UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

or

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2019

☐ 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: 001-11919

TTEC Holdings, Inc.

(Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

84-1291044 (I.R.S. Employer Identification No.)

9197 South Peoria Street
Englewood, Colorado 80112
(Address of principal executive offices)
Registrant's telephone number, including area cod

(Address of principal executive offices)
Registrant's telephone number, including area code:
(303) 397-8100

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common stock of TTEC Holdings, Inc., \$0.01 par value per share	TTEC	NASDAQ

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

Indicate by checkmark 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 15(d) of the Securities Exchange Act of 1934. 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 \boxtimes No \square

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes⊠ No □

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer □

Accelerated filer ☑

Non-accelerated filer □

Smaller reporting company ☐ Emerging growth company ☐

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

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

As of June 30, 2019, the last business day of the registrant's most recently completed second fiscal quarter, there were 46,386,727 shares of the registrant's common stock outstanding. The aggregate market value of the registrant's voting and non-voting common stock that was held by non-affiliates on such date was \$667,442,842 based on the closing sale price of the registrant's common stock on such date as reported on the NASDAQ Global Select Market.

 $As of \ February \ 28, 2020, there \ were \ 46,491,480 \ shares \ of \ the \ registrant's \ common \ stock \ outstanding.$

DOCUMENTS INCORPORATED BY REFERENCE

Certain information required for Part III of this report is incorporated by reference to the proxy statement for the registrant's 2020 annual meeting of stockholders.

TTEC HOLDINGS, INC. AND SUBSIDIARIES DECEMBER 31, 2019 FORM 10-K

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CAUTIONARY NOTE ABOUT FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934, and the Private Securities Litigation Reform Act of 1995, relating to our operations, expected financial position, results of operation, and other business matters that are based on our current expectations, assumptions, and projections with respect to the future, and are not a guarantee of performance. In this report, when we use words such as "may," "believe," "plan," "will," "anticipate," "estimate," "expect," "intend," "project," "would," "could," "target," or similar expressions, or when we discuss our strategy, plans, goals, initiatives, or objectives, we are making forward-looking statements.

We caution you not to rely unduly on any forward-looking statements. Actual results may differ materially from those expressed in the forward-looking statements, and you should review and consider carefully the risks, uncertainties and other factors that affect our business and may cause such differences as outlined in the section of this report entitled "Risk Factors". Specifically, we would like for you to focus on risks related to our strategy execution, our ability to innovate and introduce technologies that are sufficiently disruptive to allow us to maintain and grow our market share, cybersecurity risks and risks inherent to our equity structure. Our forward-looking statements speak only as of the date that this report is filed with the United States Securities and Exchange Commission ("SEC") and we undertake no obligation to update them, except as may be required by applicable laws.

AVAILABILITY OF INFORMATION

TTEC Holdings, Inc.'s principal executive offices are located at 9197 South Peoria Street, Englewood, Colorado 80112. Electronic copies of our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, Proxy Statements and any amendments to these reports are available free of charge by (i) visiting our website at http://www.ttec.com/investors/sec-filings/ or (ii) sending a written request to Investor Relations at our corporate headquarters or to investor.relations@ttec.com. TTEC's SEC filings are posted on our corporate website as soon as reasonably practical after we electronically file such materials with, or furnish them to, the SEC. Information on our website is not incorporated by reference into this report.

You may also access any materials that we file with the SEC via the SEC's public website at www.sec.gov.

PART I

ITEM 1.

BUSINESS

Our Business

TTEC Holdings, Inc. ("TTEC", "the Company", "we", "our" or "us") is a leading global customer experience technology and services company focused on the design, implementation and delivery of transformative customer experience outcomes for many of the world's most iconic and disruptive brands. Since our inception in 1982, we have been helping clients deliver frictionless customer experiences, strengthen their customer relationships, brand recognition and loyalty through personalized interactions, significantly improve their Net Promoter Score ("NPS"), and lower their total cost to serve by enabling and delivering simplified, consistent and seamless customer experience across channels and phases of the customer lifecycle.

Our customer experience thought leadership is substantiated, with innovative programs that differentiate our clients from their competition.

In the fast expanding direct-to-customer ("DTC") channel where experiences are everything, enterprises must become increasingly customer-centric and digitally enabled. Digital transformation has become a have-to-have in winning and keeping customers. It is our mission to enable and accelerate our clients' path to digital transformation. We are focused on improving the experience of our clients' customers by leveraging existing and emerging technologies — artificial intelligence ("Al"), machine learning ("ML"), robotic process automation ("RPA"), cloud, analytics, omnichannel and real-time messaging.

Through the first quarter of 2019, the Company reported its financial results of operations across four segments: Customer Strategy Services ("CSS"), Customer Technology Services ("CTS"), Customer Growth Services ("CGS") and Customer Management Services ("CMS"). Starting in the second quarter of 2019, the Company changed its go-to-market strategy, how its clients evaluate and consume its services, how TTEC assesses its operating performance and the leadership accountability for its segments. As a result, the Company now reports its financial information based on two segments: TTEC Digital and TTEC Engage.

- TTEC Digital designs, builds and delivers tech-enabled, insight-based and outcome-driven customer experience solutions through our professional services and suite of technology offerings. These solutions are critical to enabling and accelerating digital transformation for our clients. These services were previously included in the CSS and CTS segments.
- TTEC Engage provides the essential technologies, human resources, infrastructure and processes to operate customer care, acquisition, and fraud detection and prevention services. These services were previously included in the CGS and CMS segments.

TTEC Digital and TTEC Engage come together under our unified offering, Humanify™ Customer Experience as a Service ("CXaas"), which drives measurable customer results for clients through the delivery of personalized, omnichannel experiences. Our Humanify™ cloud platform provides a fully integrated ecosystem of Customer Experience ("CX") offerings, including omnichannel, messaging, Al, ML, RPA, analytics, cybersecurity, customer relationship management ("CRM"), knowledge management and journey orchestration. Our end-to-end platform differentiates us from many competitors by combining design, strategic consulting, best in class technology, data analytics, process optimization, system integration and operational excellence. This unified offering is value-oriented, outcome-based and delivered to large enterprise and governments on a global scale.

During fiscal 2019, the TTEC global operating platform delivered services in 22 countries -- the United States, Australia, Belgium, Brazil, Bulgaria, Canada, Costa Rica, Germany, Greece, Hong Kong, India, Ireland, Mexico, the Netherlands, New Zealand, the Philippines, Poland, Singapore, South Africa, Thailand, United Arab Emirates, and the United Kingdom. We provide onshore, nearshore and offshore services on six continents to accommodate client requirements. TTEC has 49,500 employees, approximately 1,400 of whom are CX professionals serving TTEC Digital clients and approximately 48,100 of whom serve TTEC Engage clients.

Our revenue for fiscal 2019 was \$1.644 billion, approximately \$305 million, or 19%, which came from our TTEC Digital segment and \$1.338 billion, or 81%, which came from our TTEC Engage segment.

To improve our competitive position in a rapidly changing market and stay strategically relevant to our clients, we continue to invest in innovation and service offerings for mainstream and high growth disruptive businesses, diversifying and strengthening our core customer care services with consulting, data analytics, insights, and technology-enabled, outcomes-focused services.

We also invest to expand our geographic footprint, broaden our product and service capabilities, increase our global client base and industry expertise, and further scale our end-to-end integrated solutions platform. To this end we have been highly acquisitive in the last several years, including an acquisition in 2019 of a U.S.-based provider of customer care, social media community management, content moderation, technical support and business process solutions; an acquisition in 2018 of a U.K.-based systems integrator for multichannel contact center platforms; an acquisition in 2017 of an India-based digital fraud prevention and detection and content moderation services company; and an acquisition in 2017 of a U.S.-based healthcare services company focused on improving the customer experience for healthcare plan providers and pharmacy benefits managers.

We have extensive expertise in the automotive, communications, financial services, government, healthcare, logistics, media and entertainment, retail, technology, travel and transportation industries. We serve more than 300 diverse clients globally, including many iconic blue-chip brands, Fortune 1000 companies, and disruptive growth companies.

Our strong balance sheet, cash flow from operations and access to debt and capital markets have historically provided us the financial flexibility to effectively fund our organic growth, capital expenditures, strategic acquisitions, incremental investments, and capital distributions.

We continue to return capital to our shareholders via semi-annual dividends. Given our cash flow generation and balance sheet strength, we believe cash dividends, in balance with our investments in innovation and strategic acquisitions, align shareholder interests with the needs of the Company. In 2015, our Board of Directors adopted a dividend policy, with the intent to distribute a periodic cash dividend to stockholders of our common stock, after consideration of, among other factors, TTEC's performance, cash flow from operations, capital needs and the overall liquidity of the Company. Since inception in 2015, the Company has continued to pay a semi-annual dividend in October and April of each year in gradually increasing amounts from \$0.18 to \$0.32 per common share. On February 27, 2020, the Company's Board of Directors authorized a semi-annual dividend of \$0.34 per common share, payable on April 16, 2020 to shareholders of record as of April 1, 2020.

Our Industry - Key Emerging Themes

- Direct-to-Consumer Revolution The DTC revolution has created a new generation of disruptive brands with few barriers to entry. These emerging brands thrive on emotional connection and authentic customer relationships relying on trusted influencers and personalized service to win the hearts and minds of a growing customer base, one that requires an on-demand, curated buying experience. We believe DTC can enhance the value we provide to our clients as we design, build and operate our clients' digital customer experience.
- Evolution of Customer Behavior and CX Imperative Yesterday's customer service experience is being replaced by today's direct experience, where brands deliver a personalized end-to-end journey. As customers become more connected and share their experiences across a variety of social channels, the quality of the experience has a greater impact on brand loyalty and business performance. We believe customers are increasingly shaping their attitudes, behaviors and willingness to recommend or stay with a brand based on the totality of their experience, including not only the superiority of the product or service, but also the quality of their ongoing service and support interactions. Given the strong correlation between high customer satisfaction and improved profitability, companies are increasingly focused on selecting partners who can deliver an integrated, insights-driven strategy, service and technology solution that increases the lifetime value of a customer.

- CX Technology is Migrating to the Cloud Cloud investment is expected to continue to grow significantly.
 We believe the adoption of cloud technology to deliver omnichannel and other customer experience technology is still in its infancy. Our clients are embracing cloud-based CX technology solutions in a manner similar to how they seek cost-effective architecture and rapid deployment across other parts of their operations.
- Enterprises are Consolidating Partners An increasing percentage of companies are consolidating their customer engagement wallet with a few select partners who can deliver measurable business outcomes by offering an integrated, technology-enabled solution. We believe companies will continue to consolidate with partners like TTEC that have demonstrated expertise in increasing brand value by delivering holistic, integrated customer-centric solutions spanning the entire customer experience journey, instead of inefficiently linking together a series of multiple point solutions.

Our Strategy

We aim to grow our revenue and profitability by focusing on our core customer engagement operational capabilities, linking them to higher margin, insights and technology-enabled platforms and managed services to drive a superior experience for our clients' customers. To that end we continually strive to:

- Build deeper, more strategic relationships with existing global clients to drive enduring, transformational change within their organizations;
- · Pursue new clients who lead their respective industries and who are committed to customer engagement as a differentiator;
- · Invest in our sales leadership team at both the segment level to improve collaboration and speed-tomarket and consultative sales level to deliver more integrated, strategic, and transformational solutions;
- · Execute strategic acquisitions that further complement and expand our integrated solutions;
- · Invest in technology-enabled platforms and innovation through technology advancements, broader and globally protected intellectual property, and process optimization, and
- · Work within our technology partner ecosystem to deliver best in class solutions with expanding intellectual property through value-add applications, integrations, services and solutions.

Our Integrated Service Offerings and Business Segments

We provide strategic value and differentiation through our two business segments: TTEC Digital and TTEC Engage.

TTEC Digital designs, builds and delivers tech-enabled, insights-based and outcome-driven customer experience solutions through our professional services and suite of technology offerings. These solutions are critical to enabling and accelerating digital transformation for our clients.

- · Technology Services: Our technology services design, integrate and operate highly scalable, digital omnichannel technology solutions in the cloud, on premise, or hybrid, including journey orchestration, automation and AI, knowledge management, and workforce productivity.
- · Professional Services: Our management consulting practices deliver customer experience strategy, analytics, process optimization, and learning and performance services.

TTEC Engage provides the essential technologies, human resources, infrastructure and processes to operate customer care, acquisition, and fraud detection and prevention services.

- · Customer Acquisition Services: Our customer growth and acquisition services optimize the buying journeys for acquiring new customers by leveraging technology and analytics to deliver personal experiences that increase the quantity and quality of leads and customers.
- Customer Care Services: Our customer care services provide turnkey contact center solutions, including digital omnichannel technologies, associate recruiting and training, facilities, and operational expertise to create exceptional customer experiences across all touchpoints.

· Fraud Prevention Services: Our digital fraud detection and prevention services proactively identify and prevent fraud and provide community content moderation and compliance.

Based on our clients' preference, we provide our services on an integrated cross-business segment and/or on a discrete basis.

Additional information with respect to our segments and geographic footprint is included in Part II, Item 8. Financial Statements and Supplementary Data, Note 3 to the Consolidated Financial Statements.

Our Competitive Strengths

We have established ourselves as an industry leader in CX by leveraging the following competitive strengths:

Humanify™ Technology Platform and Insights-Driven Technology Solutions - Innovation has been a priority since our inception almost 40 years ago. Our dedication and investment in transforming our business has differentiated our solutions portfolio and increased the value we deliver to our clients across the CX continuum. Our Humanify™ Technology Platform delivers an ecosystem of integrated CX applications, including omnichannel contact center platforms, the largest CRMs and ERP's as well as innovative technology solutions that we fully integrate into our clients' broader technology systems. The platform is based on secure, scalable public and private data centers, in both pure cloud and hybrid environments. This architecture enables us to centralize and standardize our global delivery capabilities, resulting in scalability and improved quality of delivery for our clients, as well as lowering capital and information technology operating costs.

Fundamental to our platforms is our network of global data centers which provide an integrated suite of voice and data routing, workforce management, quality monitoring, business analytics and storage capabilities, enabling seamless operations from locations around the globe. This 'hub and spoke model' enables us to provide services at a competitive cost while delivering scalability, reliability, regulatory compliance and asset utilization across the full suite of our service offerings. It also provides effective redundancy for a timely response to system interruptions and outages due to natural disasters, grid downtime, and other conditions outside of our control. Importantly, this broad-based platform has accelerated our time to market foundation for new, innovative offerings such as TTEC's cloud based Humanify™ Operations/Insights Platform, Humanify™ @Home for remote omnichannel agents, and our suite of human capital solutions.

Further, our Humanify™ Technology Platforms leverage reference architectures for multiple solutions whether we are operating the platforms and the services, implementing customized platforms for clients, or providing advanced managed services and continuous and automated development environments. They also provide clients with secure and compliant solutions for regional (e.g., the European Union General Data Protection Regulation ("GDPR"), or the California Consumer Protection Act ("CCPA")), industry (e.g., the Payment Card Industry Data Security Standard ("PCI"), or the Health Insurance Portability and Accountability Act ("HITRUST")), or client specific standards (e.g. FedRamp or FISMA).

- · Innovative Human Capital Strategies Our global, highly trained employee base is crucial to the success of our business. We have made significant investments in proprietary technologies and management tools, methodologies and training processes in the areas of talent acquisition, learning services, knowledge management, workforce engagement and collaboration and performance optimization. These capabilities are the culmination of almost four decades of experience in managing a large, global workforce combined with the latest technology, innovation and strategies in the field of human capital management. This capability has enabled us to deliver a scalable and flexible workforce that is highly engaged in achieving and exceeding our clients' expectations.
- · Robust Technology Partner Ecosystem Our strategic alliances with important digital channel partners enable our clients to deliver high-impact, personalized customer experiences more efficiently. We go to market with our Humanify™ cloud offering with our key strategic partners including Cisco, LivePerson and Pega to continue to fuel AI-powered digital transformation.

· Globally Deployed Best Operating Practices - Globally deployed best operating practices help us deliver a consistent, scalable, high-quality experience to our clients' customers from any of our 89 global customer engagement centers and geographically disbursed work-from-home associate base. Standardized processes include our approach to attracting, screening, hiring, training, scheduling, evaluating, coaching and maximizing associate performance to meet our clients' needs. We also provide real-time reporting and analytics on performance across the globe to help ensure transparency and consistency of delivery. This information provides valuable insight into what is driving customer inquiries, enabling us to proactively recommend process changes that optimize the customer experience.

New customer engagement centers are established and existing centers are expanded or scaled down to accommodate anticipated business demands or specific client needs. As of December 31, 2019, we had significant capacity in the United States, Brazil, Bulgaria, Canada, Greece, India, Mexico, the Philippines, Poland and the United Kingdom to support customer demand and deliver superior cost efficiencies. We continue to explore opportunities in North America, Central Europe, South America and Africa to diversify our delivery footprint enabling near-shore and off-shore locations that support our multi-lingual service offerings and provide attractive client economics.

See Item 1A. Risk Factors for a description of the risks associated with our foreign operations.

Clients

We develop long-term relationships with clients globally, including iconic blue-chip brands, Fortune 1000 companies, and disruptive growth companies. These companies are in customer intensive industries, whose business complexities and customer focus requires a partner that can quickly and globally scale integrated technology and data-enabled services. In 2019, our top five and ten clients represented 37% and 50% of total revenue, respectively.

In several of our offerings across TTEC Digital and TTEC Engage, we enter into long-term relationships that provide us with a more predictable revenue stream. In our TTEC Digital segment, our CX cloud and managed services technology solution contracts have an average three-year term with penalties in the case a client terminates for convenience. In our TTEC Engage segment, most of our contracts can be terminated for convenience by either party, but our relationships with our top five clients have ranged from 13 to 23 years including multiple contract renewals for several of these clients. In 2019, we had a 102% revenue retention rate for the TTEC Engage segment, versus 98% in 2018.

Certain of our communications clients provide us with telecommunication services through arm's length negotiated transactions. These clients currently represent approximately 12% of our total annual revenue. Expenditures under these supplier contracts represent less than one percent of our total operating costs.

Competition

We are a leading global customer experience technology and services company focused on the design, implementation and delivery of transformative solutions for many of the world's most iconic and disruptive brands. Our competitors vary by geography and business segment, and range from large multinational corporations to smaller, narrowly focused enterprises. Across our lines of business, the principal competitive factors include: client relationships, technology and process innovation, integrated solutions, operational performance and efficiencies, pricing, brand recognition and financial strength.

Our strategy in maintaining market leadership is to invest, innovate and provide integrated value-driven services, all centered around customer engagement management. Today, we are executing on a more expansive, holistic strategy by transforming our business into higher-value offerings through organic investments and strategic acquisitions. As we execute, we are differentiating ourselves in the marketplace and entering new markets that introduce us to an expanded competitive landscape.

In our TTEC Digital segment, we primarily compete with smaller specialized companies and divisions of multinational companies, including Bain & Company, McKinsey & Company, 8X8, Accenture, IBM, AT&T, Genpact, Interactive Intelligence, LiveOps, inContact, Five9, WPP, Publicis Groupe, Dentsu, and others. In our TTEC Engage segment, we primarily compete with in-house customer management operations as well as other companies that provide customer care services including: Alorica, Concentrix, Sitel, Sykes, and Teleperformance, amongst others.

Employees

Our people are our most valuable asset. As of December 31, 2019, we had 49,500 employees in 22 countries on six continents. Although a percentage of our TTEC Engage segment employees are hired seasonally to address periodic higher business volumes in retail, healthcare and other seasonal industries, most remain employed throughout the year. Approximately 67% of our employees are located outside of the U.S. Approximately 10% of our employees are covered by collective bargaining agreements, most of which are mandated under national labor laws outside of the United States. These agreements are subject to periodic renegotiations and we anticipate that they will be renewed in the ordinary course of business without material impact to our business or in a manner materially different from other companies covered by such industry-wide agreements.

Research, Innovation, Intellectual Property and Proprietary Technology

We recognize the value of innovation in our business and are committed to developing leading-edge technologies and proprietary solutions. Research and innovation have been a major factor in our success and we believe that they will continue to contribute to our growth in the future. We use our investment in research and development to create, commercialize and deploy innovative business strategies and high-value technology solutions.

We deliver value to our clients through, and our success in part depends on, certain proprietary technologies and methodologies. We leverage U.S. and foreign patent, trade secret, copyright and trademark laws as well as confidentiality, proprietary information non-disclosure agreements, and key staff non-competition agreements to protect our proprietary technology.

As of December 31, 2019, we had 2 patent applications pending; and hold 79 U.S. and non-U.S. patents in 8 jurisdictions that we leverage in our operations and as marketplace differentiation for our service offerings. Our trade name, logos and names of our proprietary solution offerings are protected by their historic use and by trademarks and service marks registered in 22 countries.

ITEM 1A. RISK FACTORS

In addition to the other information presented in this Annual Report on Form 10-K, you should carefully consider the risks and uncertainties discussed in this section when evaluating our business. If any of these risks or uncertainties actually occur, our business, financial condition, and results of operations (including revenue, profitability and cash flows) could be materially and adversely affected and the market price of our stock could decline.

If we are unsuccessful in implementing our business strategy, our long-term financial prospects could be adversely affected

Our growth strategy is based on continuous diversification of our business beyond contact center customer care outsourcing to an integrated customer experience platform that unites innovative and disruptive technologies, strategic consulting, data analytics, client growth solutions, and customer experience focused system design and integration. These investments in technologies and integrated solution development, however, may not lead to increased revenue and profitability. If we are not successful in creating value from these investments, there could be a negative impact on our operating results and financial condition.

Our markets are highly competitive, and we might not be able to compete effectively

The markets where we offer our services are highly competitive. Our future performance is largely dependent on our ability to compete successfully in markets we currently serve, while expanding into new, profitable markets. We compete with large multinational service providers; offshore service providers from lower-cost jurisdictions that offer similar services, often at highly competitive prices and aggressive contract terms; niche solution providers that compete with us in specific geographic markets, industry segments or service areas; companies that utilize new, potentially disruptive technologies or delivery models, including artificial intelligence powered solutions; and in-house functions of large companies that use their own resources, rather than outsourcing the customer care and customer experience services we provide. Some of our competitors have greater financial or marketing resources than we do and, therefore, may be better able to compete.

Further, the continuing trend of consolidation among business process outsourcing competitors in various geographies where we have operations may result in new competitors with greater scale, a broader footprint, better technologies, or price efficiencies that may be attractive to our clients. If we are unable to compete successfully and provide our clients with superior service and solutions at competitive prices, we could lose market share and clients to competitors, which would materially adversely affect our business, financial condition, and results of operations.

Our results of operations and ability to grow could be materially affected if we cannot adapt our service offerings to changes in technology and customer expectations

Our growth and profitability will depend on our ability to develop and adopt new technologies that expand our existing offerings by leveraging new technological trends and cost efficiencies in our operations, while meeting rapidly evolving client expectations. As technology evolves, more tasks currently performed by our agents may be replaced by automation, robotics, artificial intelligence, chatbots and other technological advances, which puts our lower-skill tier one customer care offerings at risk. These technology innovations could potentially reduce our business volumes and related revenues, unless we are successful in adapting and deploying them profitably.

We may not be successful in anticipating or responding to our client expectations and interests in adopting evolving technology solutions, and their integration in our offerings may not achieve the intended enhancements or cost reductions. Services and technologies offered by our competitors may make our service offerings not competitive or even obsolete and may negatively impact our clients' interest in our offerings. Our failure to innovate, maintain technological advantages, or respond effectively and timely to transformational changes in technology could have a material adverse effect on our business, financial condition, and results of operations.

The current trend to outsource customer care may not continue and the prices that clients are willing to pay for the services may diminish, adversely affecting our business

Our growth depends, in large part, on the willingness of our clients and potential clients to outsource customer care and management services to companies like TTEC. There can be no assurance that the customer care outsourcing trend will continue; and our clients and potential clients may elect to perform in-house customer care and management services that they currently outsource. Reduction in demand for our services and increased competition from other providers and in-house service alternatives could create pricing pressures and excess capacity that would have an adverse effect on our business, financial condition, and results of operations.

Cyber-attacks, cyber-fraud, and unauthorized information disclosure could harm our reputation, cause liability, result in service outages and losses, any of which could adversely affect our business and results of operations

Our business involves the use, storage, and transmission of information about our clients, customers of our clients, and our employees. While we take reasonable measures to protect the security of and unauthorized access to our systems and the privacy of personal and proprietary information that we access and store, our security controls over our systems may not prevent the improper access to or disclosure of this information. Such unauthorized access or disclosure could subject us to liability under relevant law or our contracts and could harm our reputation resulting in loss of revenue and loss of business opportunities.

In recent years, there have been an increasing number of high-profile security breaches at companies and government agencies, and security experts have warned about the growing risks of hackers and cyber criminals launching a broad range of attacks targeting information technology systems. Our business is dependent on information technology systems. Information security breaches, computer viruses, interruption or loss of business data, DDoS (distributed denial of service) attacks, and other cyber-attacks on any of these systems could disrupt the normal operations of our contact centers, our cloud platform offerings, and our enterprise services, impeding our ability to provide critical services to our clients.

We are experiencing an increase in frequency of cyber-fraud attempts, such as so-called "social engineering" attacks and phishing scams, which typically seek unauthorized money transfers or information disclosure. We actively train our employees to recognize these attacks and have implemented proactive risk mitigation measures to curb them. There are no assurances, however, that these attacks, which are also growing in sophistication, may not deceive our employees, resulting in a material loss.

While we have taken reasonable measures to protect our systems and processes from intrusion and cyber-fraud, we cannot be certain that advances in cyber-criminal capabilities, discovery of new system vulnerabilities, and attempts to exploit such vulnerabilities will not compromise or breach the technology protecting our systems and the information that we manage and control, which could result in damage to our systems, our reputation and our profitability.

Our need for consistent improvements in cybersecurity may force us to expend significant additional resources to respond to system disruptions and security breaches, including additional investments in repairing systems damaged by such attacks, reconfiguring and rerouting systems to reduce vulnerabilities, and resolving of legal claims that may arise from data breaches. A significant cyber security breach could materially harm our business, financial condition, and operating results.

A large portion of our revenue is generated from a limited number of clients and the loss of one or more of our clients could adversely affect our business

We rely on strategic, long-term relationships with large, global companies in targeted industries and certain agencies of the United States and state and local governments. As a result, we derive a substantial portion of our revenue from relatively few clients. Our five and ten largest clients collectively represented 37% and 50% of our revenue in 2019 with no one client over 10%.

Although we have multiple engagements with all of our largest clients and all contracts are unlikely to terminate at the same time, the contracts with our five largest clients expire between 2020 and 2023 and there can be no assurance that these contracts will continue to be renewed at all or be renewed on favorable terms. While our ongoing sales and marketing activities aim to add new opportunities with existing and new commercial and government clients, there can be no assurances that such additional work can be secured nor that it would yield financial benefits comparable to expiring contracts. The loss of all or part of a major client's business could have a material adverse effect on our business, financial condition, and results of operations, if the loss of revenue was not replaced with profitable business from other clients.

We serve clients in industries that have historically experienced a significant level of consolidation. If one of our clients is acquired (including by another of our clients) our business volume and revenue may materially decrease due to the termination or phase out of an existing client contract, volume discounts or other contract concessions which could have an adverse effect on our business, financial condition, and results of operations.

We also serve client industries that rely extensively on supply chain arrangements in the People's Republic of China and other parts of Asia. If these supply chain arrangements experience material disruption for any reason, including large scale virus epidemics, these clients' needs for our services may be impacted and our business volumes and revenues may materially decrease, which could have an adverse effect on our business, financial condition, and results of operations.

If we cannot recruit, hire, train, and retain qualified employees to respond to client demands, our business will be adversely affected

Our business is labor intensive and our ability to recruit and train employees with the right skills, at the right price point, and in the timeframe required by our client commitments is critical to achieving our growth objective. We sign multi-year client contracts that are priced based on prevailing labor rates in jurisdictions where we deliver services. In the United States, however, our business is confronted with a patchwork of ever changing minimum wage, mandatory time off, and rest and meal break laws at the state and local levels. As these jurisdiction-specific laws change with little notice or grace period for transition, we often have no opportunity to adjust and change how we do business nor pass cost increases to our clients. These frequent changes in the law and inconsistencies in laws across different jurisdictions in the United States, may result in higher costs, lower contract profitability, higher turnover and reduced operational efficiencies, which could, in the aggregate, have material adverse impact on our results of operations.

Demand for qualified personnel with multiple language capabilities and fluency in English may exceed supply. Employees with specific skills may also be required to keep pace with evolving technologies and client demands. While we invest in employee retention, we continue to experience high employee turnover and are continuously recruiting and training replacement staff. Our inability to attract and retain qualified personnel at costs acceptable under our contracts, our costs associated with attracting, training, and retaining employees, and the challenge of managing continuously changing and seasonal client demands could have a material adverse effect on our business, financial condition, and results of operations.

Our delivery model involves geographic concentration exposing us to significant operational risks

Our business model is dependent on our customer engagement centers and enterprise support functions being located in low cost jurisdictions around the globe. Our customer engagement delivery capacity and our back-office functions are concentrated in the United States, the Philippines, Mexico, India, and Bulgaria and our technology solutions centers are concentrated in a few locations in the United States, India and the UK. Our dependence on our customer engagement centers and enterprise support functions in the Philippines and Mexico, which is subject to frequent severe weather, natural disasters, and occasional health and security threats, represents a particular risk. Natural disasters (floods, winds, and earthquakes), terrorist attacks, pandemics, large-scale utilities outages, telecommunication and transportation disruptions, labor or political unrest, and restriction on repatriation of funds at some of these locations may interrupt or limit our ability to operate or may increase our costs. Our business continuity and disaster recovery plans, while extensive, may not be effective, particularly if catastrophic events occur.

