

^(a) Excludes \$(2.7) million, \$(4.8) million and \$(0.5) million disclosed as restructuring costs as of December 31, 2020, 2019 and 2018, respectively.

^(b) For the Three Months Ended December 31, 2019, respectively the Company recognized accelerated amortization for Manage technology due to a revised useful life (\$2.2 million in Research and development) and an impairment loss for Manage customers relationships (\$4.6 million in Sales and operations).

^(c) For the Three Months Ended December 31, 2020 and 2019, respectively the Company recognized restructuring charges for its new organizational structure implemented to support its multi-product platform strategy and office right sizing policy as detailed below:

	Three Months Ended December 31,	
	2020	2019
(Gain) from forfeitures of share-based compensation awards	(2,655)	(4,849)
Depreciation and amortization expense	—	(67)
Facilities and impairment related costs	4,158	9,432
Payroll related costs	1,422	6,145
Consulting costs related to transformation	1,458	—
Total restructuring related and transformation costs	\$ 4,383	\$ 10,661

	Three Months Ended							
	December 31, 2020	September 30, 2020	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019
	(as a percentage of revenue)							
Statements of Operations Data:								
Revenue	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Cost of revenue								
Traffic acquisition costs	(61.7)	(60.5)	(58.9)	(59.1)	(59.2)	(57.8)	(57.6)	(57.8)
Other cost of revenue	(5.2)	(7.4)	(7.7)	(6.7)	(4.8)	(6.0)	(5.5)	(4.7)
Gross profit	33.0	32.2	33.4	34.2	36.0	36.3	36.9	37.6
Operating expenses:								
Research and development expenses	(5.0)	(6.6)	(7.1)	(7.5)	(6.2)	(7.9)	(8.3)	(8.3)
Sales and operations expenses	(13.0)	(17.8)	(17.3)	(16.9)	(15.0)	(16.5)	(18.1)	(17.2)
General and administrative expenses	(4.9)	(6.1)	(6.7)	(5.1)	(5.7)	(6.3)	(6.8)	(6.1)
Total operating expenses	(22.9)	(30.5)	(31.1)	(29.5)	(27.0)	(30.7)	(33.2)	(31.6)
Income from operations	10.2	1.7	2.2	4.7	9.0	5.6	3.7	6.0
Financial income (expense)	—	(0.1)	(0.2)	(0.1)	(0.2)	(0.2)	(0.3)	(0.4)
Income before taxes	10.1	1.6	2.0	4.7	8.8	5.4	3.4	5.6
Provision for income taxes	(3.1)	(0.5)	(0.6)	(1.4)	(2.4)	(1.5)	(1.1)	(1.8)
Net income	7.1 %	1.1 %	1.4 %	3.3 %	6.4 %	3.9 %	2.4 %	3.8 %
Net income available to shareholders of Criteo S.A.	6.8 %	1.1 %	1.3 %	3.1 %	6.4 %	3.6 %	2.0 %	3.4 %
Other Financial Data:								
Revenue ex-TAC	38.3 %	39.5 %	41.1 %	40.9 %	40.8 %	42.2 %	42.4 %	42.2 %
Adjusted EBITDA	15.6 %	10.5 %	8.9 %	11.8 %	16.8 %	12.3 %	10.7 %	12.3 %

B. Liquidity and Capital Resources.

Market Risk

We are mainly exposed to changes of foreign currency exchange rate fluctuations.

The functional currency of the Company is the euro, while our reporting currency is the U.S. dollar. Because we incur some of our expenses and derive revenues in currencies other than the euro, we are exposed to foreign currency exchange risk as our results of operations and cash flows are subject to fluctuations in foreign currency exchange rates. Foreign exchange risk exposure also arises from intra-company transactions and financing with subsidiaries that have a functional currency different than the euro. The statements of financial position of consolidated entities having a functional currency different from the U.S. dollar are translated into U.S. dollars at the closing exchange rate (spot exchange rate at the statement of financial position date) and the statement of income, statement of comprehensive income and statement of cash flow of such consolidated entities are translated at the average period to date exchange rate. The resulting translation adjustments are included in equity under the caption "Accumulated Other Comprehensive Income" in the Consolidated Statement of Changes in Equity.

The \$1.9 million financial expense for the period ended December 31, 2020 was mainly driven by the financial expense relating to the €140 million drawdown from May 2020 to November 2020 as part of our available Revolving Credit Facility (RCF) financing, the up-front fees amortization, and the non-utilization costs, partially offset by income from invested cash & cash equivalents.

The \$5.7 million financial expense for the period ended December 31, 2019 was mainly driven by the non-utilization costs and upfront fees amortization incurred as part of our available RCF financing and the recognition of a negative impact of foreign exchange revaluations net of related hedging.

The \$5.1 million financial expense for the period ended December 31, 2018 was mainly driven by the non-utilization costs and upfront fees amortization incurred as part of our available RCF financing. The intra-group position between Criteo S.A. and its U.S. subsidiary in the context of the funding of the HookLogic acquisition is qualified as a net investment in a foreign operation from February 2018 and no longer requires hedging, resulting in reduced costs compared to the same period ended December 31, 2017.

Since 2013, the Company has had a foreign currency risk management policy in place. At December 31, 2020, our exposure to foreign currency risk was centralized at Criteo S.A. and hedged using foreign currency swaps or forward purchases or sales of foreign currencies.

Foreign Currency Risk

A 10% increase or decrease of the British pound, the euro, the Japanese yen or the Brazilian real against the U.S. dollar would have impacted the Consolidated Statements of Income including non-controlling interests as follows:

	Year Ended December 31,					
	2020		2019		2018	
	(in thousands)					
GBP/USD	+10%	-10%	+10%	-10%	+10%	-10%
Net income impact	\$ 116	\$ (116)	\$ (386)	\$ 386	\$ (785)	\$ 785

	Year Ended December 31,					
	2020		2019		2018	
	(in thousands)					
BRL/USD	+10%	-10%	+10%	-10%	+10%	-10%
Net income impact	\$ (41)	\$ 41	\$ (71)	\$ 71	\$ (645)	\$ 645

	Year Ended December 31,					
	2020		2019		2018	
	(in thousands)					
JPY/USD	+10%	-10%	+10%	-10%	+10%	-10%
Net income impact	\$ 614	\$ (614)	\$ 1,019	\$ (1,019)	\$ 1,404	\$ (1,404)

	Year Ended December 31,					
	2020		2019		2018	
	(in thousands)					
EUR/USD	+10%	-10%	+10%	-10%	+10%	-10%
Net income impact	\$ 9,360	\$ (9,360)	\$ 10,755	\$ (10,755)	\$ 11,552	\$ (11,552)

Counterparty Risk

As of December 31, 2020, we show a positive net cash position. Since 2012, we utilize a cash pooling arrangement, reinforcing cash management centralization. Investment and financing decisions are carried out by our internal central treasury function. We only deal with counterparties with high credit ratings. In addition, under our Investment and Risk Management Policy, our central treasury function ensures a balanced distribution between counterparties of the investments, no matter the rating of such counterparty.

Liquidity Risk

We are mainly exposed to changes of foreign currency exchange rate fluctuations.

Working Capital

The following table summarizes our cash flows from operations, trade receivables, net of allowances and working capital for the periods indicated:

	Year Ended December 31,	
	2020	2019
Cash flows provided by operating activities	\$185,356	\$222,832
Trade receivables, net of allowances	\$474,055	\$481,732
Working capital (<i>current assets less current liabilities</i>)	\$464,219	\$390,122

In addition, the cash flows were also positively impacted by a \$42.7 million change in foreign exchange rates on our cash position over the period. We do not enter into investments for trading or speculative purposes.

Our policy is to invest any cash in excess of our immediate requirements in investments designed to preserve the principal balance and provide liquidity. Accordingly, our cash and cash equivalents are invested primarily in demand deposit accounts and money market funds that are currently providing only a minimal return.

Sources of Liquidity

Our principal sources of liquidity are our cash and cash equivalents and cash generated from operations. We have never declared or paid any cash dividends on our ordinary shares. We do not anticipate paying cash dividends on our equity securities in the foreseeable future. Since our inception, we raised a total of \$51.1 million aggregate net proceeds from the sale of preferred shares through four private placements. In November 2013, we received aggregate net proceeds before expenses of \$269.0 million from our initial public offering. In March 2014, we received aggregate net proceeds before expenses of \$22.6 million from our secondary equity offering. We also benefited to a much lesser extent from the proceeds of the exercise of share options and warrants and expect to continue to do so in the future, as such securities are exercised by holders. In 2018, we completed an \$80 million share repurchase program. We completed two ADS repurchase programs in 2020: our July 2019 program of up to \$80 million, which was completed in February 2020, and our April 2020 program of up to \$30 million, which was completed in July 2020. Other than these repurchase programs, we intend to retain all available funds and any future earnings to fund our growth.

We are party to a loan agreement and several RCFs with third-party financial institutions. Our loan and RCF agreements as of December 31, 2020 are presented in the table below:

Nature	Nominal/ Authorized amounts (RCF Only)	Amount drawn as of December 31, 2020 (RCF only) (in thousands)	Amount Outstanding as of December 31, 2020	Interest rate	Settlement date
BPI Loan - February 2014	NA	NA	\$ 368.1	Fixed: 2.09%	May 2021
Other BPI Loans	NA	NA	\$ 912.0	0%	2023 and after
Other Loans	NA	NA	\$ 224.8	0%	2024
Bank Syndicate RCF - September 2015	€ 350,000	—	€ —	Floating rate: EURIBOR / LIBOR + margin depending on leverage ratio	March 2022

⁽¹⁾ Subsequent to the settlement date of March 2022, the authorized amount of €350 million is reduced to €294 million through to a new settlement date of March 2023

For additional information regarding our loan and RCF agreements, please refer to Note 12 - Financial Liabilities and Note 23 - Commitments.

All of these loans and RCFs are unsecured and contain customary events of default but do not contain any affirmative, financial or negative covenants, with the exception of the September 2015 RCF which contains covenants, including compliance with a total net debt to Adjusted EBITDA ratio and restrictions on the incurrence of additional indebtedness. At December 31, 2020, we were in compliance with the required leverage ratio.

We are also party to short-term credit lines and overdraft facilities with HSBC Holdings plc, LCL and BNP Paribas. We are authorized to draw up to a maximum of €21.5 million (\$26.4 million) in the aggregate under the short-term credit lines and overdraft facilities. As of December 31, 2020, we had not drawn on either of these facilities. Any loans or overdrafts under these short-term facilities bear interest based on the one month EURIBOR rate or three month EURIBOR rate. As these facilities are exclusively short-term credit and overdraft facilities, our banks have the ability to terminate such facilities on short notice.

Our cash and cash equivalents are invested primarily in demand deposit accounts that are currently providing only a minimal return. Our cash and cash equivalents at December 31, 2020 were held for working capital and general corporate purposes, which could include acquisitions, and amounted to \$488.0 million as of December 31, 2020. The \$69.2 million increase in cash and cash equivalents compared with December 31, 2019 primarily resulted from an increase of \$185.4 million in cash from operating activities partially offset by a decrease of \$(101.1) million in cash used for investing activities and a decrease of \$(57.7) million in cash used for financing activities. In addition, the increase in cash includes a \$42.7 million positive impact due to changes in foreign exchange rates on our cash position over the period. We do not enter into investments for trading or speculative purposes. Our policy is to invest any cash in excess of our immediate requirements in investments designed to preserve the principal balance and provide liquidity. Accordingly, our cash and cash equivalents are invested primarily in demand deposit accounts that are currently providing only a minimal return.

Furthermore, Criteo had financial liquidity of approximately \$960 million, including its cash position, marketable securities and its Revolving Credit Facility as of December 31, 2020. Overall, we believe that our current financial liquidity, combined with our expected cash-flow generation in 2020, enables financial flexibility.

Operating and Capital Expenditure Requirements

In 2020, 2019 and 2018, our actual capital expenditures were \$65.5 million, \$97.9 million and \$125.5 million respectively, primarily related to the acquisition of data center and server equipment, and internal IT systems. We expect our capital expenditures to remain at, or slightly below, 3% of revenue for 2021, as we plan to continue to build and maintain additional data center equipment capacity in all regions and increase our investments supporting our new work from home policy as part of our office right sizing program.

As part of our strategy to build upon our market and technology leadership, in 2016 we acquired all of the outstanding shares of HookLogic for a final purchase price of \$249.0 million financed by (i) a \$75.0 million amount drawn on the General RCF and (ii) a \$175.1 million amount financed by the available cash resources and in 2018 we acquired all of the outstanding shares of Storetail and Manage for \$43.7 million and \$60.0 million respectively, financed by available cash resources.

We believe our existing cash balances will be sufficient to meet our anticipated cash requirements through at least the next 12 months.

Our future working capital requirements will depend on many factors, including the rate of our revenue growth, the amount and timing of our investments in personnel and capital equipment, and the timing and extent of our introduction of new products and product enhancements.

If our cash and cash equivalents balances and cash flows from operating activities are insufficient to satisfy our liquidity requirements, we may need to raise additional funds through equity, equity-linked or debt financings to support our operations, and such financings may not be available to us on acceptable terms, or at all. We may also need to raise additional funds in the event we determine in the future to effect one or more acquisitions of businesses, technologies, assets or products.

If we are unable to raise additional funds when needed, our operations and ability to execute our business strategy could be adversely affected. If we raise additional funds through the incurrence of indebtedness, such indebtedness would have rights that are senior to holders of our equity securities and could contain covenants that restrict our operations. Any additional equity financing will be dilutive to our shareholders.

Historical Cash Flows

The following table sets forth our cash flows for 2020, 2019 and 2018 :

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Cash flows provided by operating activities	\$ 185,356	\$ 222,832	\$ 260,726
Cash used in investing activities	(101,093)	(103,888)	(226,717)
Cash used for financing activities	\$ (57,747)	\$ (59,111)	\$ (62,676)

Our cash and cash equivalents at December 31, 2020 were held for working capital and general corporate purposes, which could include acquisitions. The increase in cash and cash equivalents compared with December 31, 2019, primarily resulted from an increase of \$185.4 million in cash flows from operating activities partially offset by a decrease of \$(101.1) million in cash flows used for investing activities and a decrease of \$(57.7) million in cash flows used for financing activities.

Operating Activities

Cash provided by operating activities is primarily impacted by the increase in the number of clients using our solution and by the amount of cash we invest in personnel to support the anticipated growth of our business. Cash provided by operating activities has typically been generated from net income and by changes in our operating assets and liabilities, particularly in the areas of accounts receivable and accounts payable and accrued expenses, adjusted for certain non-cash and non-operating expense items such as depreciation, amortization, equity awards compensation, deferred tax assets and income taxes.

In 2020, net cash flows provided by operating activities were \$185.4 million and consisted of net income of \$74.7 million, \$154.6 million in adjustments for non-cash and non-operating items and \$(44.0) million of cash flows from working capital. Adjustments for non-cash and non-operating items primarily consisted of depreciation and amortization expense of \$106.6 million, equity awards compensation expense of \$28.8 million, changes in deferred tax assets of \$3.7 million, \$2.7 million generated on disposal of non-current assets, \$1.9 million from other non-operating items, and by \$10.9 million of accrued income taxes net of income tax paid.

The \$(44.0) million decrease in cash resulting from changes in working capital primarily consisted of a \$(33.3) million decrease in accounts payable, a \$(5.8) million decrease due to changes in operating lease liabilities and right of use assets, a \$(7.2) million increase in other current assets (including prepaid expenses and VAT receivables) and a \$(4.0) million increase in accounts receivable partially offset by a \$6.3 million increase in accrued expenses such as payroll and payroll related expenses and VAT payables.

In 2019, net cash flows provided by operating activities were \$222.8 million and consisted of net income of \$96.0 million, \$126.3 million in adjustments for non-cash and non-operating items and \$0.6 million of cash flows from working capital. Adjustments for non-cash and non-operating items primarily consisted of depreciation and amortization expense of \$97.1 million, equity awards compensation expense of \$41.0 million, \$15.4 million of changes in deferred tax assets and \$0.8 million of changes in other items, partially offset by \$28.0 million of accrued income taxes net of income tax paid. The \$0.6 million increase in cash resulting from changes in working capital primarily consisted of a \$11.4 million increase in accrued expenses such as payroll and payroll related expenses and VAT payables, a \$7.6 million decrease in other current assets (including prepaid expenses and VAT receivables) and a \$0.9 million decrease in accounts receivable partially offset by a \$14.1 million decrease in accounts payable and a \$5.2 million decrease due to changes in operating lease liabilities and right of use assets.

In 2018, net cash flows provided by operating activities were \$260.7 million and consisted of net income of \$95.9 million, \$154.4 million in adjustments for non-cash and non-operating items and by \$10.4 million of cash flows from working capital. Adjustments for non-cash and non-operating items primarily consisted of depreciation and amortization expense of \$111.8 million, equity awards compensation expense of \$66.6 million, partially offset by \$12.7 million of accrued income taxes net of income tax paid, \$8.2 million of changes in deferred tax assets and other items for \$3.1 million including \$2.3 million reclassification of the cash impact of the settlement of hedging derivatives to financing activities. The \$10.4 million increase in cash resulting from changes in working capital primarily consisted of \$1.4 million decrease in accounts receivable, a \$4.0 million decrease in other current assets (including prepaid expenses and VAT receivables) and a \$9.0 million increase in accounts payable partially offset by a \$4.0 million decrease in accrued expenses such as payroll and payroll related expenses and VAT payables.

Investing Activities

Our investing activities to date have consisted primarily of purchases of servers and other data-center equipment and business acquisitions.

In 2020, net cash flows used in investing activities were \$101.1 million and consisted of \$65.5 million for purchases of servers and other data-center equipment, \$1.2 million for business acquisitions and \$34.4 million change in other non-current financial assets resulting from investments in Marketable Securities (see Note 2 and 3).

In 2019, net cash flows used in investing activities were \$103.9 million and consisted of \$97.9 million for purchases of servers and other data-center equipment, \$4.6 million for business acquisitions and \$1.2 million in other financial liabilities.

In 2018, net cash flows used in investing activities were \$226.7 million and consisted of \$125.5 million for purchases of property and equipment, and by \$101.2 million related to the Storetail and Manage acquisitions and disposal of a business.

Financing Activities

In 2020, net cash used in financing activities was \$57.7 million mainly resulting from the \$10.9 million impact of the €140 million drawing from May 2020 to November 2020 as part of our available Revolving Credit Facility (RCF) and the \$43.7 million impact from our share repurchase program.

In 2019, net cash used in financing activities was \$59.1 million resulting from \$58.6 million relating to the share repurchase program, \$1.2 million of changes in other financial liabilities and \$1.0 million for the repayment of borrowings, partially offset by \$1.7 million related to proceeds from capital increase.

In 2018, net cash used in financing activities was \$62.7 million resulting from \$1.5 million from proceeds of share option exercises and \$16.8 million of changes in other financial liabilities relating to the cash impact of the settlement of hedging derivatives, offset by \$80.0 million relating to the share repurchase program and by \$1.0 million for the repayment of borrowings.

C. Research and Development, Patents and Licenses, etc.

We invest substantial resources in research and development to enhance our solution and technology infrastructure, develop new features, conduct quality assurance testing and improve our core technology. Our engineering group is primarily located in research and development centers in Paris, Grenoble, France and Ann Arbor, Michigan. We expect to continue to expand the capabilities of our technology in the future and to invest significantly in continued research and development efforts. We had 624 employees primarily engaged in research and development at December 31, 2020. Research and development expense totaled \$132.5 million, \$172.6 million and \$179.3 million for 2020, 2019 and 2018, respectively.

D. Trend Information.

Key Metrics

We review three key metrics to help us monitor the performance of our business and to identify trends affecting our business. These key metrics include number of clients, Revenue ex-TAC, and Adjusted EBITDA. We believe these metrics are useful to understanding the underlying trends in our business. The following table summarizes our key metrics for 2020, 2019 and 2018.

	Year Ended December 31,		
	2020	2019	2018
	(in thousands, except number of clients)		
Number of clients	21,460	20,247	19,419
Revenue ex-TAC	\$ 825,046	\$ 946,569	\$ 965,980
Adjusted EBITDA	\$ 250,995	\$ 298,972	\$ 321,059

Number of Clients

We define a client to be a unique party from whom we have received a signed contract or an insertion order and for whom we have delivered an advertisement or monetized an advertising inventory during the previous 12 months. We believe this criteria best identifies clients who actively use our set of solutions. We count specific brands or divisions within the same business as distinct clients so long as those entities have separately signed insertion orders with us. In the case of some solutions within Criteo Retail Media, we count the parent company of the brands as an individual client, even if several distinct brands pertaining to the same parent company have signed separate contracts or insertion orders with us. On the other hand, we count a client who runs campaigns in multiple geographies as a single client, even though multiple insertion orders may be involved. When the insertion order is with an advertising agency, we generally consider the client on whose behalf the advertising campaign is conducted as the "client" for purposes of this calculation. In the event a client has its advertising spend with us managed by multiple agencies, that client is counted as a single client.

We believe that our ability to increase the number of clients is an important indicator of our ability to grow revenue over time. While our client count has increased over time, this metric can also fluctuate from quarter to quarter due to the seasonal trends in advertising spend of clients and the timing and amount of revenue contribution from new clients. In addition, over time we have added an increasing number of midmarket clients that generate a lower revenue per client than large clients on average, and may continue to add a significant number of midmarket clients in the future. Therefore, there is not necessarily a direct correlation between a change in clients in a particular period and an increase or decrease in our revenue over that same period.

Revenue ex-TAC

We consider Revenue ex-TAC as a key measure of our business activity. Our traffic acquisition costs primarily consist of purchases of impressions from publishers on a CPM basis.

Our management views our Revenue ex-TAC as a key measure to evaluate, plan and make decisions on our business activities and sales performance. In particular, we believe that the elimination of TAC from revenue can provide a useful measure for period-to-period comparisons of our business. Accordingly, we believe that Revenue ex-TAC provides useful information to investors and others in understanding and evaluating our results of operations in the same manner as our management and board of directors. Revenue ex-TAC is not a measure calculated in accordance with U.S. GAAP. Please see footnote 3 to the "Other Financial and Operating Data" table in "Item 6. Selected Financial Data" in this Form 10-K for a discussion of the limitations of Revenue ex-TAC and a reconciliation of Revenue ex-TAC to revenue, the most comparable U.S. GAAP measure, for 2016, 2017, 2018, 2019 and 2020.

Adjusted EBITDA

Adjusted EBITDA represents our consolidated earnings before financial income (expense), income taxes, depreciation and amortization, adjusted to eliminate the impact of equity awards compensation expense, pension service costs, restructuring related and transformation costs, acquisition-related costs and deferred price consideration. Adjusted EBITDA is a key measure used by management to evaluate operating performance, generate future operating plans and make strategic decisions regarding the allocation of capital. In particular, we believe that the elimination of equity awards compensation expense, pension service costs, restructuring related and transformation costs, acquisition-related costs and deferred price consideration in calculating Adjusted EBITDA can provide a useful measure for period-to-period comparisons of our business.

Accordingly, we believe that Adjusted EBITDA provides useful information to investors and others in understanding and evaluating our results of operations in the same manner as our management and board of directors. Adjusted EBITDA is not a measure calculated in accordance with U.S. GAAP. Please see footnote 5 to the "Other Financial and Operating Data" table in "Item 6. Selected Financial Data" in this Form 10-K for a discussion of the limitations of Adjusted EBITDA and a reconciliation of Adjusted EBITDA to net income, the most comparable U.S. GAAP measure, for 2016, 2017, 2018, 2019 and 2020.

Highlights and Trends

Revenue

We believe the expansion of our business with existing clients as well as the addition of new clients have both been significant drivers of our historical growth. We believe significant opportunities exist for us to continue to expand our business going forward. Specifically, as part of our Commerce Media Platform strategy, we believe that we can further strengthen our core business, continue to expand our product portfolio, explore strategic game changers for our business and drive further technology innovation and operational excellence to further expand our business over time. However, due to external challenges and other factors, we may not be able to maintain our historical growth rates in the future.

Revenue ex-TAC

We are focused on maximizing our Revenue ex-TAC on an absolute basis. We believe this focus builds sustainable long-term value for our business by fortifying a number of our competitive strengths, including access to digital advertising inventory, breadth and depth of data and continuous improvement of the Criteo AI Engine's performance, allowing us to deliver more relevant advertisements at scale. As part of this focus we are continuing to invest in building preferred relationships with direct publishers, including with ecommerce retailers, and increasing access to leading advertising exchanges, which includes purchasing advertising inventory that may have lower margins on an individual impression basis, but generates incremental Revenue ex-TAC. We believe this strategy maximizes the growth of our Revenue ex-TAC on an absolute basis and strengthens our market position. As a result, we expect our traffic acquisition costs to continue to increase on an absolute basis as we continue to grow our revenue. However, our traffic acquisition costs might also increase as a percentage of revenue as we continue to invest in building liquidity and long-term value for clients and publishers over optimizing near-term gross margins, and as our product mix continues to evolve towards a growing share of new solutions, some of which might involve a higher level of traffic acquisition costs as a percentage of revenue relative to our historical trends.

Adjusted EBITDA

Our Adjusted EBITDA for 2020 was \$ 251.0 million, a (16)% decrease over 2019. Our decrease in Adjusted EBITDA for 2020 compared to 2019 was primarily the result of the (13)% decrease in Revenue ex-TAC over the period, partly offset by the decrease in our Non-GAAP operating expenses. In the short-term, we expect to continue to have a disciplined management of our expense base across the company and to drive efficiency through more automation and operational excellence across the organization, in order to self-fund investments in the strategic growth areas of our business, such as Retail Media, our first-party media network, Contextual advertising, video, Connected TV and Commerce Insights. For 2021, we anticipate an approximately flat Adjusted EBITDA margin as a percentage of Revenue ex-TAC compared to 2020. Over time, we expect to continue to invest in the growth areas of our business and to maintain a healthy profitability as our revenue returns to sustainable growth and as we benefit from operating leverage and continued discipline in our expense management. Adjusted EBITDA is not a measure calculated in accordance with U.S. GAAP. Please see footnote 5 to the "Other Financial and Operating Data" table in "Item 6. Selected Financial Data" in this Form 10-K for a discussion of the limitations of Adjusted EBITDA and a reconciliation of Adjusted EBITDA to net income, the most comparable U.S. GAAP measure.

Number of Clients

Since our inception, we have significantly grown the number of clients with which we do business. Our base of clients increased to more than 21,000 at December 31, 2020, a 4% increase over December 31, 2019. This growth in our number of clients has been driven by a number of factors, including our global footprint and our commercial expansion in existing markets, our continued development of large clients in the Retail vertical, especially in ecommerce, our expansion of midmarket clients and our penetration into the consumer brand vertical through some of our Criteo Retail Media offerings. We believe that our ability to increase our number of clients is a leading indicator of our ability to grow revenue over time. We expect to continue to focus our attention and investment on further growing our client base across all regions, client categories and verticals, with continued strong focus on ecommerce. While we intend to grow our client base across all categories, we expect midmarket customers to continue to increase their contribution in the mix of our total revenue.

Client Retention

We believe our ability to retain and grow revenue from our existing clients is a useful indicator of the stability of our revenue base and the long-term value of our client relationships. Our offering, the Criteo Commerce Media Platform, is powered by AI technology and aims to cover the entire marketing funnel (Awareness, Audience Targeting, Conversion). Our technology is optimized to drive impactful business outcomes from marketing and monetization for retailers and brands. We measure our client satisfaction through our ability to retain them and the revenue they generate quarter after quarter. We define client retention rate as the percentage of live clients during the previous quarter that continued to be live clients during the current quarter. This metric is calculated on a quarterly basis, and for annual periods, we use an average of the quarterly metrics. We define a live client as a client whose advertising campaign has or had been generating Revenue ex-TAC for us on any day over the relevant measurement period. In each of 2020, 2019 and 2018, our client retention rate was approximately 90%. We define our revenue retention rate with respect to a given 12-month period as (1) revenue recognized during such period from clients that contributed to revenue recognized in the prior 12-month period divided by (2) total revenue recognized in such prior 12-month period. Our revenue retention rate was 92%, 94%¹ and 101%¹ for the years ended December 31, 2020, 2019 and 2018, respectively.

Seasonality

Our client base consists primarily of businesses in the digital Retail, Travel and Classifieds industries, which we define as commerce clients. In the digital Retail industry and the consumer brand verticals in particular, many businesses devote the largest portion of their advertising spend to the fourth quarter of the calendar year, to coincide with increased holiday spending by consumers. With respect to Criteo Retail Media, the concentration of advertising spend in the fourth quarter of the calendar year is particularly pronounced. Our Retail clients typically conduct fewer advertising campaigns in the first and second quarters than they do in other quarters, while our Travel clients typically increase their travel campaigns in the first and third quarters and conduct fewer advertising campaigns in the second quarter. As a result, our revenue tends to be seasonal in nature, but the impact of this seasonality has, to date, been partly offset by our significant growth and geographic expansion. If the seasonal fluctuations become more pronounced, our operating cash flows could fluctuate materially from period to period.

¹ Excluding Criteo Retail Media.

E. Off-balance Sheet Arrangements.

We do not have 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. In addition, we do not engage in trading activities involving non-exchange traded contracts. We therefore believe that we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these relationships.

F. Tabular Disclosure of Contractual Obligations.

The following table discloses aggregate information about material contractual obligations and periods in which payments were due as of December 31, 2020. Future events could cause actual payments to differ from these estimates.

	Less than 1 year	1 to 5 years	More than 5 years	Total
	(in thousands of U.S. Dollars)			
Long-term debt	\$ 1,583	\$ 341	\$ —	\$ 1,924
Operating Leases	53,565	82,351	—	135,916
Other financial liabilities	398	45	—	443
Financial derivatives	925	—	—	925
Other purchase obligations	4,780	1,894	—	6,674
Total	<u>\$ 61,251</u>	<u>\$ 84,631</u>	<u>\$ —</u>	<u>\$ 145,882</u>

The commitment amounts in the table above are associated with contracts that are enforceable and legally binding and that specify all significant terms, including interest on long-term debt, fixed or minimum services to be used, fixed, minimum or variable price provisions, the approximate timing of the actions under the contracts and operating leases for offices and data centers. The table does not include obligations under agreements that we can cancel without a significant penalty. Long-term debt includes interest of \$0.1 million. Pension contributions and cash outflows have not been included in the above table as they have been deemed immaterial.

G. Safe Harbor.

This Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act and as defined in the Private Securities Litigation Reform Act of 1995. See "Special Note Regarding Forward-Looking Statements."

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are mainly exposed to changes of foreign currency exchange rate fluctuations.

For a description of our foreign exchange risk and a sensitivity analysis of the impact of foreign currency exchange rates on our net income, please see "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations – B. Liquidity and Capital Resources" in this Form 10-K.

Item 8. Financial Statements and Supplementary Data

The information required by Item 8 is set forth on pages F-1 through F-61 of this Form 10-K.

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

There have been no changes in our independent registered public accounting firm, Deloitte & Associés, or disagreements with our accountants on matters of accounting and financial disclosure.

Item 9A. Controls and Procedures***Evaluation of Disclosure Controls and Procedures***

Criteo carried out an evaluation as of December 31, 2020, under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, of the effectiveness of our disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Disclosure controls and procedures are controls and other procedures designed to reasonably assure that information required to be disclosed in our reports filed or furnished under the Exchange Act, such as this Annual Report on Form 10-K, is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Disclosure controls and procedures are also designed to reasonably assure that this information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, to allow timely decisions regarding required disclosure.

Based on that evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of December 31, 2020, our disclosure controls and procedures were effective to provide reasonable assurance.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rule 13a-15(f) under the Exchange Act. Our management assessed, with the oversight of our board of directors, the effectiveness of our internal control over financial reporting as of December 31, 2020. In making this assessment, our management used the criteria established in the Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, our management has concluded that the Company's internal control over financial reporting was effective as of December 31, 2020. The effectiveness of the Company's internal control over financial reporting as of December 31, 2020 has been audited by Deloitte & Associés, our independent registered public accounting firm, as stated in its attestation report, which appears on page F-2 of this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, that occurred during the quarter ended December 31, 2020, that have materially affected, or that are reasonably likely to materially affect, our internal control over financial reporting.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal controls will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within Criteo have been detected. These inherent limitations include the realities that judgments in decisions making can be faulty and that breakdowns can occur because of simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies and procedures. 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

On February 25, 2021, the board of directors amended and restated the By-laws (*statuts*) of the Company, effective immediately. Article 6 of the By-laws has been amended to provide that, as of the date of the amendment, the Company has a share capital of €1,656,802.65, divided into 66,272,106 shares with a par value of €0.025 each, increased from €1,651,008.05, divided into 66,040,322 shares with a par value of €0.025 each. The foregoing description is qualified in its entirety by the amended By-laws, the English translation of which is attached hereto as Exhibit 3.1 and incorporated herein by reference.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item (other than the information set forth in the next paragraph in this Item 10) will be included in our definitive proxy statement with respect to our 2021 Annual Meeting of Shareholders to be filed with the SEC, and is incorporated herein by reference.

We have adopted a Code of Business Conduct and Ethics (the "Code of Conduct") that is applicable to all of our employees, officers and directors, including our chief executive and senior financial officers. The Code of Conduct is available on our website at criteo.investorroom.com under "Governance." The Audit Committee of our board of directors is responsible for overseeing the Code of Conduct and our board of directors is required to approve any waivers of the Code of Conduct for employees, executive officers and directors. We expect that any amendments to the Code of Conduct, or any waivers of its requirements required to be disclosed under the rules of the SEC or Nasdaq will be disclosed on our website.

Item 11. Executive Compensation

The information called for by this item will be included in our definitive proxy statement with respect to our 2021 Annual Meeting of Shareholders to be filed with the SEC, and is incorporated herein by reference.

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

The information called for by this item will be included in our definitive proxy statement with respect to our 2021 Annual Meeting of Shareholders to be filed with the SEC, and is incorporated herein by reference.

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

The information called for by this item will be included in our definitive proxy statement with respect to our 2021 Annual Meeting of Shareholders to be filed with the SEC, and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services

The information called for by this item will be included in our definitive proxy statement with respect to our 2021 Annual Meeting of Shareholders to be filed with the SEC, and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) Financial Statements

The financial statements listed in the accompanying Index to Consolidated Financial Statements on page F-1 are filed as part of this Form 10-K. All schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

(b) Exhibits

Exhibit	Description	Incorporated by Reference			
		Schedule/ Form	File Number	Exhibit	File Date
2.1	Merger Agreement, dated as of October 3, 2016, by and among Criteo Corp., TBL Holdings, Inc., Hooklogic, Inc. and Fortis Advisors LLC	8-K	001-36153	2.1	October 4, 2016
3.1#	By-laws (statuts) (English translation)				
4.1	Form of Deposit Agreement, including the Form of American Depository Receipt	F-1	333-191223	4.1	October 2, 2013
4.2#	Agreement to Furnish Debt Instruments				
4.3	Description of Registrant's Securities	10-K	001-36153	4.3	March 2, 2020
10.1	Commercial Lease between Orosdi and the registrant dated January 20, 2012 (English translation)	F-1	333-191223	10.1	October 2, 2013
10.2	Form of Registration Rights Agreement by and among the registrant and certain investors signatory thereto, dated as of August 30, 2013	F-1	333-191223	10.3	October 23, 2013
10.3†	Non-Compete Agreement between the registrant and each of Messrs. Rudelle, Le Ouay and Niccoli	F-1	333-191223	10.5	October 2, 2013
10.4†	Stock Option Plans—2009, 2010, 2011, 2012, 2013 (including forms of Stock Option Grant Agreement and Exercise Notice)	F-1	333-191223	10.6	October 2, 2013
10.5†	2014 Stock Option Plan (including forms of Stock Option Grant Agreement and Exercise Notice)	S-8	333-197373	99.1	July 11, 2014
10.6†	Amended 2016 Stock Option Plan (including form of Stock Option Grant Agreement and Exercise Notice) (English Translation)	S-8	333-240043	99.1	July 23, 2020
10.7†	Summary of BSA Terms and Conditions	10-K	001-36153	10.7	February 29, 2016
10.8†	Form of BSA Grant Document (English translation)	10-K	001-36153	10.9	March 1, 2017

Exhibit	Description	Incorporated by Reference			
		Schedule/ Form	File Number	Exhibit	File Date
10.9†	Summary of BSPCE Plan	F-1	333-191223	10.8	September 18, 2013
10.10†	Form of BSPCE Grant Document (English translation)	F-1	333-191223	10.11	September 18, 2013
10.11†	Amended and Restated 2015 Performance-Based Free Share Plan (including form of Allocation Letter) (English Translation)	S-8	333-240043	99.2	July 23, 2020
10.12†	Amended and Restated 2015 Time-Based Free Share Plan (including form of Allocation Letter) (English Translation)	S-8	333-240043	99.3	July 23, 2020
10.13†	Criteo Executive Bonus Plan	10-K	001-36153	10.15	February 29, 2016
10.14†	Offer Letter between the Registrant and Sarah Glickman, dated August 27, 2020	8-K	001-36153	10.1	September 3, 2020
10.15	Amendment and Restatement Agreement, dated as of March 29, 2017, by and among the registrant, as borrower, and BNP Paribas, Cr�dit Lyonnais (LCL), HSBC France, Natixis and Soci�t� G�n�rale Corporate & Investment Banking	8-K	001-36153	4.1	March 30, 2017
10.16	Form of Offer to Directors, Officers or Specifically Designated Persons to Subscribe Liability Insurance and Provide Indemnification	10-K	001-36153	10.22	March 1, 2019
10.17†	Management Agreement between the registrant and Megan Clarken, dated October 2, 2019	8-K	001-36153	10.1	October 30, 2019
10.18†	Amendment to Management Agreement between the registrant and Megan Clarken, dated November 22, 2019	10-K	001-36153	10.18	March 2, 2020
10.19†	Employment Agreement between the registrant and Ryan Damon, dated August 1, 2018	10-K	001-36153	10.19	March 2, 2020
10.20	Consulting Agreement between the Company and Dave Anderson, dated May 14, 2020	10-Q	001-36153	10.1	July 31, 2020
10.21#	Amendment to Consulting Agreement between the Company and Dave Anderson, dated November 29, 2020				
21.1#	List of Subsidiaries				
23.1#	Consent of Deloitte & Associ�s				

Exhibit	Description	Incorporated by Reference			
		Schedule/ Form	File Number	Exhibit	File Date
31.1#	Certificate of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				
31.2#	Certificate of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002				
32.1*	Certificate of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002				
101#	The following financial statements from Criteo S.A.'s Annual Report on Form 10-K for the fiscal year ended December 31, 2020, formatted in iXBRL (Inline Extensible Business Reporting Language): (i) the Consolidated Statements of Financial Position, (ii) the Consolidated Statements of Income, (iii) the Consolidated Statements of Comprehensive Income, (iv) the Consolidated Statements of Changes in Shareholders' Equity, (v) the Consolidated Statements of Cash Flows and (vi) Notes to Consolidated Financial Statements				
104	Cover Page Interactive Data File (formatted as iXBRL and contained in Exhibit 101)				

† Indicates management contract or compensatory plan.

Filed herewith.

* Furnished herewith.

Item 16. Form 10-K Summary

Not applicable.

SIGNATURES

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

CRITEO S.A.

February 26, 2021

By: /s/ Megan Clarken
Megan Clarken
Chief Executive Officer

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

Signature	Title	Date
/s/ Megan Clarken Megan Clarken	Chief Executive Officer (Principal Executive Officer)	February 26, 2021
/s/ Sarah Glickman Sarah Glickman	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	February 26, 2021
/s/ Nathalie Balla Nathalie Balla	Director	February 26, 2021
/s/ Marie Lalleman Marie Lalleman	Director	February 26, 2021
/s/ Edmond Mesrobian Edmond Mesrobian	Director	February 26, 2021
/s/ Hubert de Pesquidoux Hubert de Pesquidoux	Director	February 26, 2021
/s/ Rachel Picard Rachel Picard	Director	February 26, 2021
/s/ James Warner James Warner	Director	February 26, 2021

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Criteo S.A.

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial position of Criteo S.A. and subsidiaries (the “Company”) as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 26, 2021, expressed an unqualified opinion on the Company's internal control over financial reporting.

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 this critical audit matter does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue — Refer to Notes 1 and 25 to the financial statements

Critical Audit Matter Description

The Company's revenue consists primarily of selling personalized display advertisements featuring product-level recommendations either directly to clients or to advertising agencies. This is achieved by converting the Company's clients' website visitors into customers, enabling the Company to charge its clients when users engage with an ad the Company delivers, either by clicking on it (cost-per-click basis), or through installing an application by clicking on an ad that the Company delivers (cost-per-install).

Because of the nature of the Company's revenue, which is made up of a significant volume of low-dollar value transactions, sourced from multiple databases and other tools, the Company uses highly automated systems to process and record its revenue transactions.

We identified revenue as a critical audit matter because the Company's systems to process and record its revenue transactions are highly automated and thus required significantly more involvement and effort from our information technology (IT) internal specialist team to identify, test, and evaluate the Company's system, software applications, and automated controls.

How the Critical Audit Matter Was Addressed in the Audit

With the assistance of our IT specialists, our audit procedures related to the Company's system to process and record its revenue transactions included the following:

- Identified the significant applications and systems used to process revenue transactions and tested the general IT controls over each of these applications and systems, including testing of user access controls, change management controls, and IT operations controls.
- Performed testing of system interface controls and automated controls within the relevant revenue solutions, as well as the controls designed to address the occurrence, accuracy and completeness of revenue.
- Tested internal controls within the relevant revenue business process, including those in place to reconcile the various applications to the Company's general ledger.
- Tested the underlying data of the revenue transactions by agreeing the amounts recognized in the financial statements to the source transactional systems and tested the mathematical accuracy of the recorded revenue.

/s/ Deloitte & Associés

Paris-La Défense, France
February 26, 2021

We have served as the Company's auditor since 2011.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of Criteo S.A.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Criteo S.A. and subsidiaries (the “**Company**”) as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2020 of the Company and our report dated February 26, 2021, expressed an unqualified opinion on those financial statements.

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 Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ Deloitte & Associés

Paris-La Défense, France
February 26, 2021

Criteo S.A. and subsidiaries
Consolidated Statements of Financial Position

	Notes	Year Ended December 31,	
		2020	2019
(in thousands)			
Assets			
Current assets:			
Cash and cash equivalents	4	\$ 488,011	\$ 418,763
Trade receivables, net of allowances of \$39.9 million and \$16.1 million as of December 2020 and 2019, respectively.	5	474,055	481,732
Income taxes		11,092	21,817
Other taxes		69,987	60,924
Other current assets	6	21,405	17,225
Total current assets		1,064,550	1,000,461
Property, plant and equipment, net	7	189,505	194,161
Intangible assets, net	8	79,744	86,886
Goodwill	9	325,805	317,100
Right of use asset - operating lease	13	114,012	142,044
Marketable securities		41,809	—
Non-current financial assets	10	18,109	21,747
Deferred tax assets	21	19,876	27,985
Total non current assets		788,860	789,923
Total assets		\$ 1,853,410	\$ 1,790,384
Liabilities and shareholders' equity			
Current liabilities:			
Trade payables		\$ 367,025	\$ 390,277
Contingencies	11	2,250	6,385
Income taxes		2,626	3,422
Financial liabilities - current portion	12	2,889	3,636
Lease liability - operating - current portion	13	48,388	45,853
Other taxes		58,491	50,099
Employee-related payables		85,272	74,781
Other current liabilities	14	33,390	35,886
Total current liabilities		600,331	610,339
Deferred tax liabilities	21	5,297	9,272
Retirement benefit obligation	15	6,167	8,485
Financial liabilities - non current portion	12	386	769
Lease liability - operating - non current portion	13	83,007	117,988
Other non-current liabilities		5,535	5,543
Total non-current liabilities		100,392	142,057
Total liabilities		700,723	752,396
Commitments and contingencies			
Shareholders' equity:			
Common shares, €0.025 per value, 66,272,106 and 66,197,181 shares authorized, issued and outstanding at December 31, 2020 and December 31, 2019, respectively.		2,161	2,158
Treasury stock, 5,632,536 and 3,903,673 shares at cost as of December 31, 2020 and December 31, 2019, respectively.		(85,570)	(74,900)
Additional paid-in capital		693,164	668,389
Accumulated other comprehensive income (loss)		16,028	(40,105)
Retained earnings		491,359	451,725
Equity - attributable to shareholders of Criteo S.A.		1,117,142	1,007,267
Non-controlling interests		35,545	30,721
Total equity		1,152,687	1,037,988
Total equity and liabilities		\$ 1,853,410	\$ 1,790,384

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

Criteo S.A. and subsidiaries
Consolidated Statements of Income

	Notes	Year Ended December 31,		
		2020	2019	2018
(in thousands, except share and per share data)				
Revenue		\$ 2,072,617	\$ 2,261,516	\$ 2,300,314
Cost of revenue				
Traffic acquisition costs	17	(1,247,571)	(1,314,947)	(1,334,334)
Other cost of revenue	17	(137,028)	(117,533)	(131,744)
Gross profit		688,018	829,036	834,236
Operating expenses:				
Research and development expenses	17,18	(132,513)	(172,591)	(179,263)
Sales and operations expenses	17,18	(330,285)	(375,477)	(372,707)
General and administrative expenses	17,18	(116,395)	(139,754)	(135,159)
Total operating expenses		(579,193)	(687,822)	(687,129)
Income from operations		108,825	141,214	147,107
Financial expense	20	(1,939)	(5,749)	(5,084)
Income before taxes		106,886	135,465	142,023
Provision for income taxes	21	(32,197)	(39,496)	(46,144)
Net income		\$ 74,689	\$ 95,969	\$ 95,879
Net income available to shareholders of Criteo S.A.		\$ 71,679	\$ 90,745	\$ 88,644
Net income available to non-controlling interests		\$ 3,010	\$ 5,224	\$ 7,235
Net income allocated to shareholders per share:				
Basic	22	\$ 1.18	\$ 1.41	\$ 1.33
Diluted	22	\$ 1.16	\$ 1.38	\$ 1.31
Weighted average shares outstanding used in computing per share amounts:				
Basic	22	60,876,480	64,305,965	66,456,890
Diluted	22	61,818,593	65,598,588	67,662,904

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

Criteo S.A. and subsidiaries
Consolidated Statements of Comprehensive Income

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Net income	\$ 74,689	\$ 95,969	\$ 95,879
Foreign currency translation differences, net of taxes	53,213	(8,070)	(18,781)
Foreign currency translation differences	53,213	(8,070)	(18,781)
Income tax effect	—	—	—
Actuarial (losses) gains on employee benefits, net of taxes	4,692	(1,211)	916
Actuarial (losses) gains on employee benefits	5,214	(1,373)	1,235
Income tax effect	(522)	162	(319)
Comprehensive income	132,594	86,688	78,014
Attributable to shareholders of Criteo S.A.	130,821	86,353	77,594
Attributable to non-controlling interests	\$ 1,773	\$ 335	\$ 420

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

Criteo S.A. and subsidiaries
Consolidated Statements of Changes in Shareholders' Equity

	Share capital	Treasury stock	Additional paid-in capital	Accumulated other comprehensive (loss) income	Retained earnings	Equity - attributable to shareholders of Criteo S.A.	Non controlling interests	Total equity		
	(Common shares)		(Shares)		(in thousands, except share data)					
Balance at January 1, 2018	66,085,097	2,152	—	—	591,404	(12,241)	300,210	881,525	16,173	897,698
Net income	—	—	—	—	—	—	88,644	88,644	7,235	95,879
Other comprehensive income (loss)	—	—	—	—	—	(18,285)	—	(18,285)	420	(17,865)
Issuance of ordinary shares	1,623,106	4	—	—	2,951	—	—	2,955	—	2,955
Change in treasury stock ⁽¹⁾	—	—	(3,459,119)	(79,159)	—	—	—	(79,159)	—	(79,159)
Shared-based compensation	—	—	—	—	64,725	—	—	64,725	393	65,118
Other changes in equity ⁽²⁾	—	45	—	—	4,201	4	(985)	3,265	—	3,265
Balance at December 31, 2018	67,708,203	2,201	(3,459,119)	(79,159)	663,281	(30,522)	387,869	943,670	24,221	967,891
Net income	—	—	—	—	—	—	90,745	90,745	5,224	95,969
Other comprehensive income (loss)	—	—	—	—	—	(9,617)	—	(9,617)	335	(9,282)
Issuance of ordinary shares	83,266	2	—	—	1,829	—	—	1,831	—	1,831
Change in treasury stock ⁽¹⁾	(1,594,288)	(45)	(444,554)	4,259	(36,091)	(296)	(26,710)	(58,883)	—	(58,883)
Shared-based compensation	—	—	—	—	39,399	—	—	39,399	214	39,613
Other changes in equity	—	—	—	—	(29)	330	(179)	122	727	849
Balance at December 31, 2019	66,197,181	\$ 2,158	(3,903,673)	\$ (74,900)	\$ 668,389	\$ (40,105)	\$ 451,725	\$ 1,007,267	\$ 30,721	\$ 1,037,988
Net income	—	—	—	—	—	—	71,679	71,679	3,010	74,689
Other comprehensive income (loss)	—	—	—	—	—	56,133	—	56,133	1,773	57,906
Issuance of ordinary shares	231,784	8	—	—	1,928	—	—	1,936	—	1,936
Change in treasury stock ⁽¹⁾	—	—	(1,728,863)	(14,570)	—	—	(29,017)	(43,587)	—	(43,587)
Shared-based compensation	—	—	—	—	26,913	—	—	26,913	188	27,101
Other changes in equity ⁽²⁾	(156,859)	(5)	—	3,900	(4,066)	—	(3,028)	(3,199)	(147)	(3,346)
Balance at December 31, 2020	66,272,106	\$ 2,161	(5,632,536)	\$ (85,570)	\$ 693,164	\$ 16,028	\$ 491,359	\$ 1,117,142	\$ 35,545	\$ 1,152,687

⁽¹⁾ Share repurchase program (see note 2)

⁽²⁾ Includes deferred consideration in the context of Storetail Marketing Services SAS acquisition in 2018 and 2020 and from January 1, 2020, the adoption of ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost issued by the Financial Accounting Standards Board (FASB).