For these and other reasons, our geographic concentration could result in a material adverse effect on our business, financial condition and results of operations. Although we procure business interruption insurance to cover some of these exposures, adequate insurance may not be available on an ongoing basis for a reasonable price.

We routinely consider acquisitions, divestitures or other strategic transactions and may enter into such transactions at any time

We are engaged in a regular review of our strategic opportunities, including acquisitions, divestitures or other strategic transactions that we believe would provide value for our stockholders. We routinely have merger, acquisition, and divestiture opportunities in various stages of active review, and we also routinely engage consultants and advisors to assist us in analyzing opportunities. While at this time we are not actively engaged in negotiations regarding a material merger, acquisition or divestiture transaction, we could do so at any time. If such a transaction involves a sale of a part of the business, it would likely reduce the revenue and income of the remaining business and may impact the Company's stock price. While we consider these transactions to improve our business and financial results over time, there can be no assurance that our goals will be realized.

Our strategy of growing through acquisitions may impact our business in unexpected ways

Our growth strategy involves acquisitions that help us expand our service offerings and diversify our existing geographic footprint. We continuously evaluate acquisition opportunities, but there are no assurances that we will be able to identify acquisition targets that complement our strategy and are available at valuation levels accretive to our business.

Even if we are successful in making acquisitions, the acquired businesses may subject our business to risks that may impact our results of operation; including:

- inability to integrate acquired companies effectively and realize anticipated synergies and benefits from the acquisitions;
- · diversion of management's attention to the integration of the acquired businesses at the expense of delivering results for the legacy business;
- · inability to appropriately scale critical resources to support the business of the expanded enterprise and other unforeseen challenges of operating the acquired business as part of TTEC's operations;
- · inability to retain key employees of the acquired businesses and/or inability of such key employees to be effective as part of TTEC operations;
- · impact of liabilities or ethical issues of the acquired businesses undiscovered or underestimated as part of the acquisition due diligence;
- · failure to realize anticipated growth opportunities from a combined business, because existing and potential clients may be unwilling to consolidate business with a single supplier or to stay with the acquirer post acquisition;
- · impacts of cash on hand and debt incurred to finance acquisitions, thus reducing liquidity for other significant strategic objectives; and
- · internal controls, disclosure controls, corruption prevention policies, human resources and other key policies and practices of the acquired companies may be inadequate or ineffective.

Compliance with laws, including unexpected changes to such laws, could adversely affect our results of operations

Our business is subject to extensive regulation by the United States and foreign national, state and provincial authorities relating to confidential client and customer data, customer communications, telemarketing practices, and licensed healthcare and financial services activities, among other areas. Costs and complexity of compliance with existing and future regulations could adversely affect our profitability. If we fail to comply with regulations relevant to our business, we could be subject to civil or criminal liability, monetary damages and fines. Private lawsuits and enforcement actions by regulatory agencies could also materially increase our costs of operations and impact our ability to serve our clients.

As we provide services to clients' customers residing in countries across the world, we are subject to numerous, and sometimes conflicting, legal regimes on matters as diverse as data privacy, import/export controls, communication content requirements, trade restrictions and sanctions, tariffs, taxation, labor regulations, wages and severance, health care requirements, internal and disclosure control obligations, and immigration. Violations of these laws and related regulations could impact our reputation and result in financial liability, criminal prosecution, unfavorable publicity, restrictions on our ability to process information, financial penalties, and breach of our contractual commitments.

Adverse changes in laws or regulations that impact our business may negatively affect the sale of our services, slow the growth of our operations, or mandate changes to how we deliver our services, including our ability to use offshore resources. These changes could threaten our ability to continue to serve certain markets.

Uncertainty and inconsistency in privacy and data protection laws that impact our business and high cost of compliance with such laws may impact our ability to deliver services and our results of operations

During the last few years, there has been a significant increase in data protection and privacy regulations and enforcement activity in many jurisdictions where we and our clients do business. These new regulations are often complex and at times they impose conflicting requirements among different jurisdictions that we serve. For example, GDPR, adopted by the European Union in 2018, imposed new data protection requirements for controllers and processers of personally identifiable information collected in Europe, while the State of California in the United States imposed similar regulations effective 2020 with a different reach. Several other states in the United States are expected to adopt their own regulations in 2020. Failure to comply with all privacy and data protection laws that are relevant to different parts of our business may result in legal claims, significant fines, sanctions, or penalties, or may make it difficult for us to secure business or efficiently serve our clients. Compliance with these evolving regulations may require significant investment which would impact our results of operations.

Our cloud solutions are technology vendor dependent, which may impact our ability to grow our business and our results of operations

Our current cloud service solutions are primarily based on a single vendor technology. If this vendor does not continue to evolve the technology to stay competitive in the rapidly changing cloud computing services market, our financial results of operations could be materially impacted. There also can be no assurance that TTEC will be able to diversify its cloud service offerings quickly enough to offset any potential negative market trends for the cloud technology vendor that we are currently partnering with, and our inability to diversify may have impacts on our business and results of operations.

Our growth of operations and geographic footprint expansion could strain our resources and cause our business to suffer

We plan to continue growing our business through the growth of clients' wallet share, increasing sales efforts, geographic expansion and strategic acquisitions, while maintaining tight controls on our expenses and overhead. Lean overhead functions combined with focused growth may place a strain on our management systems, infrastructure and resources, resulting in internal control failures, missed opportunities, and staff attrition which could impact our business and results of operations.

Our profitability could suffer if our cost-management strategies are unsuccessful

Our ability to improve or maintain our profitability is dependent on our ability to engage in continuous management of our costs. Our cost management strategies include optimizing the alignment between the demand for our services and our resource capacity, including our contact center utilization; the costs of service delivery; the cost of sales and general and administrative costs as a percentage of revenues; and the use of process automation for standard operating tasks. If we are not effective in managing our operating and administrative costs in response to changes in demand and pricing for our services, or if we are unable to absorb or pass on to our clients the increases in our costs of operations, our results of operations could be materially adversely affected.

Our financial results depend on our capacity utilization and our ability to forecast demand and make timely decisions about staffing levels, investments, and operating expenses

Our ability to meet our strategic growth and profitability objectives depends on how effectively we manage our customer engagement center capacity against the fluctuating and seasonal client demands. Predicting customer demand and making timely staffing level decisions, investments, and other operating expenditure commitments in each of our delivery center locations is key to our successful execution and profitability maximization. We can provide no assurance that we will continue to be able to achieve or maintain desired delivery center capacity utilization, because quarterly variations in client volumes, many of which are outside our control, can have a material adverse effect on our utilization rates. If our utilization rates are below expectations, because of our high fixed costs of operation, our financial conditions and results of operations could be adversely affected.

Our sales cycles for new client relationships and new lines of business with existing clients can be long, which results in a long lead time before we receive revenues

We often face a long selling cycle to secure contracts with new clients or contracts for new lines of business with existing clients. When we are successful in securing a new engagement, it is generally followed by a long implementation period when clients must give notice to incumbent service providers or transfer in-house operations to us. There may also be a long ramp up period before we commence our services, and for certain contracts we receive no revenue until we start performing the work. If we are not successful in obtaining contractual commitments after the initial prolonged sales cycle or in maintaining the contractual relationship for a period of time necessary to offset new project investment costs and appropriate return on that investment, the investments may have a material adverse effect on our results of operations.

Contract terms typical in our industry can lead to volatility in our revenue and our margins

Our contracts do not have guaranteed revenue levels. Most of our contracts require clients to provide monthly forecasts of volumes, but no guaranteed or minimum volume levels. Such forecasts vary from month to month, which can impact our staff utilizations, our cost structure, and our profitability.

Many of our contracts have termination for convenience clauses with short notice periods, which could have a material adverse effect on our results of operation. Many of our contracts can be terminated for convenience and our contracts do not guarantee a minimum revenue level or profitability. If a client terminates a contract or materially reduces customer interaction volumes, this could have a material adverse effect on our results of operations and makes it harder to make projections.

We may not always offset increased costs with increased fees under long-term contracts. The pricing and other terms of our client contracts, particularly on our long-term contact center agreements, are based on estimates and assumptions we make at the time we enter into these contracts. These estimates reflect our best judgments regarding the nature of the engagement and our expected costs to provide the contracted services but these judgments could differ from actual results. Not all our contracts allow for escalation of fees as our cost of operations increase. Moreover, those that do allow for such escalations do not always allow increases at rates comparable to increases that we experience due to rising minimum wage costs and related payroll cost increases. If and to the extent we do not negotiate long-term contract terms that provide for fee adjustments to reflect increases in our cost of service delivery, our business, financial conditions, and results of operation could be materially impacted.

Our pricing depends on effectiveness of our level of effort forecasts. Pricing of our services in our technology and strategic consulting businesses is contingent on our ability to accurately forecast the level of effort and cost necessary to deliver our services, which is data dependent and can be inaccurate. The errors in level of effort estimations could yield lower profit margins or cause projects to become unprofitable, resulting in adverse impacts on our results of operations.

Increases in income tax rates, changes in income tax laws or disagreements with tax authorities could adversely affect our business, financial condition or results of operations

We are subject to income taxes in the United States and in certain foreign jurisdictions in which we operate. Increases in income tax rates or other changes in income tax laws in any particular jurisdiction could reduce our after-tax income from such jurisdictions and could adversely affect our business, financial condition or results of operations. Our operations outside the United States generate a significant portion of our income and many of the other countries in which we have significant operations, have recently made or are actively considering changes to existing tax laws. For example, in December 2017, the Tax Cuts and Jobs Act ("2017 Tax Act") was signed into law in the United States. While our accounting for the recorded impact of the 2017 Tax Act is deemed to be complete, these amounts are based on prevailing regulations and currently available information, and any additional guidance issued by the Internal Revenue Service ("IRS") could impact our recorded amounts in future periods.

Additional changes in the U.S. tax regime or in how U.S. multinational corporations are taxed on foreign earnings, including changes in how existing tax laws are interpreted or enforced, could adversely affect our business, financial condition or results of operations.

There are no assurances that we will be able to implement effective tax planning strategies that are necessary to optimize our tax position following changes in tax laws globally. If we are unable to implement a cost effective contracting structure, our effective tax rate and our results of operations would be impacted.

We face special risks associated with our business outside of the United States

An important component of our business strategy is service delivery outside of the United States and our continuing international expansion. During 2019, we derived approximately 40% of our revenue from operations outside of the United States. Conducting business abroad is subject to a variety of risks, including:

- · inconsistent regulations, licensing and legal requirements may increase our cost of operations as we endeavor to comply with multiple, complex laws that differ from one country to another;
- · uncertainty of tax regulations in countries where we do business may affect our costs of operation;
- special challenges in managing risks inherent in international operations, such as unique and prescriptive labor rules, corrupt business environments, restrictive immigration and export control laws may cause an inadvertent violation of laws that we may not be able to immediately detect or correct;
- · longer payment cycles could impact our cash flows and results of operations;
- · political and economic instability and unexpected changes in regulatory regimes could adversely affect our ability to deliver services overseas and our ability to repatriate cash;
- the withdrawal of the UK from the European Union (known as "Brexit") created substantial uncertainty about the political and economic relationship between the UK and the EU, and the UK's other trading partners which could, depending on future trade term negotiations, impact our European operations and our operations in the UK;
- · currency exchange rate fluctuations, restrictions on currency movement, and impact of international tax laws could adversely affect our results of operations, if we are forced to maintain assets in currencies other than U.S. dollars, while our financial results are reported in U.S. dollars;
- · infrastructure challenges and lack of sophisticated disaster and pandemic preparedness in some countries where we do business, and
- terrorist attacks or civil unrest in some of the regions where we do business (e.g. the Middle East, Latin America, the Philippines, and in Europe), and the resulting need for enhanced security measures may impact our ability to deliver services, threaten the safety of our employees, and increase our costs of operations.

While we monitor and endeavor to mitigate in a timely manner the relevant regulatory, geopolitical, and other risks related to our operations outside of the United States, we cannot assess with certainty what impact such risks are likely to have over time on our business, and we can provide no assurance that we will always be able to mitigate these risks successfully and avoid adverse impact on our business and results of operations.

Our profitability may be adversely affected if we are unable to expand and maintain our delivery centers in countries with stable wage rates and find new locations required by our clients

Our business is labor-intensive and therefore cost of wages, benefits and related taxes constitute a large component of our operating expenses. As a result, expansion of our business is dependent upon our ability to maintain and expand our operations in cost-effective locations, in and outside of the United States. Most of our customer engagement centers are located in jurisdictions subject to minimum wage regulations, which may result in increased wages in the future, thus impacting our profitability.

Our clients often dictate where they wish for us to locate the delivery centers that serve their customers, such as "near shore" jurisdictions located in close proximity to the United States or specific locations elsewhere in the world. There is no assurance that we will be able to find and secure locations suitable for delivery center operations in jurisdictions which meet our cost-effectiveness and security standards. Our inability to expand our operations to such locations, however, may impact our ability to secure new and additional business from clients, and could adversely affect our growth and results of operations.

Increases in the cost of communication and data services or significant interruptions in such services could adversely affect our business

Our business is significantly dependent on telephone, internet and data service provided by various domestic and foreign communication companies. Any disruption of these services could adversely affect our business. We have taken steps to mitigate our exposure to service disruptions by investing in complex and multi-layered redundancies, and we can transition services among our different customer engagement centers around the world. Despite these efforts, there can be no assurance that the redundancies we have in place would be sufficient to maintain operations without disruption.

Our inability to obtain communication and data services at favorable rates could negatively affect our results of operations. Where possible, we have entered into long-term contracts with various providers to mitigate short term rate increases and fluctuations. There is no obligation, however, for the vendors to renew their contracts with us, or to offer the same or lower rates in the future, and such contracts may be subject to termination or modification for various reasons outside of our control. A significant increase in the cost of communication services that is not recoverable through an increase in the price of our services could adversely affect our business.

Defects or errors in software utilized in our service offerings could adversely affect our business

The third-party software and systems that we use to conduct our business and serve our clients are highly complex and may, from time to time, contain design defects, coding errors or other software errors that may be difficult to detect or correct, and which are outside of our control. Although our commercial agreements contain provisions designed to limit our exposure to potential claims and liabilities, these provisions may not always effectively protect us against claims in all jurisdictions. As a result, problems with software and systems that we use may result in damages to our clients for which we are held responsible, causing damage to our reputation, adversely affecting our business, our results of operations and financial condition.

If the transfer pricing arrangements we have among our subsidiaries are determined to be inappropriate, our tax liability may increase

We have transfer pricing arrangements among our subsidiaries in relation to various aspects of our business, including operations, marketing, sales, and delivery functions. The United States, Australia, Mexico, Philippines and other transfer pricing regulations in other countries where we operate, require that cross-border transactions between affiliates be on arm's-length terms. We carefully consider the pricing among our subsidiaries to assure that they are at arm's-length. If tax authorities were to determine that the transfer prices and terms we have applied are not appropriate, we may incur increased tax liability, including accrued interest and penalties, which would cause material increase in our tax liability, thereby impacting our profitability and cash flows, and potentially resulting in a material adverse effect on our operations, effective tax rate and financial condition.

We have incurred and may in the future incur impairments to goodwill, long-lived assets or strategic investments

As a result of past acquisitions, as of December 31, 2019, we have approximately \$301.7 million of goodwill and \$115.6 million of intangible assets included on our Consolidated Balance Sheet. We review our goodwill and intangible assets for impairment at least once annually, and more often when events or changes in circumstances indicate the carrying value may not be recoverable. We perform an assessment of qualitative and quantitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of the goodwill or intangible asset is less than its carrying amount. In the event that the book value of goodwill or intangible asset is impaired, such impairment would be charged to earnings in the period when such impairment is determined. We have recorded goodwill and intangible impairments in the past, and there can be no assurance that we will not incur impairment charges in the future that could have material adverse effects on our financial condition or results of operations.

Intellectual property infringement by us and by others may adversely impact our ability to innovate and compete

From time to time, we and members of our supply chain receive assertions that our service offerings or technologies infringe on the patents or other intellectual property rights of third parties. While to date we have been successful in defending such claims and many of these claims are without basis, the claims could require us to cease activities, incur expensive licensing costs, or engage in costly litigation, which could adversely affect our business and results of operations.

Our intellectual property may not always receive favorable treatment from the United States Patent and Trademark Office, the European Patent Office or similar foreign intellectual property adjudication and registration agencies; and our "patent pending" intellectual property may not receive a patent or may be subject to prior art limitations.

The lack of an effective legal system in certain countries where we do business or lack of commitment to protection of intellectual property rights, may prevent us from being able to defend our intellectual property and related technology against infringement by others, leading to a material adverse effect on our business, results of operations and financial condition.

Our financial results may be adversely impacted by foreign currency exchange rate risk

Many contracts that we service from customer engagement centers based outside of the United States are typically priced, invoiced, and paid in U.S. and Australian dollars, the British pound or Euros, while the costs incurred to deliver the services and operate are incurred in the functional currencies of the applicable operating subsidiary. The fluctuations between the currencies of the contract and operating currencies present foreign currency exchange risks. Furthermore, because our financial statements are denominated in U.S. dollars, but approximately 21% of our revenue is derived from contracts denominated in other currencies, our results of operations could be adversely affected if the U.S. dollar strengthens significantly against foreign currencies.

While we hedge at various levels against the effect of exchange rate fluctuations, we can provide no assurance that we will be able to continue to successfully manage this foreign currency exchange risk and avoid adverse impacts on our business, financial condition, and results of operations.

Legislation discouraging offshoring of service by United States companies or making such offshoring difficult could significantly affect our business

A perceived association between offshore service providers and the loss of jobs in the United States has been a focus of political debate in recent years. As a result, current and prospective clients may be reluctant to hire offshore service providers like TTEC to avoid negative perceptions and regulatory scrutiny. If they seek customer care and management capacity onshore that was previously available to them through outsourcers outside of the United States, they may elect to perform these services in-house instead of outsourcing the services onshore. Possible tax incentives for United States businesses to return offshored, including outsourced and offshored, services to the United States could also impact our clients' continuing interest in using our services.

Legislation aimed to expand protections for United States based customers from having their personal data accessible outside of the United States could also impact offshore outsourcing opportunities by requiring notice and consent as a condition for sharing personal identifiable information with service providers based outside of the United States. Any material changes in current trends among United States based clients to use services outsourced and delivered offshore would materially impact our business and results of operations.

Health epidemics could disrupt our business and adversely affect our financial results

Our customer engagement centers typically seat hundreds of employees in one location. Accordingly, an outbreak of a contagious infection in one or more of the locations in which we do business may result in significant worker absenteeism, lower capacity utilization rates, voluntary or mandatory closure of our customer engagement centers, transportation restrictions that could make it difficult for our employees to commute to work, travel restrictions on our employees, and other disruptions to our business. Any prolonged or widespread health epidemic could severely disrupt our business operations and have a material adverse effect on our business, its financial condition and results of operations.

Our bylaws designate Delaware courts as the exclusive forum for most disputes with our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for their disputes.

Our bylaws designate Delaware's state courts as the exclusive forum for most disputes between us and our stockholders, including federal claims and derivative actions. We believe that this provision may benefit us by providing increased consistency in the application of Delaware law and federal securities laws by chancellors and judges who are particularly experienced in resolving corporate disputes, efficient administration of cases relative to other forums, and protection against the burdens of multi-forum litigation. This choice of forum provision does not have the effect of causing our stockholders to waive our obligation to comply with the federal securities laws. This bylaw forum selection provision is not uncommon for companies incorporated in the State of Delaware, but it could limit our stockholders' ability to select a more favorable judicial forum for disputes with us, our directors, officers or other employees and may therefore discourage litigation. It is important to note, however, that our choice of forum provision would (i) not be enforceable with respect to any suits brought to enforce any liability or duty created by the Securities Exchange Act of 1934, as amended, and (ii) have uncertain enforceability with respect to claims under the Securities Act of 1933, as amended.

Delaware law and certain provisions in our restated certificate of incorporation and amended and restated bylaws might discourage, delay or prevent a change of control of our company or changes in our management and, therefore, depress the price of our common stock

Our restated certificate of incorporation and amended and restated bylaws contain provisions that could depress the market price of our common stock by acting to discourage, delay or prevent a change in control of our company or changes in our management that the stockholders of our company may deem advantageous. These provisions, among other things:

- authorize the issuance of "blank check" preferred stock that our board of directors could use to implement a stockholder rights plan;
- · provide that special meetings of our stockholders may be called only by our Chairman, President or our board of directors;
- establish advance notice requirements for nominations for election to our board of directors or for proposing matters that can be acted upon by stockholders at annual stockholder meetings:
- · permit the board of directors to establish the number of directors; and
- · provide that the board of directors is expressly authorized to make, alter or repeal our amended and restated bylaws.

In addition, Section 203 of the Delaware General Corporation Law may discourage, delay or prevent a change in control of our company. Section 203 imposes certain restrictions on mergers, business combinations and other transactions between us and holders of 15% or more of our common stock. Further, as described below, a majority of our stock is held by a single controlling stockholder, which means that a change in control of our company or the composition of the Board of Directors will not occur without the approval of the controlling stockholder.

Our Chairman and Chief Executive Officer controls a majority of our stock and has control over all matters requiring action by our stockholders; and his interest may conflict with the interests of our other stockholders

Kenneth D. Tuchman, our Chairman and Chief Executive Officer, directly and beneficially owns approximately 61% of TTEC's common stock. As a result, Mr. Tuchman could and does exercise significant influence and control over our business practices and strategy. As long as Mr. Tuchman continues to beneficially own more than 50% of our common stock he will be able to elect all of the members of our Board of Directors, effect stockholder actions by written consent in lieu of stockholder meetings, and determine the outcome of all matters submitted to a vote of our stockholders, including matters involving mergers or other business combinations, the acquisition or disposition of assets, the occurrence of indebtedness, the issuance of any additional shares of common stock or other equity securities and the payment of dividends on our common stock.

The interest of Mr. Tuchman may not always coincide with the interest of our other stockholders, and Mr. Tuchman may seek to cause the Company to take actions that might involve risks to our business or adversely affect us or our other stockholders. For example, Mr. Tuchman's control of TTEC could delay or prevent a change of control, merger, consolidation, or sale of all or substantially all of our assets that our other stockholders support, or conversely, Mr. Tuchman's control could result in the consummation of a transaction that our other stockholders do not support. As a controlling stockholder, Mr. Tuchman is generally entitled to vote his shares as he sees fit, which may not always be in the interest of our other stockholders. This concentrated control could also discourage parties from acquiring our common stock or initiating potential mergers, takeovers or other change of control transactions, which could depress the trading price of our common stock.

Our status as a "controlled company" could make our common stock less attractive to some investors or otherwise harm our stock price.

Because we qualify as a "controlled company" under the listing rules of the NASDAQ Stock Market, we are not required to have a majority of our Board of Directors be independent, nor are we required to have an independent compensation committee or an independent nominating committee of the Board. While the Company has elected not to avail itself of these governance exceptions available to "controlled companies," in the future the Company may elect to do so. Accordingly, because of our "controlled company" status, the other stockholders may not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance rules for NASDAQ-listed companies. Our status as a controlled company could make our common stock less attractive to some investors or otherwise harm our stock price.

ITEM 1B. UNRESOLVED STAFF COMMENTS

We have not received written comments regarding our periodic or current reports from the staff of the SEC that were issued 180 days or more preceding the end of our 2019 fiscal year that remain unresolved.

ITEM 2. PROPERTIES

Our corporate headquarters are located in Englewood, Colorado. In addition to our headquarters and the customer engagement centers used by our Engage segment discussed below, we also maintain sales and consulting offices in several countries around the world which serve our Digital segment.

As of December 31, 2019 we operated 89 customer engagement centers that are classified as follows:

- · Multi-Client Center We lease space for these centers and serve multiple clients in each facility;
- · Dedicated Center We lease space for these centers and dedicate the entire facility to one client; and
- · Managed Center These facilities are leased or owned by our clients and we staff and manage these sites on behalf of our clients in accordance with facility management contracts.

As of December 31, 2019, our customer engagement centers were located in the following countries:

	Multi-Client Centers	Dedicated Centers	Managed Centers	Total Number of Delivery Centers
Australia		3		3
Brazil	2	_	_	2
Bulgaria	2	_	_	2
Canada	5	_	1	6
Greece	1	_	_	1
Germany	_	_	1	1
India	1	_	_	1
Ireland	1	_	_	1
Mexico	3	_	_	3
Philippines	18	_	_	18
Poland	_	_	1	1
South Africa	_	_	1	1
Thailand	_	_	1	1
United Kingdom	_	_	2	2
United States of America	32	5	9	46
Total	65	8	16	89

The leases for our customer engagement centers have remaining terms ranging from one to 13 years and generally contain renewal options. We believe that our existing customer engagement centers are suitable and adequate for our current operations, and we have plans to build additional centers to accommodate future business.

ITEM 3. LEGAL PROCEEDINGS

From time to time, the Company has been involved in legal actions, both as plaintiff and defendant, which arise in the ordinary course of business. The Company accrues for exposures associated with such legal actions to the extent that losses are deemed both probable and reasonably estimable. To the extent specific reserves have not been made for certain legal proceedings, their ultimate outcome, and consequently, an estimate of possible loss, if any, cannot reasonably be determined at this time.

Based on currently available information and advice received from counsel, the Company believes that the disposition or ultimate resolution of any current legal proceedings, except as otherwise specifically reserved for in its financial statements, will not have a material adverse effect on the Company's financial position, cash flows or results of operations.

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

Our common stock is traded on the NASDAQ Global Select Market under the symbol "TTEC."

As of December 31, 2019, we had 282 holders of record of our common stock and during 2019 we declared and paid a \$0.30 per share dividend and a \$0.32 per share dividend on our common stock. During 2018 we declared and paid a \$0.27 per share dividend and a \$0.28 per share dividend on our common stock as discussed below.

In 2015, our Board of Directors adopted a dividend policy, with the intent to distribute a periodic cash dividend to stockholders of our common stock, after consideration of, among other things, TTEC's performance, cash flows, capital needs and liquidity factors. The Company paid the initial dividend in 2015 and has continued to pay a semi-annual dividend in October and April of each year in amounts ranging between \$0.18 and \$0.32 per common share. On February 27, 2020, the Board of Directors authorized a \$0.34 dividend per common share, payable on April 16, 2020, to shareholders of record as of April 1, 2020. While it is our intention to continue to pay semi-annual dividends in 2020 and beyond, any decision to pay future cash dividends will be made by our Board of Directors. In addition, our credit facility restricts our ability to pay dividends in the event we are in default or do not satisfy certain covenants.

Stock Repurchase Program

We continue to have the opportunity to return capital to our shareholders via an ongoing stock repurchase program (originally authorized by the Board of Directors in 2001). As of December 31, 2019, the cumulative authorized repurchase allowance was \$762.3 million, of which we have used \$735.8 million to purchase 46.1 million shares. During 2018 and 2019, we did not purchase any shares under the program, and we do not currently have plans to make repurchases in 2020.

Issuer Purchases of Equity Securities During the Fourth Quarter of 2019

The following table provides information about our repurchases of equity securities during the quarter ended December 31, 2019:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Valu Pu F	oroximate Dollar e of Shares that May Yet Be rchased Under the Plans or Programs (In thousands)
September 30, 2019				\$	26,580
October 1, 2019 - October 31, 2019	_	\$ —	_	\$	26,580
November 1, 2019 - November 30, 2019	_	\$ —	_	\$	26,580
December 1, 2019 - December 31, 2019	_	\$ —		\$	26,580
Total	_				

From January 1, 2020 through February 28, 2020, we did not purchase any additional shares. The stock repurchase program does not have an expiration date and the Board authorizes additional stock repurchases under the program from time to time.

Stock Performance Graph

The graph depicted below compares the performance of TTEC common stock with the performance of the NASDAQ Composite Index; the Russell 2000 Index; and customized peer group over the period beginning on December 31, 2014 and ending on December 31, 2019. We have chosen the 2019 "Peer Group" composed of 8x8, Inc. (NASDAQ: EGHT), Five9 Inc. (NASDAQ: FIVN), Genpact (NASDAQ: G), Sykes Enterprises, Incorporated (NASDAQ: SYKE) and Teleperformance (NYSE Euronext: RCF). We believe that the companies in the 2019 Peer Group are relevant to our current business model, market capitalization and our two segments Digital and Engage. The 2018 Peer Group included Sykes Enterprises, Incorporated (NASDAQ: SYKE) and Teleperformance (NYSE Euronext: RCF), which were relevant to our Engage segment.

The graph assumes that \$100 was invested on December 31, 2014 in our common stock and in each comparison index, and that all dividends were reinvested. We declared per share dividends on our common stock of \$0.55 during 2018 and \$0.62 during 2019. Stock price performance shown on the graph below is not necessarily indicative of future price performance.

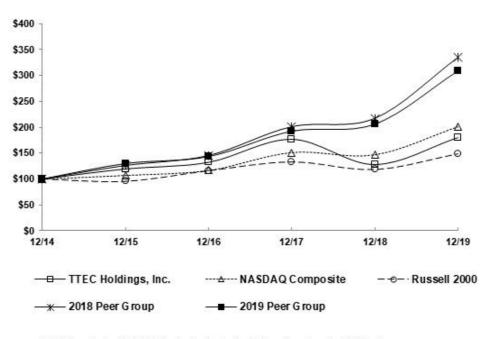
COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

Among TTEC Holdings, Inc., The NASDAQ Composite Index, The Russell 2000 Index, And A Peer Group

	December 31,											
		2014	2	2015	2	2016	2	2017	2	2018	2	2019
TTEC Holdings, Inc.	\$	100	\$	120	\$	132	\$	177	\$	128	\$	180
NASDAQ Composite	\$	100	\$	107	\$	116	\$	151	\$	147	\$	200
Russell 2000	\$	100	\$	96	\$	116	\$	133	\$	118	\$	148
2018 Peer Group	\$	100	\$	126	\$	146	\$	201	\$	217	\$	335
2019 Peer Group	\$	100	\$	130	\$	143	\$	192	\$	206	\$	309

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among TTEC Holdings, Inc., the NASDAQ Composite Index, the Russell 2000 Index, 2018 Peer Group and 2019 Peer Group



*\$100 invested on 12/31/14 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

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ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data should be read in conjunction with Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, the Consolidated Financial Statements and the related notes appearing elsewhere in this Form 10-K (amounts in thousands except per share amounts).

	Year Ended December 31,									
	_	2019	_	2018		2017	_	2016	_	2015
Statement of Operations Data										
Revenue	\$	1,643,704	\$	1,509,171	\$	1,477,365	\$	1,275,258	\$	1,286,755
Cost of services		(1,242,887)		(1,157,927)		(1,110,068)		(941,592)		(928,247)
Selling, general and administrative		(202,540)		(182,428)		(182,314)		(175,797)		(194,606)
Depreciation and amortization		(69,086)		(69,179)		(64,507)		(68,675)		(63,808)
Other operating expenses		(5,482)(1)		(7,583) ⁽⁵⁾		(19,987) ⁽⁸⁾		(36,442)(12)		(9,914) ⁽¹⁶⁾
Income from operations		123,709		92,054		100,489		52,752		90,180
Other income (expense)		$(13,298)^{(2)}$		(35,816)(6)		$(11,602)^{(9)}$		$(2,454)^{(13)}$		(4,291)
Provision for income taxes		(25,677) ⁽³⁾		(16,483)(7)		(78,075)(10)		$(12,863)^{(14)}$		$(20,004)^{(17)}$
Noncontrolling interest		(7,570)		(3,938)		(3,556)		(3,757)		(4,219)
Net income attributable to TTEC										
stockholders	\$	77,164	\$	35,817	\$	7,256	\$	33,678	\$	61,666
Weighted average shares outstanding										
Basic		46,373		46,064		45,826		47,423		48,370
Diluted		46,758		46,385		46,382		47,736		49,011
Net income per share attributable to TTEC stockholders										
Basic	\$	1.66	\$	0.78	\$	0.16	\$	0.71	\$	1.27
Diluted	\$	1.65	\$	0.77	\$	0.16	\$	0.71	\$	1.26
Dividends issued per common share	\$	0.62	\$	0.55	\$	0.47	\$	0.385	\$	0.36
Balance Sheet Data										
Total assets	\$	1,376,788 (4)	\$	1,054,508	\$	1,078,736 (11)	\$	846,304 (15)	\$	843,327
Total long-term liabilities	\$	532,846 (4)	\$	466,241	\$	514,113 (11)	\$	304,380 (15)	\$	191,473

(1) Includes \$1.1 million related to reductions in force, \$0.7 million of expense for facility exit and other charges, a \$2.6 million impairment of leasehold improvements and right to use lease assets, and a \$1.1 million impairment of internally developed software, customer relationship intangible assets and other long-term assets.

(3) Includes a \$1.7 million benefit related to return to provision adjustments, a \$2.8 million benefit related to tax rate changes, \$0.7 million of expense related to changes in tax contingent liabilities, \$4.5 million of expense related to changes in valuation allowance, a \$0.9 million benefit related to restructuring, and a \$0.3 million benefit related to other items.

(4) The Company spent \$107.0 million, net of cash acquired of \$4.5 million in 2019 for the acquisition of FCR. Upon acquisition of FCR, the Company acquired \$171.7 million in assets and assumed \$9.6 million in liabilities (\$4.0 million in long-term liabilities).

(5) Includes \$0.8 million related to reductions in force, \$5.3 million of expense for facility exit charges and a termination fee for a technology vendor contract, \$1.1 million of expense related to the impairment of property and equipment and a \$0.3 million impairment charge related to internally developed software.

(6) Includes a \$15.6 million impairment of the full value of an equity investment and a related bridge loan, a \$9.9 million charge related to the future purchase of the remaining 30% of the Motif acquisition, a \$1.6 million net loss related to a business unit which was classified as assets held for sale and subsequently reclassified to

⁽²⁾ Includes a \$4.7 million charge related to the future purchase of the remaining 30% of the Motif acquisition (for discussion regarding acquisition of Motif, see our Annual Report on Form 10-K for the year ended December 31, 2017), a \$2.4 million benefit related to a fair value adjustment of the contingent consideration based on revised estimates of performance against targets for one of our acquisitions, a \$1.4 million benefit related to royalty payments in connection with the sale of two business units, a \$1.4 million benefit related to the recovery of receivables for a division in winddown, and a \$0.7 million benefit related to the sale of trademarks.

- assets held and used as of December 31, 2018, a \$2.0 million benefit related to royalty payments in connection with the sale of a business unit, a \$0.7 million benefit related to the bargain purchase of an acquisition closed in March 2018, and a \$0.3 million benefit related to a fair value adjustment of the contingent consideration based on revised estimates of performance against targets for one or our acquisitions.
- (7) Includes a \$4.2 million benefit related to the impairment of an equity investment, a \$3.4 million benefit related to return to provision adjustments, \$0.5 million of expense related to the disposition of assets, a \$0.7 million benefit related to stock options, \$1.6 million of expense related to changes in tax contingent liabilities, \$1.5 million of expense related to changes in valuation allowance, a \$2.1 million benefit related to restructuring, and a \$0.5 million benefit related to other items.
- (8) Includes \$1.2 million expense related to reductions in force, \$2.2 million of expense for facility exit charges, \$3.5 million of expense due to write-off of leasehold improvements and other fixed assets in connection with the facilities we exited, \$7.8 million expense related to integration charges for the Connextions acquisition (for discussion regarding acquisition of Connextions, see our Annual Report on Form 10-K for the year ended December 31, 2017), and a \$5.3 million impairment charge related to two trade name intangible assets.
- (9) Includes \$5.3 million of expense related to the finalization of the transition services agreement for Connextions, a net \$2.6 million loss related to a held for sale business unit that was sold in December 2017 and a \$1.2 million charge to interest expense related to the future purchase of the remaining 30% of the Motif acquisition offset by a \$3.2 million benefit related to the release of the currency translation adjustment in equity in connection with the dissolution of a foreign entity.
- (10) Includes \$62.4 million of expense related to the US 2017 Tax Act, \$0.4 million of expense related to the disposition of assets, a \$1.9 million benefit related to impairments, a \$2.2 million benefit related to stock options, \$0.6 million of expense related to changes in valuation allowances, a \$5.8 million benefit related to restructuring, a \$0.6 million benefit related to return to provision adjustments and a \$2.1 million benefit related to changes to a transition service agreement.
- (11) The Company spent \$116.7 million, net of cash acquired of \$6.0 million, in 2017 for the acquisitions of Connextions and Motif. Upon acquisitions of Connextions and Motif, the Company acquired \$40.8 million in assets and assumed \$36.3 million in liabilities (\$27.4 million in long-term liabilities).
- (12) Includes \$3.4 million expense related to reductions in force, \$1.0 million of expense for facility exit and other charges, a \$1.3 million impairment of fixed assets, a \$1.4 million impairment of goodwill, an \$11.1 million impairment of internally developed software, and \$18.2 million of impairment charges related to several trade name, customer relationship and non-compete intangible assets.
- (13) Includes a \$5.3 million estimated loss related to two business units which were classified as assets held for sale offset by a \$4.8 million benefit related to fair value adjustments to the contingent consideration based on revised estimates of performance against targets for two of our acquisitions.
- (14) Includes \$1.7 million of expense related to return to provision adjustments, \$1.1 million of expense related to a transfer pricing adjustment for a prior period, \$0.5 million of expense related to tax rate changes, \$0.5 million of expense related to changes in valuation allowances, a \$1.5 million benefit related to restructuring charges, and a \$9.8 million benefit related to impairments and loss on assets held for sale.
- (15) The Company spent \$46.1 million, net of cash acquired of \$2.7 million, in 2016 for the acquisition of Atelka (for discussion regarding our acquisition of Atelka, see our Annual Report on Form 10-K for the year ended December 31, 2016). Upon acquisition of Atelka, the Company acquired \$25.1 million in assets and assumed \$7.7 million in liabilities (\$1.4 million in long-term liabilities).
- (16) Includes \$1.8 million expense related to reductions in force, \$0.4 million of expense related to the impairment of property and equipment, and \$7.7 million of expense related to the impairment of goodwill.
- (17) Includes a \$0.7 million benefit related to restructuring charges, \$1.2 million net expense related to changes in valuation allowance and a related release of a deferred tax liability, \$1.5 million of expense related to provisions for uncertain tax positions, a \$2.6 million benefit related to impairments, \$1.3 million of expense related to state net operating losses and credits, and a \$0.4 million benefit related to other items.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Executive Summary

TTEC Holdings, Inc. ("TTEC", "the Company", "we", "our" or "us") is a leading global customer experience technology and services company focused on the design, implementation and delivery of transformative customer experience outcomes for many of the world's most iconic and disruptive brands. Since our inception in 1982, we have been helping clients deliver frictionless customer experiences, strengthen their customer relationships, brand recognition and loyalty through personalized interactions, significantly improve their Net Promoter Score ("NPS"), and lower their total cost to serve by enabling and delivering simplified, consistent and seamless customer experience across channels and phases of the customer lifecycle.

Our customer experience thought leadership is substantiated, with innovative programs that differentiate our clients from their competition.

In the fast expanding direct-to-customer ("DTC") channel where experiences are everything, enterprises must become increasingly customer-centric and digitally enabled. Digital transformation has become a have-to-have in winning and keeping customers. It is our mission to enable and accelerate our clients' path to digital transformation. We are focused on improving the experience of our clients' customers, by leveraging existing and emerging technologies — artificial intelligence ("Al"), machine learning ("ML"), robotic process automation ("RPA"), cloud, analytics, omnichannel and real-time messaging.

Through the first quarter of 2019, the Company reported its financial results of operations across four segments: Customer Strategy Services ("CSS"), Customer Technology Services ("CTS"), Customer Growth Services ("CGS") and Customer Management Services ("CMS"). Starting in the second quarter of 2019, the Company changed its go-to-market strategy, how its clients evaluate and consume its services, how TTEC assesses its operating performance and the leadership accountability for its segments. As a result, the Company now reports its financial information based on two segments: TTEC Digital and TTEC Engage.

- TTEC Digital designs, builds and delivers tech-enabled, insight-based and outcome-driven customer experience solutions through our professional services and suite of technology offerings. These solutions are critical to enabling and accelerating digital transformation for our clients. These services were previously included in the CSS and CTS segments.
- TTEC Engage provides the essential technologies, human resources, infrastructure and processes to operate customer care, acquisition, and fraud detection and prevention services. These services were previously included in the CGS and CMS segments.

TTEC Digital and TTEC Engage come together under our unified offering, Humanify™ Customer Experience as a Service ("CXaas"), which drives measurable customer results for clients through the delivery of personalized, omnichannel experiences. Our Humanify™ cloud platform provides a fully integrated ecosystem of Customer Experience ("CX") offerings, including omnichannel, messaging, Al, ML, RPA, analytics, cybersecurity, customer relationship management ("CRM"), knowledge management and journey orchestration. Our end-to-end platform differentiates us from many competitors by combining design, strategic consulting, best in class technology, data analytics, process optimization, system integration and operational excellence. This unified offering is value-oriented, outcome-based and delivered to large enterprise and governments on a global scale.

During fiscal 2019, the TTEC global operating platform delivered services in 22 countries -- the United States, Australia, Belgium, Brazil, Bulgaria, Canada, Costa Rica, Germany, Greece, Hong Kong, India, Ireland, Mexico, the Netherlands, New Zealand, the Philippines, Poland, Singapore, South Africa, Thailand, United Arab Emirates, and the United Kingdom. We provide onshore, nearshore and offshore services on six continents to accommodate client requirements. TTEC has 49,500 employees, approximately 1,400 of whom are CX professionals serving TTEC Digital clients and approximately 48,100 of whom serve TTEC Engage clients.

Our revenue for fiscal 2019 was \$1.644 billion, approximately \$305 million, or 19%, which came from our TTEC Digital segment and \$1.338 billion, or 81%, which came from our TTEC Engage segment.

To improve our competitive position in a rapidly changing market and stay strategically relevant to our clients, we continue to invest in innovation and service offerings for mainstream and high growth disruptive businesses, diversifying and strengthening our core customer care services with consulting, data analytics, insights, and technology-enabled, outcomes-focused services.

We also invest to expand our geographic footprint, broaden our product and service capabilities, increase our global client base and industry expertise, and further scale our end-to-end integrated solutions platform. To this end we have been highly acquisitive in the last several years, including an acquisition in 2019 of a U.S.-based provider of customer care, social media community management, content moderation, technical support and business process solutions; an acquisition in 2018 of a U.K.-based systems integrator for multichannel contact center platforms; an acquisition in 2017 of an India-based digital fraud prevention and detection and content moderation services company; and an acquisition in 2017 of a U.S.-based healthcare services company focused on improving the customer experience for healthcare plan providers and pharmacy benefits managers.

We have extensive expertise in the automotive, communications, financial services, government, healthcare, logistics, media and entertainment, retail, technology, travel and transportation industries. We serve more than 300 diverse clients globally, including many iconic blue-chip brands, Fortune 1000 companies, and disruptive growth companies.

Our Integrated Service Offerings and Business Segments

We provide strategic value and differentiation through our two business segments: TTEC Digital and TTEC Engage.

TTEC Digital designs, builds and delivers tech-enabled, insights-based and outcome-driven customer experience solutions through our professional services and suite of technology offerings. These solutions are critical to enabling and accelerating digital transformation for our clients.

- · Technology Services: Our technology services design, integrate and operate highly scalable, digital omnichannel technology solutions in the cloud, on premise, or hybrid, including journey orchestration, automation and AI, knowledge management, and workforce productivity.
- · Professional Services: Our management consulting practices deliver customer experience strategy, analytics, process optimization, and learning and performance services.

TTEC Engage provides the essential technologies, human resources, infrastructure and processes to operate customer care, acquisition, and fraud detection and prevention services.

- · Customer Acquisition Services: Our customer growth and acquisition services optimize the buying journeys for acquiring new customers by leveraging technology and analytics to deliver personal experiences that increase the quantity and quality of leads and customers.
- Customer Care Services: Our customer care services provide turnkey contact center solutions, including digital omnichannel technologies, associate recruiting and training, facilities, and operational expertise to create exceptional customer experiences across all touchpoints.
- · Fraud Prevention Services: Our digital fraud detection and prevention services proactively identify and prevent fraud and provide community content moderation and compliance.

Based on our clients' preference, we provide our services on an integrated cross-business segment and/or on a discrete basis.

Additional information with respect to our segments and geographic footprint is included in Part II, Item 8. Financial Statements and Supplementary Data, Note 3 to the Consolidated Financial Statements.

Our 2019 Financial Results

In 2019, our revenue increased 8.9% to \$1,644 million over 2018, including an increase of 0.1% or \$0.8 million due to foreign currency fluctuations and a decrease of \$17.9 million, or 1.2%, due to the initial adoption of ASC 606 for revenue in the first quarter of 2018. The increase in revenue was comprised of a \$66.5 million, or 27.9%, increase for TTEC Digital and a \$68.0 million, or 5.4%, increase for TTEC Engage.

Our 2019 income from operations increased \$31.7 million to \$123.7 million or 7.5% of revenue, from \$92.1 million or 6.1% of revenue for 2018. The change in operating income is attributable to a number of different factors across the segments. The TTEC Digital operating income expanded with an 18%, or \$5.9 million, improvement over last year primarily on the growth of its higher margin cloud business and its system integration business which provides services pre and post the buildout of each client's cloud platform. The TTEC Engage operating income increased 44%, or \$25.8 million, compared to the prior year based on the increase in revenue and a \$6.8 million benefit related to foreign currency fluctuations which was offset by a \$9.8 million decrease related to the initial adoption of ASC 606 during the first quarter of 2018.

Income from operations in 2019 and 2018 included a total of \$5.5 million and \$7.6 million of restructuring and asset impairments, respectively.

Our offshore customer engagement centers serve clients based in the U.S. and in other countries and span five countries with 23,915 workstations representing 52% of our global delivery capabilities. Revenue for our TTEC Engage segment provided in these offshore locations was \$455 million and represented 34% of our 2019 revenue, as compared to \$440 million and 35% of our 2018 revenue.

As of December 31, 2019, the total production workstations for our TTEC Engage segment was 45,611 and the overall capacity utilization in our centers was 74%. The utilization is lower than the previous year as we expand and shift capacity in certain countries to accommodate the volume and location related to client specific customer engagement volume. The table below presents workstation data for all of our centers as of December 31, 2019 and 2018. Our utilization percentage is defined as the total number of utilized production workstations compared to the total number of available production workstations.

	Decemi	ber 31, 201	9	December 31, 2018				
	Total Production Workstations	In Use	% In Use	Total Production Workstations	In Use	% In Use		
Total centers								
Sites open >1 year	40,140	29,749	74 %	42,687	34,017	80 %		
Sites open <1 year	5,471	3,870	71 %	309	231	75 %		
Total workstations	45,611	33,619	74 %	42,996	34,248	80 %		

We continue to see demand from all geographic regions to utilize our offshore delivery capabilities and expect this trend to continue. On the other hand, some of our clients may be subject to regulatory pressures to bring more services onshore to the United States. In light of these trends, we plan to continue to selectively retain and grow capacity in and expand into new offshore markets, while maintaining appropriate capacity in the United States. As we grow our offshore delivery capabilities and our exposure to foreign currency fluctuations increases, we continue to actively manage this risk via a multi-currency hedging program designed to minimize operating margin volatility.

Critical Accounting Policies and Estimates

Management's Discussion and Analysis of our financial condition and results of operations are based upon our Consolidated Financial Statements, which have been prepared in accordance with accounting principles generally accepted in the U.S. ("GAAP"). The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses as well as the disclosure of contingent assets and liabilities. We regularly review our estimates and assumptions. These estimates and assumptions, which are based upon historical experience and on various other factors believed to be reasonable under the circumstances, form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Reported amounts and disclosures may have been different had management used different estimates and assumptions or if different conditions had occurred in the periods presented. Below is a discussion of the policies that we believe may involve a high degree of judgment and complexity.

Revenue Recognition - 2019 and 2018 Revenue

The Company recognizes revenue from contracts and programs when control of the promised goods or services is transferred to the customers, in an amount that reflects the consideration it expects to be entitled to in exchange for those goods or services. Revenue is recognized when or as performance obligations are satisfied by transferring control of a promised good or service to a customer. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. Performance obligation is the unit of accounting for revenue recognition under the provisions of ASC Topic 606, "Revenue from Contracts with Customers" and all related amendments ("ASC 606"). A contract's transaction price is allocated to each distinct performance obligation in recognizing revenue.

The BPO inbound and outbound service fees are based on either a per minute, per hour, per FTE, per transaction or per call basis, which represents the majority of our contracts. These contracts have a single performance obligation as the promise to transfer the individual goods or services is not separately identifiable from other promises in the contracts and, therefore, not distinct. For example, services for the training of the Company's agents (which are separately billable to the customer) are a separate promise in our BPO contracts, but they are not distinct from the primary service obligations to transfer services to the customers. The performance of the customer service by the agents is highly dependent on the initial, growth, and seasonal training services provided to the agents during the life of a program. The training itself is not considered to have value to the customer on a standalone basis, and therefore, training on a standalone basis cannot be considered a separate unit of accounting. The Company therefore defers revenue from certain training services that are rendered mainly upon commencement of a new client contract or program, including seasonal programs. Revenue is also deferred when there is significant growth training in an existing program. Accordingly, recognition of initial, growth, and seasonal training revenues and associated costs (consisting primarily of labor and related expenses) are deferred and amortized over the period of economic benefit. With the exception of training, which is typically billed upfront and deferred, the remainder of revenue is invoiced on a monthly or quarterly basis as services are performed and does not create a contract asset or liability.

In addition to revenue from BPO services, revenue also consists of fees from services for program launch, professional consulting, fully-hosted or managed technology and learning innovation services. The contracts containing these service offerings may contain multiple performance obligations. For contracts with multiple performance obligations, the Company allocates the contract's transaction price to each performance obligation using the best estimate of the standalone selling price of each distinct good or service in the contract. The primary method used to estimate standalone selling price is the expected cost plus a margin approach, under which the Company forecasts its expected costs of satisfying a performance obligation and then adds an appropriate margin for that distinct good or service. The Company forecasts its expected cost based on historical data, current prevailing wages, other direct and indirect costs incurred in recently completed contracts, market conditions, and other client specific cost considerations. For these services, the point at which the transfer of control occurs determines when revenue is recognized in a specific reporting period. Within our Digital segment, where there are product sales, the attribution of revenue is recognized when the transfer of control is completed and the products are delivered to the client's location. Where services are rendered to a customer, the attribution is aligned with the progress of work and is recognized over time (i.e. based on measuring the progress toward complete satisfaction of a performance obligation using an output method or an input method). Where output method is used, revenue is recognized on the basis of direct measurements of the value to the customer of the goods or services transferred relative to the remaining goods or services promised under the contract. The majority of the Company's services are recognized over time using the input method in which revenue is recognized on the basis of efforts or inputs toward satisfying a performance obligation (for example, resources consumed, labor hours expended, costs incurred, or time elapsed) relative to the total expected inputs to satisfy the performance obligation. The measures used provide faithful depiction of the transfer of goods or services to the customers. For example, revenue is recognized on certain consulting contracts based on labor hours expended as a measurement of progress where the consulting work involves input of consultants' time. The progress is measured based on the hours expended over total number of estimated hours included in the contract multiplied by the total contract consideration. The contract consideration can be a fixed price or an hourly rate, and in either case, the use of labor hours expended as an input measure provides a faithful depiction of the transfer of services to the customers. Deferred revenues for these services represent amounts collected from, or invoiced to, customers in excess of revenues recognized.

This results primarily from i) receipt of license fees that are deferred due to one or more of the revenue recognition criteria not being met, and ii) the billing of annual customer support agreements, annual managed service agreements, and billings for other professional services that have not yet been performed by the Company. The Company records amounts billed and received, but not earned, as deferred revenue. These amounts are recorded in Deferred revenue or Other long-term liabilities, as applicable, in the accompanying Consolidated Balance Sheets based on the period over which the Company expects to render services. Costs directly associated with revenue deferred, consisting primarily of labor and related expenses, are also deferred and recognized in proportion to the expected future revenue from the contract.

Variable consideration exists in contracts for certain client programs that provide for adjustments to monthly billings based upon whether the Company achieves, exceeds or fails certain performance criteria. Adjustments to monthly billings consist of contractual bonuses/penalties, holdbacks and other performance based conditions. Variable consideration is estimated at contract inception at its most likely value and updated at the end of each reporting period as additional performance data becomes available. Revenue related to such variable consideration is recognized only to the extent that a significant reversal of any incremental revenue is not considered probable.

Contract modifications are routine in the performance of the customer contracts. Contracts are often modified to account for customer mandated changes in the contract specifications or requirements, including service level changes. In most instances, contract modifications relate to goods or services that are incremental and distinctly identifiable, and, therefore, are accounted for prospectively.

Direct and incremental costs to obtain or fulfill a contract are capitalized, and the capitalized costs are amortized over the corresponding period of benefit, determined on a contract by contract basis. The Company recognizes an asset for the incremental costs of obtaining a contract with a customer if it expects to recover those costs. The incremental costs of obtaining a contract are those costs that the Company incurs to obtain a customer contract that it would not have incurred if the contract had not been obtained. Contract acquisition costs consist primarily of payment of commissions to sales personnel and are incurred when customer contracts are signed. The deferred sales commission amounts are amortized based on the expected period of economic benefit and are classified as current or non-current based on the timing of when they are expected to be recognized as an expense. Costs to obtain a contract that would have been incurred regardless of whether the contract was obtained are recognized as an expense when incurred, unless those costs are explicitly chargeable to the customer regardless of whether the contract is obtained. Sales commissions are paid for obtaining new clients only and are not paid for contract renewals or contract modifications. Capitalized costs of obtaining contracts are periodically reviewed for impairment.

In certain cases, the Company negotiates an upfront payment to a customer in conjunction with the execution of a contract. Such upfront payments are critical to acquisition of new business and are often used as an incentive to negotiate favorable rates from the clients and are accounted for as upfront discounts for future services. Such payments are either made in cash at the time of execution of a contract or are netted against the Company's service invoices. Payments to customers are capitalized as contract acquisition costs and are amortized in proportion to the expected future revenue from the contract, which in most cases results in straight-line amortization over the life of the contract. Such payments are considered a reduction of the selling prices of the Company's products or services, and therefore, are accounted for as a reduction of revenue when amortized. Such capitalized contract acquisition costs are periodically reviewed for impairment taking into consideration ongoing future cash flows expected from the contract and estimated remaining useful life of the contract.

Some of the Company's service contracts are short-term in nature with a contract term of one year or less. For those contracts, the Company has utilized the practical expedient in ASC 606-10-50-14 exempting the Company from disclosure of the transaction price allocated to remaining performance obligations if the performance obligation is part of a contract that has an original expected duration of one year or less. Also in alignment with ASC 606-10-50-14, the Company does not disclose the value of unsatisfied performance obligations for contracts for which it recognizes revenue at the amount to which it has the right to invoice for services performed. Additionally, the Company's standard payment terms are less than one year. Given the foregoing, the Company has elected the practical expedient under ASC 606-10-32-18 to not assess whether a contract has a significant financing component. Pursuant to the Company's election of the practical expedient under ASC 606-10-32-2A, sales, value add, and other taxes that are collected from customers concurrent with revenue-producing activities, which the Company has an obligation to remit to the governmental authorities, are excluded from revenue.

Revenue Recognition - 2017 and prior years

We recognize revenue when evidence of an arrangement exists, the delivery of service has occurred, the fee is fixed or determinable and collection is reasonably assured. The BPO inbound and outbound service fees are based on either a per minute, per hour, per full-time employee, per transaction or per call basis. Certain client programs provide for adjustments to monthly billings based upon whether we achieve, exceed or fail certain performance criteria. Adjustments to monthly billings consist of contractual bonuses/penalties, holdbacks and other performance based contingencies. Revenue recognition is limited to the amount that is not contingent upon delivery of future services or meeting other specified performance conditions.

Revenue also consists of services for agent training, program launch, professional consulting, fully-hosted or managed technology and learning innovation. These service offerings may contain multiple element arrangements whereby we determine if those service offerings represent separate units of accounting. A deliverable constitutes a separate unit of accounting when it has standalone value and delivery or performance of the undelivered items is considered probable and substantially within our control. If those deliverables are determined to be separate units of accounting, revenue is recognized as services are provided. If those deliverables are not determined to be separate units of accounting, revenue for the delivered services are bundled into one unit of accounting and recognized over the life of the arrangement or at the time all services and deliverables have been delivered and satisfied. We allocate revenue to each of the deliverables based on a selling price hierarchy of vendor specific objective evidence ("VSOE"), third-party evidence, and then estimated selling price. VSOE is based on the price charged when the deliverable is sold separately. Third-party evidence is based on largely interchangeable competitor services in standalone sales to similarly situated customers. Estimated selling price is based on our best estimate of what the selling prices of deliverables would be if they were sold regularly on a standalone basis. Estimated selling price is established considering multiple factors including, but not limited to, pricing practices in different geographies, service offerings, and customer classifications. Once we allocate revenue to each deliverable, we recognize revenue when all revenue recognition criteria are met.

Periodically, we will make certain expenditures related to acquiring contracts or provide up-front discounts for future services. These expenditures are capitalized as contract acquisition costs and amortized in proportion to the expected future revenue from the contract, which in most cases results in straight-line amortization over the life of the contract. Amortization of these contract acquisition costs is recorded as a reduction to revenue.

Income Taxes

Accounting for income taxes requires recognition of deferred tax assets and liabilities for the expected future income tax consequences of transactions that have been included in the Consolidated Financial Statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using tax rates in effect for the year in which the differences are expected to reverse. When circumstances warrant, we assess the likelihood that our net deferred tax assets will more likely than not be recovered from future projected taxable income.

We continually review the likelihood that deferred tax assets will be realized in future tax periods under the "more-likely-than-not" criteria. In making this judgment, we consider all available evidence, both positive and negative, in determining whether, based on the weight of that evidence, a valuation allowance is required.

We follow a two-step approach to recognizing and measuring uncertain tax positions. The first step is to determine if the weight of available evidence indicates that it is more likely than not that the tax position will be sustained on audit. The second step is to estimate and measure the tax benefit as the amount that has a greater than 50% likelihood of being realized upon ultimate settlement with the tax authority. We evaluate these uncertain tax positions on a quarterly basis. This evaluation is based on the consideration of several factors including changes in facts or circumstances, changes in applicable tax law, and settlement of issues under audit.

Interest and penalties relating to income taxes and uncertain tax positions are accrued net of tax in the Provision for income taxes in the accompanying Consolidated Statements of Comprehensive Income (Loss).

In the future, our effective tax rate could be adversely affected by several factors, many of which are outside our control. Our effective tax rate is affected by the proportion of revenue and income before taxes in the various domestic and international jurisdictions in which we operate. Further, we are subject to changing tax laws, regulations and interpretations in multiple jurisdictions in which we operate, as well as the requirements, pronouncements and rulings of certain tax, regulatory and accounting organizations. We estimate our annual effective tax rate each quarter based on a combination of actual and forecasted results of subsequent quarters. Consequently, significant changes in our actual quarterly or forecasted results may impact the effective tax rate for the current or future periods.

Tax Reform

In 2017, the United States enacted comprehensive tax reform legislation known as the Tax Cuts and Jobs Act (the "2017 Tax Act") that, among other things, reduced the U.S. federal corporate income tax rate from 35% to 21% and implemented a territorial tax system, but imposed an alternative "base erosion and anti-abuse tax" ("BEAT"), and an incremental tax on global intangible low taxed foreign income ("GILTI") effective January 1, 2018. In addition, the law imposed a one-time mandatory repatriation tax on accumulated post-1986 foreign earnings on domestic corporations effective for the 2017 tax year. As of December 31, 2018, we completed our accounting for the tax effects of the 2017 Tax Act and no material adjustment was recorded to the 2017 estimate.