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

Criteo S.A. and subsidiaries
Consolidated Statements of Cash Flows

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Net income	\$ 74,689	\$ 95,969	\$ 95,879
Non-cash and non-operating items	154,629	126,281	154,436
Amortization and provisions	106,591	97,110	111,825
Equity awards compensation expense ⁽¹⁾	28,770	40,999	66,600
Net gain on disposal of non-current assets	2,714	—	—
Change in deferred taxes	3,720	15,418	(8,157)
Change in income taxes	10,867	(28,015)	(12,744)
Other	1,967	769	(3,088)
Change in working capital related to operating activities	(43,962)	582	10,411
(Increase) / Decrease in trade receivables	(3,957)	876	1,358
Increase / (Decrease) in trade payables	(33,314)	(14,145)	9,047
(Increase) / Decrease in other current assets	(7,188)	7,631	3,974
Increase / (Decrease) in other current liabilities	6,261	11,390	(3,968)
Change in operating lease liabilities and right of use assets	(5,764)	(5,170)	—
Cash from operating activities	185,356	222,832	260,726
Acquisition of intangibles assets, property, plant and equipment	(67,287)	(82,716)	(116,984)
Change in accounts payable related to intangible assets, property, plant and equipment	1,818	(15,224)	(8,494)
Payment for businesses, net of cash acquired	(1,176)	(4,582)	(101,180)
Change in other financial non-current assets	(34,448)	(1,366)	(59)
Cash used for investing activities	(101,093)	(103,888)	(226,717)
Proceeds from borrowings under line-of-credit agreement	153,188	—	—
Repayment of borrowings	(167,344)	(1,022)	(964)
Proceeds from capital increase	1,727	1,691	1,473
Change in treasury stocks	(43,655)	(58,588)	(80,000)
Change in other financial liabilities	(1,663)	(1,192)	16,815
Cash used for financing activities	(57,747)	(59,111)	(62,676)
Effect of exchange rate changes on cash and cash equivalents	42,732	(5,496)	(21,018)
Net increase (decrease) in cash and cash equivalents	69,248	54,337	(49,685)
Net cash and cash equivalents - beginning of period	418,763	364,426	414,111
Net cash and cash equivalents - end of period	\$ 488,011	\$ 418,763	\$ 364,426
Supplemental disclosures of Cash Flow information			
Cash paid for taxes, net of refunds	\$ (17,610)	\$ (52,093)	\$ (67,045)
Cash paid for interest, net of amounts capitalized	\$ (2,155)	\$ (1,403)	\$ (1,695)

⁽¹⁾ Of which \$27.1 million and \$39.6 million of equity awards compensation expense consisted of share-based compensation expense according to ASC 718 Compensation - stock compensation for the twelve month period ended December 31, 2020 and 2019, respectively.

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

Notes to the Consolidated Financial Statements

Criteo S.A. was initially incorporated as a société par actions simplifiée, or S.A.S., under the laws of the French Republic on November 3, 2005, for a period of 99 years and subsequently converted to a société anonyme, or S.A.

We are a global technology company powering the world's marketers with trusted and impactful advertising. We enable brands' and retailers' growth by activating commerce data through artificial intelligence ("AI") technology, reaching consumers on an extensive scale across all stages of the consumer journey, and generating advertising revenues from consumer brands for large retailers. Our vision is to build the world's leading Commerce Media Platform to deliver measurable business outcomes at scale for global brands, agencies and retailers across multiple marketing goals. Our data is pooled among our clients and offers deep insights into consumer intent and purchasing habits. To drive trusted and impactful advertising for marketers, we activate our data assets in a privacy-by-design way through proprietary AI technology to engage consumers in real time by designing, pricing and delivering highly relevant digital advertisements ("ads") across devices and environments.

In these notes, Criteo S.A. is referred to as the Parent company and together with its subsidiaries, collectively, as "Criteo," the "Company," the "Group," or "we".

Note 1. Principles and Accounting Methods

Basis of Preparation

We prepared the consolidated financial statements in accordance with the U.S generally accepted accounting principles (“U.S. GAAP”). The consolidated financial statements include the accounts of Criteo S.A and its wholly owned subsidiaries.

Consolidation Methods

We have control over all our subsidiaries, and consequently they are all fully consolidated. Intercompany transactions and balances have been eliminated. The table below presents at each period’s end and for all entities included in the consolidation scope the following information: the country of incorporation and the percentage of voting rights and ownership interests.

	Country	2020		2019		Consolidation Method
		Voting rights	Ownership Interest	Voting rights	Ownership Interest	
Parent company						
Criteo S.A	France	100 %	100 %	100 %	100 %	Parent company
French subsidiaries						
Criteo France SAS	France	100 %	100 %	100 %	100 %	Fully consolidated
Criteo Finance SAS	France	100 %	100 %	100 %	100 %	Fully consolidated
Storetail Marketing Services SAS ⁽¹⁾	France	— %	— %	100 %	100 %	N/A
Condigolabs SAS	France	100 %	40 %	100 %	40 %	Fully consolidated
Foreign subsidiaries						
Criteo Ltd	United Kingdom	100 %	100 %	100 %	100 %	Fully consolidated
Storetail Marketing Services Ltd	United Kingdom	— %	— %	100 %	100 %	N/A
Criteo Corp.	United States	100 %	100 %	100 %	100 %	Fully consolidated
Manage, Inc. ⁽²⁾	United States	— %	— %	100 %	100 %	N/A
Criteo GmbH	Germany	100 %	100 %	100 %	100 %	Fully consolidated
Criteo Nordics AB	Sweden	100 %	100 %	100 %	100 %	Fully consolidated
Criteo Korea Ltd.	Korea	100 %	100 %	100 %	100 %	Fully consolidated
Criteo KK	Japan	66 %	66 %	66 %	66 %	Fully consolidated
Criteo Do Brasil LTDA	Brazil	100 %	100 %	100 %	100 %	Fully consolidated
Criteo BV	The Netherlands	100 %	100 %	100 %	100 %	Fully consolidated
Criteo Pty	Australia	100 %	100 %	100 %	100 %	Fully consolidated
Criteo Srl	Italy	100 %	100 %	100 %	100 %	Fully consolidated
Criteo Advertising (Beijing) Co. Ltd	China	100 %	100 %	100 %	100 %	Fully consolidated
Criteo Singapore Pte. Ltd.	Singapore	100 %	100 %	100 %	100 %	Fully consolidated
Criteo LLC	Russia	100 %	100 %	100 %	100 %	Fully consolidated
Criteo Europa S.L.	Spain	100 %	100 %	100 %	100 %	Fully consolidated
Criteo Espana S.L.	Spain	100 %	100 %	100 %	100 %	Fully consolidated
Storetail Marketing Services S.L.U ⁽³⁾	Spain	— %	— %	100 %	100 %	N/A
Criteo Canada Corp.	Canada	100 %	100 %	100 %	100 %	Fully consolidated
Criteo Reklamcılık Hizmetleri ve Ticaret Anonim Şirketi	Turkey	100 %	100 %	100 %	100 %	Fully consolidated
Criteo MEA FZ-LLC	United Arab Emirates	100 %	100 %	100 %	100 %	Fully consolidated
Criteo India Private Ltd.	India	100 %	100 %	100 %	100 %	Fully consolidated

⁽¹⁾ merged with Criteo S.A

⁽²⁾ merged with Criteo Corp.

⁽³⁾ merged with Criteo Espana S.L.

Functional Currency and Translation of Financial Statements in Foreign Currency

The Consolidated Financial Statements are presented in U.S. dollars, which differs from the functional currency of the Parent, being the Euro. The statements of financial position of consolidated entities having a functional currency different from the U.S. dollar are translated into U.S. dollars at the closing exchange rate (spot exchange rate at the statement of financial position date) and the statements of income, statements of comprehensive income and statements of cash flow of such consolidated entities are translated at the average period to date exchange rate. The resulting translation adjustments are included in equity under the caption “Accumulated other comprehensive income (loss)” in the Consolidated Statements of Changes in Shareholders’ Equity.

Conversion of Foreign Currency Transactions

Foreign currency transactions are converted to U.S. dollars at the rate of exchange applicable on the transaction date. At period-end, foreign currency monetary assets and liabilities are converted at the rate of exchange prevailing on that date. The resulting exchange gains or losses are recorded in the Consolidated Statements of Income in "Other financial income (expense)" with the exception of exchange differences arising from monetary items that form part of the reporting entity's net investment in a foreign operation which are recognized in other comprehensive income (loss); they will be recognized in profit or loss on disposal of the net investment.

Use of Estimates

The preparation of our Consolidated Financial Statements requires the use of estimates, assumptions and judgments that affect the reported amounts of assets, liabilities, and disclosures of contingent assets and liabilities at the date of the consolidated financial statements and the reported amount of revenue and expenses during the period. We base our estimates and assumptions on historical experience and other factors that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates.

On an on-going basis, management evaluates its estimates, primarily those related to: (1) revenue recognition criteria (2) allowances for credit losses, (3) research tax credits (4) income taxes, including i) recognition of deferred tax assets arising from the subsidiaries projected taxable profit for future years, ii) evaluation of uncertain tax positions associated with our transfer pricing policy and iii) recognition of income tax position in respect with tax reforms recently enacted in countries we operate, (5) assumptions used in valuing acquired assets and assumed liabilities in business combinations, (6) assumptions used in the valuation of goodwill, intangible assets and right of use assets - operating lease, and (7) assumptions used in the valuation model to determine the fair value of share-based compensation plan.

The severity, magnitude, duration and after effects of the COVID-19 pandemic on general economic conditions increase uncertainty associated with these estimates, in particular those related to allowance for credit losses, assumptions used in the valuation of goodwill and estimates relating to income taxes.

Business combinations

We include the results of operations of the businesses that we acquire as of the acquisition date. We allocate the purchase price of our acquisitions to the assets acquired and liabilities assumed based on their estimated fair values. The excess of the purchase price over the fair values of these identifiable assets and liabilities is recorded as goodwill. Acquisition-related expenses are recognized separately from the business combination and are expensed as incurred.

Intangible Assets

Acquired intangible assets are accounted for at acquisition cost, less accumulated amortization. Acquired intangible assets are composed of software, technology and customer relationships amortized on a straight-line basis over their estimated useful lives comprised between one and three years for the software, and three and nine years, for the technology and customer relationships. Intangible assets are reviewed for impairment whenever events or changes in circumstances such as, but not limited to, significant declines in revenue, earnings or cash flows or material adverse changes in the business climate indicate that the carrying amount of an asset may be impaired.

Software development costs also include costs to develop software to be used solely to meet internal needs and cloud based applications used to deliver our services. We capitalize development costs related to these software applications once the preliminary project stage is complete and it is probable that the project will be completed and the software will be used to perform the function intended. Amortization of these costs begins when assets are placed in service and is calculated on a straight-line basis over the assets' useful lives estimated at three to five years.

Cloud computing arrangements ("CCAs"), such as software as a service and other hosting arrangements, are evaluated for capitalized implementation costs in a similar manner as capitalized software development costs. If a CCA includes a software license, the software license element of the arrangement is accounted for in a manner consistent with the acquisition of other software licenses. If a CCA does not include a software license, the service element of the arrangement is accounted for as a service contract. The Company capitalized certain implementation costs for its CCAs that are service contracts, which are included in other current assets. The Company amortizes capitalized implementation costs in a CCA over the life of the service contract.

Property, Plant and Equipment

Property, plant and equipment are accounted for at acquisition cost less cumulative depreciation and any impairment loss. Depreciation is calculated on a straight-line basis over the assets' estimated useful lives as follows:

Servers..... 5 years over the life of the warranty
Furniture and IT equipments..... 3 to 5 years
Leasehold improvements are depreciated over their useful life or over the lease term, whichever is shorter.

Impairment of Assets

Goodwill and Intangible Assets

Goodwill represents the excess of the aggregate purchase price paid over the fair value of the net tangible and intangible assets acquired. Intangible assets that are not considered to have an indefinite useful life are amortized over their useful lives. The Company evaluates the estimated remaining useful lives of purchased intangible assets and whether events or changes in circumstances warrant a revision to the remaining periods of amortization.

Goodwill is not amortized and is tested for impairment at least annually or whenever events or changes in circumstances indicate that the carrying value may not be recoverable. The Company has determined that it operates as a single reporting unit and has selected December 31 as the date to perform its annual impairment test.

In the impairment assessment of its goodwill, the Company performs an impairment test, which involves assumptions regarding estimated future cash flows to be derived from the Company. The estimated future cash flows are used to derive the fair value of the reporting unit, which is then compared to its net book value, including goodwill. If these estimates or their related assumptions change in the future, the Company may be required to record impairment for these assets. If the net book value exceeds its fair value, then the Company would be required to recognize an impairment loss. The impairment loss to be recognized would be calculated by comparing the fair value of the Company to its net book value, including goodwill. An impairment loss would be recognized in the Consolidated Statement of Income when the carrying amount of goodwill exceeds its implied fair value.

With respect to intangible assets, acquired intangible assets are accounted for at acquisition cost less cumulative amortization and any impairment loss. Acquired intangible assets are amortized over their estimated useful lives of three to nine years on a straight-line method. Intangible assets are reviewed for impairment whenever events or changes in circumstances such as, but not limited to, significant declines in revenue, earnings or cash flows or material adverse changes in the financial and economic environment indicate that the carrying amount of an asset may be impaired.

Property, Plant and Equipment and Impairment of Long-lived Assets

The Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset is impaired or the estimated useful life is no longer appropriate. If indicators of impairment exist and the undiscounted projected cash flows associated with an asset are less than the carrying amount of the asset, an impairment loss is recorded to write the asset down to its estimated fair value. Fair value is estimated based on discounted future cash flows.

Leases

We lease space under non-cancellable operating leases for our offices and data centers. Our office leases typically include rent free periods or rent escalation periods, and may also include leasehold improvement incentives. Leases for data centers may also include rent free periods or rent escalation periods. These leases typically do not include residual value guarantees. Both office and data center leases may contain both lease components (rent) and non-lease components (maintenance, electrical costs, and other service charges). Non-lease components are accounted for separately.

Both office and data center leases typically contain options to renew, and/or early terminate the lease. Options have been included in the lease term if management has determined it is reasonably certain that they will be exercised.

Operating lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term at commencement date. As most of our leases do not provide an implicit rate, we use our incremental borrowing rate at lease commencement to determine the present value of future payments. We have a centralized treasury function, and the majority of our leases are negotiated and signed by representatives of Criteo SA. As such, the incremental borrowing rate of Criteo SA is used for all of our contracts. It is then adjusted in consideration of the currency of the lease and the lease term as of the lease commencement date.

Lease expense is recognized for minimum lease payments on a straight-line basis over the lease term. Variable costs are expensed in the period incurred. Variable expenses include changes in indexation. Leases for data centers may have variable costs based on electrical usage.

We chose to use certain practical expedients offered by the standard including:

- We did not reassess whether any expired or existing contracts are or contain leases, the lease classification for any expired or existing leases, or the initial direct costs for any existing leases,
- We do not recognize a lease liability or right of use asset for leases with a term of 12 months or less, and
- We used hindsight in determining the lease term.

Financial Assets and Liabilities, Excluding Derivative Financial Instruments

Financial assets, excluding cash and cash equivalents, consist exclusively of loans and receivables. Loans and receivables are non-derivative financial assets with a payment, which is fixed or can be determined, not listed on an active market. They are included in current assets, except those that mature more than twelve months after the reporting date. Loans are measured at amortized cost using the effective interest method. The recoverable amount of loans and advances is estimated whenever there is an indication that the asset may be impaired and at least on each reporting date. If the recoverable amount is lower than the carrying amount, an impairment loss is recognized in the Consolidated Statements of Income.

Financial liabilities are initially recorded at their fair value at the transaction date. Subsequently they are measured at amortized cost using the effective interest method.

We carry our accounts receivable at original invoiced amount less an allowance for any potential uncollectible amounts. Management makes estimates of expected credit trends for the allowance for credit losses based on, among other factors, a past history of collections, current credit conditions, the aging of the receivables, past history of write downs, credit quality of our customers, current economic conditions, and reasonable and supportable forecasts of future economic conditions. A receivable is considered past due if we have not received payments based on agreed-upon terms. A higher default rate than estimated or a deterioration in our clients' creditworthiness could have an adverse impact on our future results. Allowances for credit losses on trade receivables are recorded in "sales and operations expenses" in our Consolidated Statements of Income. We generally do not require any security or collateral to support our receivables.

Derivative financial instruments

We buy and sell derivative financial instruments (mainly put, forward buying and selling) in order to manage and reduce our exposure to the risk of exchange rate fluctuations. We deal only with major financial institutions. Financial instruments may only be classified as hedges when we can demonstrate and document the effectiveness of the hedging relationship at inception and throughout the life of the hedge. Derivatives not designated as hedging instruments mainly consist of put, forward buying and selling contracts that we use to hedge intercompany transactions and other monetary assets or liabilities denominated in currencies other than the local currency of a subsidiary.

We recognize gains and losses on these contracts, as well as the related costs in the financial income (expense), net, along with the foreign currency gains and losses on monetary assets and liabilities.

The Company reported the cash impact of the settlement of hedging derivatives in cash from (used for) financing activities in the consolidated statements of cash flows. This accounting policy choice results in the cash flows from the derivative instrument to be classified in the same category as the underlying cash flows.

Fair value measurements

Financial instruments are presented in three categories based on a hierarchical method used to determine their fair value : (i) level 1: fair value calculated using quoted prices in an active market for identical assets and liabilities; (ii) level 2: fair value calculated using valuation techniques based on observable market data such as prices of similar assets and liabilities or parameters quoted in an active market; (iii) level 3: fair value calculated using valuation techniques based wholly or partially on unobservable inputs such as prices in an active market or a valuation based on multiples for unlisted companies. The Company's valuation techniques used to measure the fair value of money market funds and certain short term investments were derived from quoted prices in active markets. The valuation techniques used to measure the fair value of the Company's financial liabilities and all other financial instruments, all of which have counterparties with high credit ratings, were valued based on quoted market prices or model-driven valuations using inputs derived from or corroborated by observable market data.

Cash, Cash Equivalents and Marketable Securities

Cash includes cash on deposit with banks and highly liquid investments such as demand deposits with banks. Cash equivalents include short-term, highly liquid investments, with a remaining maturity at the date of purchase of three months or less for which the risk of changes in value is considered to be insignificant. Highly liquid demand deposits therefore meet the definition of cash equivalents.

We hold investments in marketable securities, consisting mainly of term deposits with banks, not meeting the cash equivalents definition. We classify marketable securities as either available-for-sale or held-to-maturity investments, depending on whether we have the positive intent and ability to hold the term deposits to maturity. Our available-for-sale investments are carried at estimated fair value with any unrealized gains and losses, net of taxes, included in accumulated other comprehensive income (loss) in stockholders' equity. Our held-to-maturity investments are carried at amortized cost, and are subject to impairment assessments. Interest income generated from held-to-maturity investments is recorded as financial income.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash, cash equivalents and accounts receivable. The Company's cash and cash equivalents are held and foreign exchange contracts are transacted with major financial institutions that the Company's management has assessed to be of high credit quality. The Company has not experienced any losses in such accounts.

The Company mitigates its credit risk with respect to accounts receivable by performing credit evaluations and monitoring agencies' and advertisers' accounts receivable balances. As of December 31, 2020 and 2019 no customer accounted for 10% or more of accounts receivable. During the years ended December 31, 2020, 2019 and 2018, no single customer represented 10% or more of revenue.

Employee Benefits

Depending on the laws and practices of the countries in which we operate, employees may be entitled to compensation when they retire or to a pension following their retirement. For state-managed plans and other defined contribution plans, we recognize them as expenses when they become payable, our commitment being limited to our contributions.

The liability with respect to defined benefit plans is estimated using the following main assumptions:

- discount rate;
- future salary increases;
- employee turnover; and
- mortality tables.

Service costs are recognized in profit or loss and are allocated by function.

Actuarial gains and losses are recognized in other comprehensive income and subsequently amortized into the income statement over a specified period, which is generally the expected average remaining service period of the employees participating in the plan. Actuarial gains and losses arise as a result of changes in actuarial assumptions or experience adjustments (differences between the previous actuarial assumptions and what has actually occurred).

Contingencies

An estimated loss from a loss contingency is recognized if the following two conditions are met:

- information available before the financial statements are issued indicates that it is probable that an asset had been impaired or a liability had been incurred at the date of the financial statements;
- the amount of loss can be reasonably estimated.

With respect to litigation and claims that may result in a provision to be recognized, we exercise significant judgment in measuring and recognizing provisions or determining exposure to contingent liabilities that are related to pending litigation or other outstanding claims. These judgment and estimates are subject to change as new information becomes available.

Revenue Recognition

We sell personalized display advertisements featuring product-level recommendations either directly to clients or to advertising agencies. Historically, the Criteo model has focused solely on converting our clients' website visitors into customers, enabling us to charge our clients only when users engage with an ad we deliver, usually by clicking on it. More recently, we have expanded our solutions to address a broader range of marketing goals for our clients.

We offer two families of solutions to our commerce and brand clients:

- *Criteo Marketing Solutions* allow commerce companies to address multiple marketing goals by engaging their consumers with personalized ads across the web, mobile and offline store environments.
- *Criteo Retail Media* solutions allow retailers to generate advertising revenues from consumer brands, and/or to drive sales for themselves, by monetizing their data and audiences through personalized ads, either on their own digital property or on the open Internet, that address multiple marketing goals.

We also have multiple pricing models which now include cost plus margin models in addition to cost-per-click, cost-per-install and cost-per-impression pricing models.

We recognize revenues when we transfer control of promised services directly to our clients or to advertising agencies, which we collectively refer to as our clients, in an amount that reflects the consideration to which we expect to be entitled to in exchange for those services.

For campaigns priced on a cost-per-click, cost-per-install basis and cost plus margin basis, we bill our clients when a user clicks on an advertisement we deliver or installs an application by clicking on an advertisement we delivered, respectively. For these pricing models, we recognize revenue when a user clicks on an advertisement or installs an application.

For campaigns priced on a cost-per-impression basis, we bill our clients based on the number of times an advertisement is displayed to a user. For this pricing model, we recognize revenue when an advertisement is displayed.

For campaigns with a fixed pricing component, where fixed amounts are billed to the customer at various intervals, we recognize revenue on a ratable basis, based on our completion of our performance obligation to the customer.

We mainly act as principal in our arrangements because (i) we control the advertising inventory before it is transferred to our clients; (ii) we bear sole responsibility for fulfillment of the advertising promise and inventory risks and (iii) we have full discretion in establishing prices. Therefore, based on these factors, we report revenue earned and the related costs incurred on a gross basis.

Customer Credit Notes

We offer credit notes to certain customers as a form of incentive, which are accounted for as variable consideration. We estimate these amounts based on the expected amount to be provided to customers and they are recognized as a reduction of revenue. We believe that there will not be significant changes to our estimates of variable consideration.

Deferred Revenues

We record deferred revenues when cash payments are received or due in advance of our performance. Our payment terms vary depending on the service or the type of customer. For certain customers, we require payment before the services are delivered.

Practical Expedients

We do not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less and (ii) contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed.

We generally expense sales commissions when incurred because the amortization period would have been one year or less. These costs are recorded within sales and operating expenses.

Cost of Revenue

Our cost of revenue primarily includes traffic acquisition costs and other cost of revenue.

Traffic Acquisition Costs. Traffic acquisition costs consist primarily of purchases of impressions from publishers on a CPM basis. We purchase impressions directly from publishers or third-party intermediaries, such as advertisement exchanges. We recognize cost of revenue on a publisher by publisher basis as incurred. Costs owed to publishers but not yet paid are recorded in our Consolidated Statements of Financial Position as trade payables and other current liabilities.

For some solutions within Criteo Retail Media, we pay for the inventory of our ecommerce retailer partners on a revenue sharing basis, effectively paying the retailers a portion of the click-based revenue generated by user clicks on the sponsored products advertisements displaying the products of our brand manufacturer clients.

Other Cost of Revenue. Other cost of revenue includes expenses related to third-party hosting fees, depreciation of data center equipment, data purchased from third parties and digital taxes. The Company does not build or operate its own data centers and none of its Research and Development employments are dedicated to revenue generating activities. As a result, we do not include the costs of such personnel in other cost of revenue.

Share-Based Compensation

Shares, employee share options and employee and non-employee warrants are primarily awarded to our employees or directors. These awards are measured at their fair value on the date of grant. The fair value is calculated with the most relevant formula regarding the settlement and the conditions of each plan. The fair value is recorded in personnel expenses (allocated by function in the Consolidated Statements of Income) on a straight-line basis over each milestone composing the vesting period with a corresponding increase in shareholders' equity. At each closing date, we re-examine the number of options likely to become exercisable. If applicable, the impact of the review of the estimate is recognized in the Consolidated Statements of Income with a corresponding adjustment in equity.

Income Taxes

Income taxes are accounted for under the asset and liability method of accounting. Deferred taxes are recorded on all temporary differences between the financial reporting and tax bases of assets and liabilities, and on tax losses, using the liability method. Differences are defined as temporary when they are expected to reverse within a foreseeable future. We may only recognize deferred tax assets on net operating losses if, based on the projected taxable incomes within the next three years, we determine that it is probable that future taxable profit will be available against which the unused tax losses and tax credits can be utilized. As a result, the measurement of deferred income tax assets is reduced, if necessary, by a valuation allowance for any tax benefits which are not expected to be realized. If future taxable profits are considerably different from those forecasted that support recording deferred tax assets, we will have to revise downwards or upwards the amount of deferred tax assets, which would have a significant impact on our financial results. Tax assets and liabilities are not discounted. Amounts recognized in the Consolidated Financial Statements are calculated at the level of each tax entity included in the consolidation scope. The effect on deferred income tax assets and liabilities of a change in tax rates is recognized in the period that such tax rate changes are enacted.

The French Research Tax Credit, *Crédit d'Impôt Recherche* ("CIR"), is a French tax incentive to stimulate research and development ("R&D"). Generally, the CIR offsets the income tax to be paid and the remaining portion (if any) can be refunded at the end of a three-fiscal year period. The CIR is calculated based on the claimed volume of eligible R&D expenditures by us. As a result, the CIR is presented as a deduction to "research and development expenses" in the Consolidated Statements of Income, as the CIR is not within the scope of ASC 740. We have exclusively claimed R&D performed in France for purposes of the CIR.

The U.S. Research Tax Credit is a U.S. tax credit to incentivize research and development activities in the U.S. Qualifying R&D expenses generating a tax credit which may be used to offset future taxable income once all net operating losses and foreign tax credits have been used. It is not refundable and as such, considered in the scope of ASC 740 as a component of income tax expense. We have exclusively claimed R&D performed in the U.S. for purposes of the U.S. Research Tax Credit.

Uncertain Tax Positions

We recognize tax benefits from uncertain tax positions only if we believe that it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. These uncertain tax positions include our estimates for transfer pricing that have been developed based upon analyses of appropriate arms-length prices. Similarly, our estimates related to uncertain tax positions concerning research tax credits are based on an assessment of whether our available documentation corroborating the nature of our activities supporting the tax credits will be sufficient. Although we believe that we have adequately reserved for our uncertain tax positions (including net interest and penalties), we can provide no assurance that the final tax outcome of these matters will not be materially different. We make adjustments to these reserves in accordance with the income tax accounting guidance when facts and circumstances change, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different from the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made, and could have a material impact on our financial condition and operating results.

Operating Segments

Segment information reported is built on the basis of internal management data used for performance analysis of businesses and for the allocation of resources (management approach). An operating segment is a component of the Company for which separate financial information is available that is evaluated regularly by our Chief Decision Maker in deciding how to allocate resources and assessing performance.

Our chief operating decision-maker is our CEO. The CEO reviews consolidated data for revenue, revenue excluding traffic acquisition costs (revenue ex-TAC) and Adjusted EBITDA (earnings before financial income (expense), income taxes, depreciation and amortization, adjusted to eliminate the impact of equity awards compensation expense, pension service costs, restructuring related and transformation costs, acquisition-related costs and deferred price consideration) for the purposes of allocating resources and evaluating financial performance.

We have concluded that our operations constitute one operating and reportable segment.

Earnings Per Share

Basic earnings per share ("EPS") are calculated by dividing the net income attributable to shareholders of the Parent by the weighted average number of shares outstanding. The weighted average number of shares outstanding is calculated according to movements in share capital.

In addition, we calculate diluted earnings per share by dividing the net income attributable to shareholders of the Parent company, Criteo S.A. by the weighted average number of shares outstanding plus any potentially dilutive shares not yet issued.

Accounting Pronouncements adopted in 2020

Effective January 1, 2020, we have adopted the Financial Accounting Standards Board ("FASB") Accounting Standards Update ("ASU") No. 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss model which requires the use of forward-looking information to calculate credit loss estimates. This results in earlier recognition of credit losses.

We measure loss allowances for all trade receivables using the lifetime expected credit loss approach, as described above. The expected credit losses on these financial assets are estimated using a provision matrix based on the Company's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current as well as the forecast direction of conditions at the reporting date.

Effective January 1, 2020, we have adopted ASU 2017-04, *Goodwill and Other (Topic 350)*. ASU 2017-04 simplifies the subsequent measurement of goodwill and reduces the cost and complexity of evaluating goodwill for impairment. It eliminates the need for entities to calculate the implied fair value of goodwill by assigning the fair value of a reporting unit to all of its assets and liabilities as if that reporting unit had been acquired in a business combination. Under this amendment, an entity will perform its goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An impairment charge is recognized for the amount by which the carrying value exceeds the reporting unit's fair value. The adoption of the ASU did not have an impact on our financial position or results of operations as we did not recognize an impairment loss during the period.

Effective January 1, 2020, we have adopted ASU 2018-15, *Intangibles - Goodwill and Other - Internal Use Software - Customer's Accounting for Implementation Costs incurred in a Cloud Computing Arrangement That is a Service Contract*. This ASU was issued to clarify the accounting for implementation costs incurred for SaaS agreements. Previously the guidance only referred to development of internal use software and the accounting for SaaS agreements was not clarified. This ASU states that any capitalized implementation costs would be included in prepaid expenses, amortized over the term of the hosting arrangement on a straight-line basis and presented in the same line items in the Consolidated Statement of Income as the expense for fees of the associated hosting arrangements. The adoption of the standard did not have an impact on our financial position or results of operations, however, it did have a minor impact on expense classification in current and future periods.

Recent Accounting Pronouncements

In August 2018, the FASB issued ASU 2018 - 14, *Compensation - Retirement Benefits - Defined Benefit Plans - General*. The purpose of this update is to modify disclosure requirements for Defined Benefit Plans. It removes requirements to disclose the amounts in accumulated other comprehensive income expected to be recognized as components of net periodic benefit cost over the next fiscal year among others. It adds disclosure requirements for the items such as an explanation of the reasons for significant gains and losses related to changes in the benefit obligation for the period. We intend to adopt the standard on the effective date of January 1, 2021. The adoption of ASU 2018-14 is not expected to have a material impact on our financial position or results of operations but may have an impact on our disclosures.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which simplifies the accounting for income taxes. We intend to adopt the standard on the effective date of January 1, 2021. The adoption of ASU 2019-12 is not expected to have a material impact on our financial position, results of operations or on our disclosures.

Other accounting standards that have been issued or proposed by the FASB or other standards-setting bodies that do not require adoption until a future date are not expected to have a material impact on the Company's Consolidated Financial Statements upon adoption.

Note 2. Significant Events and Transactions of the Period

Share repurchase programs

On October 25, 2018 Criteo's Board of Directors authorized a share repurchase program of up to \$80.0 million of the Company's outstanding American Depositary Shares. As of December 31, 2018, 3.5 million shares were held as treasury shares. We completed this share repurchase program in 2018.

On February 8, 2019, the Board of Directors authorized the reduction of capital resulting in the formal retirement of 1.6 million treasury shares.

On July 26, 2019, Criteo's Board of Directors authorized a share repurchase program of up to \$80.0 million of the Company's outstanding American Depositary Shares. As of December 31, 2019, 3.2 million shares were held as treasury shares as part of the share repurchase program authorized on July 26, 2019. We completed this share repurchase program in February 2020.

As of December 31, 2019, we have 3.9 million treasury shares remaining which may be used to satisfy the company's obligations under its employee equity plans upon RSU vesting in lieu of issuing new shares, and for M&A activity.

On April 23, 2020, Criteo's Board of Directors authorized a share repurchase program of up to \$30.0 million of the Company's outstanding American Depositary Shares. We completed this share repurchase program in July 2020.

As of December 31, 2020 we had 5.6 million treasury shares remaining which may be used to satisfy the Company's obligations under its employee equity plan upon RSU vesting in place of issuing new shares, and for any potential M&A activity.

	Number of Treasury Shares	Amount (in thousands)
Balance at January 1, 2019	3,459,119	\$ 79,159
Treasury Shares Retired	(1,594,288)	(36,137)
Treasury Shares Repurchased to use for M&A or RSU Vesting	1,498,709	28,452
Treasury Shares Repurchased to use for RSU Vesting	1,743,223	30,136
Treasury Shares Issued for RSU Vesting	(1,203,090)	(26,710)
Balance at December 31, 2019	3,903,673	\$ 74,900
Treasury Shares Repurchased to use for RSU Vesting	3,358,068	\$ 43,655
Treasury Shares Issued for RSU Vesting	(1,472,346)	\$ (29,085)
Treasury Shares Issued for M&A	(156,859)	(3,900)
Balance at December 31, 2020	5,632,536	\$ 85,570

Cessation of our R&D operations in Palo Alto

On October 7, 2019, in connection with the new organization structure, the Company announced a plan to restructure its R&D activities with the closing of its R&D operations in Palo Alto. The Company incurred additional net restructuring costs of \$0.1 million and \$0.6 million for the three and twelve months ended December 31, 2020, respectively, comprising of payroll expenses included in Research and Development expenses.

The following table summarizes restructuring activities as of December 31, 2020 included in other current liabilities on the balance sheet :

	Restructuring Liability	
	(in thousands)	
Restructuring liability - January 1, 2020	\$	5,581
Restructuring costs		633
Amounts paid		(5,932)
Restructuring liability - December 31, 2020	\$	282

Termination of the Palo Alto Lease

During the year ended December 31, 2020, we early terminated the Palo Alto lease, originally expiring in 2027. We incurred broker fees and termination penalties of \$4.6 million in connection with this transaction. The net impact of write-offs of the right of use assets, lease liabilities, and fixed assets associated with the lease was nil.

For the three and twelve months ended December 31, 2020, \$0 million and \$1.5 million, respectively, was included in Research and Development expenses, \$0 million and \$0.8 million was included in General and Administrative expenses and \$0 million and \$2.3 million was included in Sales and Operations expenses.

New organization structure

As part of a new organization structure designed to best support our multi-product platform strategy and accelerate execution, commenced in the year ended December 31, 2019, the Company incurred net restructuring costs of \$1.4 million and \$5.3 million for the three and twelve month periods ended December 31, 2020, respectively, comprising of payroll expenses.

For the three and twelve month periods ended December 31, 2020, respectively, \$0.3 million and \$0.5 million was included in Research and Development expenses, \$(0.3) million and \$0.9 million was included in General and Administrative expenses and \$1.4 million and \$3.9 million was included in Sales and Operations expenses.

The following table summarizes restructuring activities as of December 31, 2020 included in other current liabilities on the balance sheet:

	Twelve Months Ended	
	December 31, 2020	
	(in thousands)	
Restructuring liability - January 1, 2020	\$	510
Restructuring costs		5,278
Amount paid		(3,812)
Restructuring liability - December 31, 2020	\$	1,976

Changes in Group funding

In September 2015, Criteo S.A. entered into a Multicurrency Revolving Facility Agreement for general purposes of the Group including the funding of business combinations. In March 2017, the maximum amount available under this RCF was increased to €350 million (\$429.5 million). On May 4, 2020, Criteo decided to draw €140 million (\$153.2 million) under its RCF credit facility for general purposes. This six month drawdown of €140 million (\$159.9 million) was fully reimbursed on November 4, 2020. In addition, the parties to the RCF agreement have agreed to extend the term of the agreement for one additional year, from March 2022 to March 2023, composed of a €350 million (\$429 million) commitment through March 2022, and a €294 million (\$360.8 million) commitment from the end of March 2022 through March 2023.

Changes in Group financial investments

In December 2020, \$5.0 million was invested in a 24 month term deposit with an annual yield of 0.60% and €10.0 million (\$12.3 million) was invested in a 15 month term deposit with an annual yield of 0.50%. These investments have been classified as Marketable Securities, a non-current asset, as they do not meet the cash and cash equivalent criteria.

In September 2020, \$20.0 million was invested in a 12 month term deposit with an annual yield of 0.75%. This new investment is classified as Cash and Cash Equivalents.

In June 2020, €20.0 million (\$24.5 million) was invested in a 24 month term deposit with an annual yield of 0.25%. This investment has been classified as Marketable Securities, a non-current asset, as it does not meet the cash and cash equivalent criteria.

Note 3. Categories of Financial Assets and Financial Liabilities

Financial assets

	Year Ended December 31,	
	2020	2019
	(in thousands)	
Trade receivables, net of allowances	\$ 474,055	\$ 481,732
Other taxes	69,987	60,924
Other current assets	21,405	17,225
Marketable securities	\$ 41,809	\$ —
Non-current financial assets	18,109	21,747
Total	<u>\$ 625,365</u>	<u>\$ 581,628</u>

Credit Risk

We maintain an allowance for estimated credit losses. During the years ended December 31, 2020 and 2019, our net change in the allowance for credit losses was \$(23.8) million and \$(9.9) million, respectively. The primary cause of this change was the adoption of ASU 2016-13, Financial Instruments - Credit Losses (Topic 326) from January 1, 2020 resulting in an earlier recognition of credit losses, the cumulative effect of which was recorded as an adjustment to retained earnings for \$3.5 million (note 1), as well as an increase to the provision due to the expected impact of COVID-19 on the Company's future cash collection.

For our financial assets, the fair value approximates the carrying amount, given the nature of the financial assets and the maturity of the expected cash flows.

Trade Receivables

Credit risk is defined as an unexpected loss in cash and earnings if the client is unable to pay its obligations in due time. We perform internal ongoing credit risk evaluations of our clients. When a possible risk exposure is identified, we require prepayments.

As of December 31, 2020 and 2019, no customer accounted for 10% or more of trade receivables.

Financial liabilities

	Year Ended December 31,	
	2020	2019
	(in thousands)	
Trade payables	\$ 367,025	\$ 390,277
Other taxes	58,491	50,099
Employee - related payables	85,272	74,781
Other current liabilities	33,390	35,886
Financial liabilities	3,275	4,405
Total	<u>\$ 547,453</u>	<u>\$ 555,448</u>

The fair value of financial liabilities approximates the carrying amount, given the nature of the financial liabilities and the maturity of the expected cash flows.

Fair Value Measurements

We measure the fair value of our cash equivalents, which include interest bearing deposits, as level 2 measurements because they are valued using observable market data.

Financial assets or liabilities include derivative financial instruments used to manage our exposure to the risk of exchange rate fluctuations. These instruments are considered level 2 financial instruments as they are measured using valuation techniques based on observable market data.

Derivative Financial Instruments

Derivatives consist of foreign currency forward contracts that we use to hedge intercompany transactions and other monetary assets or liabilities denominated in currencies other than the local currency of a subsidiary. We recognize gains and losses on these contracts in financial income (expense), and their position on the balance sheet is based on their fair value at the end of each respective period. These instruments are considered level 2 financial instruments as they are measured using valuation techniques based on observable market data.

	Year Ended December 31,	
	2020	2019
	(in thousands)	
Derivative Assets:		
Included in other current assets	\$	—
	\$	—
Derivative Liabilities:		
Included in financial liabilities - current portion	\$	925
	\$	1,284

The fair value of derivative financial instruments approximates the carrying amount, given the nature of the derivative financial instruments and the maturity of the expected cash flows.

Marketable Securities

The following table presents for each reporting period, the breakdown of marketable securities:

	December 31, 2020		December 31, 2019	
	(in thousands)			
Securities Available-for-sale				
Term Deposits	\$	24,538	\$	—
Securities Held-to-maturity				
Term Deposits	\$	17,271	\$	—
Total	\$	41,809	\$	—

The gross unrealized gains or (loss) on our marketable securities were not material as of December 31, 2020.

For our marketable securities, the fair value approximates the carrying amount, given the nature of the term deposit and the maturity of the expected cash flows. The term deposit is considered a level 2 financial instrument as it is measured using valuation techniques based on observable market data.

The following table classifies our marketable securities by contractual maturities:

	Held-to-maturity		Available-for-sale	
	December 31, 2020			
	(in thousands)			
Due in one year	\$	—	\$	—
Due in one to five years	\$	17,271	\$	24,538
Total	\$	17,271	\$	24,538

Note 4. Cash and Cash Equivalents

The following table presents for each reported period, the breakdown of cash and cash equivalents:

	Year Ended December 31,	
	2020	2019
	(in thousands)	
Cash equivalent	\$ 162,457	\$ 189,119
Cash on hand	325,554	229,644
Total Cash and cash equivalents	<u>\$ 488,011</u>	<u>\$ 418,763</u>

Investments in interest-bearing bank deposits which met ASC 230 - *Statement of Cash flows* criteria: short-term, highly liquid investments, for which the risks of changes in value are considered to be insignificant. Interest-bearing bank deposits are considered level 2 financial instruments as they are measured using valuation techniques based on observable market data. For our cash and cash equivalents, the fair value approximates the carrying amount, given the nature of the cash and cash equivalents and the maturity of the expected cash flows.

Note 5. Trade Receivables

The following table shows the breakdown in trade receivables net book value for the presented periods:

	Year Ended December 31,	
	2020	2019
	(in thousands)	
Trade accounts receivables	\$ 513,954	\$ 497,800
(Less) Allowance for doubtful accounts	(39,899)	(16,068)
Net book value at end of period	<u>\$ 474,055</u>	<u>\$ 481,732</u>

Changes in allowance for doubtful accounts are summarized below:

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Balance at beginning of period	\$ (16,068)	\$ (25,918)	\$ (20,818)
Allowance for credit losses through retained earnings ^(*)	(3,522)	—	—
Provision for doubtful accounts	(30,818)	(11,072)	(17,656)
Reversal of provision	11,555	20,811	11,956
Change in consolidation scope	—	—	(150)
Currency translation adjustment	(1,046)	111	750
Balance at end of period	<u>\$ (39,899)</u>	<u>\$ (16,068)</u>	<u>\$ (25,918)</u>

^(*) From January 1, 2020, we adopted ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost issued by the Financial Accounting Standards Board (FASB). ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss model which requires the use of forward-looking information to calculate credit loss estimates. This results in earlier recognition of credit losses. We adopted ASU 2016-13 effective January 1, 2020 with the cumulative effect of adoption recorded as an adjustment to retained earnings (note 1).

The amount charged to allowance for credit losses for the twelve months ended December 31, 2020 increased compared to the same period in the prior year due to the application of the expected credit loss model beginning on January 1, 2020 as well as an increase to the provision due to the expected impact of COVID-19 on the Company's future cash collections caused by the downturn in the economy which has led to financial difficulties for some of our customers, particularly those operating in the retail sector. In times of the global economic turmoil brought about by COVID-19, our estimates and judgments with respect to the collectability of our receivables are subject to greater uncertainty than in more stable periods.

The reversal of provision decreased during the twelve month period ended December 31, 2020, mainly due to lower payments received and lower write-offs of long outstanding receivables already reserved for which it is certain we will not collect the receivable. During the twelve month period ended December 31, 2020, the Company recovered \$3.6 million previously written off, accounted for as a reversal of provision.

The Company mitigates its credit risk with respect to accounts receivables by performing credit evaluations and monitoring agencies and advertisers' accounts receivables balances.

We write off accounts receivable balances once the receivables are no longer deemed collectible.

Note 6. Other Current Assets

The following table shows the breakdown in other current assets net book value for the presented periods:

	Year Ended December 31,	
	2020	2019
	(in thousands)	
Prepayments to suppliers	\$ 5,613	\$ 5,109
Other debtors	5,991	4,225
Prepaid expenses	9,801	7,891
Gross book value at end of period	21,405	17,225
Net book value at end of period	\$ 21,405	\$ 17,225

Prepaid expenses mainly consist of office rental advance payments.

Note 7. Property, Plant and Equipment

Changes in net book value during the presented periods are summarized below:

	Fixtures and fittings	Furniture and equipment	Construction in Progress	Total
	(in thousands)			
Net book value at January 1, 2019	\$ 18,884	\$ 144,801	\$ 20,328	\$ 184,013
Additions to property, plant and equipment	466	23,117	46,959	70,542
Disposal of property, plant and equipment net of accumulated depreciation	(999)	(904)	(12)	(1,915)
Depreciation expense	(6,377)	(50,222)	—	(56,599)
Change in consolidation scope	—	3	—	3
Currency translation adjustment	(43)	(1,660)	(180)	(1,883)
Transfer into service	892	61,895	(62,787)	—
Net book value at December 31, 2019	12,823	177,030	4,308	194,161
Gross book value at end of period	35,456	412,915	4,308	452,679
Accumulated depreciation at end of period	(22,633)	(235,885)	—	(258,518)
Net book value at January 1, 2020	12,823	177,030	4,308	194,161
Additions to property, plant and equipment	771	38,932	13,164	52,867
Disposal of property, plant and equipment net of accumulated depreciation	(2,786)	(1,527)	—	(4,313)
Depreciation expense	(3,815)	(59,482)	—	(63,297)
Change in consolidation scope	—	(11)	17	6
Currency translation adjustment	78	9,485	518	10,081
Transfer into service	247	3,596	(3,843)	—
Net book value at December 31, 2020	\$ 7,318	\$ 168,023	\$ 14,164	\$ 189,505
Gross book value at end of period	29,606	439,089	14,164	482,859
Accumulated depreciation at end of period	(22,288)	(271,066)	—	(293,354)

The increase in property plant and equipment (gross book value and accumulated depreciation) mainly includes purchases of server equipment in the French, American and Japanese subsidiaries where the Company's data center equipment are located.