While our accounting for the recorded impact of the 2017 Tax Act is deemed to be complete, these amounts are based on prevailing regulations and currently available information, and any additional guidance issued by the Internal Revenue Service ("IRS") or the results of an audit related to these items, could impact our recorded amounts in future periods.

The Company's selection of an accounting policy with respect to both the new GILTI and BEAT rules is to compute the related taxes in the period the entity becomes subject to either. A reasonable estimate of the effects of these provisions has been included in the 2019 and 2018 annual financial statements.

Impairment of Long-Lived Assets

We evaluate the carrying value of property, plant and equipment and definite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An asset is considered to be impaired when the forecasted undiscounted cash flows of an asset group are estimated to be less than its carrying value. The amount of impairment recognized is the difference between the carrying value of the asset group and its fair value. Fair value estimates are based on assumptions concerning the amount and timing of estimated future cash flows and assumed discount rates.

Goodwill and Indefinite-Lived Intangible Assets

We evaluate goodwill and indefinite-lived intangible assets for possible impairment at least annually or whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable.

We use a two step process to assess the realizability of goodwill. The first step, Step 0, is a qualitative assessment that analyzes current economic indicators associated with a particular reporting unit. For example, we analyze changes in economic, market and industry conditions, business strategy, cost factors, and financial performance, among others, to determine if there would be a significant decline to the fair value of a particular reporting unit. A qualitative assessment also includes analyzing the excess fair value of a reporting unit over its carrying value from impairment assessments performed in previous years. If the qualitative assessment indicates a stable or improved fair value, no further testing is required.

If a qualitative assessment indicates that a significant decline to fair value of a reporting unit is more likely than not, or if a reporting unit's fair value has historically been closer to its carrying value, we will proceed to Step 1 testing where we calculate the fair value of a reporting unit based on discounted future probability-weighted cash flows. If Step 1 indicates that the carrying value of a reporting unit is in excess of its fair value, we will record an impairment equal to the amount by which a reporting unit's carrying value exceeds its fair value.

We estimate fair value using discounted cash flows of the reporting units. The most significant assumptions used in these analyses are those made in estimating future cash flows. In estimating future cash flows, we use financial assumptions in our internal forecasting model such as projected capacity utilization, projected changes in the prices we charge for our services, projected labor costs, as well as contract negotiation status. The financial and credit market volatility directly impacts our fair value measurement through our weighted average cost of capital that we use to determine our discount rate. We use a discount rate we consider appropriate for the country where the business unit is providing services.

Similar to goodwill, the Company may first use a qualitative analysis to assess the realizability of its indefinite-lived intangible assets. The qualitative analysis will include a review of changes in economic, market and industry conditions, business strategy, cost factors, and financial performance, among others, to determine if there would be a significant decline to the fair value of an indefinite-lived intangible asset. If a quantitative analysis is completed, an indefinite-lived intangible asset (such as a trade name) is evaluated for possible impairment by comparing the fair value of the asset with its carrying value. Fair value is estimated as the discounted value of future revenues arising from a trade name using a royalty rate that a market participant would pay for use of that trade name. An impairment charge is recorded if the trade name's carrying value exceeds its estimated fair value.

Derivatives

We may enter into foreign exchange forward and option contracts to reduce our exposure to foreign currency exchange rate fluctuations that are associated with forecasted revenue earned in foreign locations. We may enter into interest rate swaps to reduce our exposure to interest rate fluctuations associated with our variable rate debt. Upon proper qualification, these contracts are often accounted for as cash flow hedges under current accounting standards. From time-to-time, we may also enter into foreign exchange forward contracts to hedge our net investment in a foreign operation.

All derivative financial instruments are reported in the accompanying Consolidated Balance Sheets at fair value. Changes in fair value of derivative instruments designated as cash flow hedges are recorded in Accumulated other comprehensive income (loss), a component of Stockholders' Equity, to the extent they are deemed effective. Based on the criteria established by current accounting standards, all of our cash flow hedge contracts are deemed to be highly effective. Changes in fair value of any net investment hedge are recorded as cumulative translation adjustment in Accumulated other comprehensive income (loss) in the accompanying Consolidated Balance Sheets offsetting the change in cumulative translation adjustment attributable to the hedged portion of our net investment in the foreign operation. Any realized gains or losses resulting from the foreign currency cash flow hedges are recognized together with the hedged transactions within Revenue. Any realized gains or losses resulting from the interest rate swaps are recognized in Interest expense. Gains and losses from the settlements of our net investment hedges remain in Accumulated other comprehensive income (loss) until partial or complete liquidation of the applicable net investment.

We also enter into fair value derivative contracts to reduce our exposure to foreign currency exchange rate fluctuations associated with changes in asset and liability balances. Changes in the fair value of derivative instruments designated as fair value hedges affect the carrying value of the asset or liability hedged, with changes in both the derivative instrument and the hedged asset or liability being recognized in Other income (expense), net in the accompanying Consolidated Statements of Comprehensive Income (Loss).

While we expect that our derivative instruments will continue to be highly effective and in compliance with applicable accounting standards, if our hedges did not qualify as highly effective or if we determine that forecasted transactions will not occur, the changes in the fair value of the derivatives used as hedges would be reflected currently in earnings.

Contingencies

We record a liability for pending litigation and claims where losses are both probable and reasonably estimable. Each quarter, management reviews all litigation and claims on a case-by-case basis and assigns probability of loss and range of loss.

Explanation of Key Metrics and Other Items

Cost of Services

Cost of services principally include costs incurred in connection with our customer experience services and technology services, including direct labor and related taxes and benefits, telecommunications, technology costs, sales and use tax and certain fixed costs associated with the customer engagement centers. In addition, cost of services includes income related to grants we may receive from local or state governments as an incentive to locate customer engagement centers in their jurisdictions which reduce the cost of services for those facilities.

Selling, General and Administrative

Selling, general and administrative expenses primarily include costs associated with administrative services such as sales, marketing, product development, legal, information systems (including core technology and telephony infrastructure), accounting and finance. It also includes outside professional fees (i.e., legal and accounting services), building expense for non-engagement center facilities and other items associated with general business administration.

Restructuring and Integration Charges, Net

Restructuring charges, net primarily include costs incurred in conjunction with reductions in force or decisions to exit facilities, including termination benefits and lease liabilities, net of expected sublease rentals. Integration charges represent the activities related to the re-hiring and retraining of the agents, the consolidation of facilities, the transfer of IT systems and other duplicative expenses incurred as the acquisitions are fully integrated.

Interest Expense

Interest expense includes interest expense, amortization of debt issuance costs associated with our Credit Facility, and the accretion of deferred payments associated with our acquisitions.

Other Income

The main components of other income are miscellaneous income not directly related to our operating activities, such as foreign exchange gains and reductions in our contingent consideration.

Other Expenses

The main components of other expenses are expenditures not directly related to our operating activities, such as foreign exchange losses and increases in our contingent consideration.

RESULTS OF OPERATIONS

Year Ended December 31, 2019 Compared to December 31, 2018

The tables included in the following sections are presented to facilitate an understanding of Management's Discussion and Analysis of Financial Condition and Results of Operations and present certain information by segment for the years ended December 31, 2019 and 2018 (amounts in thousands). All inter-company transactions between the reported segments for the periods presented have been eliminated.

TTEC Digital

	Year Ended D	ecember 31,		
	2019	2018	\$ Change	% Change
Revenue	\$ 305,346	\$ 238,799	\$ 66,547	27.9 %
Operating Income	38,927	33,054	5,873	17.8 %
Operating Margin	12.7 %	13.8 %		

The increase in revenue for the TTEC Digital segment was related to significant increases in the cloud platform and the systems integration practice including a large multi-year governmental contract and increases in the digital learning and insights practices, offset by reductions in both the legacy facilitation based training and lower volumes in the Middle East business, which the Company is in the process of winding down.

The operating income expansion is primarily attributable to the revenue growth, improved utilization of technology and people assets as the business scales its cloud and system integration revenue. The operating income increase was offset by investments in sales and marketing and a \$2.0 million impairment of intangible and other long-lived assets related to the facilitation component of this segment. The operating income as a percentage of revenue decreased slightly to 12.7% in 2019 as compared to 13.8% in 2018. Included in the operating income was amortization related to acquired intangibles of \$2.6 million and \$2.5 million for the years ended December 31, 2019 and 2018, respectively.

TTEC Engage

	Year Ended D	ecember 31,		
	2019	2018	\$ Change	% Change
Revenue	\$1,338,358	\$1,270,372	\$ 67,986	5.4 %
Operating Income	84,782	59,000	25,782	43.7 %
Operating Margin	6.3 %	4.6 %)	

The increase in revenue for the TTEC Engage segment was due to a net increase of \$172.2 million in client programs including noteworthy increases in the customer growth, @home and fraud detection and prevention offerings as well as our automotive and hypergrowth born digital sectors, our acquisition of FCR, and a \$1.6 million increase due to foreign currency fluctuations. This increase was offset by decreases for program completions of \$88.0 million, a \$17.9 million reduction due to the initial adoption of ASC 606 related to revenue in 2018.

The operating income increased in line with the improved revenue, pricing increases related to rising wages, lower healthcare costs, improved profitability in our customer growth, @home and fraud detection and prevention offerings and our automotive and hypergrowth client portfolios, and a \$6.4 million volume commitment payment. Additionally, the operating income was positively affected by \$6.7 million of foreign currency fluctuations and negatively impacted by an \$9.8 million decrease due to the initial adoption of ASC 606 in 2018. As a result, the operating income as a percentage of revenue increased to 6.3% in 2019 as compared to 4.6% in the prior period. Included in the operating income was amortization expense related to acquired intangibles of \$9.0 million and \$8.2 million for the years ended December 31, 2019 and 2018, respectively.

Interest Income (Expense)

Interest income decreased to \$1.9 million in 2019 from \$4.5 million in 2018 due to lower average cash balances. Interest expense decreased to \$19.1 million during 2019 from \$28.7 million during 2018, primarily due to lower utilization of the line of credit, and a \$5.3 million reduction in the charge related to the future purchase of the remaining 30% interest in Motif versus the prior year.

Other Income (Expense), Net

Included in the year ended December 31, 2019 was a \$2.4 million benefit related to the fair value adjustment of contingent consideration for an acquisition, a \$1.4 million benefit on recovery of receivables in connection with the consulting business that we are winding down, a \$1.4 million benefit related to royalty payments in connection with the sale of a business, and a \$0.7 million benefit on the sale of trademarks.

Included in the year ended December 31, 2018 was a \$15.6 million impairment of the full value of an equity investment and a related bridge loan, a net \$1.6 million loss related to a business unit which was classified as assets held for sale but was reclassified to assets held and used at December 31, 2018, a \$2.0 million gain related to royalty payments in connection with the sale of a business unit, a \$0.7 million gain related to the bargain purchase for the Percepta acquisition closed on March 31, 2018, and a \$0.3 million benefit related to a fair value adjustment of the contingent consideration based on revised estimates of performance against targets for one of our acquisitions.

For further information on the above items, see Part II. Item 8. Financial Statements, Note 2 to the Consolidated Financial Statements.

Income Taxes

The reported effective tax rate for 2019 was 23.3% as compared to 29.3% for 2018. The effective tax rate for 2019 was impacted by earnings in international jurisdictions currently under an income tax holiday, \$0.7 million of expense related to changes in tax contingent liabilities, a \$1.7 million benefit related to provision to return adjustments, a \$2.8 million benefit related to tax rate changes, \$4.5 million of expense related to changes in valuation allowances, a \$0.9 million benefit related to restructuring charges, and \$0.3 million of other benefits. Without these items our effective tax rate for the year ended December 31, 2019 would have been 22.9%.

For the year ended December 31, 2018, our effective tax rate was 29.3%. The effective tax rate for 2018 was impacted by earnings in international jurisdictions currently under an income tax holiday, \$1.6 million of expense related to changes in tax contingent liabilities, a \$3.4 million benefit related to provision to return adjustments, a \$4.2 million benefit related to the impairment of an equity investment, \$0.5 million of expense related to the disposition of assets, \$1.5 million of expense related to changes in valuation allowances, a \$0.7 million benefit related to excess taxes on equity compensation, a \$2.1 million benefit related to restructuring charges, and \$0.5 million of other benefits. Without these items our effective tax rate for the year ended December 31, 2018 would have been 25.6%.

Year Ended December 31, 2018 compared to December 31, 2017

For a discussion of our results of operations for the year ended December 31, 2018 compared to the year ended December 31, 2017, please see our Annual Report on Form 10-K for the year ended December 31, 2018.

Liquidity and Capital Resources

Our principal sources of liquidity are our cash generated from operations, our cash and cash equivalents, and borrowings under our Credit Facility. During the year ended December 31, 2019, we generated positive operating cash flows of \$238.0 million. We believe that our cash generated from operations, existing cash and cash equivalents, and available credit will be sufficient to meet expected operating and capital expenditure requirements for the next 12 months.

We manage a centralized global treasury function in the United States with a focus on concentrating and safeguarding our global cash and cash equivalents. While the majority of our cash is held outside the U.S., we prefer to hold U.S. Dollars in addition to the local currencies of our foreign subsidiaries. We expect to use our offshore cash to support working capital and growth of our foreign operations. While there are no assurances, we believe our global cash is protected given our cash management practices, banking partners and utilization of diversified, high quality investments.

In 2018 and 2019, the Company paid dividends from its foreign operations to its U.S. parent in the amount of \$310 million and \$39 million, respectively, which were used to pay down portions of the Credit Facility.

We have global operations that expose us to foreign currency exchange rate fluctuations that may positively or negatively impact our liquidity. We are also exposed to higher interest rates associated with our variable rate debt. To mitigate these risks, we enter into foreign exchange forward and option contracts through our cash flow hedging program. Please refer to Item 7A. Quantitative and Qualitative Disclosures About Market Risk, Foreign Currency Risk, for further discussion.

We primarily utilize our Credit Facility to fund working capital, general operations, stock repurchases, dividends, and other strategic activities, such as the acquisitions described in Part II. Item 8. Financial Statements and Supplementary Data, Note 2 to the Consolidated Financial Statements. As of December 31, 2019 and 2018, we had borrowings of \$290.0 million and \$282.0 million, respectively, under our Credit Facility, and our average daily utilization was \$331.8 million and \$514.7 million for the years ended December 31, 2019 and 2018, respectively. After consideration for the current level of availability based on the covenant calculations, our remaining borrowing capacity was approximately \$530.0 million as of December 31, 2019. As of December 31, 2019, we were in compliance with all covenants and conditions under our Credit Facility.

The amount of capital required over the next 12 months will depend on our levels of investment in infrastructure necessary to maintain, upgrade or replace existing assets. Our working capital and capital expenditure requirements could also increase materially in the event of acquisitions or joint ventures, among other factors. These factors could require that we raise additional capital through future debt or equity financing. We can provide no assurance that we will be able to raise additional capital with commercially reasonable terms acceptable to us.

The following discussion highlights our cash flow activities during the years ended December 31, 2019 and 2018.

Cash and Cash Equivalents

We consider all liquid investments purchased within 90 days of their original maturity to be cash equivalents. Our cash and cash equivalents totaled \$82.4 million and \$78.2 million as of December 31, 2019 and 2018, respectively. We diversify the holdings of such cash and cash equivalents considering the financial condition and stability of the counterparty institutions.

We reinvest our cash flows to grow our client base, expand our infrastructure, for investment in research and development, for strategic acquisitions, and to pay dividends.

Cash Flows from Operating Activities

For the years 2019 and 2018 we reported net cash flows provided by operating activities of \$238.0 million and \$168.3 million, respectively. The increase of \$69.6 million from 2018 to 2019 was primarily due to a \$23.9 million increase in net cash income from operations and a \$45.7 million improvement in net working capital.

Cash Flows from Investing Activities

For the years 2019 and 2018, we reported net cash flows used in investing activities of \$162.9 million and \$47.6 million, respectively. The net increase in cash used in investing activities from 2018 to 2019 was primarily due to a \$17.3 million increase in capital expenditures and a \$98.3 million increase related to acquisitions.

Cash Flows from Financing Activities

For the years 2019 and 2018, we reported net cash flows used in financing activities of \$47.4 million and \$102.1 million, respectively. The change in net cash flows from 2018 to 2019 was primarily due to a \$70.0 million paydown on the line of credit, a \$4.6 million payment related to the hold-back for an acquisition, a \$3.4 million increase in dividends paid to shareholders, and a \$5.9 million of increased payments on other debt.

Free Cash Flow

Free cash flow (see "Presentation of Non-GAAP Measurements" below for the definition of free cash flow) was \$177.2 million and \$124.9 million for the years 2019 and 2018, respectively. The increase from 2018 to 2019 was primarily due to an increase in the net cash from operations offset by higher capital expenditures and higher spending on acquisitions.

Presentation of Non-GAAP Measurements

Free Cash Flow

Free cash flow is a non-GAAP liquidity measurement. We believe that free cash flow is useful to our investors because it measures, during a given period, the amount of cash generated that is available for debt obligations and investments other than purchases of property, plant and equipment. Free cash flow is not a measure determined by GAAP and should not be considered a substitute for "income from operations," "net income," "net cash provided by operating activities," or any other measure determined in accordance with GAAP. We believe this non-GAAP liquidity measure is useful, in addition to the most directly comparable GAAP measure of "net cash provided by operating activities," because free cash flow includes investments in operational assets. Free cash flow does not represent residual cash available for discretionary expenditures, since it includes cash required for debt service. Free cash flow also includes cash that may be necessary for acquisitions, investments and other needs that may arise.

The following table reconciles net cash provided by operating activities to free cash flow for our consolidated results (in thousands):

	Year Ended I	Year Ended December 31,		
	2019	2018		
Net cash provided by operating activities	\$ 237,989	\$ 168,345		
Less: Purchases of property, plant and equipment	60,776	43,450		
Free cash flow	\$ 177,213	\$ 124,895		

Obligations and Future Capital Requirements

Future maturities of our outstanding debt and contractual obligations as of December 31, 2019 are summarized as follows (in thousands):

	Less than 1 Year	1 to 3 Years	3 to 5 Years	Over 5 Years	Total
Credit Facility(1)	\$ 8,960	\$ 17,921	\$ 300,065	\$ —	\$ 326,946
Equipment financing arrangements	6,825	7,313	1,414	_	15,552
Purchase obligations	11,485	7,848	813	_	20,146
Operating lease commitments undiscounted)	54,903	91,482	42,618	14,734	203,737
Transition tax related to US 2017 Tax Act	3,300	6,700	14,600	4,422	29,022
Other debt	43,803	470	71	_	44,344
Total	\$ 129,276	\$ 131,734	\$ 359,581	\$ 19,156	\$ 639,747

⁽¹⁾ Includes estimated interest payments based on the weighted-average interest rate, unused commitment fees, current interest rate swap arrangements, and outstanding debt as of December 31, 2019.

- · Contractual obligations to be paid in a foreign currency are translated at the period end exchange rate.
- Purchase obligations primarily consist of outstanding purchase orders for goods or services not yet received, which are not recognized as liabilities in our Consolidated Balance Sheets until such goods and/or services are received.
- The contractual obligation table excludes our liabilities of \$6.8 million related to uncertain tax positions because we cannot reliably estimate the timing of future cash payments. See Part II, Item 8. Financial Statements and Supplementary Data, Note 10 to the Consolidated Financial Statements for further discussion.

Our outstanding debt is primarily associated with the use of funds under our Credit Agreement to fund working capital, for strategic acquisitions, to pay dividends and for other cash flow needs across our global operations.

Purchase Obligations

Occasionally we contract with certain of our communications clients to provide us with telecommunication services. These clients currently represent approximately 12% of our total annual revenue. We believe these contracts are negotiated on an arm's-length basis and may be negotiated at different times and with different legal entities

Future Capital Requirements

We expect total capital expenditures in 2020 to be between 3.6% and 3.8% of revenue. Approximately 65% of these expected capital expenditures are to support growth in our business and 35% relate to the maintenance of existing assets. The anticipated level of 2020 capital expenditures is primarily driven by new client contracts and the corresponding requirements for additional customer engagement center capacity as well as enhancements to our technological infrastructure.

We may consider restructurings, dispositions, mergers, acquisitions and other similar transactions. Such transactions could include the transfer, sale or acquisition of significant assets, businesses or interests, including joint ventures or the incurrence, assumption, or refinancing of indebtedness and could be material to the consolidated financial condition and consolidated results of our operations. Our capital expenditures requirements could also increase materially in the event of an acquisition or joint venture. In addition, as of December 31, 2019, we were authorized to purchase an additional \$26.6 million of common stock under our stock repurchase program (see Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities). Our stock repurchase program does not have an expiration date.

The launch of large client contracts may result in short-term negative working capital because of the time period between incurring the costs for training and launching the program and the beginning of the accounts receivable collection process. As a result, we may sometimes generate negative cash flows from operating activities.

Debt Instruments and Related Covenants

On February 14, 2019, we entered into a Fourth Amendment to our Amended and Restated Credit Agreement and Amended and Restated Security Agreement originally dated as of June 3, 2013 (collectively the "Credit Agreement") for a senior secured revolving credit facility with a syndicate of lenders led by Wells Fargo Bank, National Association, as agent, swing line and fronting lender (the "Credit Facility"). The amended Credit Agreement provides for a secured revolving Credit Facility that matures on February 14, 2024.

Other than the extension of the Credit Facility's maturity date and a few material terms outlined below, the material terms of the Credit Facility, including pricing and collateral, are substantially the same as those previously disclosed as part of our Annual Report on Form 10-K for the period ended December 31, 2015 ("2016 Credit Facility").

The maximum commitment under the Credit Facility is \$900.0 million with an accordion feature of up to \$1.2 billion in the aggregate, if certain conditions are satisfied. The Credit Facility commitment fees are payable to the lenders as previously disclosed and as determined by reference to our net leverage ratio. The Credit Agreement contains customary affirmative, negative, and financial covenants, which remained unchanged from the 2016 Credit Facility, except that we are now obligated to maintain a maximum net leverage ratio of 3.50 to 1.00, and a minimum Interest Coverage Ratio of 2.50 to 1.00. The Credit Agreement permits accounts receivable factoring up to the greater of \$75 million or 25 percent of the average book value of all accounts receivable over the most recent twelve month period.

We primarily utilize our Credit Facility to fund working capital, general operations, dividends, acquisitions, and other strategic activities.

Base rate loans bear interest at a rate equal to the greatest of (i) Wells Fargo's prime rate, (ii) one half of 1% in excess of the federal funds effective rate, or (iii) 1.25% in excess of the one month London Interbank Offered Rate ("LIBOR"), plus in each case a margin of 0% to 0.75% based on our net leverage ratio. Eurodollar loans bear interest at LIBOR plus a margin of 1.0% to 1.75% based on our net leverage ratio. Alternate currency loans bear interest at rates applicable to their respective currencies.

Letter of credit fees are one eighth of 1% of the stated amount of the letter of credit on the date of issuance, renewal or amendment, plus an annual fee equal to the borrowing margin for Eurodollar loans.

Indebtedness under the Credit Agreement is guaranteed by certain of our domestic subsidiaries and is secured by security interests (subject to permitted liens) in the U.S. accounts receivable and cash of our Company and certain of its domestic subsidiaries. The indebtedness may also be secured by tangible assets of our Company and its domestic subsidiaries, if borrowings by foreign subsidiaries exceed \$100.0 million and the total net leverage ratio is greater than 3.00 to 1.00. We also pledged 65% of the voting stock and all of the non-voting stock, if any, of certain of our material foreign subsidiaries.

The Credit Facility also contains certain customary information and reporting requirements, and events of default, including without limitation events of default based on payment obligations, material inaccuracies of representations and warranties, covenant defaults, cross defaults to certain other debt, certain ERISA events, changes in control, monetary judgments, and insolvency proceedings. Upon the occurrence of an event of default, the lenders may accelerate the maturity of all amounts outstanding under the Credit Facility.

As of December 31, 2019 and 2018, we had borrowings of \$290.0 million and \$282.0 million, respectively, under the Credit Facility. During 2019, 2018 and 2017, borrowings accrued interest at an average rate of approximately 3.4%, 3.1%, and 2.2% per annum, respectively, excluding unused commitment fees. Our daily average borrowings during 2019, 2018 and 2017 were \$331.8 million, \$514.7 million and \$494.7 million, respectively. As of December 31, 2019, and 2018, based on the current level of availability based on the covenant calculations, the remaining borrowing capacity was approximately \$530.0 million and \$360.0 million, respectively.

Off-Balance Sheet Arrangements

As of December 31, 2019, we had no transactions that met the definition of off-balance sheet arrangements that may have a current or future material effect on our consolidated financial position or operating results.

Client Concentration

During 2019, none of our clients represented more than 10% of our total annual revenue. Our five largest clients accounted for 37%, 35% and 35% of our annual revenue for each of the three years ended December 31, 2019, 2018 and 2017, respectively. We have long-term relationships with our top five Engage clients, ranging from 13 to 23 years, with the majority of these clients having completed multiple contract renewals with us. The relative contribution of any single client to consolidated earnings is not always proportional to the relative revenue contribution on a consolidated basis and varies greatly based upon specific contract terms. In addition, clients may adjust business volumes served by us based on their business requirements. We believe the risk of this concentration is mitigated, in part, by the long-term contracts we have with our largest clients. Although certain client contracts may be terminated for convenience by either party, we believe this risk is mitigated, in part, by the service level disruptions and transition/migration costs that would arise for our clients if they terminated our contract for convenience.

The contracts with our five largest clients expire between 2020 and 2023. Additionally, a particular client may have multiple contracts with different expiration dates. We have historically renewed most of our contracts with our largest clients, but there can be no assurance that future contracts will be renewed or, if renewed, will be on terms as favorable as the existing contracts.

Cybersecurity

We have made and continue to make significant financial investments in technologies and processes to mitigate cyber risks. We have a number of complex information systems used for a variety of functions ranging from services we deliver to our customers to support for our operations. We depend on the proper functioning of these information systems. Like any information system, they are susceptible to cyber-attack. Any cyber-attack could impact the availability, reliability, speed, accuracy, or other proper functioning of these systems or result in confidential data being compromised, which could have a significant impact on our reputation, results of operations, and financial condition. Our information systems are protected through physical and technological safeguards as well as backup systems considered appropriate by management. We also provide employee awareness training about phishing, malware, social engineering, and other cyber risks. Further, we have formed a cybersecurity specific risk management steering committee that meets periodically to fully coordinate all enterprise level cybersecurity issues. Our Board of Directors and executive leadership team are updated at least quarterly on the progress and status of our cybersecurity priorities. We continuously monitor and develop our information technology networks and infrastructure to prevent, detect, address, and mitigate the risk of unauthorized access, distributed denial of service attacks, malware attacks, computer viruses, cyber fraud, and other events intended to disrupt information systems, theft of valuable information, or other types of malicious events that result in harm to our business. Our investment in cybersecurity is not expected to decrease in the foreseeable future, and despite our on-going efforts to improve our cybersecurity, there can be no assurance that a sophisticated cyber-attack could be detected or thwarted.

Recently Issued Accounting Pronouncements

We discuss the potential impact of recent accounting pronouncements in Part II, Item 8. Financial Statements and Supplementary Data, Note 1 to the Consolidated Financial Statements.

Changes in Accounting Principle

As discussed in Note 1, the Company changed its method of accounting for leases in 2019 due to the adoption of Accounting Standards Update ("ASU") No. 2016-02, Leases (Topic 842).

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk represents the risk of loss that may impact our consolidated financial position, consolidated results of operations, or consolidated cash flows due to adverse changes in financial and commodity market prices and rates. Market risk also includes credit and non-performance risk by counterparties to our various financial instruments. We are exposed to market risks due to changes in interest rates and foreign currency exchange rates (as measured against the U.S. dollar), as well as credit risk associated with potential non-performance of our counterparty banks. These exposures are directly related to our normal operating and funding activities. We enter into derivative instruments to manage and reduce the impact of currency exchange rate changes, primarily between the U.S. dollar/Philippine peso, the U.S. dollar/Mexican peso, and the Australian dollar/Philippine peso. We enter into interest rate derivative instruments to reduce our exposure to interest rate fluctuations associated with our variable rate debt. To mitigate against credit and non-performance risk, it is our policy to only enter into derivative contracts and other financial instruments with investment grade counterparty financial institutions and, correspondingly, our derivative valuations reflect the creditworthiness of our counterparties. As of the date of this report, we have not experienced, nor do we anticipate, any issue related to derivative counterparty defaults.

Interest Rate Risk

We have previously entered into interest rate derivative instruments to reduce our exposure to interest rate fluctuations associated with our variable rate debt. The interest rate on our Credit Agreement is variable based upon the Prime Rate and LIBOR and, therefore, is affected by changes in market interest rates. As of December 31, 2019, we had \$290.0 million of outstanding borrowings under the Credit Agreement. Based upon average daily outstanding borrowings during the years ended December 31, 2019 and 2018, interest accrued at a rate of approximately 3.4% and 3.1% per annum, respectively. If the Prime Rate or LIBOR increased by 100 basis points, there would be \$1.0 million of additional interest expense per \$100.0 million of outstanding borrowing under the Credit Agreement.

The Company's interest rate swap arrangement expired as of May 31, 2017 and no additional swaps have been entered into since that time.

Foreign Currency Risk

Our subsidiaries in the Philippines, Mexico, India, Bulgaria and Poland use the local currency as their functional currency for paying labor and other operating costs. Conversely, revenue for these foreign subsidiaries is derived principally from client contracts that are invoiced and collected in U.S. dollars or other foreign currencies. As a result, we may experience foreign currency gains or losses, which may positively or negatively affect our results of operations attributed to these subsidiaries. For the years ended December 31, 2019, 2018 and 2017, revenue associated with this foreign exchange risk was 22%, 23% and 26% of our consolidated revenue, respectively.

The following summarizes relative (weakening) strengthening of local currencies that are relevant to our business:

	Year End	Year Ended December 31,		
	2019	2018	2017	
Canadian Dollar vs. U.S. Dollar	4.5 %	(8.6)%	6.6 %	
Philippine Peso vs. U.S. Dollar	3.5 %	(5.1)%	(0.8)%	
Mexican Peso vs. U.S. Dollar	3.8 %	0.2 %	5.0 %	
Australian Dollar vs. U.S. Dollar	(0.6)%	(10.7)%	7.7 %	
Euro vs. U.S. Dollar	(2.0)%	(4.7)%	12.1 %	
Philippine Peso vs. Australian Dollar	4.0 %	5.0 %	(9.2)%	

In order to mitigate the risk of these non-functional foreign currencies weakening against the functional currencies of the servicing subsidiaries, which thereby decreases the economic benefit of performing work in these countries, we may hedge a portion, though not 100%, of the projected foreign currency exposure related to client programs served from these foreign countries through our cash flow hedging program. While our hedging strategy can protect us from adverse changes in foreign currency rates in the short term, an overall weakening of the non-functional revenue foreign currencies would adversely impact margins in the segments of the servicing subsidiary over the long term.

Cash Flow Hedging Program

To reduce our exposure to foreign currency exchange rate fluctuations associated with forecasted revenue in nonfunctional currencies, we purchase forward and/or option contracts to acquire the functional currency of the foreign subsidiary at a fixed exchange rate at specific dates in the future. We have designated and account for these derivative instruments as cash flow hedges for forecasted revenue in non-functional currencies.

While we have implemented certain strategies to mitigate risks related to the impact of fluctuations in currency exchange rates, we cannot ensure that we will not recognize gains or losses from international transactions, as this is part of transacting business in an international environment. Not every exposure is or can be hedged and, where hedges are put in place based on expected foreign exchange exposure, they are based on forecasts for which actual results may differ from the original estimate. Failure to successfully hedge or anticipate currency risks properly could adversely affect our consolidated operating results.

Our cash flow hedging instruments as of December 31, 2019 and 2018 are summarized as follows (in thousands). All hedging instruments are forward contracts, except as noted.

As of December 31, 2019	Local Currency Notional Amount	U.S. Dollar Notional Amount	% Maturing in the next 12 months	Contracts Maturing Through
Philippine Peso	7,715,000	147,654 ⁽¹⁾	58.2 %	December 2022
Mexican Peso	1,299,500	61,529	46.9 %	December 2022
		\$ 209,183		
	Local Currency Notional	U.S. Dollar Notional		
As of December 31, 2018	Amount	Amount		
Philippine Peso	6,710,000	130,957 ⁽¹⁾		
Mexican Peso	1,091,500	57,708		
		\$ 188,665		

Includes contracts to purchase Philippine pesos in exchange for New Zealand dollars and Australian dollars, which are translated into equivalent U.S. dollars on December 31, 2019 and December 31, 2018.

The fair value of our cash flow hedges at December 31, 2019 was an asset (in thousands):

	December 31, 2019	Maturing in the Next 12 Months
Philippine Peso	2,517	929
Mexican Peso	3,157	1,315
	\$ 5,674	\$ 2,244

Our cash flow hedges are valued using models based on market observable inputs, including both forward and spot foreign exchange rates, implied volatility, and counterparty credit risk. The fair value of our cash flow hedges increased by \$17.0 million from December 31, 2018 to December 31, 2019. The increase in fair value from December 31, 2018 largely reflects a reduction in the total notional value of outstanding cash flow hedges and an increase in average hedge exchange rates.

We recorded net losses of \$4.2 million, \$17.5 million, and \$22.8 million for settled cash flow hedge contracts for the years ended December 31, 2019, 2018, and 2017, respectively. These losses were reflected in Revenue in the accompanying Consolidated Statements of Comprehensive Income (Loss). If the exchange rates between our various currency pairs were to increase or decrease by 10% from current period-end levels, we would incur a material gain or loss on the contracts. However, any gain or loss would be mitigated by corresponding increases or decreases in our underlying exposures.

Other than the transactions hedged as discussed above and in Part II. Item 8. Financial Statements and Supplementary Data, Note 8 to the Consolidated Financial Statements, the majority of the transactions of our U.S. and foreign operations are denominated in their respective local currency. However, transactions are denominated in other currencies from time-to-time. We do not currently engage in hedging activities related to these types of foreign currency risks because we believe them to be insignificant as we endeavor to settle these accounts on a timely basis. For the years ended 2019 and 2018, approximately 21% and 23%, respectively, of revenue was derived from contracts denominated in currencies other than the U.S. Dollar. Our results of operations and revenue could be adversely affected if the U.S. Dollar strengthens significantly against foreign currencies.

Fair Value of Debt and Equity Securities

We did not have any investments in marketable debt or equity securities as of December 31, 2019 or 2018.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements required by this item are located beginning on page F-1 of this report and incorporated herein by reference.

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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

This Form 10-K includes the certifications of our Chief Executive Officer (the "CEO") and Chief Financial Officer (the "CFO") required by Rule 13a-14 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). See Exhibits 31.1 and 31.2. This Item 9A includes information concerning the controls and control evaluations referred to in those certifications.

Disclosure Controls and Procedures

Disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) are designed to provide reasonable assurance that information required to be disclosed in reports filed or submitted under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms and that such information is accumulated and communicated to management, including our CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure.

We carried out an evaluation under the supervision and with the participation of management, including the CEO and CFO, of the effectiveness of our disclosure controls and procedures, as of December 31, 2019, the end of the period covered by this Form 10-K. Based on this evaluation, our CEO and CFO have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) were effective at the reasonable assurance level.

Inherent Limitations of Internal Controls

Our management, including the CEO and CFO, believes that any disclosure controls and procedures or internal control over financial reporting, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of internal controls are met. Further, the design of internal controls must consider the benefits of controls relative to their costs. Inherent limitations within internal controls include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by unauthorized override of the control. Over time, control may become inadequate because of changes in conditions or deterioration in the degree of compliance with associated policies or procedures. While the objective of the design of any system of controls is to provide reasonable assurance of the effectiveness of controls, such design is also based in part upon certain assumptions about the likelihood of future events, and such assumptions, while reasonable, may not take into account all potential future conditions. Thus, even effective internal control over financial reporting can only provide reasonable assurance of achieving their objectives. Therefore, because of the inherent limitations in cost effective internal controls, misstatements due to error or fraud may occur and may not be prevented or detected.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. 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. Internal control over financial reporting includes those policies and procedures which (a) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of assets, (b) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, (c) provide reasonable assurance that receipts and expenditures are being made only in accordance with appropriate authorization of management and the Board of Directors, and (d) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on the financial statements.

In connection with the preparation of this Annual Report on Form 10-K, our management, under the supervision and with the participation of our CEO and CFO, conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2019 based on the framework established in *Internal Control Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). As a result of that evaluation, our management concluded that the Company's internal control over financial reporting was effective as of December 31, 2019, the end of the period covered by this Form 10-K

We excluded First Call Resolution, LLC ("FCR") from our assessment of internal control over financial reporting as of December 31, 2019 because this company was acquired by the Company in a purchase business combination in 2019. FCR's total assets and total revenues represent 12.6% and 1.2%, respectively, of the related consolidated financial amounts as of and for the year ended December 31, 2019.

The effectiveness of our internal control over financial reporting as of December 31, 2019 has been audited by PricewaterhouseCoopers LLP, our independent registered public accounting firm, as stated in their report, which is included herein.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the most recent quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information in our 2020 Definitive Proxy Statement on Schedule 14A, which will be filed no later than 120 days after December 31, 2019 (the "2020 Proxy Statement") regarding our executive officers under the heading "Information Regarding Executive Officers" is incorporated herein by reference. We have both the Ethics Code for Senior Executive and Financial Officers and the Ethics Code defining rules of conduct for our employees, partners and suppliers. Our Ethics Code for Senior Executive and Financial Officers applies to our Chief Executive Officer, Chief Financial Officer, lead executives of our business segments, Controller, Treasurer, the General Counsel, Chief Audit executive, senior financial officers of each operating segment and other persons performing similar functions. The Ethics Code defines conduct for all directors, officers, employees, partners and suppliers (as applicable). Both the Ethics Code for Senior Executive and Financial Officers and the Ethics Code are posted on our website at www.ttec.com on the Corporate Governance page. We will post on our website any amendments to or waivers under the Ethics Code for Senior Executive and Financial Officers in accordance with applicable laws and regulations.

There have been no material changes to the procedures by which stockholders may recommend nominees to the board of directors. The remaining information called for by this Item 10 is incorporated by reference herein from our 2020 Proxy Statement.

ITEM 11. EXECUTIVE COMPENSATION

The information in our 2020 Proxy Statement is incorporated herein by reference.

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

The information regarding these matters is included in Part II, Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities. Also the information in our 2020 Proxy Statement is incorporated herein by reference.

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

The information in our 2020 Proxy Statement is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANTS FEES AND SERVICES

The information in our 2020 Proxy Statement is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

- (a) The following documents are filed as part of this report:
 - 1. Consolidated Financial Statements.
 - The Index to Consolidated Financial Statements is set forth on page F-1 of this report.
 - 2. Financial Statement Schedules.
 - All schedules for TTEC have been omitted since the required information is not present or not present in amounts sufficient to require submission of the schedule, or because the information is included in the respective Consolidated Financial Statements or notes thereto.

3. Exhibits.

EXHIBIT INDEX

Exhibit		Incorporated Herein by F		d Herein by Reference	
No.	Exhibit Description	Form	Exhibit	Filing Date	
3.01**	Restated Certificate of Incorporation of TeleTech Holdings, Inc. filed with the State of Delaware on August 1, 1996	S-1/A	3.01	7/5/1996	
3.03**	Certificate of Amendment of Incorporation of TTEC Holdings, Inc. (reflecting name change) with an effective date of January 1, 2018	8-K	3.03	1/9/2018	
3.04**	Amended and Restated Bylaws of TTEC Holdings, Inc. (reflecting name change)	8-K	3.04	1/9/2018	
4.01*	<u>Description of Securities of TTEC Holdings, Inc. registered pursuant to Section 12 of the Securities Act of 1934</u>				
10.06**	TeleTech Holdings, Inc. 2010 Equity Incentive Plan	DEF 14A	Α	4/12/2010	
10.25**	Form of TTEC Holdings, Inc. Performance Restricted Stock Unit Agreement (Executive Committee Members) effective July 5, 2019	10-Q	10.25	8/7/2019	
10.29**	Form of TeleTech Holdings, Inc. Restricted Stock Unit Award Agreement (non-executive employees) effective July 1, 2014	10-K	10.29	3/9/2015	
10.30**	Form of TeleTech Holdings, Inc. Restricted Stock Unit Award Agreement (Directors and Executive Committee Members) effective July 1, 2014	10-K	10.30	3/9/2015	
10.32**	<u>Independent Director Compensation Arrangements (effective May 2019)</u>	10-K	10.32	3/6/2019	
10.33**	Form of Indemnification Agreement with Directors and Executive Officers	10-Q	10.33	11/5/2019	
10.40**	Employment Agreement between Kenneth D. Tuchman and TeleTech Holdings, Inc. dated October 15, 2001	10-K	10.68	4/1/2002	
10.41**	Amendment to Employment Agreement between Kenneth D. Tuchman and TeleTech Holdings, Inc. dated December 31, 2008	10-K	10.17	2/23/2009	
10.60**	Amended and Restated Executive Employment Agreement between Regina M. Paolillo and TTEC Services Corporation effective May 1, 2018	10-Q	10.60	5/10/2018	
10.82**	Amended and Restated Executive Employment Agreement between Judi A. Hand and TTEC Services Corporation effective May 1, 2018	10-Q	10.82	5/10/2018	
10.83**	Amended and Restated Executive Employment Agreement between Martin F. DeGhetto and TTEC Services Corporation effective May 1, 2018	10-Q	10.83	5/10/2018	
10.86**	Amended and Restated Executive Employment Agreement between Margaret B. McLean and TTEC Services Corporation effective December 12, 2018	10-K	10.86	3/6/2019	
10.88**	Executive Employment Agreement between Jonathan Lerner and TTEC Services Corporation effective December 9, 2019	8-K	10.88	12/11/2019	

10.90**	Amended and Restated Credit Agreement, dated as of June 3, 2013, among TeleTech Holdings, Inc., the foreign borrowers party thereto, the lenders party thereto, Wells Fargo Bank, National Association, as Administrative Agent, Swing Line Lender and Fronting Lender, KeyBank National Association, Bank of America, N.A., BBVA Compass, and HSBC Bank USA, National Association, each as Documentation Agent and Wells Fargo Securities, LLC, KeyBank National Association, Merrill Lynch, Pierce, Fenner & Smith Incorporated, BBVA Compass and HSBC Bank USA, National Association, as Joint Lead Arrangers	8-K	10.1	6/7/2013
10.91**	First Amendment to Amended and Restated Credit Agreement and First Amendment to Amended and Restated Security. Agreement for the senior secured revolving credit facility with a syndicate of lenders led by Wells Fargo Bank, National Association, as agent, swing line and fronting lender.	8-K	10.90	2/16/2016
10.94**	Fourth Amendment to Amended and Restated Credit Agreement and Restated Security Agreement for a senior secured revolving credit facility with a syndicate of lenders led by Wells Fargo Bank, National Association, as agent, swing line and fronting lender	8-K	10.32	2/26/2019
10.97**	Stock Purchase Agreement of November 8, 2017 by and among TeleTech Services Corporation, Motif, Inc. ("Motif"). Kaushal Mehta and Parul Mehta (referred to collectively as the "Founders"), the shareholders of Motif (other than Founders, referred to as "Sellers"), and Outforce LLC (the Seller's Agent).	10-Q	10.97	11/8/2017
10.98**	Shareholders' Agreement of November 8, 2017 by and among TeleTech Services Corporation, the Founders, the Anishi Mehta Irrevocable Trust, the Ishan Mehta Irrevocable Trust, Anishi Mehta and Ishan Mehta	10-Q	10.98	11/8/2017
10.99**	Membership Interest Purchase Agreement dated October 26, 2019, by and among Ortana Holdings, LLC, an Oregon limited liability company, First Call Resolution, LLC, an Oregon limited liability company, John Stadter, Matthew Achak, and TTEC Services Corporation, a Colorado corporation	8-K	10.99	10/29/2019
21.1*	<u>List of subsidiaries</u>			
23.1*	Consent of Independent Registered Public Accounting Firm			
24.1*	Power of Attorney			
31.1*	Rule 13a-14(a) Certification of CEO of TTEC			
31.2*	Rule 13a-14(a) Certification of CFO of TTEC			
32.1*	Written Statement of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350)			
32.2*	Written Statement of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350)			

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101.INS***	XBRL Instance Document
101.SCH***	XBRL Taxonomy Extension Schema Document
101.CAL***	XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB***	XBRL Taxonomy Extension Label Linkbase Document
101.PRE***	XBRL Taxonomy Extension Presentation Linkbase Document
101.DEF***	XBRL Taxonomy Extension Definition Linkbase Document

ITEM 16. FORM 10-K SUMMARY

None

Filed of furnished herewith.
 Identifies exhibit that consists of or includes a management contract or compensatory plan or arrangement.
 Attached as Exhibit 101 to this report are the following documents formatted in XBRL (Extensible Business Reporting Language):

 (i) Consolidated Balance Sheets as of December 31, 2019 and 2018, (ii) Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2019, 2018 and 2017, (iii) Consolidated Statements of Stockholders' Equity for the years ended December 31, 2019, 2018 and 2017, (iv) Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2018 and 2017, and (v) Notes to Consolidated Financial Statements.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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 on March 4, 2020.

TTEC HOLDINGS, INC.

By: /s/ KENNETH D. TUCHMAN
Chief Executive Officer

DIRECTOR

DIRECTOR

DIRECTOR

Pursuant to the requirements of the Securities Excha March 4, 2020, by the following persons on behalf of the	nge Act of 1934, this report has been signed below or e registrant and in the capacities indicated:
Signature	Title
/s/ KENNETH D. TUCHMAN Kenneth D. Tuchman	PRINCIPAL EXECUTIVE OFFICER Chief Executive Officer and Chairman of the Board
/s/ REGINA M. PAOLILLO	PRINCIPAL FINANCIAL AND ACCOUNTING OFFICER
Regina M. Paolillo	Chief Financial Officer
* Steven J. Anenen	DIRECTOR
* Tracy L. Bahl	DIRECTOR
*	DIRECTOR

Gregory A. Conley

Robert N. Frerichs

Marc L. Holtzman

Ekta Singh-Bushell

 $^{^{\}star}$ By /s/ Regina M. Paolillo under Power of Attorney as attached hereto as Exhibit 24.1

INDEX TO THE CONSOLIDATED FINANCIAL STATEMENTS OF TTEC HOLDINGS, INC.

	Page No.
Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2019 and 2018	F-4
Consolidated Statements of Comprehensive Income (Loss) for the Years Ended December 31, 2019,	
2018 and 2017	F-5
Consolidated Statements of Stockholders' Equity and Mezzanine Equity for the Years Ended	
December 31, 2019, 2018 and 2017	F-6
Consolidated Statements of Cash Flows for the Years Ended December 31, 2019, 2018 and 2017	F-7
Notes to the Consolidated Financial Statements	F-8

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of TTEC Holdings, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of TTEC Holdings, Inc. and its subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of comprehensive income (loss), of stockholders' equity and mezzanine equity, and of cash flows for each of the three years in the period ended December 31, 2019, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Changes in Accounting Principles

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019 and the manner in which it accounts for revenues from contracts with customers in 2018.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As described in Management's Report on Internal Control over Financial Reporting, management has excluded First Call Resolution, LLC ("FCR") from its assessment of internal control over financial reporting as of December 31, 2019 because it was acquired by the Company in purchase business combinations during 2019. We have also excluded FCR from our audit of internal control over financial reporting. FCR is a majority owned subsidiary, whose total assets and total revenues excluded from management's assessment and our audit of internal control over financial reporting represent 12.6% and 1.2%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2019.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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/PricewaterhouseCoopers LLP

Denver, Colorado March 4, 2020

We have served as the Company's auditor since 2007.

TTEC HOLDINGS, INC. AND SUBSIDIARIES Consolidated Balance Sheets (Amounts in thousands, except share amounts)

	December 31, 2019		De	December 31, 2018	
ASSETS					
Current assets					
Cash and cash equivalents	\$	82,407	\$	78,237	
Accounts receivable, net		331,096		350,962	
Prepaids and other current assets		96,287		61,808	
Income and other tax receivables		40,035		35,470	
Total current assets		549,825		526,477	
Long-term assets					
Property, plant and equipment, net		176,633		161,523	
Operating lease assets		150,808		_	
Goodwill		301,694		204,633	
Deferred tax assets, net		13,263		15,523	
Other intangible assets, net		115,596		80,911	
Other long-term assets		68,969		65,441	
Total long-term assets		826,963		528,031	
Total assets	\$	1,376,788	\$	1,054,508	
LIABILITIES AND STOCKHOLDERS' EQUITY AND MEZZANINE EQUITY					
Current liabilities					
Accounts payable	\$	64,440	\$	59,447	
Accrued employee compensation and benefits		114,165		83,437	
Other accrued expenses		79,171		15,963	
Income tax payable		11,307		12,325	
Deferred revenue		39,447		44,926	
Current operating lease liabilities		45,218			
Other current liabilities		9,541		19.320	
Total current liabilities		363,289		235,418	
Long-term liabilities					
Line of credit		290,000		282,000	
Deferred tax liabilities, net		10,602		10,371	
Non-current income tax payable		25,208		30,754	
Deferred rent				16,584	
Non-current operating lease liabilities		127,395		_	
Other long-term liabilities		79,641		126,532	
Total long-term liabilities		532.846		466,241	
Total liabilities		896,135		701,659	
Commitments and contingencies (Note 13)					
Redeemable noncontrolling interest		48,923		_	
Stockholders' equity					
Preferred stock; \$0.01 par value; 10,000,000 shares authorized; zero shares outstanding as of					
December 31, 2019 and December 31, 2018 Common stock; \$0.01 par value; 150,000,000 shares authorized; 46,488,938 and 46,194,717 shares		_		_	
outstanding as of December 31, 2019 and December 31, 2018, respectively		465		462	
Additional paid-in capital		356,409		353,932	
Treasury stock at cost: 35,563,315 and 35,857,536 shares as of December 31, 2019 and December 31, 2018, respectively		(605,314)		(610,177)	
Accumulated other comprehensive income (loss)		(106,234)		(124,596)	
Retained earnings		773,218		725,551	
Noncontrolling interest		13.186		7.677	
Total stockholders' equity	_	431,730	_	352,849	
Total liabilities and stockholders' equity and mezzanine equity	\$	1,376,788	\$	1,054,508	
iotal nabililes and stockholders equity and mezzanine equity	Ψ	1,570,700	Ψ	1,004,000	

TTEC HOLDINGS, INC. AND SUBSIDIARIES Consolidated Statements of Comprehensive Income (Loss) (Amounts in thousands, except per share amounts)

	Year Ended December 31,		
	2019	2018	2017
Revenue	\$ 1,643,704	\$ 1,509,171	\$ 1,477,365
Operating expenses			
Cost of services (exclusive of depreciation and amortization presented			
separately below)	1,242,887	1,157,927	1,110,068
Selling, general and administrative	202,540	182,428	182,314
Depreciation and amortization	69,086	69,179	64,507
Restructuring and integration charges, net	1,747	6,131	14,665
Impairment losses	3,735	1,452	5,322
Total operating expenses	1,519,995	1,417,117	1,376,876
Income from operations	123,709	92,054	100,489
Other income (expense)			
Interest income	1,913	4,476	2,841
Interest expense	(19,113)	(28,674)	(13,734)
Other income (expense), net	3,902	(11,618)	1,869
Loss on asset held for sale	_	` _	(2,578)
Total other income (expense)	(13,298)	(35,816)	(11,602)
Income before income taxes	110,411	56,238	88,887
			(= 1 - 1 - 1 ·
Provision for income taxes	(25,677)	(16,483)	(78,075)
Not in come	04.704	20.755	10.010
Net income	84,734	39,755	10,812
Not income attributable to nancentralling interest	(7 E70)	(2.020)	(2 EE6)
Net income attributable to noncontrolling interest	(7,570)	(3,938)	(3,556)
Net income attributable to TTEC stockholders	\$ 77,164	\$ 35,817	\$ 7,256
Other comprehensive income (loss)			
Net income	\$ 84,734	\$ 39,755	\$ 10,812
Foreign currency translation adjustments	6,816	(30,382)	8,285
Derivative valuation, gross	16,990	11,526	27,931
Derivative valuation, tax effect	(4,530)	(4,058)	(11,284)
Other, net of tax	(786)	308	105
Total other comprehensive income (loss)	18,490	(22,606)	25,037
Total comprehensive income (loss)	103,224	17,149	35,849
Less: Comprehensive income attributable to noncontrolling interest	(7,698)	(3,624)	(3,933)
Less. Comprehensive income authoritable to noncontrolling interest	(1,090)	(3,024)	(3,933)
Comprehensive income attributable to TTEC stockholders	\$ 95,526	\$ 13,525	\$ 31,916
Weighted average shares outstanding			
Basic	46,373	46,064	45,826
Diluted	46,758	46,385	46,382
Net income per share attributable to TTEC stockholders			
Basic	\$ 1.66	\$ 0.78	\$ 0.16
Diluted	\$ 1.65	\$ 0.77	\$ 0.16

TTEC HOLDINGS, INC. AND SUBSIDIARIES Consolidated Statements of Stockholders' Equity and Mezzanine Equity (Amounts in thousands)

		Stockholders' Equity of the Company									
							Accumulated				
			_		_		Other				
		ed Stock	Commo		Treasury	Additional	Comprehensive	Retained	Noncontrolling		Mezzanine
	Shares	Amount	Shares	Amount	Stock	Paid-in Capital	Income (Loss)	Earnings	interest	Total Equity	Equity
Balance as of December 31, 2016	_	\$ —	46,114	\$ 462	\$ (603,262)	\$ 348,739	\$ (126,964)	\$ 735,939	\$ 6,981	\$ 361,895	\$ —
Net income	_	_	_	_	_	_	_	7,256	3,556	10,812	_
Dividends to shareholders (\$0.47 per common share)	_							(21,531)		(21,531)	
	_	_	_	_	_	_	_		(0.645)		_
Dividends distributed to noncontrolling interest				_		_	7.908		(3,645) 377	(3,645) 8,285	
Foreign currency translation adjustments Derivatives valuation, net of tax	_	_	_	_			16,647	_		8,285 16.647	
	_		298	3	4.913		16,647				
Vesting of restricted stock units	_	_	298 60		4,913	(10,313)	_	_	_	(5,397) 2.150	
Exercise of stock options	_	_		_		1,156	_		(004)		
Equity-based compensation expense	_	_	- (04.0)	- (0)	- (40.000)	12,143	_	_	(291)	11,852	_
Purchases of common stock	_	_	(610)	(6)	(18,322)	_		_	_	(18,328)	
Other, net of tax							105			105	
Balance as of December 31, 2017		\$ —	45,862	\$ 459	\$ (615,677)	\$ 351,725	\$ (102,304)	\$ 721,664	\$ 6,978	\$ 362,845	\$ —
Cumulative effect of adopting accounting											
standard updates	_	_	_	_	_	_	_	(6,584)	_	(6,584)	_
Net income	_	_	_	_	_	_	_	35,817	3,938	39,755	_
Dividends to shareholders (\$0.55 per common											
share)	_	_	_	_	_	_	_	(25,346)	_	(25,346)	_
Dividends distributed to noncontrolling interest	_	_	_	_	_	_	_	_	(2,925)	(2,925)	_
Foreign currency translation adjustments	_	_	_	_	_	_	(30,068)	_	(314)	(30,382)	_
Derivatives valuation, net of tax	_	_	_	_	_	_	7,468	_		7,468	_
Vesting of restricted stock units	_	_	318	3	5,252	(9,898)	_	_	_	(4,643)	_
Exercise of stock options	_	_	15	_	248	(40)	_	_	_	208	_
Equity-based compensation expense	_	_	_	_	_	12,145	_	_	_	12,145	_
Other, net of tax	_	_	_	_	_	_	308	_	_	308	_
Balance as of December 31, 2018		\$ —	46.195	\$ 462	\$ (610.177)	\$ 353.932	\$ (124,596)	\$ 725.551	\$ 7,677	\$ 352.849	\$ —
Cumulative effect of adopting accounting		<u> </u>	10,200	<u>Ψ 102</u>	ψ (010,111)	ψ 000,002	ψ (12 1,000)	Ψ 120,001	4 1,011	<u>♥ 002,010</u>	<u>*</u>
standard updates	_	_	_	_	_	_	_	(758)	_	(758)	_
Acquisition of noncontrolling interest	_	_	_	_	_	_	_	(.00)	_	(.00)	48.322
Net income	_	_	_	_	_	_	_	77,164	6,969	84,133	601
Dividends to shareholders (\$0.62 per common								,20	0,000	0 1,200	001
share)	_						_	(28,739)		(28,739)	_
Contribution from noncontrolling interest					_	_		(20,759)	3.362	3,362	
Dividends distributed to noncontrolling interest									(4,950)	(4,950)	
Foreign currency translation adjustments							6.688		128	6.816	
Derivatives valuation, net of tax							12.460		120	12.460	
Vesting of restricted stock units	_	_	294	_	4.863		,	_			
				3	,	(10,337)	_			(5,471)	
Equity-based compensation expense Other, net of tax	_	_	_	_	_	12,814	(706)	_	_	12,814	_
							(786)			(786)	
Balance as of December 31, 2019	_	\$ —	46,489	\$ 465	\$ (605,314)	\$ 356,409	\$ (106,234)	\$ 773,218	\$ 13,186	\$ 431,730	\$ 48,923

TTEC HOLDINGS, INC. AND SUBSIDIARIES Consolidated Statements of Cash Flows (Amounts in thousands)

		Year Ended December 31,					
		2019		2018		2017	
Cash flows from operating activities							
Net income	\$	84,734	\$	39,755	\$	10,812	
Adjustments to reconcile net income to net cash provided by operating activities:							
Depreciation and amortization		69,086		69,179		64,507	
Amortization of contract acquisition costs		1,002		3,015		1,678	
Amortization of debt issuance costs		1,083		992		745	
Imputed interest expense and fair value adjustments to contingent consideration		2,339		10,217		51	
Provision for doubtful accounts		1,711		3,679		458	
(Gain) loss on disposal of assets		189		111		3,694	
Gain on sale of businesses and dissolution of entity		_		_		(908)	
Impairment losses		3,735		1,452		5,322	
Impairment on equity investment		_		15,632			
Gain (adjustment) on bargain purchase of a business		_		(685)		_	
Non-cash loss on assets held for sale reclassified to held and used		_		1,616			
Deferred income taxes		(1,376)		(7,975)		16,777	
Excess tax benefit from equity-based awards		(1,231)		(635)		(2,192)	
Equity-based compensation expense		12,814		12,145		11,852	
(Gain) loss on foreign currency derivatives		(140)		1,524		(681)	
Changes in assets and liabilities, net of acquisitions:							
Accounts receivable		29,608		29,985		(59,284)	
Prepaids and other assets		27,413		(30,438)		(19,266)	
Accounts payable and accrued expenses		97,268		11,713		18,968	
Deferred revenue and other liabilities		(90,246)		7,063		60,619	
Net cash provided by operating activities		237,989		168,345		113,152	
Cash flows from investing activities							
Proceeds from sale of long-lived assets		382		34		39	
Purchases of property, plant and equipment, net of acquisitions		(60,776)		(43,450)		(51,958)	
Proceeds from sale of business		_		<u> </u>		636	
Investments in non-marketable equity investments				(2,119)		(1,384)	
Acquisitions, net of cash acquired of \$4,547, \$4,530, and \$5,997, respectively		102,457 <u>)</u>	_	(2,027)		(116,320)	
Net cash used in investing activities	(162,851)		(47,562)		(168,987)	
Cash flows from financing activities		450 750		0.400.400		0.000.505	
Proceeds from line of credit	,	152,750		2,162,400		2,293,587	
Payments on line of credit	(1,	144,750)	((2,224,400)	(2,166,887)	
Payments on other debt		(11,855)		(5,989)		(6,041)	
Payments of contingent consideration and hold-back payments to acquisitions		(5,902)		(1,349)		(1,409)	
Dividends paid to shareholders		(28,739)		(25,346)		(21,531)	
Payments to noncontrolling interest		(4,950)		(2,925)		(3,645)	
Capital contribution from noncontrolling interest		3,362		_			
Proceeds from exercise of stock options				208		2,150	
Tax payments related to issuance of restricted stock units		(5,471)		(4,643)		(5,397)	
Payments of debt issuance costs		(1,819)		(35)		(918)	
Purchase of treasury stock		(47.07.4)		(4.00.070)		(18,328)	
Net cash (used in) provided by financing activities		(47,374)		(102,079)		71,581	
Effect of exchange rate changes on cash, cash equivalents and restricted cash		(410)		(14,904)		3,427	
Ingresses in each cook againstants and restricted each		27,354		3,800		19,173	
Increase in cash, cash equivalents and restricted cash							
Cash, cash equivalents and restricted cash, beginning of period	_	78,237	ф.	74,437	Ф.	55,264	
Cash, cash equivalents and restricted cash, end of period	\$	105,591	\$	78,237	\$	74,437	
Supplemental disclosures							
Cash paid for interest	\$	13,108	\$	17,456	\$	11,727	
Cash paid for income taxes	\$	36,316	\$	39,984	\$	18,813	
Non-cash investing and financing activities	<u>Ψ</u>	50,510	Ψ	55,554	Ψ	10,010	
	¢.	2 721	\$	15,018		9,836	
Acquisition of long-lived assets through finance leases Acquisition of equipment through increase in accounts payable, net	<u>\$</u> \$	3,731 881	\$		Φ.	,	
	*	XXI	35	339	\$	97	

(1) OVERVIEW AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Overview

TTEC Holdings, Inc. ("TTEC", "the Company") is a leading global customer experience technology and services company focused on the design, implementation and delivery of transformative customer experience outcomes for many of the world's most iconic and disruptive brands. Since inception in 1982, the Company has been helping clients deliver frictionless customer experiences, strengthen their customer relationships, brand recognition and loyalty through personalized interactions, significantly improve their Net Promoter Score ("NPS"), and lower their total cost to serve by enabling and delivering simplified, consistent and seamless customer experience across channels and phases of the customer lifecycle. TTEC's 49,500 employees serve clients in the automotive, communication, financial services, government, healthcare, logistics, media and entertainment, retail, technology, transportation and travel industries via operations in the United States, Australia, Belgium, Brazil, Bulgaria, Canada, Costa Rica, Germany, Greece, Hong Kong, India, Ireland, Mexico, the Netherlands, New Zealand, the Philippines, Poland, Singapore, South Africa, Thailand, the United Arab Emirates, and the United Kingdom.