Note 8. Intangible assets

Changes in net book value during the presented periods are summarized below:

	Software	Technology and customer relationships	Construction in Progress	Total
	(in thousands)			
Net book value at January 1, 2019	\$ 13,266	\$ 93,317	\$ 5,453	\$ 112,036
Additions to intangible assets	2,627	—	9,548	12,175
Disposal of intangible assets	—	—	—	—
Amortization and impairment expense	(8,982)	(27,906)	—	(36,888)
Change in consolidation scope	111	—	—	111
Currency translation adjustment	(232)	(207)	(109)	(548)
Transfer into service	12,325	—	(12,325)	—
Net book value at December 31, 2019	19,115	65,204	2,567	86,886
Gross book value at end of period	56,501	144,226	2,567	203,294
Accumulated amortization and impairment at end of period	(37,386)	(79,022)	—	(116,408)
Net book value at January 1, 2020	19,115	65,204	2,567	86,886
Additions to intangible assets	3,169	—	11,246	14,415
Disposal of intangible assets	—	—	—	—
Amortization and impairment expense	(9,420)	(15,520)	—	(24,940)
Change in consolidation scope	64	—	—	64
Currency translation adjustment	1,460	1,142	717	3,319
Transfer into service	2,211	—	(2,211)	—
Net book value at December 31, 2020	\$ 16,599	\$ 50,826	\$ 12,319	\$ 79,744
Gross book value at end of period	66,851	148,063	12,319	227,233
Accumulated amortization and impairment at end of period	(50,252)	(97,237)	—	(147,489)

Additions to software mainly consist of capitalization of internally developed internal-use software and IT licenses.

In 2019 we accounted for in "Amortization and depreciation expense" to a change in useful life of Manage technology based on the early decommissioning of the Manage platform (\$2.2 million) and an impairment loss of Manage customers relationships (\$4.6 million) driven by lower business performance compared to expectations at the time of the acquisition, largely due to high client concentration and a volatile business environment. The Manage customer relationships were written down to their estimated fair value, calculated under the discounted cash flows model.

The average life of software is 3 years. The average life of technology and customer relationships, consisting of identified intangible assets arising from HookLogic and Storetail business combinations, is between 3 and 9 years.

As of December 31, 2020, expected amortization expense for intangible assets for the next five years and thereafter is as follows (in thousands):

	Software	Technology and customer relationships	Total
2021	\$ 12,336	\$ 11,704	\$ 24,040
2022	9,377	11,704	21,081
2023	6,372	11,158	17,530
2024	767	8,700	9,467
2025	66	7,560	7,626
Thereafter	—	—	—
Total	\$ 28,918	\$ 50,826	\$ 79,744

Note 9. Goodwill

	Goodwill (in thousands)
Balance at January 1, 2019	\$ 312,881
Additions to goodwill	5,277
Currency translation adjustment	(1,058)
Balance at December 31, 2019	317,100
Additions to goodwill	2,807
Currency translation adjustment	5,898
Balance at December 31, 2020	\$ 325,805

Additions to goodwill in 2020 and 2019, were due to one business combination, and two business combination, respectively considered as not material to our consolidated financial statements. In addition, on the basis of our impairment assessment as of December 31, 2020, no impairment has been detected.

Note 10. Non-Current Financial Assets

Non-current financial assets are mainly composed of (i) an interest-bearing bank deposit amounting to \$6.9 million, which is pledged to the benefit of a bank in order to secure the first-demand bank guarantee in connection with our headquarters premises, and (ii) guarantee deposits for office rentals in France, Spain, the United Kingdom, the United States, Japan and Singapore.

Note 11. Contingencies

Changes in provisions during the presented periods are summarized below:

	Provision for employee- related litigation	Other provisions	Total
	(in thousands)		
Balance at January 1, 2019	\$ 244	\$ 2,396	\$ 2,640
Charges	461	3,797	4,258
Provision used	(82)	—	(82)
Provision released not used	—	(402)	(402)
Currency translation adjustments	(3)	(26)	(29)
Balance at January 1, 2020	\$ 620	\$ 5,765	\$ 6,385
Charges	507	994	1,501
Provision used	—	(831)	(831)
Provision released not used (*)	(33)	(2,207)	(2,240)
Currency translation adjustments	85	26	111
Other (**)	—	(2,676)	(2,676)
Balance at December 31, 2020	\$ 1,179	\$ 1,071	\$ 2,250
- of which current	\$ 1,179	\$ 1,071	\$ 2,250
- of which non-current	\$ —	\$ —	\$ —

*Due to changes in management's best estimates of the future outflow

**Transfer to Other liabilities due to tax notification received confirming the amount owed

The amount of the provisions represents management's best estimate of the future outflow.

Note 12. Financial Liabilities

We are party to several loan agreements and a revolving credit facility, or RCF, with third-party financial institutions. Our loans and RCF agreements are presented in the table below:

Nature	Nominal/ Authorized amounts (RCF Only)	Amount drawn as of December 31, 2020 (RCF only) (in thousands)	Amount Outstanding as of December 31, 2020	Interest rate	Settlement date
BPI Loan - February 2014	NA	NA	\$ 368.1	Fixed: 2.09%	May 2021
Other BPI Loans	NA	NA	\$ 912.0	— %	2023 and after
Other Loans	NA	NA	\$ 224.8	— %	2024
Bank Syndicate RCF - September 2015 ⁽¹⁾	€ 350,000	\$—	\$—	Floating rate: EURIBOR / LIBOR + margin depending on leverage ratio	March 2022

⁽¹⁾ Subsequent to the settlement date of March 2022, the authorized amount of €350 million is reduced to €294 million through to a new settlement date of March 2023

In September 2015, Criteo entered into a 5 year revolving credit facility for general corporate purposes, including acquisitions, for a maximum amount of €250 million (\$306.8 million), with a bank syndicate composed of Natixis (coordinator and documentation agent), Le Credit Lyonnais (LCL) (facility agent), HSBC France, Société Générale Corporate & Investment Banking and BNP Paribas (each acting individually as bookrunners and mandated lead arrangers). In 2017, this agreement was amended by, among other things, increasing the amount of facility to €350.0 million (\$429.4 million) and extending the term of the contract from 2020 to 2022.

In 2020, the parties to the RCF agreement have agreed to extend the term of the agreement for one additional year, from March 2022 to March 2023, composed of a €350 million (\$429.4 million) commitment through March 2022, and a €294 million (\$360.8 million) commitment from the end of March 2022 through March 2023. This multi-currency revolving credit facility bears interest rate at Euribor or the relevant Libor plus a margin to be adjusted on the basis of the leverage ratio.

Besides this RCF agreement, Criteo is part of many credit lines it entered into or maintained following acquisitions. Criteo specifically has agreements with Bpifrance Financement (French Public Investment Bank) for a total amount outstanding as of December 31, 2020 of €1.0 million (\$1.3 million).

All of these loans and revolving credit facilities are unsecured and contain customary events of default but do not contain any affirmative, financial or negative covenants, with the exception of the September 2015 revolving credit facility which contains covenants, including compliance with a total net debt to adjusted EBITDA ratio and restrictions on the incurrence of additional indebtedness. At December 31, 2020, we were in compliance with the required leverage ratio. Criteo intends to repay the BPI bank loans in 2021, prior to their settlement date.

The following table shows the maturity of our financial liabilities:

Carrying value	Maturity					
	2021	2022	2023	2024	2025	2026
	(in thousands)					
Borrowings	\$ 1,505	\$ 1,505				
Other financial liabilities	845	459	45	—	341	—
Financial derivatives	925	925	—	—	—	—
Financial liabilities	3,275	2,889	45	—	341	—

Note 13. Leases

The components of lease expense are as follows:

	Three Months Ended			Twelve Months Ended		
	December 31,			December 31,		
	2020			2020		
	Offices	Data Centers	Total	Offices	Data Centers	Total
Lease expense	\$ 8,413	\$ 5,331	\$ 13,744	\$ 29,183	\$ 25,850	\$ 55,033
Short term lease expense	487	335	822	819	335	1,154
Variable lease expense	124	(110)	14	444	—	444
Sublease income	(242)	—	(242)	(756)	—	(756)
Total operating lease expense	<u>\$ 8,782</u>	<u>\$ 5,556</u>	<u>\$ 14,338</u>	<u>\$ 29,690</u>	<u>\$ 26,185</u>	<u>\$ 55,875</u>

	Three Months Ended			Twelve Months Ended		
	December 31,			December 31,		
	2019			2019		
	Offices	Data Centers	Total	Offices	Data Centers	Total
Lease expense	\$ 11,833	\$ 7,169	\$ 19,002	\$ 38,910	\$ 24,596	\$ 63,506
Short term lease expense	352	253	605	2,296	1,826	4,122
Variable lease expense	141	(958)	(817)	599	—	599
Sublease income	(378)	—	(378)	(2,916)	—	(2,916)
Total operating lease expense	<u>\$ 11,948</u>	<u>\$ 6,464</u>	<u>\$ 18,412</u>	<u>\$ 38,889</u>	<u>\$ 26,422</u>	<u>\$ 65,311</u>

As of December 31, 2020, we had future minimum lease payments as follows:

	December 31, 2020		
	Offices	Data Centers	Total
	(in thousands)		
2021	\$ 29,463	\$ 24,102	\$ 53,565
2022	27,737	11,656	39,393
2023	17,818	4,427	22,245
2024	8,424	2,274	10,698
2025	7,211	380	7,591
Thereafter	2,424	—	2,424
Total minimum lease payments	93,077	42,839	135,916
Impact of Discount Rate	(3,103)	(1,418)	(4,521)
Total Lease Liability	\$ 89,974	\$ 41,421	\$ 131,395

The weighted average remaining lease term and discount rates as of December 31, 2020 and 2019 are as follows:

	December 31, 2020	December 31, 2019
Weighted average remaining lease term (years)		
Offices	3.59	4.52
Data Centers	2.18	2.52
Weighted average discount rate		
Offices	1.97 %	2.47 %
Data Centers	1.51 %	1.85 %

Supplemental cash flow information related to our operating leases is as follows for the period December 31, 2020 and 2019:

	Twelve Months Ended	
	December 31,	
	2020	2019
	(in thousands)	
Cash paid for amounts included in the measurement of lease liabilities		
Cash flow for operating activities	\$ (61,343)	\$ (54,259)
Right of use assets obtained in exchange for new operating lease liabilities	\$ 57,550	\$ 15,714

As of December 31, 2020, we have additional operating leases, that have not yet commenced which will result in additional operating lease liabilities and right of use assets:

	Offices	Data Centers
	(in thousands)	
Additional operating lease liabilities	\$ —	\$ 7,900
Additional right of use assets	\$ —	\$ 7,900

These operating leases will commence during the fiscal year ending December 31, 2021.

During the three months period ended December 31, 2020 and December 31, 2019, we incurred an impairment loss of \$0.0 million and \$8.9 million, respectively, on certain right of use assets due to the implementation of management's facilities right sizing program. We used market quotes in determining the fair value of the right of use assets. The impairment loss was classified between Research and Development expenses of \$0.0 million, and \$0.7 million, Sales and Operations expenses of \$0.0 million and \$6.4 million, and General and Administrative expenses of \$0.0 million and \$1.8 million.

During the year ended December 31, 2020 and December 31, 2019, we incurred an impairment loss of \$1.6 million, and \$8.9 million, respectively, on certain right of use assets due to the implementation of management's facilities right sizing program. We used market quotes in determining the fair value of the right of use assets. The impairment loss was classified between Research and Development expenses of \$0.2 million and \$0.7 million, Sales and Operations expenses of \$1.1 million and \$6.4 million, and General and Administrative expenses of \$0.3 million and \$1.8 million.

Note 14. Other Current Liabilities

Other current liabilities are presented in the following table:

	Year Ended December 31,	
	2020	2019
	(in thousands)	
Clients' prepayments	\$ 12,234	\$ 13,618
Credit notes	14,433	16,420
Accounts payable relating to capital expenditures	4,721	4,408
Other creditors	1,918	1,213
Deferred revenue	84	227
Total	\$ 33,390	\$ 35,886

Note 15. Employee Benefits

Defined Benefit Plans

According to the French law and the Syntec Collective Agreement, French employees are entitled to compensation paid on retirement.

The following table summarizes the changes in the projected benefit obligation:

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Projected benefit obligation present value - beginning of period	\$ 8,485	\$ 5,537	\$ 5,149
Service cost	2,232	1,556	1,690
Interest cost	95	113	86
Actuarial losses (gains)	(5,214)	1,374	(1,235)
Change in consolidation scope	—	—	98
Currency translation adjustment	569	(95)	(251)
Projected benefit obligation present value - end of period	\$ 6,167	\$ 8,485	\$ 5,537

The Company does not hold any plan assets for any of the periods presented.

The main assumptions used for the purposes of the actuarial valuations are listed below:

	Year Ended December 31,		
	2020	2019	2018
Discount rate (Corp AA)	0.85%	1.1%	2.1%
Expected rate of salary increase	5.0%	5.0%	5.0%
Expected rate of social charges	49.0% - 50.0%	49.0% - 50.0%	49.0% - 50.0%
Expected staff turnover	—% - 17.8%	—% - 10.5%	—% - 10.5%
Estimated retirement age	Progressive table	Progressive table	Progressive table
Life table	TH-TF 2000-2002 shifted	TH-TF 2000-2002 shifted	TH-TF 2000-2002 shifted

Defined Contribution Plans

The total expense represents contributions payable to these plans by us at specified rates.

In some countries, the Group's employees are eligible for pension payments and similar financial benefits. The Group provides these benefits via defined contribution plans. Under defined contribution plans, the Group has no obligation other than to pay the agreed contributions, with the corresponding expense charged to income for the year. The main contributions concern France, the United States, for 401k plans, and the United Kingdom.

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Defined contributions plans included in personnel expenses	\$ (16,211)	\$ (15,686)	\$ (16,912)

Note 16. Common shares and Treasury stock

Change in Number of Shares

	<u>Number of ordinary shares</u>
Balance at January 1, 2019	<u>64,249,084</u>
	<i>of which Common shares</i> 67,708,203
	<i>of which Treasury stock</i> (3,459,119)
Issuance of shares under share option and free share plans ⁽¹⁾	83,266
Treasury shares retired ⁽²⁾	(1,594,288)
Share repurchase program (see Note 2)	(444,554)
Balance at December 31, 2019	<u>62,293,508</u>
	<i>of which Common shares</i> 66,197,181
	<i>of which Treasury stock</i> (3,903,673)
Issuance of shares under share option and free share plans ⁽³⁾	231,784
Storetail deferred consideration	(156,859)
Share repurchase program (see Note 2)	(1,728,863)
Balance at December 31, 2020	<u>60,639,570</u>
	<i>of which Common shares</i> 66,272,106
	<i>of which Treasury stock</i> (5,632,536)

⁽¹⁾ Adopted by the Board of Directors on March 1, 2019, April 25, 2019, June 25, 2019, July 25, 2019, October 24, 2019 and December 11, 2019.

⁽²⁾ On February 8th, 2019, the Board acknowledged the share capital decrease resulting from the cancellation of 1,594,288 shares and approved the related amendment of Article 6 of the Company's by-laws reflecting such decrease.

⁽³⁾ Adopted by the Board of Directors on March 3, 2020, April 23, 2020, June 22, 2020, July 23, 2020, October 23, 2020 and December 9, 2020

Note 17. Nature of Expenses Allocated by Function

Nature of Expenses Allocated to Cost of Revenue

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Traffic acquisition costs	\$ (1,247,571)	\$ (1,314,947)	\$ (1,334,334)
Other cost of revenue	(137,028)	(117,533)	(131,744)
Hosting costs	(61,458)	(57,139)	(54,764)
Depreciation and amortization	(55,935)	(44,866)	(67,346)
Data acquisition	(4,961)	(2,410)	(282)
Other cost of sales	(14,674)	(13,118)	(9,352)
Total cost of revenue	\$ (1,384,599)	\$ (1,432,480)	\$ (1,466,078)

Nature of Expenses Allocated to Research and Development

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Personnel expenses	\$ (90,525)	\$ (116,803)	\$ (130,696)
Personnel expense excluding equity awards compensation expense and research tax credit	(97,396)	(123,696)	(120,024)
Equity awards compensation expense	(9,771)	(9,320)	(21,359)
Research tax credit	16,642	16,213	10,687
Other cash operating expenses	(30,115)	(37,820)	(37,119)
Subcontracting and other headcount related costs	(10,706)	(16,343)	(15,129)
Rent and facilities costs	(12,196)	(14,009)	(14,201)
Consulting and professional fees	(4,782)	(4,416)	(3,320)
Marketing costs	(2,135)	(3,818)	(4,976)
Other	(296)	766	507
Other non-cash operating expenses	(11,873)	(17,968)	(11,448)
Depreciation and amortization	(10,759)	(17,208)	(10,602)
Net change in other provisions	(1,114)	(760)	(846)
Total research and development expenses	\$ (132,513)	\$ (172,591)	\$ (179,263)

Nature of Expenses Allocated to Sales and Operations

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Personnel expenses	\$ (222,370)	\$ (243,733)	\$ (244,256)
Personnel expense excluding equity awards compensation expense	(212,081)	(226,849)	(215,615)
Equity awards compensation expense	(10,289)	(16,884)	(28,641)
Other cash operating expenses	(70,680)	(109,268)	(104,960)
Subcontracting and other headcount related costs	(13,338)	(24,655)	(25,706)
Rent and facilities costs	(29,713)	(32,353)	(32,398)
Marketing costs	(2,882)	(20,804)	(17,864)
Consulting and professional fees	(9,660)	(6,988)	(5,330)
Operating taxes	(4,268)	(6,197)	(11,788)
Other including bad debt expense	(10,819)	(18,271)	(11,874)
Other non-cash operating expenses	(37,235)	(22,476)	(23,491)
Depreciation and amortization	(18,495)	(30,620)	(18,245)
Net change in provisions for doubtful receivables	(19,264)	9,740	(5,453)
Net change in other provisions	524	(1,596)	207
Total sales and operations expenses	\$ (330,285)	\$ (375,477)	\$ (372,707)

Nature of Expenses Allocated to General and Administrative

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Personnel expenses	\$ (66,062)	\$ (75,815)	\$ (76,476)
Personnel expense excluding equity awards compensation expense	(57,351)	(61,020)	(59,876)
Equity awards compensation expense	(8,711)	(14,795)	(16,600)
Other cash operating expenses	(47,950)	(52,057)	(48,687)
Subcontracting and other headcount related costs	(9,576)	(14,781)	(16,638)
Rent and facilities costs	(11,228)	(11,951)	(11,081)
Marketing costs	(1,645)	(3,130)	(1,061)
Consulting and professional fees	(20,081)	(19,329)	(18,163)
Other	(5,420)	(2,866)	(1,744)
Other non-cash operating expenses	(2,383)	(11,882)	(9,996)
Depreciation and amortization	(4,153)	(8,825)	(7,306)
Net change in other provisions	1,770	(3,057)	(2,690)
Total general and administrative expenses	\$ (116,395)	\$ (139,754)	\$ (135,159)

Note 18. Allocation of Personnel Expenses**Allocation of Personnel Expenses By Function**

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Research and development expenses	\$ (90,525)	\$ (116,803)	\$ (130,696)
Sales and operations expenses	(222,370)	(243,733)	(244,256)
General and administrative expenses	(66,062)	(75,815)	(76,476)
Total personnel expenses	<u>\$ (378,957)</u>	<u>\$ (436,351)</u>	<u>\$ (451,428)</u>

Allocation of Personnel Expenses by Nature

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Wages and salaries	\$ (278,934)	\$ (306,862)	\$ (296,336)
Severance pay	(5,251)	(12,504)	(6,922)
Social charges	(75,552)	(76,594)	(77,284)
Other social expenses	(7,091)	(15,513)	(14,375)
Equity awards compensation expense	(28,771)	(40,999)	(66,600)
Profit sharing	—	(92)	(598)
Research tax credit (classified as a reduction of R&D expenses)	16,642	16,213	10,687
Total personnel expenses	<u>\$ (378,957)</u>	<u>\$ (436,351)</u>	<u>\$ (451,428)</u>

Note 19. Share-Based Compensation

Share Options Plans and Employee Warrants Grants (BSPCE)

The Board of Directors has been authorized by the general meeting of the shareholders to grant employee warrants (*Bons de Souscription de Parts de Créateur d'Entreprise* or "BSPCE") and to implement share options, free shares plans as follows:

- Issuance of 2,112,000 BSPCE, authorized at the General Meeting of Shareholders on October 24, 2008, making available up to 2,112,000 BSPCE until April 24, 2010 ("Plan 1");
- Issuance of 1,472,800 BSPCE, authorized at the General Meeting of Shareholders on April 16, 2009, making available up to 1,472,800 BSPCE until October 16, 2010 ("Plan 2");
- 1,584,000 Share Options, authorized at the General Meeting of Shareholders on September 9, 2009, making available up to 1,584,000 share options until November 8, 2012. This Plan has been amended at the General Meeting of Shareholders on November 16, 2010, making available up to 2,700,000 share options or BSPCE ("Plan 3");
- Issuance of 361,118 BSPCE, granted to Criteo co-founders at the General Meeting of Shareholders on April 23, 2010 ("Plan 4");
- 2,800,000 BSPCE or Share Options (*Options de Souscription d'Actions* or "OSA"), authorized at the General Meeting of Shareholders on November 18, 2011, making available up to 2,800,000 share options or BSPCE ("Plan 5");
- 1,654,290 BSPCE or Share Options, authorized at the General Meeting of Shareholders on September 14, 2012, making available up to 1,654,290 share options or BSPCE ("Plan 6");
- 6,627,237 BSPCE or Share Options, authorized at the General Meeting of Shareholders on August 2, 2013, making available up to 6,627,237 share options or BSPCE ("Plan 7");
- 9,935,710 Share Options, authorized at the General Meeting of Shareholders on June 18, 2014, making available up to 9,935,710 share options ("Plan 8"). The Board of Directors has also authorized free shares/restricted stock units ("RSUs") to Criteo employees under presence condition and to certain senior managers, employees and members of the Management, subject to the achievement of internal performance objectives and presence condition.
- 4,600,000 Share Options or RSUs, authorized at the General Meeting of Shareholders on June 29, 2016 and 100,000 BSAs (any BSA granted will also be deducted from the 4,600,000 limit), such authorizations collectively referred to as "Plan 9". The Board of Directors has authorized RSUs to Criteo employees subject to a presence condition and to certain senior managers, employees and members of management, subject to the achievement of internal performance objectives and a presence condition.
- 4,600,000 Share Options or RSUs, authorized at the General Meeting of Shareholders on June 28, 2017 and 120,000 BSAs (any BSA granted will also be deducted from the 4,600,000 limit), such authorizations collectively referred to as "Plan 10". The Board of Directors has authorized RSUs to Criteo employees subject to a presence condition and to certain senior managers, employees and members of management, subject to the achievement of internal performance objectives and a presence condition.
- 4,200,000 Share Options or RSUs, authorized at the General Meeting of Shareholders on June 27, 2018 and 150,000 BSAs (any BSA granted will also be deducted from the limit), such authorizations collectively referred to as "Plan 11". The Board of Directors has authorized RSUs to Criteo employees subject to a presence condition and to certain senior managers, employees and members of management, subject to the achievement of internal performance objectives and a presence condition.
- 6,200,000 Share Options or RSUs, authorized at the General Meeting of Shareholders on May 16, 2019 and 175,000 BSAs (any BSA granted will also be deducted from the limit), such authorizations collectively referred to as "Plan 12". The Board of Directors has authorized RSUs to Criteo employees subject to a presence condition and to members of management, subject to the achievement of internal performance objectives and a presence condition.