Through the first quarter of 2019, the Company reported its financial results of operations across four segments: Customer Strategy Services ("CSS"), Customer Technology Services ('CTS"), Customer Growth Services ("CGS') and Customer Management Services ("CMS"). Starting in the second quarter of 2019, the Company changed its go-to-market strategy, how its clients evaluate and consume its services, how TTEC assesses its operating performance and the leadership accountability for its segments. As a result, the Company now reports its financial information based on two segments: TTEC Digital and TTEC Engage.

- TTEC Digital designs, builds and delivers tech-enabled, insight-based and outcome-driven customer
 experience solutions through our professional services and suite of technology offerings. These solutions
 are critical to enabling and accelerating digital transformation for our clients. These services were
 previously included in the CSS and CTS segments.
- TTEC Engage provides the essential technologies, human resources, infrastructure and processes to operate customer care, acquisition, and fraud detection and prevention services. These services were previously included in the CGS and CMS segments.

TTEC Digital and TTEC Engage come together under our unified offering, Humanify™ Customer Experience as a Service ("CXaas"), which drives measurable customer results for clients through the delivery of personalized, omnichannel experiences. Our Humanify™ cloud platform provides a fully integrated ecosystem of Customer Experience ("CX") offerings, including omnichannel, messaging, Al, ML, RPA, analytics, cybersecurity, customer relationship management ("CRM"), knowledge management and journey orchestration.

Basis of Presentation

The Consolidated Financial Statements are comprised of the accounts of TTEC, its wholly owned subsidiaries, its 55% equity owned subsidiary Percepta, LLC, and its 70% equity owned subsidiary First Call Resolution, LLC (see Note 2). All intercompany balances and transactions have been eliminated in consolidation.

As of December 31, 2018, one business unit in the Digital segment classified as assets and liabilities held for sale as of September 30, 2016, was reclassified as held and used as of December 31, 2018 and 2017. The assets and liabilities of the business unit are no longer separately identified as held for sale as of December 31, 2018 and 2017 (see Note 2).

Reclassifications

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

Use of Estimates

The preparation of the Consolidated Financial Statements in conformity with accounting principles generally accepted in the U.S. ("GAAP") requires management to make estimates and assumptions in determining the reported amounts of assets and liabilities, disclosure of contingent liabilities at the date of the Consolidated Financial Statements and the reported amounts of revenue and expenses during the reporting period. On an ongoing basis, the Company evaluates its estimates including those related to derivatives and hedging activities, income taxes including the valuation allowance for deferred tax assets, self-insurance reserves, litigation reserves, restructuring reserves, allowance for doubtful accounts, contingent consideration, and valuation of goodwill, long-lived and intangible assets. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ materially from these estimates under different assumptions or conditions.

Concentration of Credit Risk

The Company is exposed to credit risk in the normal course of business, primarily related to accounts receivable and derivative instruments. Historically, the losses related to credit risk have been immaterial. The Company regularly monitors its credit risk to mitigate the possibility of current and future exposures resulting in a loss. The Company evaluates the creditworthiness of its clients prior to entering into an agreement to provide services and as necessary through the life of the client relationship. The Company does not believe it is exposed to more than a nominal amount of credit risk in its derivative hedging activities, as the Company diversifies its activities across nine investment-grade financial institutions.

Fair Value of Financial Instruments

Fair values of cash equivalents, accounts receivable and payable and debt approximate the carrying amounts because of their short-term nature.

Cash, Cash Equivalents and Restricted Cash

Cash and cash equivalents consist of cash and highly liquid short-term investments, primarily held in interestbearing investments which have original maturities of less than 90 days. Restricted cash includes cash whereby the Company's ability to use the funds at any time is contractually limited or is generally designed for specific purposes arising out of certain contractual or other obligations.

The Company manages a centralized global treasury function in the United States with a focus on concentrating and safeguarding its global cash and cash equivalents. While the majority of the Company's cash is held outside the U.S., the Company prefers to hold U.S. Dollars in addition to the local currencies of the foreign subsidiaries. The Company believes that it has effectively mitigated and managed its risk relating to its global cash through its cash management practices, banking partners, and utilization of diversified, high quality investments. However, the Company can provide no assurances that it will not sustain losses.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported in the Consolidated Balance Sheets that sum to the amounts reported in the Consolidated Statement of Cash Flows (in thousands):

	December 31, 2019		December 31, 2018		December 31, 201	
Cash and cash equivalents	\$	82,407	\$	78,237	\$	74,437
Restricted cash included in "Prepaid and other current						
assets"		23,172		_		_
Restricted cash included in "Other noncurrent assets"		12		_		_
Total	\$	105,591	\$	78,237	\$	74,437

Accounts Receivable

An allowance for doubtful accounts is determined based on the aging of the Company's accounts receivable, historical experience, client financial condition, and management judgment. The Company writes off accounts receivable against the allowance when the Company determines a balance is uncollectible.

Derivatives

The Company enters into foreign exchange forward and option contracts to reduce its exposure to foreign currency exchange rate fluctuations that are associated with forecasted revenue earned in foreign locations. The Company also enters into interest rate derivatives which consist of interest rate swaps to reduce the Company's exposure to interest rate fluctuations associated with its variable rate debt. Upon proper qualification, these contracts are designated as cash flow hedges. The Company formally documents at the inception of the hedge all relationships between hedging instruments and hedged items as well as its risk management objective and strategy for undertaking various hedging activities.

All derivative financial instruments are reported at fair value and recorded in Prepaids and other current assets, Other long-term assets, Other current liabilities, and Other long-term liabilities in the accompanying Consolidated Balance Sheets as applicable for each period end. Changes in fair value of derivative instruments designated as cash flow hedges are recorded in Accumulated other comprehensive income (loss), a component of Stockholders' Equity, to the extent they are deemed effective. Ineffectiveness is measured based on the change in fair value of the forward contracts and the fair value of the hypothetical derivatives with terms that match the critical terms of the risk being hedged. Based on the criteria established by current accounting standards, the Company's cash flow hedge contracts are deemed to be highly effective. Any realized gains or losses resulting from the foreign currency cash flow hedges are recognized together with the hedged transaction within Revenue. Any realized gains or losses from the interest rate swaps are recognized in Interest expense. Gains and losses from the settlements of the Company's net investment hedges remain in Accumulated other comprehensive income (loss) until partial or complete liquidation of the applicable net investment.

The Company also enters into fair value derivative contracts that hedge against foreign currency exchange gains and losses primarily associated with short-term payables and receivables. Changes in the fair value of derivative instruments designated as fair value hedges affect the carrying value of the asset or liability hedged, with changes in both the derivative instrument and the hedged asset or liability being recognized in Other income (expense), net in the accompanying Consolidated Statements of Comprehensive Income (Loss).

Property, Plant and Equipment

Property, plant and equipment are stated at historical cost less accumulated depreciation and amortization. Maintenance, repairs and minor renewals are expensed as incurred.

Depreciation and amortization are computed on the straight-line method based on the following estimated useful lives:

Building	30 years
Computer equipment and software	3 to 7 years
Telephone equipment	4 to 7 years
Furniture and fixtures	5 years
Leasehold improvements	Lesser of economic useful life (typically 10 years) or original lease term
Other	3 to 7 years

The Company evaluates the carrying value of property, plant and equipment for impairment whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable. An asset is considered to be impaired when the forecasted undiscounted cash flows of an asset group are estimated to be less than its carrying value. The amount of impairment recognized is the difference between the carrying value of the asset group and its fair value. Fair value estimates are based on assumptions concerning the amount and timing of forecasted future cash flows.

Software Development Costs

The Company capitalizes costs incurred to acquire or develop software for internal use. Capitalized software development costs are amortized using the straight-line method over the estimated useful life equal to the lesser of the license term or 4 or 7 years depending on the software type. The amortization expense is recorded in Depreciation and amortization in the accompanying Consolidated Statements of Comprehensive Income (Loss).

Goodwill

The Company evaluates goodwill for possible impairment at least annually on December 1, and whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. The Company uses a two step process to assess the realizability of goodwill. The first step, Step 0, is a qualitative assessment that analyzes current economic indicators associated with a particular reporting unit. For example, the Company analyzes changes in economic, market and industry conditions, business strategy, cost factors, and financial performance, among others, to determine if there would be a significant decline to the fair value of a particular reporting unit. A qualitative assessment also includes analyzing the excess fair value of a reporting unit over its carrying value from impairment assessments performed in previous years. If the qualitative assessment indicates a stable or improved fair value, no further testing is required.

If a qualitative assessment indicates that a significant decline to fair value of a reporting unit is more likely than not, or if a reporting unit's fair value has historically been closer to its carrying value, the Company will proceed to Step 1 testing where the Company calculates the fair value of a reporting unit. If Step 1 indicates that the carrying value of a reporting unit is in excess of its fair value, the Company will record an impairment equal to the amount by which a reporting unit's carrying value exceeds its fair value.

Other Intangible Assets

The Company has other intangible assets that include customer relationships (definite-lived), trade names (definite-lived) and non-compete agreements (definite-lived). Definite-lived intangible assets are amortized on a straight-line basis over their estimated useful lives, which range from 3 to 12 years. The Company evaluates the carrying value of its definite-lived intangible assets whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. A definite-lived intangible asset is considered to be impaired when the forecasted undiscounted cash flows of its asset group are estimated to be less than its carrying value.

The Company evaluates indefinite-lived intangible assets for possible impairment at least annually or whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Similar to goodwill, the Company may first use a qualitative analysis to assess the realizability of its indefinite-lived intangible assets. The qualitative analysis will include a review of changes in economic, market and industry conditions, business strategy, cost factors, and financial performance, among others, to determine if there would be a significant decline to the fair value of an indefinite-lived intangible asset. If a quantitative analysis is completed, an indefinite-lived intangible asset (i.e. trade name) is evaluated for possible impairment by comparing the fair value of the asset with its carrying value. Fair value is estimated as the discounted value of future revenues arising from a trade name using a royalty rate that a market participant would pay for use of that trade name. An impairment charge is recorded if the trade name's carrying value exceeds its estimated fair value.

Self Insurance Liabilities

The Company self-insures for certain levels of workers' compensation and employee health insurance. The Company records estimated liabilities for these insurance lines based upon analyses of historical claims experience. The most significant assumption the Company makes in estimating these liabilities is that future claims experience will emerge in a similar pattern with historical claims experience. The liabilities related to workers' compensation and employee health insurance are included in Accrued employee compensation and benefits in the accompanying Consolidated Balance Sheets. The liability for other general liability insurance is included in Other accrued expenses in the accompanying Consolidated Balance Sheets.

Restructuring Liabilities

The Company routinely assesses the profitability and utilization of its customer engagement centers and existing markets. In some cases, the Company has chosen to close under-performing customer engagement centers and complete reductions in workforce to enhance future profitability. Severance payments that occur from reductions in workforce are in accordance with the Company's postemployment plans and/or statutory requirements that are communicated to all employees upon hire date; therefore, severance liabilities are recognized when they are determined to be probable and reasonably estimable. Other liabilities for costs associated with an exit or disposal activity are recognized when the liability is incurred, rather than upon commitment to a plan.

Asset Retirement Obligations

Asset retirement obligations relate to legal obligations associated with the retirement of long-lived assets resulting from the acquisition, construction, development and/or normal use of the underlying assets.

The Company records all asset retirement obligations at estimated fair value. The Company's asset retirement obligations primarily relate to clauses in its customer engagement center operating leases which require the Company to return the leased premises to its original condition. The associated asset retirement obligations are capitalized as part of the carrying amount of the underlying asset and depreciated over the estimated useful life of the asset. The liability, reported within Other long-term liabilities, is accreted through charges to operating expenses. If the asset retirement obligation is settled for an amount other than the carrying amount of the liability, the Company recognizes a gain or loss on settlement in operating expenses.

Income Taxes

Accounting for income taxes requires recognition of deferred tax assets and liabilities for the expected future income tax consequences of transactions that have been included in the Consolidated Financial Statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Gross deferred tax assets may then be reduced by a valuation allowance for amounts that do not satisfy the realization criteria established by current accounting standards.

The Company accounts for uncertain tax positions using a two-step approach to recognizing and measuring uncertain tax positions. The first step is to determine if the weight of available evidence indicates that it is more likely than not that the tax position will be sustained on audit. The second step is to estimate and measure the tax benefit as the amount that has a greater than 50% likelihood of being realized upon ultimate settlement with the tax authority. The Company evaluates these uncertain tax positions on a quarterly basis. This evaluation is based on the consideration of several factors including changes in facts or circumstances, changes in applicable tax law, and settlement of issues under audit. The Company recognizes interest and penalties related to uncertain tax positions as a part of the Provision for income taxes in the accompanying Consolidated Statements of Comprehensive Income (Loss).

No changes in indefinite reinvestment assertion were made during 2019. The Company has completed its analysis in regard to the full tax impact related to prior changes in indefinite reinvestment reassertion and any related taxes have been recorded. No additional income taxes have been provided for any remaining outside basis difference inherent in our foreign subsidiaries as these amounts continue to be indefinitely reinvested in foreign operations. Determination of any unrecognized deferred tax liability related to the outside basis difference in investments in foreign subsidiaries is not practicable due to the inherent complexity of the multi-national tax environment in which we operate.

Tax Reform

In 2017, the United States enacted comprehensive tax reform legislation known as the Tax Cuts and Jobs Act (the "2017 Tax Act") that, among other things, reduced the U.S. federal corporate income tax rate from 35% to 21% and implemented a territorial tax system, but imposed an alternative "base erosion and anti-abuse tax" ("BEAT"), and an incremental tax on global intangible low taxed foreign income ("GILTI") effective January 1, 2018. In addition, the law imposed a one-time mandatory repatriation tax on accumulated post-1986 foreign earnings on domestic corporations effective for the 2017 tax year. As of December 31, 2018, the Company had completed the accounting for the tax effects of the 2017 Tax Act and no material adjustment was recorded to the 2017 estimate.

While the Company's accounting for the recorded impact of the 2017 Tax Act is deemed to be complete, these amounts are based on prevailing regulations and current information, and any additional guidance issued by the Internal Revenue Service ("IRS") or the results of an audit related to these items, could impact the Company's recorded amounts in future periods.

The Company's selection of an accounting policy with respect to both the new GILTI and BEAT rules is to compute the related taxes in the period the entity becomes subject to either. A reasonable estimate of the effects of these provisions has been included in the 2019 and 2018 annual financial statements.

Revenue Recognition

2019 and 2018 Revenue

The Company recognizes revenue from contracts and programs when control of the promised goods or services is transferred to the customers, in an amount that reflects the consideration it expects to be entitled to in exchange for those goods or services. Revenue is recognized when or as performance obligations are satisfied by transferring control of a promised good or service to a customer. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer. Performance obligation is the unit of accounting for revenue recognition under the provisions of ASC Topic 606, "Revenue from Contracts with Customers" and all related amendments ("ASC 606"). A contract's transaction price is allocated to each distinct performance obligation in recognizing revenue.

The Business Process Outsourcing ("BPO") inbound and outbound service fees are based on either a per minute, per hour, per FTE, per transaction or per call basis, which represents the majority of our contracts. These contracts have a single performance obligation as the promise to transfer the individual goods or services is not separately identifiable from other promises in the contracts and, therefore, not distinct. For example, services for the training of the Company's agents (which are separately billable to the customer) are a separate promise in the BPO contracts, but they are not distinct from the primary service obligations to transfer services to the customers. The performance of the customer service by the agents is highly dependent on the initial, growth, and seasonal training services provided to the agents during the life of a program. The training itself is not considered to have value to the customer on a standalone basis, and therefore, training on a standalone basis cannot be considered a separate unit of accounting. The Company therefore defers revenue from certain training services that are rendered mainly upon commencement of a new client contract or program, including seasonal programs. Revenue is also deferred when there is significant growth training in an existing program. Accordingly, recognition of initial, growth, and seasonal training revenues and associated costs (consisting primarily of labor and related expenses) are deferred and amortized over the period of economic benefit. With the exception of training which is typically billed upfront and deferred, the remainder of revenue is invoiced on a monthly or quarterly basis as services are performed and does not create a contract asset or liability.

In addition to revenue from BPO services, revenue also consists of fees from services for program launch, professional consulting, fully-hosted or managed technology and learning innovation services. The contracts containing these service offerings may contain multiple performance obligations. For contracts with multiple performance obligations, the Company allocates the contract's transaction price to each performance obligation using the best estimate of the standalone selling price of each distinct good or service in the contract. The primary method used to estimate standalone selling price is the expected cost plus a margin approach, under which the Company forecasts its expected costs of satisfying a performance obligation and then adds an appropriate margin for that distinct good or service. The Company forecasts its expected cost based on

historical data, current prevailing wages, other direct and indirect costs incurred in recently completed contracts, market conditions, and other client specific cost considerations. For these services, the point at which the transfer of control occurs determines when revenue is recognized in a specific reporting period. Within our Digital segment, where there are product sales, the attribution of revenue is recognized when the transfer of control is completed and the products are delivered to the client's location. Where services are rendered to a customer, the attribution is aligned with the progress of work and is recognized over time (i.e. based on measuring the progress toward complete satisfaction of a performance obligation using an output method or an input method). Where output method is used, revenue is recognized on the basis of direct measurements of the value to the customer of the goods or services transferred relative to the remaining goods or services promised under the contract. The majority of the Company's services are recognized over time using the input method in which revenue is recognized on the basis of efforts or inputs toward satisfying a performance obligation (for example, resources consumed, labor hours expended, costs incurred, or time elapsed) relative to the total expected inputs to satisfy the performance obligation. The measures used provide faithful depiction of the transfer of goods or services to the customers. For example, revenue is recognized on certain consulting contracts based on labor hours expended as a measurement of progress where the consulting work involves input of consultants' time. The progress is measured based on the hours expended over total number of estimated hours included in the contract multiplied by the total contract consideration. The contract consideration can be a fixed price or an hourly rate, and in either case, the use of labor hours expended as an input measure provides a faithful depiction of the transfer of services to the customers. Deferred revenues for these services represent amounts collected from, or invoiced to, customers in excess of revenues recognized. This results primarily from i) receipt of license fees that are deferred due to one or more of the revenue recognition criteria not being met, and ii) the billing of annual customer support agreements, annual managed service agreements, and billings for other professional services that have not yet been performed by the Company. The Company records amounts billed and received, but not earned, as deferred revenue. These amounts are recorded in either Deferred revenue or Other long-term liabilities, as applicable, in the accompanying Consolidated Balance Sheets based on the period over which the Company expects to render services. Costs directly associated with revenue deferred, consisting primarily of labor and related expenses, are also deferred and recognized in proportion to the expected future revenue from

Variable consideration exists in contracts for certain client programs that provide for adjustments to monthly billings based upon whether the Company achieves, exceeds or fails certain performance criteria. Adjustments to monthly billings consist of contractual bonuses/penalties, holdbacks and other performance based conditions. Variable consideration is estimated at contract inception at its most likely value and updated at the end of each reporting period as additional performance data becomes available. Revenue related to such variable consideration is recognized only to the extent that a significant reversal of any incremental revenue is not considered probable.

Contract modifications are routine in the performance of the customer contracts. Contracts are often modified to account for customer mandated changes in the contract specifications or requirements, including service level changes. In most instances, contract modifications relate to goods or services that are incremental and distinctly identifiable, and, therefore, are accounted for prospectively.

Incremental Costs to Obtain a Contract

Direct and incremental costs to obtain or fulfill a contract are capitalized, and the capitalized costs are amortized over the corresponding period of benefit, determined on a contract by contract basis. The Company recognizes an asset for the incremental costs of obtaining a contract with a customer if it expects to recover those costs. The incremental costs of obtaining a contract are those costs that the Company incurs to obtain a customer contract that it would not have incurred if the contract had not been obtained. Contract acquisition costs consist primarily of payment of commissions to sales personnel and are incurred when customer contracts are signed. The deferred sales commission amounts are amortized based on the expected period of economic benefit and are classified as current or non-current based on the timing of when they are expected to be recognized as an expense. Costs to obtain a contract that would have been incurred regardless of whether the contract was obtained are recognized as an expense when incurred, unless those costs are explicitly chargeable to the customer regardless of whether the contract is obtained. Sales commissions are paid for obtaining new clients only and are not paid for contract renewals or contract modifications. Capitalized costs of obtaining contracts

are periodically reviewed for impairment. As of December 31, 2019, the Company has a deferred asset of \$7.0 million related to sales commissions.

In certain cases, the Company negotiates an upfront payment to a customer in conjunction with the execution of a contract. Such upfront payments are critical to acquisition of new business and are often used as an incentive to negotiate favorable rates from the clients and are accounted for as upfront discounts for future services. Such payments are either made in cash at the time of execution of a contract or are netted against the Company's service invoices. Payments to customers are capitalized as contract acquisition costs and are amortized in proportion to the expected future revenue from the contract, which in most cases results in straight-line amortization over the life of the contract. Such payments are considered a reduction of the selling prices of the Company's products or services, and therefore, are accounted for as a reduction of revenue when amortized. Such capitalized contract acquisition costs are periodically reviewed for impairment taking into consideration ongoing future cash flows expected from the contract and estimated remaining useful life of the contract.

Practical Expedients and Exemptions

Some of the Company's service contracts are short-term in nature with a contract term of one year or less. For those contracts, the Company has utilized the practical expedient in ASC 606-10-50-14 exempting the Company from disclosure of the transaction price allocated to remaining performance obligations if the performance obligation is part of a contract that has an original expected duration of one year or less. Also in alignment with ASC 606-10-50-14, the Company does not disclose the value of unsatisfied performance obligations for contracts for which it recognizes revenue at the amount to which it has the right to invoice for services performed. Additionally, the Company's standard payment terms are less than one year from transfer of goods or services, as such, the election could apply. Given the foregoing, the Company has elected the practical expedient under ASC 606-10-32-18 to not assess whether a contract has a significant financing component. Pursuant to the Company's election of the practical expedient under ASC 606-10-32-2A, sales, value add, and other taxes that are collected from customers concurrent with revenue-producing activities, which the Company has an obligation to remit to the governmental authorities, are excluded from revenue.

2017 and Prior Revenue

The Company recognizes revenue when evidence of an arrangement exists, the delivery of service has occurred, the fee is fixed or determinable and collection is reasonably assured. The BPO inbound and outbound service fees are based on either a per minute, per hour, per full-time employee, per transaction or per call basis. Certain client programs provide for adjustments to monthly billings based upon whether the Company achieves, exceeds or fails certain performance criteria. Adjustments to monthly billings consist of contractual bonuses/penalties, holdbacks and other performance based contingencies. Revenue recognition is limited to the amount that is not contingent upon delivery of future services or meeting other specified performance conditions.

Revenue also consists of services for agent training, program launch, professional consulting, fully-hosted or managed technology and learning innovation. These service offerings may contain multiple element arrangements whereby the Company determines if those service offerings represent separate units of accounting. A deliverable constitutes a separate unit of accounting when it has standalone value and delivery or performance of the undelivered items is considered probable and substantially within the Company's control. If those deliverables are determined to be separate units of accounting, revenue is recognized as services are provided. If those deliverables are not determined to be separate units of accounting, revenue for the delivered services are bundled into one unit of accounting and recognized over the life of the arrangement or at the time all services and deliverables have been delivered and satisfied. The Company allocates revenue to each of the deliverables based on a selling price hierarchy of vendor specific objective evidence ("VSOE"), third-party evidence, and then estimated selling price. VSOE is based on the price charged when the deliverable is sold separately. Third-party evidence is based on largely interchangeable competitor services in standalone sales to similarly situated customers. Estimated selling price is based on its best estimate of what the selling prices of deliverables would be if they were sold regularly on a standalone basis. Estimated selling price is established considering multiple factors including, but not limited to, pricing practices in different geographies, service

offerings, and customer classifications. Once the Company allocates revenue to each deliverable, it recognizes revenue when all revenue recognition criteria are met.

Periodically, the Company will make certain expenditures related to acquiring contracts or provide up-front discounts for future services. These expenditures are capitalized as contract acquisition costs and amortized in proportion to the expected future revenue from the contract, which in most cases results in straight-line amortization over the life of the contract. Amortization of these contract acquisition costs is recorded as a reduction to revenue.

Lease Expense

The Company has negotiated certain rent holidays, landlord/tenant incentives and escalations in the base price of lease payments over the initial term of its operating leases. The initial term could include the "build-out" period of leases, where no lease payments are typically due. The Company recognizes rent holidays and rent escalations on a straight-line basis to lease expense over the lease term. The landlord/tenant incentives are recorded as a reduction to the right of use asset and depreciated on a straight line basis over the remaining lease term once the assets are placed in service.

Equity-Based Compensation Expense

Equity-based compensation expense for all share-based payment awards granted is determined based on the grant-date fair value net of an estimated forfeiture rate on a straight-line basis over the requisite service period of the award, which is typically the vesting term of the share-based payment award. The Company estimates the forfeiture rate annually based on its historical experience of forfeited awards.

Foreign Currency Translation

The assets and liabilities of the Company's foreign subsidiaries, whose functional currency is not the U.S. Dollar, are translated at the exchange rates in effect on the last day of the period and income and expenses are translated using the monthly average exchange rates in effect for the period in which the items occur. Foreign currency translation gains and losses are recorded in Accumulated other comprehensive income (loss) within Stockholders' Equity. Foreign currency transaction gains and losses are included in Other income (expense), net in the accompanying Consolidated Statements of Comprehensive Income (Loss).

Recently Adopted Accounting Pronouncements

On January 1, 2018, the Company adopted ASC 606, using the modified retrospective method. The adoption of ASC 606 resulted in the deferral of certain fees that had already been recognized in prior periods. The Company recorded a net reduction to opening retained earnings of \$10.0 million, net of tax, as of January 1, 2018 due to the cumulative impact of adopting ASC 606. The ASC 606 adjustments pertain to the timing of revenue recognition associated with upfront training fees on certain contracts. Consistent with the modified retrospective method of adoption, the Company has not adjusted prior period amounts which continue to be reported in accordance with the Company's historic revenue accounting policy and principles.

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-02, "Leases", which amends the existing accounting standards for lease accounting, including requiring lessees to recognize most leases on their balance sheets related to the rights and obligations created by those leases, and making targeted changes to lessor accounting. The FASB also issued ASU 2018-10, Codification Improvements to Topic 842 Leases, and ASU 2018-11, Targeted Improvements to Topic 842 Leases, which allows the new lease standard to be applied as of the adoption date with a cumulative-effect adjustment to the opening balance of retained earnings rather than a retroactive restatement of all periods presented.

The Company adopted Accounting Standards Codification ("ASC") 842 as of January 1, 2019 using the effective date as the date of initial application. The election allowed the Company to recognize the effects of the implementation of ASC 842 as a cumulative effect adjustment to the opening balance of retained earnings in the period of adoption. The Company also made certain assumptions in judgements when applying ASC 842. The most significant judgements are as follows:

- 1. The Company elected the package of practical expedients that allowed the Company not to reassess (a) whether any expired or existing contracts are leases or contain leases, (b) the lease classification for any expired or existing leases, and (c) initial direct costs.
- 2. The Company did not use hindsight during transition in determining the lease term and assessing impairment of the entity's right-of-use assets.
- 3. The Company elected to not separate non-lease components (which include common area maintenance, taxes, and insurance) from the lease components for gross payment real estate leases. For net payment real estate leases and IT equipment leases, the non-lease components are not included in the lease right of use asset and lease liability and instead are reflected as an expense in the period incurred.
- 4. The Company did not apply the recognition requirements in ASC 842 for leases with a term of 12 months or less for all asset classes.

The Company determines if an arrangement is a lease at contract inception. The key specifics in determining if a leasing arrangement exists are as follows:

- 1. Does the arrangement convey the right to control the use of an identified asset in exchange for consideration over a period of time.
- 2. Does the Company obtain the right to substantially all of the asset's economic benefits.

The Company predominantly acts as a lessee and is required under the new standard to apply a dual approach, classifying leases as either finance or operating leases based on whether or not the lease is effectively a financed purchase. The determination of the lease type is largely similar to the process the Company utilized under ASC 840. This classification determines whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease. ASC 842 also requires lessees to record a right of use asset and a lease liability for all leases with a term of greater than one year regardless of classification.

The adoption of the new standard resulted in the recording of additional net lease assets and lease liabilities of \$129.9 million and \$148.3 million, respectively, as of January 1, 2019. The operating lease assets are lower than the operating lease liabilities primarily due to deferred rent balances at the transition date being reclassed into the right of use operating assets. On January 1, 2019 the Company recognized a reduction of \$0.8 million, net of tax, in its retained earnings as a result of recognizing previously impaired right of use assets recorded at transition. The standard did not impact our consolidated net earnings or cash flows. See Note 15 for additional lease disclosures.

Other Recently Issued Accounting Pronouncements

In August 2017, the FASB issued ASU 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities". ASU 2017-12 amends and simplifies existing guidance for derivatives and hedges including aligning accounting with companies' risk management strategies and increasing disclosure transparency regarding both the scope and results of hedging programs. The changes include designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The ASU is effective for interim and annual periods beginning after December 15, 2018 and early adoption is permitted. The Company has adopted the new guidance effective January 1, 2019 and the adoption did not have a material impact on the consolidated statements or related disclosures.

In January 2016, the FASB issued ASU 2016-13, "Financial Instruments – Credit Losses" (ASC 326), which amends the methodology of how and when companies measure credit losses on financial instruments. The objective of the ASU is to provide financial statement users more useful information regarding expected credit losses on financial instruments and other commitments. In November 2018, the FASB issued ASU 2018-19, "Codification Improvements to Topic 326, Financial Instruments – Credit Losses" which clarifies the scope of guidance in ASU 2016-13. In May 2019, the FASB issued ASU No. 2019-05, "Financial Instruments – Credit Losses (Topic 326), Targeted Transition Relief", which amended the transition guidance for the new credit losses standard (ASC 326). The ASU is effective for interim and annual periods beginning on or after December 15, 2019 with early adoption permitted, using a modified retrospective approach. The Company is finalizing the evaluation of effects of adoption on its consolidated financial statements and related disclosures with particular emphasis on accounts receivable as this will be the most impacted financial line item.

In December 2019, the FASB issues ASU 2019-12, "Simplifying the Accounting for Income Taxes" (ASU 740), which is intended to simplify various aspects related to income tax accounting. The ASU is effective for interim and annual periods beginning on or after December 15, 2020 with early adoption permitted. The Company is currently evaluating the potential effects of adoption on its consolidated financial statements and related disclosures.

(2) ACQUISITIONS

First Call Resolution

On October 26, 2019, the Company acquired, through its subsidiary TTEC Services Corporation ("TSC"), 70% of the outstanding membership interest in First Call Resolution, LLC ("FCR"), an Oregon limited liability company ("the Transaction"). FCR is a customer care, social networking and business process solutions service provider with approximately 2,000 employees based in the U.S. The business has been integrated into the Engage segment and is being fully consolidated into the financial statements of TTEC.

Total cash paid at acquisition was \$107.0 million, inclusive of \$4.5 million related to cash balances, for the 70% membership interest in FCR. The Transaction was subject to customary representations and warranties, holdbacks, and a net working capital adjustment. The Transaction included a potential contingent payment with a maximum value of \$10.9 million based on FCR's 2020 EBITDA performance. The Company finalized the working capital adjustment for \$0.4 million during the first quarter of 2020 which will be paid from FCR to TSC in March 2020.

As of the closing of the Transaction, Ortana Holdings, LLC, an Oregon limited liability company ("Ortana"), owned by the FCR founders, will continue to hold the remaining 30% membership interest in FCR ("Remaining Interest"). Between January 31, and December 31, 2023, Ortana shall have an option to sell to TSC and TSC shall have an option to purchase from Ortana the Remaining Interest at a purchase price equal to a multiple of FCR's adjusted trailing twelve month EBITDA for this particular acquisition and not to compete with the Company for a period of four years after the disposition of the Remaining Interest. The noncontrolling interest was recorded at fair value on the date of acquisition. The fair value was based on significant inputs not observable in the market (Level 3 inputs) including forecasted earnings, discount rate of 19.6%, working capital requirements and applicable tax rates. The noncontrolling interest was valued at \$48.3 million and is shown as Redeemable noncontrolling interest in the accompanying Consolidated Balance Sheets.

The fair value of the contingent consideration has been measured based on significant inputs not observable in the market (Level 3 inputs). Significant assumptions include a discount rate of 16.7% expected forecast volatility of 20%, an equivalent metric risk premium of 15.1%, risk-free rate of 1.6% and a credit spread of 1.8%. Based on these, a \$6.5 million expected future payment was calculated. As of the acquisition date, the present value of the contingent consideration was \$6.1 million. As of December 31, 2019, the value of the contingent consideration was \$6.1 million and was included in Other long-term liabilities in the accompanying Consolidated Balance Sheets.

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

Droliminon

	Prelimina Estimate (Acquisition) Fair Valu	of Date
Cash	\$ 5	,225
Accounts receivable, net	10	,659
Prepaid expenses		357
Property and equipment	6	,006
Other assets		224
Operating lease assets	5	,127
Tradename	8	3,600
Customer relationships	38	3,540
Goodwill	96	5,993
	\$ 171	.,731
Accounts payable	\$	388
Operating lease liability - short-term	1	,160
Accrued employee compensation and benefits	4	,049
Accrued expenses		72
Operating lease liability - long-term	3	3,967
	\$ 9	,636
Total nurchago price	Ф 163	2,095
Total purchase price	\$ 162	.,095

The estimates of fair value of identifiable assets acquired and liabilities assumed are preliminary, pending finalization of a valuation and tax returns, thus are subject to revisions that may result in adjustments to the values presented above.

As part of the purchase, an additional net \$0.7 million of cash was retained in the entity to pay for certain Ortana liabilities that had been recorded prior to the acquisition.

The FCR customer relationships and tradename have been estimated based on the initial valuation and will be amortized over an estimated useful life of 10 and 4 years, respectively. The goodwill recognized from the FCR acquisition is estimated to be attributable, but not limited to, the acquired workforce and expected synergies with Engage. The tax basis of the acquired intangibles and goodwill will be deductible for income tax purposes. The acquired goodwill and intangibles and operating results of FCR are reported within the Engage segment from the date of acquisition.

Strategic Communications Services

On April 30, 2018, the Company acquired all of the outstanding equity securities of Strategic Communications Services, Ltd ("SCS"). SCS provides services as a system integrator for multichannel contact center platforms, including CISCO. The Company offers in-house, managed and outsourced network, information, communications and contact center services to leading brands throughout Europe. This business has been integrated into the Company's Digital segment.

Total cash paid at acquisition was £4.4 million (\$6.1 million USD) (inclusive of \$4.5 million related to cash balances). The purchase price was subject to customary representations and warranties, indemnities, and a net working capital adjustment. The agreement includes potential contingent payments over the next three years with a maximum value of £3.0 million (\$4.1 million USD) based on EBITDA performance over the next three years. The Company finalized the working capital adjustment for an additional \$210 thousand during the third quarter of 2018 which was paid in October 2018.

The fair value of the contingent consideration has been measured based on significant inputs not observable in the market (Level 3 inputs). Key assumptions include a discount rate of 4.7% and expected future value of payments of \$2.9 million. The \$2.9 million of expected future payments was calculated using probability weighted EBITDA assessment with the highest probability associated with SCS achieving the targeted EBITDA for each earn-out year. As of the acquisition date, the fair value of the contingent consideration was \$2.7 million. During the fourth quarter of 2018 and the second quarter of 2019, \$0.3 million and \$2.4 million in net benefits, respectively, were recorded related to fair value adjustments of the estimated contingent consideration based on revised actuals and estimates of EBITDA performance for 2018, 2019 and 2020. The benefits were included in Other Income (Expense) in the Consolidated Statements of Comprehensive Income (Loss) in the applicable quarters. As of December 31, 2019, the fair value of the contingent consideration was zero.

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

	equisition Date Fair Value	
Cash	\$ 4,530	
Accounts receivable, net	985	
Prepaid expenses	39	
Customer relationships	3,619	
Goodwill	1,231	
	\$ 10,404	
Accounts payable	\$ 216	
Accrued employee compensation and benefits	27	
Accrued expenses	21	
Deferred tax liabilities	629	
	\$ 893	
Total purchase price	\$ 9,511	

In the first quarter of 2019, the Company finalized its valuation of SCS for the acquisition date assets acquired and liabilities assumed and determined that no material adjustments to any of the balances were required.

The SCS customer relationships are being amortized over a useful life of 10 years. The goodwill recognized from the SCS acquisition is attributable, but not limited to, the acquired workforce and expected synergies with Digital. None of the tax basis of the acquired intangibles and goodwill will be deductible for income tax purposes. The acquired goodwill and intangibles and operating results of SCS are reported within the Digital segment from the date of acquisition.

Berkshire Hathaway Specialty Concierge

On March 31, 2018, the Company, through its subsidiary Percepta, acquired certain assets from Berkshire Hathaway Specialty Concierge, LLC ("BH") related to a customer engagement center and the related customer contracts. This acquisition is being accounted for as a business combination. These assets will be integrated into the Company's Engage segment.

The total cash paid was \$1. In connection with the purchase, Percepta assumed the lease for the customer engagement center and entered into a transitional services agreement with BH to facilitate the transfer of the employees and business. Fair values were assigned to each purchased asset including \$257 thousand for customer relationships, \$330 thousand as a lease subsidy and \$98 thousand for fixed assets. Based on the \$1 purchase price, a gain on purchase of \$685 thousand was recorded in the quarter ended March 31, 2018 and was included in Other income (expense) in the Consolidated Statements of Comprehensive Income (Loss).

Financial Impact of Acquired Businesses

The acquired businesses purchased in 2019 and 2018 noted above contributed revenues of \$21.5 million and \$3.1 million, and a net income of \$0.2 million and \$0.4 million, inclusive of \$1.4 million and \$0.2 million of acquired intangible amortization, to the Company for the years ended December 31, 2019 and 2018, respectively.

The unaudited proforma financial results for the twelve months ended 2019 and 2018 combines the consolidated results of the Company, FCR, SCS, and BH, assuming the acquisitions had been completed on January 1, 2018. The reported revenue and net income of \$1,509.2 million and \$35.8 million would have been \$1,585.0 million and \$48.2 million for the twelve months ended December 31, 2018, respectively, on an unaudited proforma basis.

For 2019, the reported revenue and net income of \$1,643.7 million and \$77.7 million would have been \$1,716.9 million and \$88.3 million for the year ended December 31, 2019, respectively, on an unaudited proforma basis.

The unaudited pro forma consolidated results are not to be considered indicative of the results if these acquisitions occurred in the periods mentioned above, or indicative of future operations or results. Additionally, the pro forma consolidated results do not reflect any anticipated synergies expected as a result of the acquisition.

Assets and Liabilities Held for Sale

During the third quarter of 2016, the Company determined that one business unit from the Engage segment and one business unit from the Digital segment would be divested from the Company's operations. These business units met the criteria to be classified as held for sale. The Company took into consideration the discounted cash flow models, management input based on early discussions with brokers and potential buyers, and third-party evidence from similar transactions to complete the fair value analysis as there had not been a selling price determined at this point for either unit. For the two business units in Engage and Digital losses of \$2.6 million and \$2.7 million, respectively, were recorded as of December 31, 2016 in Loss on assets held for sale in the Consolidated Statements of Comprehensive Income (Loss).

For the business unit in Engage, based on further discussion and initial offers, management determined that the estimated selling price assumed should be revised and an additional \$3.2 million loss was recorded as of June 30, 2017 and included in Loss on assets held for sale in the Consolidated Statements of Comprehensive Income (Loss). Effective December 22, 2017, the business unit was sold to The Search Agency ("TSA") for an up-front payment of \$245 thousand and future contingent earnout on the one year anniversary of the closing date. During the fourth quarter of 2017, a net \$0.6 million gain was recorded in Loss on assets held for sale in the Consolidated Statements of Comprehensive Income (Loss).

For the business unit in Digital, based on further discussions and the offer at that time, management determined that the estimated selling price assumed should be revised and an additional \$2.0 million loss was recorded during the quarter ended June 30, 2018 and included in Loss on assets held for sale in the Consolidated Statements of Comprehensive Income (Loss).

As of December 31, 2018, management determined that the business unit in Digital should be reclassified from assets held for sale to assets held and used. At this point, a fair value assessment of this specific balance sheet was completed and a \$0.4 million gain was recorded during the quarter ended December 31, 2018. This gain in addition to the \$2.0 million loss recorded earlier in 2018 were reclassified to Other Income (Expense), net in the Consolidated Statements of Comprehensive Income (Loss) for the year ended December 31, 2018. The assets and liabilities of the business are no longer separately identified as held for sale on the Consolidated Balance Sheets as of December 31, 2018 and 2017 and the estimated loss on sale recorded during 2016 has been reclassified to Other income (expense), net in the Consolidated Statements of Comprehensive Income (Loss).

Investments

CaféX

In 2015, the Company invested \$9.0 million in CaféX Communications, Inc. ("CaféX"), a provider of omni-channel web-based real time communication (WebRTC) solutions, through the purchase of a portion of its outstanding Series B Preferred Stock. During the fourth quarter of 2016, the Company invested an additional \$4.3 million to purchase a portion of the Series C Preferred Stock of CaféX. During the first quarter of 2019, the Company purchased a portion of the common shares of CaféX from another investor for \$1. At December 31, 2019, the Company owns 17.8% of the total equity of CaféX. The investment is accounted for under the cost method of accounting. The Company evaluates its investments for possible other-than-temporary impairment at least annually or whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable.

During the first quarter of 2018, the Company provided a \$2.1 million bridge loan to CaféX which accrues interest at a rate of 12% per year until maturity or conversion, which will be no later than June 30, 2020.

As of March 31, 2018, the Company evaluated the investment in CaféX for impairment due to a large anticipated sale of IP not being completed as planned, a shift in the strategy of the company, an ongoing default by CaféX of its loan agreement with its bank, and a lack of potential additional funding options. Based on this evaluation, the Company determined that the fair value of its investment was zero and thus the investment was impaired as of March 31, 2018. The Company recorded a \$15.6 million write-off of the equity investment and the bridge loan which was included in Other income (expense) in the Consolidated Statements of Comprehensive Income (Loss).

Subsequent Event

On February 7, 2020, the Company acquired, through its subsidiary TTEC Digital, LLC ("TTEC Digital"), 70% of the outstanding shares of capital stock of Serendebyte Inc., a Delaware corporation ("the Transaction"). Serendebyte is an autonomous customer experience and intelligent automation solutions provider with 125 employees based in India, the United States, and Canada. The business has been integrated into the Digital segment.

Total cash paid at acquisition was \$9.0 million. The Transaction is subject to customary representations and warranties, holdbacks, and a net working capital adjustment.

As of the closing of the Transaction, Serendebyte's founder and certain members of its management will continue to hold the remaining 30% interest in Serendebyte, Inc. ("Remaining Interest"). Between January 31, 2023 and December 31, 2023, Serendebyte's founder and the management team shall have an option to sell to TTEC Digital and TTEC Digital shall have an option to purchase the Remaining Interest at a purchase price equal to a multiple of Serendebyte's adjusted trailing twelve month EBITDA for this particular acquisition.

As a condition to closing, Serendebyte's founder and certain members of the management team agreed to continue their affiliation with Serendebyte at least through 2023, and the founder agreed not to compete with TTEC for a period of four years after the disposition of the Remaining Interest.

(3) SEGMENT INFORMATION

During the second quarter of 2019, the Company finalized changes to the Company's operating strategy and the way in which the Company assesses performance. In accordance with this change, the Company adjusted certain reporting relationships between the Chief Operating Decision Maker ("CODM") and other members of management, updated the compensation metrics for senior management, and modified the internal financial reporting provided to the CODM and his direct reports consistent with this revised management and measurement structure. Accordingly, during the second quarter of 2019, the Company reevaluated the definition of the operating segments, reportable segments, and reporting units which resulted in a change to the reportable segments. Effective June 30, 2019, the segment information was reported consistent with these updated reportable segments comprised of TTEC Digital and TTEC Engage.

The Company reports the following two segments:

- TTEC Digital designs, builds and delivers tech-enabled, insight-based and outcome-driven customer experience solutions through our professional services and suite of technology offerings. These solutions are critical to enabling and accelerating digital transformation for our clients.
 - Technology Services: Our technology services design, integrate and operate highly scalable, digital omnichannel technology solutions in the cloud, on premise, or hybrid, including journey orchestration, automation and AI, knowledge management, and workforce productivity.
 - o Professional Services: Our management consulting practices deliver customer experience strategy, analytics, process optimization, and learning and performance services.
- TTEC Engage provides the essential technologies, human resources, infrastructure and processes to operate customer care, acquisition, and fraud detection and prevention services.
 - o Customer Acquisition Services: Our customer growth and acquisition services optimize the buying journeys for acquiring new customers by leveraging technology and analytics to deliver personal experiences that increase the quantity and quality of leads and customers.
 - O Customer Care Services: Our customer care services provide turnkey contract center solutions, including digital omnichannel technologies, associate recruiting and training, facilities, and operational expertise to create exceptional customer experiences across all touchpoints.
 - o Fraud Prevention Services: Our digital fraud detection and prevention services proactively identify and prevent fraud and provide community content moderation and compliance.

The Company allocates to each segment its portion of corporate operating expenses. All intercompany transactions between the reported segments for the periods presented have been eliminated.

The following tables present certain financial data by segment (in thousands):

Year Ended December 31, 2019

	Gross Revenue	Int	tersegment Sales	F	Net Revenue	oreciation & ortization	(Lo	ncome oss) from perations
TTEC Digital	\$ 305,595	\$	(249)	\$	305,346	\$ 11,216	\$	38,927
TTEC Engage	1,338,358		_		1,338,358	57,870		84,782
Total	\$ 1,643,953	\$	(249)	\$	1,643,704	\$ 69,086	\$	123,709

Year Ended December 31, 2018

	Gross Revenue	Intersegment Sales	Net Revenue	Depreciation & Amortization	Income (Loss) from Operations
TTEC Digital	\$ 239,144	\$ (345)	\$ 238,799	\$ 8,814	\$ 33,054
TTEC Engage	1,270,372	_	1,270,372	60,365	59,000
Total	\$ 1,509,516	\$ (345)	\$ 1,509,171	\$ 69,179	\$ 92,054

Year Ended December 31, 2017

	Gross Revenue	Intersegment Sales	Net Revenue	Depreciation & Amortization	Income (Loss) from Operations
TTEC Digital	\$ 207,244	\$ (337)	\$ 206,907	\$ 9,355	\$ 14,480
TTEC Engage	1,270,477	(19)	1,270,458	55,152	86,009
Total	\$ 1,477,721	\$ (356)	\$ 1,477,365	\$ 64,507	\$ 100,489

	For	the \	Year Ended Decem	ber 3	1,
	 2019		2018		2017
Capital Expenditures					
TTEC Digital	\$ 14,397	7 \$	4,833	\$	3,018
TTEC Engage	 46,379	<u> </u>	38,617		48,940
Total	\$ 60,776	3	43,450	\$	51,958
			December 31,		
	2019		2018		2017
Total Assets					
TTEC Digital	\$ 238,081	\$	222,977	\$	168,106
TTEC Engage	1,138,707		831,531		910,630
Total	\$ 1,376,788	\$	1,054,508	\$	1,078,736
			December 31,		
	2019		2018		2017
Goodwill					
TTEC Digital	\$ 66,275	\$	66,158	\$	65,791
TTEC Engage	235,419		138,475		143,936
Total	\$ 301,694	\$	204,633	\$	209,727

The following tables present certain financial data based upon the geographic location where the services are provided (in thousands):

				of and for the		31,
		2019		2018		2017
Revenue	_					
United States	\$	1,002,524	\$	862,026	\$	820,597
Philippines		370,395		351,829		353,122
Latin America		100,117		109,104		130,082
Europe / Middle East / Africa		70,613		67,163		62,597
Asia Pacific / India		55,554		57,978		36,715
Canada		44,501		61,071		74,252
Total	\$	1,643,704	\$	1,509,171	\$	1,477,365
			_		_	
Property, plant and equipment, gross						
United States	\$	559,326	\$	508,202	\$	490,110
Philippines		144,213		130,176		137,683
Latin America		45,743		44,065		51,451
Europe / Middle East / Africa		14,823		10,499		10,280
Asia Pacific / India		21,562		19,874		24,592
Canada		15,516		15,193		15,912
Total	\$	801,183	\$	728,009	\$	730,028
Other long-term assets						
United States	\$	57,417	\$	56,459	\$	46,029
Philippines		7,892		5,188		7,753
Latin America		993		1,329		1,475
Europe / Middle East / Africa		993		544		(750)
Asia Pacific / India		1,422		1,680		4,326
Canada		252		241		324
Total	\$	68,969	\$	65,441	\$	59,157

(4) ACCOUNTS RECEIVABLE AND SIGNIFICANT CLIENTS

Accounts receivable, net in the accompanying Consolidated Balance Sheets consists of the following (in thousands):

		December 31,		
	· · · ·	2019		2018
Accounts receivable	\$	336,548	\$	356,554
Less: Allowance for doubtful accounts		(5,452)		(5,592)
Accounts receivable, net	\$	331,096	\$	350,962

Activity in the Company's Allowance for doubtful accounts consists of the following (in thousands):

		December 31,				
	2019	2018	2017			
Balance, beginning of year	\$ 5,592	\$ 921	\$ 662	2		
Provision for doubtful accounts	1,711	3,679	458	8		
Uncollectible receivables written-off	(1,311)	(429)	(180	0)		
Effect of foreign currency and other	(540)	1,421	(19	9)		
Balance, end of year	\$ 5,452	\$ 5,592	\$ 923	1		

On October 15, 2018, Sears Holding Corporation ("Sears") announced that it had filed a petition for bankruptcy protection in the United States Bankruptcy Court for the Southern District of New York. As of December 31, 2019 and 2018, TTEC had approximately \$2.7 million in pre-petition accounts receivables outstanding related to Sears; during the fourth quarter of 2018 a \$2.7 million allowance for uncollectible accounts was recorded and included in Selling, general and administrative expenses in the Consolidated Statements of Comprehensive Income (Loss). TTEC continues to provide post-petition services to Sears and has assessed these receivables for collection risk and has determined that these will be collectible.

Significant Clients

The Company had no clients that contributed in excess of 10% of total revenue for the year ended December 31, 2019. The Company has one client that contributed in excess of 10% of total revenue for the year ended December 31, 2018; this client operates in the healthcare industry and is included in the Engage segment. The revenue from this client as a percentage of total revenue was as follows:

	Year Er	nded December	31,
	2019	2018	2017
Healthcare client	8 %	10 %	7 %

Accounts receivable from this client was as follows (in thousands):

		Year	Ende	ed Decemb	er 31	,
	_	2019		2018		2017
Healthcare client	\$	18,385	\$	49,245	\$	56,802

The Company does have clients with aggregate revenue exceeding \$100 million annually and the loss of one or more of these significant clients could have a material adverse effect on the Company's business, operating results, or financial condition. To mitigate this risk, the Company has multiple contracts with these larger clients, where each individual contract is for an amount below the \$100 million aggregate. To limit the Company's credit risk with its clients, management performs periodic credit evaluations, maintains allowances for uncollectible accounts and may require pre-payment for services from certain clients. Based on currently available information, management does not believe significant credit risk exists as of December 31, 2019.

Accounts Receivable Factoring Agreement

On March 5, 2019, the Company entered into an Uncommitted Receivables Purchase Agreement ("Agreement") with Bank of the West ("Bank"), whereby from time-to-time the Company may elect to sell, on a revolving basis, U.S. accounts receivables of certain clients at a discount to the bank for cash on a limited recourse basis. The maximum amount of receivables that the Company may sell to the Bank at any given time shall not exceed \$75 million. The sales of accounts receivable in accordance with the Agreement are reflected as a reduction of Accounts Receivable, net on the Consolidated Balance sheets. The Company has retained no interest in the sold receivables but retains all collection responsibilities on behalf of the Bank. The discount on the accounts receivable sold will be recorded within Other expense, net in the Consolidated Statements of Comprehensive Income (Loss). The cash proceeds from this Agreement are included in the change in accounts receivable within the operating activities section of the Consolidated Statements of Cash Flows.

As of December 31, 2019, the Company had factored \$52.0 million of accounts receivable; under the Agreement discounts on these receivables were not material during the quarter. As of December 31, 2019, the Company had collected \$23.2 million of cash from customers which had not been remitted to the Bank. The unremitted cash is Restricted Cash and is included within Prepaid and Other Current Assets with the corresponding liability included in Accrued Expenses on the Consolidated Balance Sheet. The Company has not recorded any servicing assets or liabilities as of December 31, 2019 as the fair value of the servicing arrangement as well as the fees earned were not material to the financial statements.

(5) PROPERTY, PLANT AND EQUIPMENT

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

	December 31,			31,
		2019		2018
Land and buildings	\$	32,942	\$	33,286
Computer equipment and software		447,260		411,653
Telephone equipment		49,447		45,351
Furniture and fixtures		85,191		74,538
Leasehold improvements		186,083		161,960
Motor vehicles		260		90
Construction-in-progress and other		-		1,131
Property, plant and equipment, gross		801,183		728,009
Less: Accumulated depreciation and amortization		(624,550)		(566,486)
Property, plant and equipment, net	\$	176,633	\$	161,523

Depreciation and amortization expense for property, plant and equipment was \$57.5 million, \$58.4 million and \$57.0 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Included in the computer equipment and software is internally developed software of \$15.3 million net and \$11.2 million net as of December 31, 2019 and 2018, respectively.

(6) GOODWILL

Goodwill consisted of the following (in thousands):

	Dec	December 31, 2018		Acquisitions / Adjustments		Impairments		Effect of Foreign Currency		cember 31, 2019
TTEC Digital	\$	66,158	\$	_	\$	_	\$	117	\$	66,275
TTEC Engage		138,475		96,993		_		(49)		235,419
Total	\$	204,633	\$	96,993	\$		\$	68	\$	301,694
		December 31,		Acquisitions / Adjustments			Effect of Foreign Currency			
	Dec	ember 31, 2017			Impa	<u>irments</u>	Fo	reign	Dec	cember 31, 2018
TTEC Digital	Dec	- · · · ,			Impa \$	irments —	Fo	reign	Dec	,
TTEC Digital TTEC Engage		2017	Adj	ustments		irments — —	Fo Cu	reign rrency		2018

Impairment

The Company has three reporting units with goodwill and performs a goodwill impairment test on at least an annual basis. The Company conducts its annual goodwill impairment test during the fourth quarter, or more frequently, if indicators of impairment exist.

For the annual goodwill impairment analysis, the Company elected to perform a Step 1 evaluation for all of its reporting units, which includes comparing a reporting unit's estimated fair value to its carrying value. The determination of fair value requires significant judgments including estimation of future cash flows, which is dependent on internal forecasts, estimation of the long-term growth rates for the businesses, the useful lives over which the cash flows will occur and determination of appropriate discount rates (based in part on the Company's weighted average cost of capital). Changes in these estimates and assumptions could materially affect the determination of fair value and/or conclusions on goodwill impairment for each reporting unit. As of December 1, 2019, the date of the annual impairment testing, the Company concluded that for all three of the reporting units the fair values were in excess of their respective carrying values and the goodwill for those reporting units was not impaired.

The process of evaluating the fair value of the reporting units is highly subjective and requires significant judgment and estimates as the reporting units operate in a number of markets and geographical regions. The Company used a market approach and an income approach to determine our best estimates of fair value which incorporated the following significant assumptions:

- Revenue projections, including revenue growth during the forecast periods ranging from (19.0)% to
- · EBITDA margin projections held relatively flat over the forecast periods ranging from zero to 21.0%;
- Estimated income tax rates of 24.9% to 27.5%;
- · Estimated capital expenditures ranging from \$0.9 million to \$47.0 million; and
- Discount rates ranging from 10% to 14% based on various inputs, including the risks associated with the specific reporting units, the country of operations as well as their revenue growth and EBITDA margin assumptions.

During the Company's annual impairment testing as of December 1, 2019, the Company identified triggering events that could lead to impairment of goodwill for the Digital Consulting reporting unit, including lower revenues and profits than had been anticipated over the past two years. The carrying value of Digital Consulting was \$39.7 million at December 1, 2019, including approximately \$24.3 million of goodwill. Based on the Company's assessment, the estimated fair value of the Digital Consulting reporting unit exceeded its carrying value by approximately 26%, but based on additional sensitivity analysis, the amount of cushion could fall to 0% or below if the performance of the business does not improve as expected. The estimate of fair value was based on generally accepted valuation techniques and information available at the date of the assessment, which incorporated management's assumptions about expected revenues and future cash flows and available market information for comparable companies.