- 6,463,000 Share Options or RSUs, authorized at the General Meeting of Shareholders on June 25, 2020, such authorizations collectively referred to as “Plan 13”. The Board of Directors has authorized RSUs to Criteo employees subject to a presence condition and to members of management, subject to the achievement of internal performance objectives and a presence condition.

Upon the exercise of the BSPCEs or Share Options, we grant beneficiaries newly issued ordinary shares of the Parent. We also grant beneficiaries ordinary shares of the Parent upon the vesting of RSUs. Prior to the beginning of our share repurchase programs described elsewhere in this Form 10-K, these grants relating to vested RSUs were completed using newly issued ordinary shares. Since the initiation of our share repurchase programs, the grants relating to vested RSUs are completed using existing ordinary shares that were repurchased as part of our share repurchase programs.

The vesting schedule for the BSPCEs and OSAs is the following for the Plans 1, 2 and 3:

- up to one third (1/3) of the BSPCEs on the first anniversary of the date of grant;
- up to one twelfth (1/12) at the expiration of each quarter following the first anniversary of the date of grant, and this during twenty-four (24) months thereafter.
- The BSPCEs and OSAs may be exercised at the latest within ten (10) years from the date of grant.

For the Plan 3 amended to Plan 13, the vesting schedule is as follows:

- up to one fourth (1/4) of the BSPCEs/share options on the first anniversary of the date of grant;
- up to one-sixteenth (1/16) at the expiration of each quarter following the first anniversary of the date of grant, and this during thirty-six (36) months thereafter.
- The BSPCEs and OSAs may be exercised at the latest within ten (10) years from the date of grant.

The vesting schedule for the RSUs is as follows:

- 50% at the expiration of a two year period
- 6.25% at the expiration of each quarter following the first two years-period during twenty four (24) months.

When the Company was not listed, exercise prices were determined by reference to the latest capital increase as of the date of grant, unless the Board of Directors decided otherwise. Since our initial public offering, exercise prices are determined by reference to the closing share price the day before the date of the grant if higher than a floor value of 95% of the average of the closing share price for the last 20 trading days.

In the following tables, exercise prices, grant date share fair values and fair value per equity instruments are provided in euros, as the Company is incorporated in France and the euro is the currency used for the grants.

Details of BSPCE / OSA / RSU plans

	Plans 1 & 2	Plan 3	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9	Plan 10	Plan 11	Plan 12	Plan 13	
Dates of grant (Boards of Directors)	Oct 24, 2008 - Sept 14, 2010	Sept 9, 2009 - Sept 21, 2011	Nov 18, 2011 - May 22, 2012	Oct 25, 2012	Oct 25, 2012 - April 18, 2013	Sept 3, 2013 - April 23, 2014	July 30, 2014 - June 28, 2016	July 28, 2016 - June 27, 2017	July 27, 2017 - June 26, 2018	July 26, 2018 - June 25, 2019	July 25, 2019 - June 24, 2020	June 25, 2020 - December 15, 2020
Vesting period	3.0 years	3.0 - 4.0 years	4.0 years	1.0 year	4.0 - 5.0 years	4.0 years	4.0 years	4.0 years	4.0 years	4.0 years	4.0 years	4.0 years
Contractual life	10.0 years	10.0 years	10.0 years	10.0 years	10.0 years	10.0 years	10.0 years	10.0 years	10.0 years	10.0 years	10.0 years	10.0 years
Expected option life	8.0 years	8.0 years	8.0 years	8.0 years	8.0 years	6.0 - 8.0 years	6.0 years	6.0 years	6.0 years	6.0 years	6.0 years	6.0 years
Number of instruments granted	1,819,120	4,289,940	1,184,747	257,688	1,065,520	2,317,374	4,318,551	2,534,262	502,410	2,556,315	947,565	2,150,498
Type - Share Option (S.O.) / BSPCE / RSU	BSPCE	BSPCE & OSA	BSPCE & OSA	BSPCE	BSPCE & OSA	BSPCE & OSA	OSA	RSU	OSA	RSU	OSA	RSU
Share entitlement per option	1	1	1	1	1	1	1	1	1	1	1	1
Exercise price	€0.45 - €2.1	€0.2 - €5.95	€5.95	€8.28	€8.28 - €10.43	€12.08 - €38.81	€22.95 - €47.47	—	€38.2 - €43.45	—	€24.63 - €28.69	—
Valuation method	Black & Scholes											
Grant date share fair value	€0.2 - €0.7	€0.20 - €4.98	€4.98	€6.43	€5.45 - €6.43	€12.08 - €38.81	€22.95 - €47.47	€35.18 - €35.58	€38.20 - €43.45	€33.98 - €49.08	€24.63 - €28.69	€22.92 - €44.37
Expected volatility ⁽¹⁾	53.0% - 55.7%	55.2% - 57.8%	52.1% - 52.9%	50.2%	49.6% - 50.2%	44.2% - 50.1%	39.4% - 44.5%	—	40.6% - 41.3%	—	41.0% - 41.5%	—
Discount rate ⁽²⁾	2.74% - 4.10%	2.62% - 3.76%	2.79% - 3.53%	2.20%	1.80% - 2.27%	1.20% - 2.40%	—% - 0.71%	N/A	N/A	N/A	0.60% - 0.70%	1.20% - 0.90%
Performance conditions	No	Yes (A)	No	Yes (B)	No	No	No	Yes (C)	No	Yes (D) (E)	No	No
Fair value per option / RSU	€0.08 - €0.45	€0.08 - €2.88	€2.75 - €2.85	€3.28	€3.28 - €5.83	€6.85 - €16.90	€9.47 - €17.97	€26.16 - €37.10	€14.40 - €16.82	€33.98 - €49.08	€9.85 - €11.40	€22.92 - €44.37
												€6.15 - €6.94
												€15.86 - €30.80
												€3.29 - €5.78
												€8.66 - €17.44
												€10.79 - €15.57

(1) Based on similar listed entities.

(2) Based on Obligation Assimilables du Trésor, i.e. French government bonds with a ten-year maturity ("TEC 10 OAT floating-rate bonds").

(A) Options subject to performance condition: Among the 960,000 share options granted in April 7, 2011, 180,000 are subjected to performance conditions based on revenue excluding traffic acquisition costs targets that were met in 2012.

(B) On October 25, 2012, the Board of Directors of the Parent also granted a total of 257,688 BSPCE to our co-founders. The conditions of exercise of these BSPCE are linked to a future liquidity event or a transfer of control of the Company, and the number of BSPCE that can be exercised are determined by the event's date which cannot occur after March 31, 2014. Based on the assumptions known as at December 31, 2012, we determined that the share-based compensation expense would be recognized over a one-year period. This assumption was confirmed in 2013.

(C) On October 29, 2015, the Board of Directors of the Parent also granted a total of 337,960 RSU to Criteo employees under condition of presence and to certain senior managers, employees and members of the management, subject to the achievement of internal performance objectives and condition of presence. Based on the assumptions known at December 31, 2015, we determined the share-based compensation expense by applying a probability ratio on performance objectives completion. This assumption was confirmed in 2016. On January 29, 2016, the Board of Directors of the Parent granted a total of 33,010 RSUs to members of the management, subject to the achievement of internal performance objectives and condition of presence. Based on the assumptions known at December 31, 2016, we determined the share-based compensation expense by applying a probability ratio on performance objectives completion. This assumption was confirmed in 2016.

(D) On July 28, 2016, the Board of Directors of the Parent granted a total of 195,250 RSUs to certain senior managers and members of the management, subject to the achievement of internal performance objectives and condition of presence. Based on the assumptions known at December 31, 2016, we determined the share-based compensation expense by applying a probability ratio on performance objectives completion. This assumption was confirmed in 2017.

(E) On June 27, 2017, the Board of Directors of the Parent granted a total of 135,500 RSUs to certain senior managers and members of the management, subject to the achievement of internal performance objectives and condition of presence. Based on the assumptions known at December 31, 2017, we determined the share-based compensation expense by applying a probability ratio on performance objectives completion. This assumption was confirmed in 2018.

(F) On July 26, 2018, the Board of Directors of the Parent granted a total of 203,332 RSUs to certain senior managers and members of the management, subject to the achievement of internal performance objectives and condition of presence. Based on the assumptions known at December 31, 2018, we determined the share-based compensation expense by applying a probability ratio on performance objectives completion.

(G) On April 25, 2019, the Board of Directors of the Parent granted a total of 257,291 RSUs to members of the management, subject to the achievement of internal performance objectives and condition of presence. Based on the assumptions known at December 31, 2019, we determined the share-based compensation expense by applying a probability ratio on performance objectives completion.

(H) On March 3, 2020, October 23, 2020 and December 9, 2020 the Board of Directors of the Parent granted a total of 272,600 RSUs to members of the management, subject to the achievement of internal performance objectives and condition of presence. Based on the assumptions known at December 31, 2020, we determined the share-based compensation expense by applying a probability ratio on performance objectives completion.

Change in Number of outstanding BSPCE / OSA / RSU

	OSAs	RSUs	Total
Balance at January 1, 2018	3,192,708	4,212,508	7,405,216
Granted	1,013,065	3,133,644	4,146,709
Exercised (BSPCE and OSA)	(137,348)	—	(137,348)
Vested (RSU)	—	(1,362,873)	(1,362,873)
Forfeited	(880,960)	(1,203,142)	(2,084,102)
Expired	—	—	—
Balance at December 31, 2018	3,187,465	4,780,137	7,967,602
Granted	438,347	3,147,751	3,586,098
Exercised (BSPCE and OSA)	(83,266)	—	(83,266)
Vested (RSU)	—	(1,219,112)	(1,219,112)
Forfeited	(983,012)	(1,729,789)	(2,712,801)
Expired	—	—	—
Balance at December 31, 2019	2,559,534	4,978,987	7,538,521
Granted	140,513	2,684,402	2,824,915
Exercised (BSPCE and OSA)	(223,934)	—	(223,934)
Vested (RSU)	—	(1,478,894)	(1,478,894)
Forfeited	(370,355)	(1,230,404)	(1,600,759)
Expired	(3,600)	—	(3,600)
Balance at December 31, 2020	2,102,158	4,954,091	7,056,249

Breakdown of the Closing Balance

	Plans 1 & 2	Plan 3	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9	Plan 10	Plan 11	Plan 12	RSUs	Total
Balance at December 31, 2018												
Number outstanding	\$ 3,600	\$ 67,751	\$ 242,613	\$ 41,338	\$ 306,172	\$ 1,599,033	\$ 328,726	\$ 532,732	\$ 65,500	\$ —	\$ 4,780,137	\$ 7,967,602
Weighted-average exercise price	€ 0.70	€ 4.43	€ 5.95	€ 9.26	€ 17.95	€ 30.99	€ 41.75	€ 25.79	€ 18.72	€ —	€ —	€ 26.94
Number exercisable	3,600	67,751	242,613	41,338	306,172	1,417,904	161,658	—	—	—	—	2,241,036
Weighted-average exercise price	€ 0.70	€ 4.43	€ 5.95	€ 9.26	€ 17.95	€ 30.04	€ 41.37	€ —	€ —	€ —	€ —	€ 25.39
Weighted-average remaining contractual life	1.2 years	2.4 years	3.3 years	4.0 years	4.9 years	6.2 years	8.2 years	9.3 years	9.8 years	—	—	6.7 years
Balance at December 31, 2019												
Number outstanding	3,600	63,544	230,673	26,350	216,157	1,080,017	116,580	318,766	128,380	375,467	4,978,987	7,538,521
Weighted-average exercise price	€ 0.70	€ 4.37	€ 5.95	€ 9.28	€ 17.70	€ 29.69	€ 41.50	€ 26.58	€ 17.32	€ 15.67	€ —	€ 23.09
Number exercisable	3,600	63,544	230,673	26,350	216,157	1,066,670	80,966	129,908	16,375	—	—	1,834,243
Weighted-average exercise price	€ 0.70	€ 4.37	€ 5.95	€ 9.28	€ 17.70	€ 29.58	€ 41.17	€ 26.42	€ —	€ —	€ —	€ 24.12
Weighted-average remaining contractual life	0.2 years	1.4 years	2.3 years	3.0 years	3.9 years	5.1 years	7.1 years	8.3 years	9.1 years	9.9 years	—	6.2 years
Balance at December 31, 2020												
Number outstanding	—	42,644	101,852	20,870	104,131	921,534	97,013	169,754	128,380	515,980	4,954,091	7,056,249
Weighted-average exercise price	€ —	€ 5.31	€ 5.95	€ 9.36	€ 20.05	€ 29.82	€ 41.18	€ 26.46	€ 17.32	€ 13.76	€ —	€ 26.81
Number exercisable	—	42,644	101,852	20,870	104,131	921,534	97,013	169,754	56,330	93,867	—	1,607,995
Weighted-average exercise price	€ —	€ 5.31	€ 5.95	€ 9.36	€ 20.05	€ 29.82	€ 41.18	€ 26.46	€ 17.52	€ —	€ —	€ 24.87
Weighted-average remaining contractual life	—	0.5 years	1.3 years	2.1 years	2.9 years	4.2 years	6.1 years	7.3 years	8.1 years	9.0 years	—	5.8 years

Non-Employee Warrants (Bons de Souscription d'Actions or BSA)

In addition to the RSUs, share options and BSPCE grants, the shareholders of the Parent also authorized the grant of non-employee warrants or *Bons de Souscription d'Actions* ("BSA"), as indicated below:

- Plan A : up to one-eighth (1/8) at the expiration of each quarter following the date of grant, and this during twenty-four (24) months; and at the latest within ten (10) years as from the date of grant.
- Plan B : up to one third (1/3) of the non-employee warrants on the first anniversary of the date of grant; then up to one twelfth (1/12) at the expiration of each quarter following the first anniversary of the beginning of the vesting period, and this during twenty-four (24) months thereafter; and at the latest within ten (10) years as from the date of grant.
- Plan C : up to one-twenty fourth (1/24) at the expiration of each month following the date of grant, and this during twenty-four (24) months, and at the latest within ten (10) years as from the date of grant.
- Plan D (member of the advisory board) : up to one-twenty fourth (1/24) at the expiration of each month following the date of grant, and this during twenty-four (24) months; and at the latest within ten (10) years as from the date of grant.
- Plan D (not member of the advisory board): one-third (1/3) at the date of grant; one third (1/3) at the first anniversary of the date of grant; one third (1/3) at the second anniversary of the date of grant; and at the latest within ten (10) years as from the date of grant.
- Plans E, F, G, H and I : up to one fourth (1/4) of the non-employee warrants on the first anniversary of the date of grant; up to one-sixteenth (1/16) at the expiration of each quarter following the first anniversary of the date of grant, and this during thirty-six (36) months thereafter; and at the latest within ten (10) years from the date of grant.

Upon exercise of the non-employee warrants, we offer settlement of the warrants in newly issued ordinary shares of the Parent.

Details of Non-Employee Warrants

	Plan A	Plan B	Plan C	Plan D	Plan E	Plan F	Plan G	Plan H	Plan I
Dates of grant (Boards of Directors)	November 17, 2009	March 11, 2010	November 16, 2010 - September 21, 2011	October 25, 2012 - March 6, 2013	March 19, 2015 - October 29, 2015	April 20, 2016 - March 1, 2017	July 27, 2017 - October 26, 2017	October 25, 2018	October 24, 2019
Vesting period	2 years	3 years	2 years	2 years	1 - 4 years	1 - 4 years	1 - 4 years	1 - 4 years	1 - 4 years
Contractual life	10 years	10 years	10 years	10 years	10 years	10 years	10 years	10 years	10 years
Number of warrants granted	231,792	277,200	192,000	125,784	38,070	59,480	46,465	125,000	105,680
Share entitlement per warrant	1	1	1	1	1	1	1	1	1
Share warrant price	€0.02	€0.07 - €0.11	€0.04 - €0.30	€0.43 - €0.48	€9.98 - €16.82	€13.89 - €17.44	€13.88 - €17.55	€6.91	€6.81
Exercise price	€0.70	€0.70	€0.70 - €5.95	€8.28 - €9.65	€35.18 - €41.02	€33.98 - €43.42	€35.80 - €44.37	€19.71	€17.44
Valuation method					Binomial method				
Grant date share fair value	€0.2	€0.7	€0.7 - €4.98	€6.43 - €9.65	€35.18 - €41.02	€33.98 - €44.33	€35.8 - €44.37	€19.71	€17.44
Expected volatility ⁽¹⁾	55.7%	55.2%	53.5% - 55%	50% - 50.2%	39.9%	40.6% - 40.9%	41% - 41.3%	40.7%	37.2%
Discount rate ⁽²⁾	3.58%	3.44%	2.62% - 3.38%	2.13% - 2.27%	—% - 0.52%	0.1% - 0.66%	0.54% - 0.6%	0.6%	(0.2)%
Performance conditions	No	Yes (A)	No	No	No	No	No	No	No
Fair value per warrant	€0.05	€0.33 - €0.38	€0.40 - €2.58	€2.85 - €4.98	€9.98 - €16.82	€13.89 - €14.55	€13.88 - €17.55	€6.91	€6.81

⁽¹⁾ Based on similar listed entities.

⁽²⁾ Based on Obligations Assimilables du Trésor, i.e. French government bonds with a ten-year maturity ("TEC 10 OAT floating-rate bonds").

(A) All the performance conditions were achieved during the period ended December 31, 2010.

Changes in Number of Non-Employee Warrants

Balance at January 1, 2018	186,276
Granted	125,000
Exercised	—
Forfeited	(19,606)
Balance at December 31, 2018	291,670
Granted	105,680
Exercised	—
Forfeited	(33,583)
Balance at December 31, 2019	363,767
Granted	—
Exercised	(7,250)
Forfeited	(12,742)
Expired	—
Balance at December 31, 2020	343,775

Breakdown of the Closing Balance

	Non-employee warrants
Balance at December 31, 2018	
Number outstanding	291,670
Weighted-average exercise price	€ 13.02
Number exercisable	108,780
Weighted-average exercise price	€ 18.95
Weighted-average remaining contractual life	7.9 years
Balance at December 31, 2019	
Number outstanding	363,767
Weighted-average exercise price	€ 14.83
Number exercisable	156,604
Weighted-average exercise price	€ 17.52
Weighted-average remaining contractual life	7.6 years
Balance at December 31, 2020	
Number outstanding	343,775
Weighted-average exercise price	\$ 15.12
Number exercisable	205,890
Weighted-average exercise price	\$ 17.33
Weighted-average remaining contractual life	6.8 years

Reconciliation with the Consolidated Statements of Income

	Balance for the year ended December 31, 2020				Balance for the year ended December 31, 2019				Balance for the year ended December 31, 2018			
	(in thousands)											
	R&D	S&O	G&A	Total	R&D	S&O	G&A	Total	R&D	S&O	G&A	Total
RSUs	(9,771)	(9,891)	(6,619)	(26,281)	(9,742)	(17,282)	(11,109)	(38,133)	(20,499)	(27,025)	(12,179)	(59,703)
Share options / BSPCE	—	(398)	(422)	(820)	422	398	(2,300)	(1,480)	(860)	(1,616)	(2,938)	(5,414)
Plan 7	—	—	—	—	—	—	—	—	(2)	(1)	(1)	(4)
Plan 8	—	—	(20)	(20)	131	90	(187)	34	169	(553)	(493)	(877)
Plan 9	—	—	231	231	202	258	(314)	146	(495)	(461)	(902)	(1,858)
Plan 10	—	—	874	874	89	178	(1,454)	(1,187)	(532)	(601)	(1,485)	(2,618)
Plan 11	—	(190)	(118)	(308)	—	(128)	(269)	(397)	—	—	(57)	(57)
Plan 12	—	(208)	(1,389)	(1,597)	—	—	(76)	(76)	—	—	—	—
Total share-based compensation	(9,771)	(10,289)	(7,041)	(27,101)	(9,320)	(16,884)	(13,409)	(39,613)	(21,359)	(28,641)	(15,117)	(65,117)
BSAs	—	—	(1,670)	(1,670)	—	—	(1,386)	(1,386)	—	—	(1,483)	(1,483)
Total equity awards compensation expense	\$ (9,771)	\$ (10,289)	\$ (8,711)	\$ (28,771)	\$ (9,320)	\$ (16,884)	\$ (14,795)	\$ (40,999)	\$ (21,359)	\$ (28,641)	\$ (16,600)	\$ (66,600)

Note 20. Financial expense

The Consolidated Statements of Income line item “Financial income (expense)” can be broken down as follows:

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Financial income from cash equivalents	\$ 1,117	\$ 1,528	\$ 1,055
Interest and fees	(2,811)	(2,383)	(2,107)
	<i>Interest on debt</i>	<i>(2,381)</i>	<i>(1,796)</i>
	<i>Fees</i>	<i>(430)</i>	<i>(311)</i>
Foreign exchange loss	(150)	(4,425)	(3,945)
Other financial expense	(95)	(469)	(87)
Total financial expense	<u>\$ (1,939)</u>	<u>\$ (5,749)</u>	<u>\$ (5,084)</u>

The \$1.9 million financial expense for the period ended December 31, 2020 was mainly driven by the financial expense relating to the €140 million drawing from May 2020 to November 2020 as part of our available Revolving Credit Facility (RCF) financing, the up-front fees amortization, the non-utilization costs, partially offset by income from cash & cash equivalent. At December 31, 2020, our exposure to foreign currency risk was centralized at Criteo S.A. and hedged using foreign currency swaps or forward purchases or sales of foreign currencies.

The \$5.7 million financial expense for the period ended December 31, 2019 was mainly driven by the non-utilization costs and upfront fees amortization incurred as part of our available RCF financing and the recognition of a negative impact of foreign exchange revaluations net of related hedging. At December 31, 2019, our exposure to foreign currency risk was centralized at Criteo S.A. and hedged using foreign currency swaps or forward purchases or sales of foreign currencies.

Note 21. Income Taxes**Breakdown of Income Taxes**

The Consolidated Statements of Income line item "Provision for income taxes" can be broken down as follows:

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Current income tax	\$ (28,477)	\$ (24,078)	\$ (54,301)
France	(16,379)	(8,410)	(37,223)
International	(12,098)	(15,668)	(17,078)
Net change in deferred taxes	(3,720)	(15,418)	8,157
France	4,548	(14,109)	11,155
International	(8,268)	(1,309)	(2,998)
Provision for income tax	\$ (32,197)	\$ (39,496)	\$ (46,144)

As mentioned in Note 1 (Principles and Accounting Methods), the French Research Tax Credit is not included in the line item "Provision for income taxes" but is deducted from "Research and development expenses" (see Note 18 - Allocation of Personnel Expenses) unlike the U.S. Research Tax Credit for an amount of nil, \$5.3 million and \$6.4 million and for the year ended December 31, 2020, 2019 and 2018, respectively. French business tax, CVAE, is included in the current tax balance for an amount of \$5.1 million, \$5.5 million and \$5.9 million, for the years ended December 31, 2020, 2019 and 2018, respectively.

Income before taxes included income from France of \$114.4 million, \$122.7 million and \$130.7 million for the periods ended 2020, 2019 and 2018 respectively. Income (loss) before taxes from countries outside of France totaled \$(7.5) million, \$12.8 million and \$11.3 million for the periods ended December 31, 2020, 2019 and 2018, respectively.

Reconciliation between the Effective and Nominal Tax Expense

The following table shows the reconciliation between the effective and nominal tax expense at the nominal standard French rate of 32.02% (excluding additional contributions):

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Income before taxes	\$ 106,886	\$ 135,465	\$ 142,023
Theoretical group tax-rates	32.02 %	34.43 %	34.43 %
Nominal tax expense	(34,225)	(46,641)	(48,899)
Increase / decrease in tax expense arising from:			
Research tax credit ⁽¹⁾	5,298	10,851	10,211
Net effect of shared-based compensation ⁽²⁾	(11,604)	(13,432)	(17,674)
BEAT waiver election ⁽³⁾	(18,640)	(15,962)	—
Other permanent differences ⁽⁴⁾	8,979	(7,667)	(11,982)
Non recognition of deferred tax assets related to tax losses and temporary differences ⁽⁵⁾	(6,026)	(2,713)	(11,664)
Utilization or recognition of previously unrecognized tax losses ⁽⁶⁾	2,511	20,636	4,461
French CVAE included in income taxes	(3,464)	(3,632)	(3,849)
Special tax deductions ⁽⁷⁾	13,402	15,946	38,577
Effect of different tax rates	3,963	5,441	(377)
Other differences	7,609	(2,323)	(4,948)
Effective tax expense	\$ (32,197)	\$ (39,496)	\$ (46,144)
Effective tax rate	30.1 %	29.2 %	32.5 %

Increases and decreases in tax expense are presented applying the theoretical Group tax rate to the concerned tax bases. The impact resulting from the differences between local tax rates and the Group theoretical rate is shown in the "effect of different tax rates."

⁽¹⁾ Included income tax effect of the French RTC deducted from the "Research and development expenses" and US Tax credits included in the line "Provision for income taxes".

⁽²⁾ While in most countries share-based compensation does not give rise to any tax effect either when granted or when exercised, the United States and the United Kingdom generally permit tax deductions in respect of share-based compensation. The tax deduction generated in the United States and United Kingdom in connection with the number of options exercised during the period was offset by the share-based compensation accounting expense exclusion.

⁽³⁾ Final and new proposed regulations on the Base Erosion Anti-abuse Tax (BEAT) have been issued by the United States Treasury and IRS, allowing a waiver election to permanently forgo deductions for all U.S. federal tax purposes, with the result that the foregone deductions will not be treated as a base erosion tax benefit.

⁽⁴⁾ Mainly related to employee costs, depreciation expenses and intercompany transactions.

⁽⁵⁾ Deferred tax assets on which a valuation allowance has been recognized over the periods mainly relate to Criteo Ltd, Criteo Corp, Criteo France, Criteo Singapore Pte. Ltd, Criteo do Brasil LTDA and Criteo Pty.

⁽⁶⁾ In 2019 recognition of previously unrecognized tax losses related to Criteo Corp., mainly generated by the BEAT waiver election implementation .

⁽⁷⁾ Special tax deductions refer to the application of a reduced income tax rate on the majority of the technology royalties income invoiced by the Parent to its subsidiaries.

Deferred Tax Assets and Liabilities

The following table shows the changes in the major sources of deferred tax assets and liabilities:

(in thousands)	Year ended December 31, 2018	Change recognized in profit or loss	Change recognized in OCI	Change in consolidation scope	Other	Currency translation adjustments	Year ended December 31, 2019
Net deferred tax assets :							
Net operating loss carryforwards	\$ 55,358	\$ (27,680)	\$ —	\$ (330)	\$ —	\$ (371)	\$ 26,977
Intangibles	(25,345)	7,214	—	—	—	91	(18,040)
Stock compensation	14,400	(3,515)	—	—	—	—	10,885
Bad debt allowance	3,879	(1,871)	—	—	—	(19)	1,989
Personnel-related accruals	7,317	219	—	—	—	(24)	7,512
Other accruals	3,901	290	—	—	—	(74)	4,117
Projected benefit obligation	1,907	575	473	—	—	(32)	2,923
Financial instruments	(586)	1,014	—	—	—	15	443
Other	5,479	(9,472)	—	—	11,105	84	7,196
Valuation allowance	(43,186)	17,808	(310)	330	—	69	(25,289)
Net Deferred Income Taxes	23,124	(15,418)	163	—	11,105	(261)	18,713

(in thousands)	Year ended December 31, 2019	Change recognized in profit or loss	Change recognized in OCI	Change in consolidation scope	Other	Currency translation adjustments	Year ended December 31, 2020
Net deferred tax assets :							
Net operating loss carryforwards	\$ 26,977	\$ (3,991)	\$ —	\$ 1,150	\$ —	\$ 443	\$ 24,579
Intangibles	(18,040)	4,646	—	(34)	—	(527)	(13,955)
Stock compensation	10,885	(4,173)	—	—	—	—	6,712
Bad debt allowance	1,989	3,256	—	(21)	—	(6)	5,218
Personnel-related accruals	7,512	(679)	—	—	—	20	6,853
Other accruals	4,117	888	—	—	—	(86)	4,919
Projected benefit obligation	2,923	205	(1,508)	—	—	164	1,784
Financial instruments	443	(199)	—	—	—	25	269
Other	7,196	8,856	—	63	—	(182)	15,933
Valuation allowance	(25,289)	(12,529)	986	(1,206)	—	305	(37,733)
Net Deferred Income Taxes	18,713	(3,720)	(522)	(48)	—	156	14,579

Amounts recognized in our Consolidated Financial Statements are calculated at the level of each subsidiary within our Consolidated Financial Statements. As at December 31, 2020, 2019 and 2018, the valuation allowance against net deferred income taxes amounted to \$37.3 million, \$25.3 million and \$43.2 million, which related mainly to Criteo Corp. (\$13.3 million, \$12.8 million and \$18.6 million, respectively), Criteo Brazil (\$2.8 million, \$3.2 million and \$3.6 million, respectively), Criteo Ltd (\$7.4 million, \$7.5 million and \$7.2 million, respectively), Criteo China (\$3.3 million, \$3.3 million and \$3.5 million, respectively), Criteo Singapore (\$3.3 million, \$2.8 million and \$2.9 million), Criteo Pty (\$2.8 million, \$2.6 million and \$2.5 million) and Criteo France (\$1.0 million, \$(7.7) million and \$3.9 million, respectively).

In accordance with ASC 740 - Income taxes, no uncertain tax positions were identified as of December 31, 2020.

The Company has various net operating loss carryforwards in the U.S. and China for \$4.2 million and \$3.3 million, respectively, which begin to expire in 2030 and in 2021, respectively. The Company has net operating loss carryforwards in the United Kingdom of \$7.7 million which have no expiration date.

Current tax assets and liabilities

The total amount of current tax assets mainly consists of prepayments of incomes taxes and credits of Criteo SA, Criteo Corp., and Criteo GmbH. The current tax liabilities mainly refer to the corporate tax payables of Criteo K.K.

Ongoing tax audits

As a multinational corporation, we are subject to regular review and audit by U.S. federal and state, and foreign tax authorities. Significant uncertainties exist with respect to the amount of our tax liabilities, including those arising from potential challenges with certain positions we have taken. Any unfavorable outcome of such a review or audit could have an adverse impact on our tax rate.

On September 27, 2017, we received a draft notice of proposed adjustment (NOPA) from the Internal Revenue Service ("IRS") audit of Criteo Corp. for the year ended December 31, 2014, confirmed by the definitive notice dated February 8, 2018. We disagreed with the IRS's position and contested it. On August 24, 2020, the IRS and the Company agreed to a settlement and closed the income tax audit for the year ended December 31, 2014. The settlement provides for a disallowance of Criteo Corp's. Net Operating Losses (NOLs) amounting to \$9.2 million.

Note 22. Earnings Per Share

Basic Earnings Per Share

We calculate basic earnings per share by dividing the net income for the period attributable to shareholders of the Parent by the weighted average number of shares outstanding.

	Year Ended December 31,		
	2020	2019	2018
	(in thousands, except share data)		
Net income attributable to shareholders of Criteo S.A.	\$ 71,679	\$ 90,745	\$ 88,644
Weighted average number of shares outstanding (note 16)	60,876,480	64,305,965	66,456,890
Basic earnings per share	\$ 1.18	\$ 1.41	\$ 1.33

Diluted Earnings Per Share

We calculate diluted earnings per share by dividing the net income attributable to shareholders of the Parent by the weighted average number of shares outstanding plus any potentially dilutive shares not yet issued from share-based compensation plans (see note 19). There were no other potentially dilutive instruments outstanding as of December 31, 2020, 2019 and 2018. Consequently all potential dilutive effects from shares are considered.

For each period presented, a contract to issue a certain number of shares (i.e. share option, share warrant, restricted share award or BSPCE contracts) is assessed as potentially dilutive, if it is "in the money" (i.e., the exercise or settlement price is inferior to the average market price).

	Year Ended December 31,		
	2020	2019	2018
	(in thousands, except share data)		
Net income attributable to shareholders of Criteo S.A.	\$ 71,679	\$ 90,745	\$ 88,644
Weighted average number of shares outstanding of Criteo S.A.	60,876,480	64,305,965	66,456,890
Dilutive effect of :			
Restricted share awards	796,609	978,521	786,932
Share options and BSPCE	133,177	279,270	382,512
Share warrants	12,327	34,832	36,570
Weighted average number of shares outstanding used to determine diluted earnings per share	61,818,593	65,598,588	67,662,904
Diluted earnings per share	\$ 1.16	\$ 1.38	\$ 1.31

The weighted average number of securities that were anti-dilutive for diluted EPS for the periods presented but which could potentially dilute EPS in the future are as follows:

	Year Ended December 31,		
	2020	2019	2018
Restricted share awards	1,726,506	1,120,439	1,464,145
Share options and BSPCE	70,257	142,380	40,573
Share warrants	—	—	—
Weighted average number of anti-dilutive securities excluded from diluted earnings per share	1,796,763	1,262,819	1,504,718

Note 23. Commitments and contingencies

Purchase Obligations

As of December 31, 2020, we had \$6.2 million of other non-cancellable contractual obligations, primarily related to software licenses, maintenance and \$0.5 million bandwidth for our servers.

Revolving Credit Facilities, Credit Lines Facilities and Bank Overdrafts

As mentioned in Note 12, we are party to one RCF with a syndicate of banks which allow us to draw up to €350.0 million (\$429.4 million).

We are also party to short-term credit lines and overdraft facilities with HSBC plc, BNP Paribas and LCL. We are authorized to draw up to a maximum of €21.5 million (\$26.4 million) in the aggregate under the short-term credit lines and overdraft facilities. As of December 31, 2020, we had not drawn on any of these facilities. Any loans or overdraft under these short-term facilities bear interest based on the one month EURIBOR rate or three month EURIBOR rate. As these facilities are exclusively short-term credit and overdraft facilities, our banks have the ability to terminate such facilities on short notice.

Contingencies

From time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, results of operations, financial condition or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Note 24. Related Parties

On March 2, 2020, the Group announced that Chief Financial Officer Benoit Fouilland planned to depart from Criteo at the end of the second quarter 2020.

On May 15, 2020, the Group announced the appointment of Dave Anderson as the Company's Interim Chief Financial Officer for a six-month term in replacement of Benoit Fouilland, effective May 18, 2020. During his engagement, Mr. Anderson was also the Company's Principal Financial Officer and Principal Accounting Officer. Mr. Fouilland departed Criteo on June 30, 2020.

On August 31, 2020, the Group announced that Jean-Baptiste Rudelle, Criteo's co-founder and former CEO, had stepped down from Criteo's Board of Directors effective August 27, 2020. Mr. Rudelle had previously stepped down from the day to day activities as CEO in November 2019, and as Chairman of the Board in July 2020. Also effective August 27, 2020, CEO Megan Clarcken was appointed to the Board of Directors.

On September 3, 2020, the Group announced the appointment of Sarah Glickman as the Company's Chief Financial Officer and Principal Accounting Officer, effective September 8, 2020, replacing Dave Anderson who served as interim Chief Financial Officer for four months.

The Executive Officers as of December 31, 2020 were:

- Megan Clarcken - Chief Executive Officer
- Sarah Glickman - Chief Financial Officer and Principal Accounting Officer
- Ryan Damon - General Counsel and Corporate Secretary

Total compensation for the Executive Officers, including social contributions, is summarized in the following table:

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Short-term benefits ⁽¹⁾	\$ (3,380)	\$ (3,830)	\$ (3,150)
Long-term benefits ⁽²⁾	(23)	(44)	(47)
Shared-based compensation	(2,103)	(4,605)	(8,016)
Total	\$ (5,506)	\$ (8,479)	\$ (11,213)

⁽¹⁾ wages, bonuses and other compensations

⁽²⁾ pension defined benefit plan

For the year ended December 31, 2020, 2019 and 2018, there were no material related party transactions.

Note 25. Breakdown of Revenue and Non-Current Assets by Geographical Areas

The Company operates in the following three geographical markets:

- Americas: North and South America;
- EMEA: Europe, Middle-East and Africa; and
- Asia-Pacific.

The following tables disclose our consolidated revenue for each geographical area for each of the reported periods. Revenue by geographical area is based on the location of advertisers' campaigns.

	Americas	EMEA	Asia-Pacific	Total
	(in thousands)			
December 31, 2018	\$ 954,073	\$ 839,825	\$ 506,416	\$ 2,300,314
December 31, 2019	952,154	806,197	503,165	2,261,516
December 31, 2020	\$ 894,854	\$ 749,672	\$ 428,091	\$ 2,072,617

Revenue generated in France amounted to \$132.7 million, \$144.3 million and \$153.3 million for the periods ended December 31, 2020, 2019 and 2018, respectively.

Revenue generated in other significant countries where we operate is presented in the following table:

	Year Ended December 31,		
	2020	2019	2018
	(in thousands)		
Americas			
United States	\$ 815,476	\$ 861,099	\$ 848,378
EMEA			
Germany	184,183	200,025	203,020
United Kingdom	93,319	88,928	97,849
Asia-Pacific			
Japan	\$ 301,183	\$ 342,298	\$ 351,441

Other Information

For each reported period, non-current assets (corresponding to the net book value of tangible and intangible assets) are presented in the table below. The geographical information results from the locations of legal entities.

	Holding	Americas	Of which			Of which		Total
			United States	EMEA	Asia-Pacific	Japan	Singapore	
	(in thousands)							
December 31, 2019	\$ 136,621	\$ 104,389	\$ 100,107	\$ 20,336	\$ 19,701	\$ 9,617	\$ 5,970	\$ 281,047
December 31, 2020	\$ 135,516	\$ 93,389	\$ 93,030	\$ 8,746	\$ 31,598	\$ 20,532	\$ 7,003	\$ 269,249

Note 26. Subsequent Events

On February 5, 2021 Criteo announced that its Board of Directors has authorized a share repurchase program of up to \$100 million of the Company's outstanding American Depositary Shares. The Company intends to use any repurchased shares under this new authorization to satisfy employee equity obligations in lieu of issuing new shares, which would limit future dilution for its shareholders.

Please note that because we are a French company, the full text of the by-laws has been translated from French. In the case of any discrepancy between this version and the French version, the French version will prevail.



Société anonyme

Share capital: €1,656,802.65

Registered office: 32 rue Blanche, 75009 Paris, France

484 786 249 RCS Paris

UPDATED BY-LAWS
as of February 25, 2021

TITLE I

LEGAL FORM, NAME, PURPOSES, REGISTERED OFFICE AND TERM OF THE COMPANY

Article 1 – LEGAL FORM

The Company was incorporated as a *société par actions simplifiée* (simplified corporation) and subsequently converted into a *société anonyme* by a decision adopted by the shareholders on March 3, 2006.

It is governed by Book II of the Commercial Code (*Code de Commerce*) and by these by-laws.

Article 2 – NAME

The Company's name is:

CRITEO

In all instruments and documents issued by the Company and intended for third parties, the Company's name shall always be immediately preceded or followed by the words "*société anonyme*" or the acronym "S.A." and by the amount of share capital.

Article 3 – PURPOSES

The Company's purposes, directly or indirectly, both in France and abroad, are:

- Providing IT services and software, acting as a communication agency, providing consulting services to companies and engaging in distance sales;
- Taking equity stakes or acquiring interests in all commercial, industrial, financial, real or personal property companies and enterprises by creating new companies, making contributions, subscribing for or purchasing securities or corporate rights, carrying out corporate mergers and entering into alliances or consortia, whether by taking equity stakes or otherwise;
- Managing, administering and disposing of said equity stakes, including providing consulting services in the fields of administration and management, in particular commercial, financial and administrative administration and management; and
- More broadly, engaging in all financial, commercial, industrial and personal or real property operations that may be directly or indirectly related to the purposes above or any similar or connected purposes that may promote the Company's expansion or development in France and abroad.

Article 4 – REGISTERED OFFICE

The Company's registered office is located at:

32 rue Blanche, 75009 Paris.

The registered office may be transferred to any other location in France by a decision of the Board of Directors, provided such decision is ratified by the next ordinary general shareholders' meeting, and anywhere else by a decision adopted by an extraordinary general shareholders' meeting.

If a transfer is decided by the Board of Directors, the Board of Directors is authorized to amend the by-laws and perform the publication and filing formalities required as a result, provided it is stated that the transfer is subject to the aforementioned ratification.

Article 5 – TERM

The term of the Company shall be ninety-nine (99) years from the date of its registration with the Trade and Companies Registry, except in the event it is dissolved before the expiration of its term or if said term is extended by an extraordinary general shareholders' meeting.

*** **

TITLE II

SHARE CAPITAL AND SHARES

Article 6 – SHARE CAPITAL

The Company has a share capital of €1,656,802.65. It is divided into 66,272,106 shares with a par value of €0.025 each, all fully paid-up and of the same category.

Article 7 – LEGAL FORM

All shares shall be registered shares. Shares shall be registered in an account, in accordance with the law.

Article 8 – SHARE TRANSFERS

8.1. All share transfers shall be carried out in accordance with the law. All expenses generated by a share transfer shall be borne by the transferee.

8.2. Shares are freely transferable.

Article 9 – RIGHTS AND OBLIGATIONS PERTAINING TO SHARES

The rights and obligations pertaining to shares follow the shares, regardless of who holds the shares, and share transfers shall include all dividends declared but not paid and future dividends and, if applicable, the relevant share of reserve funds and provisions.

Ownership of a share shall *ipso facto* be deemed the shareholder's approval of these by-laws and of decisions adopted by general shareholders' meetings.

Except as otherwise provided by the law, each shareholder shall have in general meetings as many votes as the number of shares he or she owns, provided that all required payments due for such share have been met. For the same par value, each share entitles its holder to one vote.

Each share carries a right to a share of corporate assets, of profits, and of liquidation surplus, proportional to the number and nominal value of the existing shares.

Whenever it is necessary to hold more than one share, whether or not preferred shares, or securities to exercise any right, the shareholders or holders of securities shall take it upon themselves to pool the number of shares or securities required.

Article 10 – PAYMENT FOR SHARES

Amounts to be paid, in cash, as payment for shares subscribed pursuant to a capital increase shall be payable in accordance with the requirements imposed by an extraordinary general shareholders' meeting.

The initial payment shall not be less than one-fourth, at the time of a capital increase, of the par value of the shares. If applicable, the initial payment shall include the entire amount of the issue premium.

The Board of Directors shall make calls for payment of the balance, in one or more installments, within a period of five years from the date the capital increase is completed.

Each shareholder shall be notified of the amounts called and the date on which the corresponding sums are to be paid at least fifteen days before the due date.

Shareholders who do not pay amounts owed on the shares they hold by the due date shall automatically and without the need for a formal demand for payment owe the Company late payment interest calculated on a daily basis, on the basis of a 365 day year, as of the due date at the legal rate in commercial matters, plus three points, without prejudice to the Company's personal action against the shareholder in breach and the enforcement measures authorized by law.

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TITLE III

MANAGEMENT OF THE COMPANY

Article 11 – BOARD OF DIRECTORS

11.1. Composition

The Company is administered by a board composed of at least three (3) members and no more than ten (10) members, whether individuals or legal entities.

At the time they are appointed, legal entities shall designate an individual as their permanent representative to the Board of Directors. The term of office of the permanent representative shall have the same duration as the term of office of the legal entity he represents. If a legal entity removes its permanent representative from office, it shall immediately appoint a replacement. The same provision shall also apply in the event of the death or resignation of the permanent representative.

The directors are appointed for a term of two years. The office of a director shall terminate at the close of the ordinary general meeting of shareholders which deliberated on the accounts of the preceding financial year and held in the year during which the term of office of said director comes to an end.

Directors are always eligible for reappointment. They may be removed from office at any time by a decision of a general shareholders' meeting.

In the event of one or more vacancies on the Board of Directors due to death or resignation, the Board of Directors may make temporary appointments between two general shareholders' meetings.

A director appointed to replace another director shall serve only for the remaining portion of his predecessor's term of office.

Appointments made by the Board of Directors pursuant to the preceding paragraph shall be submitted for ratification by the next ordinary general shareholders' meeting.

If such appointments are not ratified, decisions adopted and acts performed by the Board of Directors shall nevertheless remain valid.

If the number of directors falls below the statutory minimum, the remaining directors shall immediately convene an ordinary general shareholders' meeting for the purpose of completing the membership of the Board of Directors.

Company employees may be appointed as directors. However, their employment contracts must correspond to actual employment. In such case, employees do not lose the benefit of their employment contracts.

The number of directors who are parties to an employment contract with the Company shall not exceed one-third of the directors in office.

The number of directors over the age of 70 shall not exceed one-third of the directors in office. If this limit is exceeded during the directors' terms of office, the oldest director shall automatically be deemed to have resigned at the conclusion of the next general shareholders' meeting.

11.2. Chairman

The Board of Directors shall elect a Chairman from among its members, who shall be an individual. The Board of Directors shall determine the duration of his term of office, which shall not exceed his term of office as director, and may remove him from office at any time. The Board of Directors shall set his compensation.

The Chairman shall organize and manage the work of the Board of Directors and report thereon to the general shareholders' meetings. The Chairman shall ensure the satisfactory functioning of the Company's governing bodies and, in particular, ensure that the directors are able to perform their duties.

The Chairman of the Board of Directors shall not be over the age of 70. If the Chairman reaches this age limit during his term of office as Chairman, he shall automatically be deemed to have resigned. The Chairman's term of office shall continue until the next Board of Directors' meeting, at which his successor shall be appointed. Subject to this provision, the Chairman of the Board of Directors is always eligible for reappointment.

Article 12 ~ BOARD OF DIRECTORS

12.1. The Board of Directors shall meet as often as required by the Company's interests.

12.2. The Chairman shall give the directors notice of Board meetings. Notice may be given by any means, whether written or oral.

The Chief Executive Officer may also request the Chairman to convene a meeting of the Board of Directors to consider a specific agenda.

In addition, directors representing at least one-third of Board members may validly convene a Board meeting. In such case, they shall state the agenda for the meeting.

If a Works Council has been created, the representatives of such Council, appointed in accordance with the provisions of the Labor Code (*Code du Travail*), shall be given notice of all Board of Directors' meetings.

Board meetings shall be held at the registered office or at any other place in France or abroad.

12.3. For the Board of Directors to deliberate validly, at least one-half of its members shall be present.

Decisions of the Board of Directors shall be adopted by a majority of votes cast. In the event of a tie vote, the Chairman shall not have the power to break the tie.

12.4. The Board of Directors may adopt internal rules and regulations, which may provide *inter alia* that, for purposes of calculating the quorum and majority, directors who participate in Board meetings by videoconference or other means of telecommunication in compliance with the laws and regulations in force will be deemed to be present. This provision shall not apply to decisions concerning (i) the approval of the annual financial statements or the Board of Directors' management report; (ii) if applicable, the preparation of consolidated financial statements or the group management rapport and (iii) the dismissal from office of the Chief Executive Officer for any other cause than willful misconduct.

12.5. Each director shall receive the information necessary to perform his duties and hold his corporate office, and may obtain copies of all documents he deems of use.

12.6. Any director may, including by letter, telegram or fax, grant another director a proxy to represent him at a Board meeting, but no director may hold more than one proxy at any meeting.

12.7. The Board of Directors may also take by written consultation of the Directors the following decisions that fall within the specific powers of the Board of Directors:

- Appointment of the Board of Directors' members provided for in Article L. 225-24 of the French Commercial Code,
- Authorization of sureties, endorsements and guarantees provided for in the last paragraph of Article L. 225-35 of the French Commercial Code,
- Decisions taken upon delegation granted by the shareholder meeting pursuant the second paragraph of Article L. 225-36 of the French Commercial Code, to modify the by-laws to amend them with the legal and regulatory provisions,
- Convening of the shareholders' meetings, and
- Transfer of the head office in the same department.

When the decisions is taken by written consultation, the text of the proposed resolutions together with the voting form are sent by the Chairman of the Board of Directors to every one of its members by electronic means.

The directors have a period of three (3) working days (or any shorter delay indicated in the request sent by the Chairman or the secretary of the Board of Directors) following receipt of the text of the proposed resolutions and of the voting form vote to complete and send to the Chairman or the secretary of the Board of Directors by electronic means the voting form, dated and signed, by checking for each resolution, a unique box corresponding to the meaning of its vote.

If none or more than one box have been ticked for a same resolution, the vote shall be null and void and shall not be taken into account in the calculation of the majority.

Any director who has not sent his reply within the above mentioned time limit will be considered absent and his vote will therefore not be taken into account for the calculation of the quorum and the majority.

During the delay of response, any director may require any additional explanations from the initiator of the consultation.

Within five (5) working days following the receipt of the last voting form, the Chairman shall draw up and date the minutes of the deliberations to which the voting forms shall be appended and which shall be signed by the Chairman of the Board of Directors and one director.

12.8. Copies or extracts of the minutes of Board of Directors' meetings shall be validly certified by the Chairman of the Board of Directors, the Chief Executive Officer, the Deputy Chief Executive Officers, a director temporarily appointed to act as Chairman or an agent duly authorized for such purpose.

Article 13 – POWERS OF THE BOARD OF DIRECTORS

The Board of Directors determines the orientations of the Company's activity and ensure they are carried out, in accordance with its social interest and taking into consideration its social and environmental challenges. Subject to the powers expressly granted to shareholders' meetings, and within the limits of the corporate purposes, the Board of Directors may consider any issue relating to the proper operation of the Company and shall resolve matters that concern the Company by its decisions.

Article 14 ~ EXECUTIVE MANAGEMENT

14.1.1. The Company's executive management functions shall be performed, under his responsibility, by the Chairman of the Board of Directors or another individual appointed by the Board of Directors, who shall hold the title of Chief Executive Officer.

The Chief Executive Officer shall have the broadest possible powers to act in all circumstances in the name of the Company. The Chief Executive Officer shall exercise his powers within the limits of the corporate purposes and subject to the powers expressly granted by law to shareholders' meetings and to the Board of Directors.

He shall represent the Company in its dealings with third parties. The Company shall be bound by acts of the Chief Executive Officer that exceed the scope of the corporate purposes, unless the Company is able to prove that the third party was aware, or that in light of the circumstances could not have been unaware, that the act was not within said corporate purposes. However, the mere publication of the by-laws shall not be sufficient to constitute such proof.

14.1.2. The Chief Executive Officer shall not be over 70 years of age. If the Chief Executive Officer reaches this age limit, he shall automatically be deemed to have resigned. The Chief Executive Officer's term of office shall continue until the next Board of Directors' meeting, at which a new Chief Executive Officer shall be appointed.

14.1.3. If the Chief Executive Officer is a director, the term of his position shall not exceed his term of office as director.

The Board of Directors may remove the Chief Executive Officer from office at any time. If the removal from office is decided without just cause, the Chief Executive Officer removed from office may claim damages unless he also holds the position of Chairman of the Board of Directors.

14.1.4. By a decision adopted by a majority vote of the directors present or represented, the Board of Directors shall choose between the two executive management methods described in Article 14.1.1, paragraph 1. The shareholders and third parties shall be informed of such choice in the manner prescribed by the laws and regulations.

The choice made by the Board of Directors shall remain in effect until a contrary decision of the Board of Directors or, at the Board of Directors' discretion, for the duration of the Chief Executive Officer's term of office.

If the Company's executive management functions are carried out by the Chairman of the Board of Directors, the provisions concerning the Chief Executive Officer shall apply to him.

In accordance with the provisions of Article 706-43 of the Code of Criminal Procedure, the Chief Executive Officer may validly delegate to any person of his choice the authority to represent the Company in connection with criminal proceedings that may be initiated against the Company.

14.2.1. Pursuant to a proposal of the Chief Executive Officer, the Board of Directors may authorize one or more individuals to assist the Chief Executive Officer in the capacity of Deputy Chief Executive Officer.

In agreement with the Chief Executive Officer, the Board of Directors shall determine the scope and duration of the powers granted to the Deputy Chief Executive Officers. The Board of Directors shall set their compensation. If a Deputy Chief Executive Officer is a director, the term of his position shall not exceed his term of office as director.

Vis-à-vis third parties, Deputy Chief Executive Officers shall have the same powers as the Chief Executive Officer. Deputy Chief Executive Officers have *inter alia* the power to initiate legal proceedings.

No more than five Deputy Chief Executive Officers shall be appointed.

Pursuant to a proposal of the Chief Executive Officer, the Deputy Chief Executive Officer(s) may be removed from office by the Board of Directors at any time. If the removal from office is decided without just cause, a Deputy Chief Executive Officer removed from office may claim damages.

Deputy Chief Executive Officers shall not be over 70 years of age. If a Deputy Chief Executive Officer in office reaches this age limit, he shall automatically be deemed to have resigned. The Deputy Chief

Executive Officer's term of office shall continue until the next Board of Directors' meeting, at which a new Deputy Chief Executive Officer may be appointed.

If the Chief Executive Officer leaves office or is unable to perform his duties, unless otherwise decided by the Board of Directors, the Deputy Chief Executive Officer(s) shall remain in office and retain their powers until the appointment of a new Chief Executive Officer.

Vis-à-vis third parties, the Deputy Chief Executive Officers shall have the same powers as the Chief Executive Officer.

ARTICLE 15 – BOARD OBSERVERS

Pursuant to a proposal of the Board of Directors, an ordinary general shareholders' meeting may appoint Board observers. The Board of Directors may also appoint Board observers directly, subject to ratification by the next general shareholders' meeting.

No more than five Board observers shall be appointed, and they shall constitute a panel. They shall be appointed, without restriction, on the basis of their expertise.

The observers are appointed for a term of two years. The office of an observer shall terminate at the close of the ordinary general meeting of shareholders which deliberated on the accounts of the preceding financial year and held in the year during which the term of office of said observer comes to an end.

The panel of Board observers shall review matters that the Board of Directors or its Chairman submits to it for its opinion. The Board observers shall attend Board of Directors' meetings and shall take part in deliberations in a non-voting capacity. However, their absence shall not affect the validity of the Board of Directors' deliberations.

They shall be given notice of Board meetings in the same manner as the directors.

The Board of Directors may remunerate the Board observers by allocating an amount from the directors' fees granted annually by a general shareholders' meeting.

Article 16 – AGREEMENTS SUBJECT TO AUTHORIZATION

16.1. Guarantees, pledges and other security interests granted by the Company shall be authorized by the Board of Directors in accordance with the requirements prescribed by law.

16.2. All agreements made directly or through an intermediary between the Company and its Chief Executive Officer, a Deputy Chief Executive Officer, a director, a shareholder holding more than 10% of voting rights or, if the shareholder is a company, with the company controlling such shareholder within the meaning of Article L. 223-3 of the Commercial Code, shall require the prior approval of the Board of Directors.

The foregoing shall also apply to agreements in which any of the persons described in the previous paragraph has an indirect interest.

Agreements made between the Company and any enterprise in which the Chief Executive Officer, a Deputy Chief Executive Officer or a director is an owner, a partner with unlimited liability, a manager, a director, a member of the Supervisory Board, or, generally, is a person with management responsibilities in such enterprise, shall also require prior authorization.

The prior authorization of the Board of Directors shall be required, in accordance with the requirements prescribed by law.

The foregoing provisions shall not apply to agreements concerning ordinary transactions that are entered into on arm's length terms, nor to agreements entered into between two companies, where one holds, directly or indirectly, all the share capital of the other, less, if applicable, the minimum number of shares required to meet the requirements of Article 1832 of the French Civil Code or Articles L. 225-1 and L. 226-1 of the French Commercial Code.

Article 17 – PROHIBITED AGREEMENTS

Directors who are not legal entities shall be prohibited from obtaining, in any form whatsoever, loans from the Company, current account or other overdraft facilities from the Company or to have the Company provide a guarantee or pledge securing their undertakings to third parties.

The same prohibition shall apply to the Chief Executive Officer, the Deputy Chief Executive Officers and to the permanent representatives of directors that are legal entities. The foregoing provision shall also apply to the spouses, ascendants and descendants of the persons referred to in this article, as well as to all intermediaries.

Article 18 – STATUTORY AUDITORS

The Company shall be audited, in accordance with the requirements prescribed by law, by one or more statutory auditors who meet the eligibility requirements prescribed by law. If the requirements prescribed by law are met, the Company shall appoint at least two statutory auditors.

Each statutory auditor shall be appointed by an ordinary general shareholders' meeting.

An ordinary shareholders' meeting shall appoint, when required by law, one or more deputy statutory auditors, which shall replace the principal statutory auditors in the event they refuse or are unable to perform their duties, or in the event of their resignation or death.

If an ordinary general shareholders' meeting fails to appoint a statutory auditor, any shareholder may petition the court to appoint one, after having duly joined the Chairman of the Board of Directors to the proceedings. The term of office of a statutory auditor appointed by the court shall expire when an ordinary shareholders' meeting appoints the statutory auditor(s).

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TITLE IV

GENERAL SHAREHOLDERS' MEETINGS

Article 19

General shareholders' meetings shall be convened and shall meet in the manner prescribed by law.

If the Company wishes to give notice of meetings electronically, instead of by mail, it must first obtain the agreement of the shareholders concerned, who shall provide their email address.

Meetings shall be held at the registered office or at any other location specified in the notice of meeting.

The right to participate in the shareholders' meetings is evidenced by the registration of the shares in the name of the shareholder on the second (2nd) business day preceding the date of the shareholders' meeting at 12:00 a.m., Paris time.

Shareholders who do not attend the general shareholders' meeting personally may choose one of three following options:

- Granting a proxy to another shareholder, his spouse or his partner in a French domestic partnership (PACS), or
- Voting by mail, or
- Sending a proxy to the Company without specifying any voting instructions,

in accordance with the requirements prescribed by the laws and regulations.

In accordance with the requirements prescribed by the laws and regulations in force, the Board of Directors may arrange for shareholders to participate and vote by videoconference or means of telecommunication that allow them to be identified. If the Board of Directors decides to exercise this right for a particular shareholders' meeting, such Board decision shall be mentioned in the announcement and/or notice of the meeting. Shareholders who participate in shareholders' meetings by videoconference or any of the other means of telecommunication referred to above, as selected by the Board of Directors, shall be deemed present for the purposes of calculating the quorum and majority.

Shareholders' meetings shall be chaired by the Chairman of the Board of Directors or, in the absence thereof, by the Chief Executive Officer, a Deputy Chief Executive Officer, if he is a director, or by a director specifically appointed for such purpose by the Board of Directors. Failing this, the shareholders' meeting shall elect its own Chairman.

The duties of scrutineer shall be performed by the two members of the shareholders' meeting who are present and hold the highest number of votes, and who agree to perform such duties. The officers shall appoint a secretary, who may but need not be a shareholder.

An attendance sheet shall be kept, in accordance with the requirements prescribed by law.

An ordinary general shareholders' meeting can be validly conducted pursuant to a first or second notice of meeting only if the shareholders present or represented hold at least 33 1/3 percent of the shares having the right to vote.

Decisions of ordinary general meetings shall be adopted by a majority of the votes cast by the shareholders present or represented. The votes expressed do not include those attached to the shares for which the shareholder did not take part in the vote, abstained or voted blank or void.

An extraordinary general shareholders' meeting can be validly conducted pursuant to a first or second notice of meeting only if the shareholders present or represented hold at least 33 1/3 percent of the shares having the right to vote.

Decisions of extraordinary general meetings shall be adopted by a majority of two-thirds of the votes cast by the shareholders present or represented. The votes expressed do not include those attached to the shares for which the shareholder did not take part in the vote, abstained or voted blank or void.

Copies or extracts of shareholder meeting minutes may be validly certified by the Chairman of the Board of Directors, a director who holds the position of Chief Executive Officer or the secretary of the meeting.

Ordinary and extraordinary general shareholders' meetings shall exercise their respective powers in accordance with the requirements prescribed by law.

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TITLE V

CORPORATE INCOME

Article 20 – FISCAL YEAR

Each fiscal year shall last one year, starting on January 1 and ending on December 31.

Article 21 – PROFITS – STATUTORY RESERVE FUND

An amount of at least five percent (5%) shall be deducted from the profits for the fiscal year, reduced by prior losses, if any, in order to constitute the reserve fund known as the "statutory reserve fund". Such deduction shall cease to be mandatory when the amount in the statutory reserve fund is equal to one-tenth of share capital.

The distributable profits are comprised of the profits for the fiscal year, reduced by prior losses and the deduction required by the previous paragraph, and increased by profits carried forward.

Article 22 ~ DIVIDENDS

If the financial statements for the fiscal year, as approved by a general shareholders' meeting, show a distributable profit, the general shareholders' meeting shall post it to one or more reserve funds that they have the power to appropriate or use, carry it forward or distribute it in the form of dividends.

After having confirmed the existence of reserve funds available to it, a general shareholders' meeting may decide to distribute amounts withdrawn from such reserve funds. In such case, the decision shall expressly state the reserve items from which the withdrawals are made. However, dividends shall first be withdrawn from the distributable profits for the fiscal year.

The procedures for paying dividends shall be set by a general shareholders' meeting or, failing this, by the Board of Directors.

However, dividends shall be paid within a maximum period of nine months from the end of the fiscal year.

The shareholders' meeting called to approve the accounts of the financial year may grant to each shareholder, for all or part of the dividend available for distribution, a choice between payment in the form of cash or in form of shares.

In the same manner, each shareholder may be granted, for all or part of the interim dividends available for distribution, a choice between payment of said interim dividends in the form of cash or in the form of shares.

The offer of a payment in the form of shares, the price and the terms of issues of shares, as well as the request for payment in the form of shares, and the terms of acknowledgment of the subsequent share capital increase are provided by the laws and regulations.

In the event that a balance sheet prepared during or at the end of the fiscal year and certified as accurate by the statutory auditor(s) shows that since the end of the previous fiscal year the Company has generated a profit after necessary depreciation allowances and provisions have been booked, after deducting, if applicable, previous losses and sums to be booked into reserve funds as required by law or these by-laws, and after taking into account profits carried forward, the Board of Directors may decide to distribute interim dividends before the financial statements for the fiscal year have been approved, as well as the amount thereof and the distribution date. The amount of such interim dividends shall not exceed the amount of profits as defined in this paragraph.

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TITLE VI

DISSOLUTION - LIQUIDATION

Article 23 ~ EARLY DISSOLUTION

An extraordinary general shareholders' meeting may, at any time, decide to dissolve the Company before the expiration of its term.

Article 24 ~ LOSS OF ONE-HALF OF SHARE CAPITAL

If as a result of losses reported in the accounting documents, the Company's shareholders' equity falls below one-half of share capital, the Board of Directors shall, within four months following the approval of the financial statements reporting such loss, convene an extraordinary general shareholders' meeting to decide whether to dissolve the Company before the expiration of its term.

If it is decided not to dissolve the Company, no later than the end of the second fiscal year following the fiscal year in which the loss is observed, and subject to the legal provisions with respect to the minimum capital of *sociétés anonymes*, the Company shall reduce its share capital by an amount at least equal to losses that cannot be set off against reserve funds, if during such period shareholders' equity has not been reconstituted to an amount at least equal to one-half of share capital.

If a general shareholders' meeting is not held or if such shareholders' meeting is unable to validly deliberate after it had been convened a second time, any interested party may petition the Commercial Court to dissolve the Company.

Article 25 ~ EFFECTS OF DISSOLUTION

The Company shall be in liquidation from the time it is dissolved, regardless of the reason there for. The Company's legal personality shall continue to exist for the purposes of the liquidation until completion of the liquidation proceedings.

During the entire duration of the liquidation proceedings, general shareholders' meetings shall have the same powers as during the Company's existence.

Shares shall remain negotiable until completion of the liquidation proceedings.

The Company's dissolution shall be binding vis-à-vis third parties only as of the date that notice thereof has been published with the Trade and Companies Registry.

Article 26 ~ APPOINTMENT OF LIQUIDATORS – POWERS

When the Company's term expires or if the Company is dissolved before the expiration of its term, a general shareholders' meeting shall decide the method of liquidation, appoint one or more liquidators and establish their powers, which the liquidators shall exercise in accordance with the law. The appointment of liquidators shall cause the duties of the directors, Chairman, Chief Executive Officer and Deputy Chief Executive Officers to end.

Article 27 ~ LIQUIDATION – CONCLUSION OF LIQUIDATION PROCEEDINGS

In the event of the Company's dissolution or liquidation, after payment of the liabilities, the remaining assets shall be used first for the payment to the shareholders of the par value of their shares which has not been amortized. Then, the balance, if any, shall be divided among all the shareholders.

Upon completion of the liquidation proceedings, the shareholders shall be convened to vote on the final accounts, the discharge to be granted to the liquidators for the performance of their duties, the termination of their duties and to certify the completion of the liquidation proceedings.

The completion of the liquidation proceedings shall be published in accordance with the law.

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TITLE VII

NOTICES

Article 28

All notices required by these by-laws shall be sent by certified mail, return receipt requested, or served by a bailiff (*acte extra-judiciaire*). At the same time, a copy of the notice shall be sent to the addressee by ordinary mail.

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AGREEMENT TO FURNISH DEBT INSTRUMENTS

Pursuant to Item 601(b)(4)(iii)(A) of Regulation S-K, Criteo S.A. (the "Company") has not included as an exhibit to its Annual Report on Form 10-K any instrument relating to long-term debt if the total amount of debt authorized by such instrument does not exceed 10% of the total assets of the Company. The Company agrees to furnish a copy of any such instrument to the Securities and Exchange Commission upon request.

CRITEO S.A.

By: /s/ Megan Clarken
Name: Megan Clarken
Title: Chief Executive Officer
Date: February 26, 2021

AMENDMENT TO CONSULTING AGREEMENT

This AMENDMENT (the "Amendment"), entered into and effective as of November 29, 2020, is made to that certain Consulting Agreement dated as of May 14, 2020 (the "Agreement") by and between Criteo Corp., a Delaware corporation (the "Company"), and Dave Anderson (the "Consultant"). Capitalized terms used herein but not otherwise defined shall have the meanings ascribed to them in the Agreement.

WHEREAS, the Company and the Consultant desire to amend the Agreement to extend the Term of the Agreement; and

WHEREAS, pursuant to Section 13(a) of the Agreement, the Agreement may only be amended by written instrument signed by both the Company and the Consultant.

NOW THEREFORE, in exchange for good and valuable consideration, the sufficiency of which are acknowledged, and intending to be legally bound hereby, each of the Company and the Consultant hereby agree as follows:

1. Term. Section 4 of the Agreement is hereby amended to extend the Term to expire on December 31, 2020.

2. Duties. Section 3(a) of the Agreement is hereby amended to clarify that, from September 8, 2020 through the end of the Term, the scope of Consultant's Services shall not include service as Interim CFO, Principal Financial Officer or Principal Accounting Officer. Instead, the Services shall include certain financial and business consulting services as requested by the Company and Parent, including, but not limited to, providing guidance and advice to Parent's Chief Financial Officer as requested, and providing guidance and advice on matters related to corporate finance, financial administration, corporate management practices and infrastructure development.

3. Acknowledgement. Each of the Company and the Consultant acknowledge that, except for the amendment expressly set forth in this Amendment, all other terms and conditions of the Agreement shall be unaffected hereby and remain in full force and effect. The Company and the Consultant reaffirm, ratify and confirm their respective obligations, covenants and agreements under the Agreement. For the avoidance of doubt, each of the Company and Consultant acknowledge that the Performance Bonus is not impacted by the extension of the Term.

4. Miscellaneous.

a) This Amendment may be executed and delivered (including by facsimile or .pdf transmission) in one or more counterparts, and by the different parties hereto in separate counterparts, each of which when executed shall be deemed to be an original but all of which taken together shall constitute one and the same agreement.

b) To the extent that any provision of the Agreement needs to be waived or amended in order to allow the amendments made herein to be effective, such provisions are hereby waived and/or amended to the extent necessary to allow for the amendments made herein to be effective.

c) This Amendment and any and all matters arising directly or indirectly herefrom shall be governed by and construed and enforced in accordance with the laws of the State of Delaware applicable to agreements made and to be performed entirely in such state, without giving effect to the choice or conflict of law principles thereof.

JA 11/29/20

d) On or after the date of this Amendment, each reference in the Agreement to "this Agreement," "hereunder," "hereof," "herein" or words of like import referring to the Agreement shall mean and be a reference to the Agreement as amended by this Amendment, and this Amendment shall be deemed to be a part of the Agreement.

[Signature Page Follows]

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IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first above written.

CRITEO CORP.:

DocuSigned by:
By: Sarah Glickman
DBA0651EBFCD4D6...
Name: Sarah Glickman
Title: Chief Financial Officer

CONSULTANT:

Dave Anderson
Dave Anderson
[Signature Page to Amendment to Consulting Agreement]

Subsidiaries of Criteo S.A.

<u>Name of Subsidiary</u>	<u>Jurisdiction of Incorporation</u>
Criteo Australia Pty Ltd	Australia
Criteo Do Brasil Desenvolvimento De Serviços De Internet Ltda.	Brazil
Criteo Canada Corp.	Canada
Criteo Advertising (Beijing) Co., Ltd.	China
Condigolabs S.A.S.	France
Criteo France S.A.S.	France
Criteo Finance S.A.S.	France
Criteo GmbH	Germany
Criteo India Private Limited	India
Criteo S.R.L.	Italy
Criteo K.K.	Japan
Criteo Societe Anonyme, Korea Branch	Korea
Criteo B.V.	Netherlands
Criteo LLC	Russia
Criteo Singapore PTE. LTD.	Singapore
Criteo Europa MM, S.L.	Spain (Barcelona)
Criteo España, S.L.	Spain (Madrid)
Criteo Nordics AB	Sweden
Criteo Reklamcilik Hizmetleri ve Ticaret A.S.	Turkey
Criteo MEA FZ - LLC	United Arab Emirates (Dubai)
Criteo Ltd	United Kingdom
Criteo Corp.	United States (Delaware)
Gemini HoldCo, LLC	United States (Delaware)
Madyourself Technologies, Inc.	United States (Delaware)

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in Registration Statement Nos. 333-192024, 333-197373, 333-207658, 333-212722, 333-219496, 333-226367 and 333-232329 on Form S-8 of our reports, dated February 26, 2021, relating to the consolidated financial statements of Criteo S.A. and subsidiaries (the "Company") and the effectiveness of the Company's internal control over financial reporting, appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2020.

/s/ Deloitte & Associés

Paris-La-Défense, France
February 26, 2021

**Certification by the Chief Executive Officer pursuant to
Securities Exchange Act Rules 13a-14(a) and 15d-14(a)
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Megan Clarcken, certify that:

1. I have reviewed this Annual Report on Form 10-K of Criteo S.A.;
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(s) 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(s) 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 26, 2021

By: /s/ Megan Clarcken
Name: Megan Clarcken
Title: Chief Executive Officer

**Certification by the Chief Financial Officer pursuant to
Securities Exchange Act Rules 13a-14(a) and 15d-14(a)
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Sarah Glickman, certify that:

1. I have reviewed this Annual Report on Form 10-K of Criteo S.A.;
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(s) 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(s) 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 26, 2021

By: /s/ Sarah Glickman
Name: Sarah Glickman
Title: Chief Financial Officer
(Principal Financial and Accounting Officer)

**Certification by the Chief Executive Officer and Chief Financial Officer pursuant to
18 U.S.C. Section 1350, as adopted pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002**

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Megan Clarcken, Chief Executive Officer of Criteo S.A. (the "Company"), and Sarah Glickman, Chief Financial Officer of the Company, each hereby certifies that, to the best of their knowledge:

1. The Company's Annual Report on Form 10-K for the period ended December 31, 2020, to which this Certification is attached as Exhibit 32.1 (the "Annual Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act, and
2. The information contained in the Annual Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 26, 2021

By: /s/ Megan Clarcken
Name: Megan Clarcken
Title: Chief Executive Officer

By: /s/ Sarah Glickman
Name: Sarah Glickman
Title: Chief Financial Officer

This certification accompanies the Annual Report, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Annual Report), irrespective of any general incorporation language contained in such filing.