(7) OTHER INTANGIBLE ASSETS

Other intangible assets which are included in Other long-term assets in the accompanying Consolidated Balance Sheets consisted of the following (in thousands):

	Dec	cember 31, 2018	Amorti	zation	Impa	irments	•	uisitions and istments	Fo	fect of oreign rrency	De	cember 31, 2019
Customer relationships, gross	\$	123,527	\$	_	\$		\$	38,540	\$	(311)	\$	161,756
Customer relationships - accumulated												
amortization		(43,223)	(1	1,055)		(423)		_		48		(54,653)
Other intangible assets, gross		4,575				· -		8,600		(13)		13,162
Other intangible assets - accumulated amortization		(3,968)		(541)		(170)		_		10		(4,669)
Other intangible assets, net	\$	80,911	\$ (1	1,596)	\$	(593)	\$	47,140	\$	(266)	\$	115,596
Other intaligible assets, het	Ψ	00,011	- \-						_			
Otter intangible assets, her		cember 31, 2017	Amortiz		Impai	rments	•	uisitions and stments	Fo	ect of reign rrency	De	cember 31, 2018
Customer relationships, gross	Dec	cember 31,			Impai \$	rments	•	and	Fo Cu	reign	Dec	
Customer relationships, gross Customer relationships - accumulated amortization		cember 31, 2017 127,431 (35,217)	Amortiz \$			rments —	Adju	and stments	Fo Cu	reign rrency (5,860)		2018
Customer relationships, gross Customer relationships - accumulated amortization Other intangible assets, gross		cember 31, 2017 127,431	Amortiz \$	zation —		rments — —	Adju	and stments 1,956	Fo Cu	reign rrency (5,860)		2018 123,527
Customer relationships, gross Customer relationships - accumulated amortization		cember 31, 2017 127,431 (35,217)	Amortiz \$	zation —		rments — — — —	Adju	and stments 1,956	For Cui	reign rrency (5,860)		2018 123,527 (43,223)

The acquisitions recorded during 2019 relate to the purchase of FCR (see Note 2 for further information). The impairments recorded during 2019 relate to rogenSi intangible assets (see below)

The acquisitions and adjustments recorded during 2018 relate to the purchase of SCS (see Note 2 for further information) and the fair value of the Digital-PRG balance sheet (see below).

Digital - PRG

As of December 31, 2018, in connection with reclassifying a business unit from assets held for sale to assets held and used, a fair value assessment was completed and it was determined that due to continuing estimated losses, the fair value of the customer relationship balance was zero. The Company recorded a \$0.7 million expense related to a fair value adjustment during the fourth quarter of 2018 which was included in Other income (expense), net in the Consolidated Statements of Comprehensive Income (Loss).

Digital - rogenSi

In connection with reduced profitability of the rogenSi component of the TTEC Digital segment, an interim impairment analysis was completed during the second quarter of 2019. The long-lived assets reviewed for impairment consisted of the customer relationship intangible, intellectual property, and right of use assets. The Company completed an asset group recoverability evaluation based on the current estimated cash flow based on forecasted revenues and operating income using significant inputs not observable in the market (Level 3 inputs). Based on this calculation, the Company recorded an impairment expense of \$2.0 million in the three months ended June 30, 2019, which was included in Impairment losses in the Consolidated Statements of Comprehensive Income (Loss). As part of the \$2.0 million impairment \$0.4 million was assigned to the customer relationship intangible asset and \$0.2 million to the IP intangible asset. At December 31, 2019, the Company reviewed the evaluation completed as of June 30, 2019, and noted no material changes, thus no additional impairment is required.

Customer relationships are being amortized over the remaining weighted average useful life of 8.2 years and other intangible assets are being amortized over the remaining weighted average useful life of 5.5 years. Amortization expense related to intangible assets was \$10.5 million, \$10.8 million and \$7.5 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Expected future amortization of other intangible assets as of December 31, 2019 is as follows (in thousands):

2020	\$ 14,942
2021	14,686
2022	14,066
2023	13,204
2024	11,122
Thereafter	47,576
Total	\$ 115,596

(8) DERIVATIVES

Cash Flow Hedges

The Company enters into foreign exchange related derivatives. Foreign exchange derivatives entered into consist of forward and option contracts to reduce the Company's exposure to foreign currency exchange rate fluctuations that are associated with forecasted revenue earned in foreign locations. Upon proper qualification, these contracts are designated as cash flow hedges. It is the Company's policy to only enter into derivative contracts with investment grade counterparty financial institutions, and correspondingly, the fair value of derivative assets considers, among other factors, the creditworthiness of these counterparties. Conversely, the fair value of derivative liabilities reflects the Company's creditworthiness. As of December 31, 2019, the Company had not experienced, nor does it anticipate, any issues related to derivative counterparty defaults. The following table summarizes the aggregate unrealized net gain or loss in Accumulated other comprehensive income (loss) for the years ended December 31, 2019, 2018 and 2017 (in thousands and net of tax):

	Year Ended December 31,						
	2019			2018	2017		
Aggregate unrealized net gain/(loss) at beginning of period	\$	(8,278)	\$	(15,746)	\$	(32,393)	
Add: Net gain/(loss) from change in fair value of cash flow hedges		15,545		20,278		31,053	
Less: Net (gain)/loss reclassified to earnings from effective hedges		(3,085)		(12,810)		(14,406)	
Aggregate unrealized net gain/(loss) at end of period	\$	4,182	\$	(8,278)	\$	(15,746)	

The Company's foreign exchange cash flow hedging instruments as of December 31, 2019 and 2018 are summarized as follows (in thousands). All hedging instruments are forward contracts.

As of December 31, 2019	Local Currency Notional Amount	U.S. Dollar Notional Amount	% Maturing in the next 12 months	Contracts Maturing Through
Philippine Peso	7,715,000	147,654 ⁽¹⁾	58.2 %	December 2022
Mexican Peso	1,299,500	61,529	46.9 %	December 2022
		\$ 209,183		
	Local Currency Notional	U.S. Dollar Notional		
As of December 31, 2018	Amount	Amount		
Philippine Peso	6,710,000	130,957 (1)		
Philippine Peso Mexican Peso	6,710,000 1,091,500	130,957 ⁽¹⁾ 57,708		

⁽¹⁾ Includes contracts to purchase Philippine pesos in exchange for New Zealand dollars and Australian dollars, which are translated into equivalent U.S. dollars on December 31, 2019 and December 31, 2018.

Fair Value Hedges

The Company enters into foreign exchange forward contracts to economically hedge against foreign currency exchange gains and losses on certain receivables and payables of the Company's foreign operations. Changes in the fair value of derivative instruments designated as fair value hedges are recognized in earnings in Other income (expense), net. As of December 31, 2019 and 2018, the total notional amount of the Company's forward contracts used as fair value hedges was \$64.5 million and \$70.4 million, respectively.

Derivative Valuation and Settlements

The Company's derivatives as of December 31, 2019 and 2018 were as follows (in thousands):

		December 31, 2019							
Designation: Derivative contract type: Derivative classification:		Designated as Hedging Instruments		Designated Hedging truments					
		Foreign Exchange	Foreign Exchange						
Derivative classification:		ash Flow	F	air Value					
Fair value and location of derivative in the Consolidated Balance Sheet:									
Prepaids and other current assets	\$	3,467	\$	205					
Other long-term assets		3,525		_					
Other current liabilities		(1,223)		(107)					
Other long-term liabilities		(95)							
Total fair value of derivatives, net	\$	5,674	\$	98					

		December 31, 2018							
		Designated as Hedging Instruments Foreign		t Designated					
Designation.				s Hedging					
Designation:	_			struments Foreign					
Derivative contract type:		xchange	Exchange						
Derivative classification:	С	ash Flow		Fair Value					
Fair value and location of derivative in the Consolidated Balance Sheet:									
Prepaids and other current assets	\$	814	\$	60					
Other long-term assets		215		_					
Other current liabilities		(8,861)		(104)					
Other long-term liabilities		(3,484)							
Total fair value of derivatives, net	\$	(11,316)	\$	(44)					

The effect of derivative instruments on the Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2019 and 2018 were as follows (in thousands):

		Year Ended December 3				
			2019 2018			
		D	esignated	as I	ledging	
Designation:			Instru	men	ts	
Derivative contract type:	_		Foreign E	Exch	ange	
Derivative classification:			Cash	Flo	N	
Amount of gain or (loss) recognized in Other comprehensive income (loss) -						
effective portion, net of tax		\$	(3,085)	\$	(12,810)	
Amount and location of net gain or (loss) reclassified from Accumulated OCI						
to income - effective portion:			(4.000)	_	(4.7.5.40)	
Revenue		\$	(4,228)	\$	(17,548)	
	Ye	Year Ended December 31.				
	201				2018	
Designation:	Not Desig	nated	l as Hedgii	ng Ir	struments	
Derivative contract type:		Fore	eign Excha	nge		
Derivative classification:			Fair Value			
Amount and location of net gain or (loss) recognized in the Consolidated						
Statement of Comprehensive Income (Loss):						
Cost of services	\$		— \$		_	
Other income (expense), net		1,7	73		(7,436)	

(9) FAIR VALUE

The authoritative guidance for fair value measurements establishes a three-level fair value hierarchy that prioritizes the inputs used to measure fair value. This hierarchy requires that the Company maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair value are as follows:

- Level 1 Quoted prices in active markets for identical assets or liabilities.
- Level 2 Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets, similar assets and liabilities in markets that are not active or can be corroborated by observable market data.
- Level 3 Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

The following presents information as of December 31, 2019 and 2018 of the Company's assets and liabilities required to be measured at fair value on a recurring basis, as well as the fair value hierarchy used to determine their fair value.

Accounts Receivable and Payable - The amounts recorded in the accompanying balance sheets approximate fair value because of their short-term nature.

Investments – The Company measures investments, including cost and equity method investments, at fair value on a nonrecurring basis when they are deemed to be other-than-temporarily impaired. The fair values of these investments are determined based on valuation techniques using the best information available, and may include market observable inputs and discounted cash flow projections. An impairment charge is recorded when the cost of the investment exceeds its fair value and this condition is determined to be other-than-temporary. As of December 31, 2019, the investment in CaféX Communications, Inc., which consists of the Company's total \$15.6 million investment, was fully impaired to zero (see Note 2).

Debt - The Company's debt consists primarily of the Company's Credit Agreement, which permits floating-rate borrowings based upon the current Prime Rate or LIBOR plus a credit spread as determined by the Company's leverage ratio calculation (as defined in the Credit Agreement). As of December 31, 2019 and 2018, the Company had \$290.0 million and \$282.0 million, respectively, of borrowings outstanding under the Credit Agreement. During 2019 and 2018, borrowings accrued interest at an average rate of 3.4% and 3.1% per annum, respectively, excluding unused commitment fees. The amounts recorded in the accompanying Balance Sheets approximate fair value due to the variable nature of the debt based on level 2 inputs.

Derivatives - Net derivative assets (liabilities) are measured at fair value on a recurring basis. The portfolio is valued using models based on market observable inputs, including both forward and spot foreign exchange rates, interest rates, implied volatility, and counterparty credit risk, including the ability of each party to execute its obligations under the contract. As of December 31, 2019, credit risk did not materially change the fair value of the Company's derivative contracts.

The following is a summary of the Company's fair value measurements for its net derivative assets (liabilities) as of December 31, 2019 and 2018 (in thousands):

As of December 31, 2019

		g						
				nificant				
	Active Markets for Identical Assets		-	Other servable	-	nificant servable		
			Inputs		Inputs			
	(L	evel 1)	(Level 2)		(Level 3)		At Fair Value	
Cash flow hedges	\$		\$	5,674	\$		\$	5,674
Fair value hedges				98		_		98
Total net derivative asset (liability)	\$		\$	5,772	\$		\$	5,772

As of December 31, 2018

		Fair Value Measurements Using								
		d Prices in e Markets dentical essets evel 1)	Other Observable Inputs		Other Significant oservable Unobservable		Δt	Fair Value		
Cash flow hedges	\$		\$	(11,316)	\$		\$	(11,316)		
Fair value hedges		_		(44)		_		(44)		
Total net derivative asset (liability)	\$		\$	(11,360)	\$		\$	(11,360)		

The following is a summary of the Company's fair value measurements as of December 31, 2019 and 2018 (in thousands): $\frac{1}{2}$

As of December 31, 2019

	Fair Value Measurements Using								
	Active N	Prices in Markets for eal Assets	Obse	ficant Other rvable Inputs Level 2)	Significant Unobservable Inputs (Level 3)				
Assets									
Derivative instruments, net	\$	_	\$	5,772	\$	_			
Total assets	\$		\$	5,772	\$				
Liabilities									
Deferred compensation plan liability	\$		\$	(20,370)	\$	_			
Derivative instruments, net		_		_					
Contingent consideration		_		_		(6,134)			
Total liabilities	\$		\$	(20,370)	\$	(6,134)			

As of December 31, 2018

		Fair Value Measurements Using							
	Active M Identica	Prices in arkets for al Assets /el 1)	Obser	ficant Other vable Inputs Level 2)	Significant Unobservable Inputs (Level 3)				
Assets									
Derivative instruments, net	\$		\$		\$	_			
Total assets	\$		\$	_	\$				
Liabilities									
Deferred compensation plan liability	\$	_	\$	(14,836)	\$	_			
Derivative instruments, net		_		(11,360)		_			
Contingent consideration		_				(2,363)			
Total liabilities	\$	_	\$	(26,196)	\$	(2,363)			

Deferred Compensation Plan - The Company maintains a non-qualified deferred compensation plan structured as a Rabbi trust for certain eligible employees. Participants in the deferred compensation plan select from a menu of phantom investment options for their deferral dollars offered by the Company each year, which are based upon changes in value of complementary, defined market investments. The deferred compensation liability represents the combined values of market investments against which participant accounts are tracked.

Contingent Consideration — The Company recorded contingent consideration related to the acquisitions of SCS and FCR. This contingent payable was recognized at fair value using either a discounted cash flow approach or an option valuation model and a discount rate of 4.7% and 16.7%, respectively. The measurements were based on significant inputs not observable in the market. The Company records interest expense each period using the effective interest method until the future value of these contingent payables reaches their expected future value. Interest expense related to all recorded contingent payables is included in Interest expense in the Consolidated Statements of Comprehensive Income (Loss).

During the fourth quarter of 2018 and the second quarter of 2019, the Company recorded fair value adjustments to the contingent consideration associated with the SCS acquisition based on decreased estimates of EBITDA which caused the estimated payable to be zero for both future payments. Accordingly, a \$0.3 million and a \$2.5 million decrease to the payable were recorded as of December 31, 2018 and June 30, 2019, respectively, and were included in Other income (expense), net in the Consolidated Statements of Comprehensive Income (Loss). As of December 31, 2019, the expected future EBITDA is still below the target, thus the contingent consideration remains at zero.

The Company recorded contingent consideration related to a revenue servicing agreement with Welltok in the fourth quarter of 2016, in which a maximum of \$1.25 million would be paid over eight quarters based on the dollar value of revenue earned by the Company. The contingent payable was recognized at fair value of \$1.25 million as of December 31, 2016. Payments totaling \$851 thousand were completed during 2017 and the final payment of \$399 thousand was made during the first quarter of 2018.

A rollforward of the activity in the Company's fair value of the contingent consideration is as follows (in thousands):

	Dec	ember 31, 2018	Acq	Acquisitions		Acquisitions Payments		Imputed Interest / Adjustments		December 31, 2019	
Welltok	\$	_	\$	_	\$	_	\$	_	\$	_	
SCS		2,363		_		_		(2,363)		_	
FCR		_		6,134		_		<u> </u>		6,134	
Total	\$	2,363	\$	6,134	\$		\$	(2,363)	\$	6,134	

	Dec	ember 31, 2017	Acc	quisitions	Pay	/ments	In	nputed terest / ustments	Dec	cember 31, 2018
Welltok	\$	399	\$	_	\$	(399)	\$	_	\$	_
SCS		_		2,731		_		(368)		2,363
Total	\$	399	\$	2,731	\$	(399)	\$	(368)	\$	2,363

(10) INCOME TAXES

The sources of pre-tax operating income are as follows (in thousands):

	Year	Year Ended December 31,					
	2019	2018	2017				
Domestic	\$ 39,864	\$ (13,926)	\$ 10,909				
Foreign	70,547	70,164	77,978				
Total	\$ 110,411	\$ 56,238	\$ 88,887				

In 2017, the United States enacted comprehensive tax reform legislation known as the Tax Cuts and Jobs Act (the "2017 Tax Act") that, among other things, reduces the U.S. federal corporate income tax rate from 35% to 21% and implements a territorial tax system, but imposes an alternative "base erosion and anti-abuse tax" ("BEAT"), and an incremental tax on global intangible low taxed foreign income ("GILTI") effective January 1, 2018. In addition, the law imposed a one-time mandatory repatriation tax on accumulated post-1986 foreign earnings on domestic corporations effective for the 2017 tax year. As of December 31, 2018, the Company had completed its analysis of the impacts of the 2017 Tax Act within the measurement period in accordance with SAB 118, and no material adjustment was recorded to the 2017 estimate.

The significant components of this expense include (i) the remeasurement of net deferred tax assets at the lower enacted U.S. federal corporate tax rate, (ii) the deemed repatriation tax on unremitted non-U.S. earnings and profits that were previously tax deferred and (iii) other miscellaneous tax impacts.

While the Company's accounting for the recorded impact of the 2017 Tax Act is deemed to be complete, these amounts are based on prevailing regulations and currently available information, and any additional guidance issued by the Internal Revenue Service ("IRS") or the results of an audit related to these items, could impact the Company's recorded amounts in future periods.

The Company's selection of an accounting policy with respect to both the new GILTI and BEAT rules is to compute the related taxes in the period the entity becomes subject to either. A reasonable estimate of the effects of these provisions has been included in the 2019 and 2018 annual financial statements.

No changes in indefinite reinvestment assertion were made during the year. The Company has completed its analysis in regard to the full tax impact related to prior changes in indefinite reinvestment reassertion and any related taxes have been recorded. No additional income taxes have been provided for any remaining outside basis difference inherent in the Company's foreign subsidiaries as these amounts continue to be indefinitely reinvested in foreign operations. Determination of any unrecognized deferred tax liability related to the outside basis difference in investments in foreign subsidiaries is not practicable due to the inherent complexity of the multi-national tax environment in which the Company operates.

The components of the Company's Provision for (benefit from) income taxes are as follows (in thousands):

	Year Ended December 31,				31,	
	-	2019		2018		2017
Current provision for (benefit from)						
Federal	\$	5,289	\$	2,771	\$	48,556
State		2,826		2,754		99
Foreign		18,938		18,933		12,643
Total current provision for (benefit from)		27,053		24,458		61,298
Deferred provision for (benefit from)						
Federal		2,515		(943)		14,441
State		118		(138)		707
Foreign		(4,009)		(6,894)		1,629
Total deferred provision for (benefit from)		(1,376)		(7,975)		16,777
Total provision for (benefit from) income taxes	\$	25,677	\$	16,483	\$	78,075

The following reconciles the Company's effective tax rate to the federal statutory rate (in thousands):

	Year Ended December 31,				
	2019	2018	2017		
Income tax per U.S. federal statutory rate (21%, 21%, 35%)	\$ 23,186	\$ 11,810	\$ 31,110		
State income taxes, net of federal deduction	3,144	2,003	460		
Change in valuation allowances	9,832	2,191	(924)		
Foreign income taxes at different rates than the U.S.	(3,356)	(3,758)	(14,417)		
Foreign withholding taxes	600	785	323		
Losses in international markets without tax benefits	(2,651)	(68)	1,098		
Nondeductible compensation under Section 162(m)	668	615	647		
Liabilities for uncertain tax positions	661	1,105	1,607		
Permanent difference related to foreign exchange gains	36	136	142		
(Income) losses of foreign branch operations	55	475	(824)		
Non-taxable earnings of noncontrolling interest	(1,294)	(594)	(1,030)		
Foreign dividend less foreign tax credits	(1,681)	(1,748)	(4,798)		
Decrease (increase) to deferred tax asset - change in tax rate	(2,848)	(1,944)	1,101		
State income tax credits	(1,176)	19	207		
Foreign earnings taxed currently in U.S.	2,172	3,976	3,143		
Taxes related to prior year filings	(1,643)	(1,659)	(865)		
Taxes related to acquisition accounting	978	2,110	_		
Transition tax	_	_	61,569		
Other	(1,006)	1,029	(474)		
Income tax per effective tax rate	\$ 25,677	\$ 16,483	\$ 78,075		
Effective tax rate percentage	23.30%	29.30%	87.80%		

The Company's deferred income tax assets and liabilities are summarized as follows (in thousands):

	Year Ended December 31			mber 31,
	2019			2018
Deferred tax assets, gross				,
Accrued workers compensation, deferred compensation and employee benefits	\$	7,999	\$	8,724
Allowance for doubtful accounts, insurance and other accruals		3,393		3,301
Amortization of deferred lease liabilities		25,757		2,614
Net operating losses		19,222		18,475
Equity compensation		1,442		1,348
Customer acquisition and deferred revenue accruals		9,047		13,894
Federal and state tax credits, net		1,263		549
Unrealized losses on derivatives		1,421		2,035
Impairment of equity investment		4,142		4,221
Partnership Investment		2,435		_
Other		1,322		1,001
Total deferred tax assets, gross		77,443		56,162
Valuation allowances		(17,051)		(10,867)
Total deferred tax assets, net		60,392		45,295
Deferred tax liabilities				
Depreciation and amortization		(6,095)		(15,547)
Unrealized gain on derivatives		(1,491)		
Contract acquisition costs		(5,740)		(8,519)
Intangible assets		(22,585)		(15,890)
Operating lease assets		(21,413)		
Other		(407)		(187)
Total deferred tax liabilities		(57,731)		(40,143)
Net deferred tax assets	\$	2,661	\$	5,152

Quarterly, the Company assesses the likelihood by jurisdiction that its net deferred tax assets will be recovered. Based on the weight of all available evidence, both positive and negative, the Company records a valuation allowance against deferred tax assets when it is more-likely-than-not that a future tax benefit will not be realized.

As of December 31, 2019 the Company had approximately \$3.9 million of net deferred tax liabilities in the U.S. and \$6.6 million of net deferred tax assets related to certain international locations whose recoverability is dependent upon their future profitability. As of December 31, 2019 the deferred tax valuation allowance was \$17.1 million and related primarily to tax losses in foreign jurisdictions which do not meet the "more-likely-than-not" standard under current accounting guidance.

When there is a change in judgment concerning the recovery of deferred tax assets in future periods, a valuation allowance is recorded into earnings during the quarter in which the change in judgment occurred. In 2019, the Company made adjustments to its deferred tax assets and corresponding valuation allowances. The net change to the valuation allowance consisted of the following: a \$4.6 million increase related to capital loss carry forwards and other credit carry forwards not expected to be utilized in Brazil and Canada, a \$2.7 million increase in valuation allowance in the United Kingdom, Ireland, Canada, Luxembourg, Turkey, the United States and Australia for deferred tax assets that do not meet the "more-likely-than-not" standard, and a \$1.1 million release of valuation allowance in Argentina, New Zealand, and the Netherlands and various other jurisdictions related to the utilization or write-off of deferred tax assets.

Activity in the Company's valuation allowance accounts consists of the following (in thousands):

	Year E	Year Ended December 31,					
	2019		2018		2017		
Beginning balance	\$ 10,867	\$	9,526	\$	9,949		
Additions of deferred income tax expense	7,373		2,913		2,044		
Reductions of deferred income tax expense	(1,189)		(1,572)		(2,467)		
Ending balance	\$ 17,051	\$	10,867	\$	9,526		

As of December 31, 2019, after consideration of all tax loss and tax credit carry back opportunities, the Company had tax affected tax loss carry forwards worldwide expiring as follows (in thousands):

2020	\$ 1,151
2021	5
2022	3
2023	1,105
After 2023	9,298
No expiration	7,660
Total	\$ 19,222

The Company has been granted "Tax Holidays" as an incentive to attract foreign investment by the governments of the Philippines and Costa Rica. Generally, a Tax Holiday is an agreement between the Company and a foreign government under which the Company receives certain tax benefits in that country, such as exemption from taxation on profits derived from export-related activities. In the Philippines, the Company has been granted multiple agreements, with an initial period of four years and additional periods for varying years, expiring at various times between 2020 and 2022. The aggregate benefit to income tax expense for the years ended December 31, 2019, 2018 and 2017 was approximately \$8.4 million, \$8.2 million and \$11.9 million, respectively, which had a favorable impact on diluted net income per share of \$0.18, \$0.18 and \$0.26, respectively.

Accounting for Uncertainty in Income Taxes

In accordance with ASC 740, the Company has recorded a reserve for uncertain tax positions. The total amount of interest and penalties recognized in the accompanying Consolidated Balance Sheets and Consolidated Statements of Comprehensive Income (Loss) as of December 31, 2019, 2018 and 2017 was approximately \$2.1 million, \$1.4 million and \$1.8 million, respectively.

The Company had a reserve for uncertain tax benefits, on a net basis, of \$4.8 million and \$4.8 million for the years ended December 31, 2019 and 2018, respectively. The liability for uncertain tax positions was unchanged during 2019.

The tabular reconciliation of the reserve for uncertain tax benefits on a gross basis without interest for the three years ended December 31, 2019 is presented below (in thousands):

Balance as of December 31, 2016	\$ 2,382
Additions for current year tax positions	916
Reductions in prior year tax positions	_
Balance as of December 31, 2017	3,298
Additions for current year tax positions	3,600
Reductions in prior year tax positions	(2,114)
Balance as of December 31, 2018	4,784
Additions for current year tax positions	_
Reductions in prior year tax positions	_
Balance as of December 31, 2019	\$ 4,784

At December 31, 2019, the amount of uncertain tax benefits including interest, that, if recognized, would reduce tax expense was \$6.8 million. Within the next 12 months, it is expected that the amount of unrecognized tax benefits may be reduced by \$1.4 million as a result of the expiration of various statutes of limitation or other confirmations of tax positions.

In accordance with ASC 740, during the second quarter of 2018, \$1.1 million of liability was released due to the closing of statues of limitations. During the third quarter of 2018, \$2.0 million of liability was released due to the closing of statutes of limitations and changes calculated as allowed under SAB 118 related to the 2017 Tax Act. During the fourth quarter of 2018, the Company recorded liabilities of \$3.6 million related to new uncertain tax positions.

The Company and its domestic and foreign subsidiaries (including Percepta LLC and its domestic and foreign subsidiaries) file income tax returns as required in the U.S. federal jurisdiction and various state and foreign jurisdictions. The following table presents the major tax jurisdictions and tax years that are open as of December 31, 2019 and subject to examination by the respective tax authorities:

Tax Jurisdiction	Tax Year Ended
United States	2016 to present
Australia	2015 to present
Brazil	2014 to present
Canada	2011 to present
Mexico	2014 to present
Philippines	2016 to present

The Company's U.S. income tax returns filed for the tax years ending December 31, 2016 to present, remain open tax years. The Company has been notified of the intent to audit, or is currently under audit of, income taxes for the United States for tax year 2017, Canada for tax years 2009 and 2010, and the state of New York for tax years 2015 through 2017. Although the outcome of examinations by taxing authorities are always uncertain, it is the opinion of management that the resolution of these audits will not have a material effect on the Company's Consolidated Financial Statements.

(11) RESTRUCTURING CHARGES, INTEGRATION CHARGES AND IMPAIRMENT LOSSES

Restructuring Charges

During the years ended December 31, 2019, 2018 and 2017, the Company continued restructuring activities primarily associated with reductions in the Company's capacity, workforce and related management in both segments to better align the capacity and workforce with current business needs.

During 2017, several restructuring activities were completed related to an acquisition including the closure of two delivery centers that came with the acquisition. During 2017, a net \$0.4 million severance accrual was recorded in relation to these closures. In conjunction with closing these two delivery centers, a \$0.6 million termination fee and a \$1.4 million net lease liability and applicable expenses were recorded as of December 31, 2017. These net charges were included in the Consolidated Statements of Comprehensive Income (Loss) during the year ended December 31, 2017. During 2018, in connection with one of these delivery centers, an early termination option was exercised and a \$1.9 million fee was expensed and recorded in Restructuring, net in the Consolidated Statements of Comprehensive Income (Loss).

During 2018, TTEC determined it would close several other delivery centers in the Engage segment and a net \$2.9 million was expensed related to early termination fees and cease use lease accruals. These expenses are included in the Restructuring and integration charges, net in the Consolidated Statements of Comprehensive Income (Loss) as of December 31, 2018.

A summary of the expenses recorded for restructuring and included in Restructuring and integration charges, net in the accompanying Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2019, 2018 and 2017, respectively, is as follows (in thousands):

		Year Ended December 31,						
	2	2019		2018		2017		
Reduction in force			-					
TTEC Digital	\$	141	\$	133	\$	149		
TTEC Engage		894		694		1,012		
Total	\$	1,035	\$	827	\$	1,161		

		Year Ended December 31,						
	2	2019		2018	2017			
Facility exit and other charges					-			
TTEC Digital	\$	41	\$		\$	169		
TTEC Engage		671		5,304		2,050		
Total	\$	712	\$	5,304	\$	2,219		

A rollforward of the activity in the Company's restructuring accruals for the years ended December 31, 2019 and 2018, respectively, is as follows (in thousands):

	 eduction in Force	Facility Exit and Other Charges		 Total
Balance as of December 31, 2017	\$ 694	\$	1,409	\$ 2,103
Expense	1,021		5,303	6,324
Payments	(937)		(3,480)	(4,417)
Changes due to foreign currency	(169)		(6)	(175)
Changes in estimates	(193)		<u> </u>	(193)
Balance as of December 31, 2018	416		3,226	3,642
Expense	1,039		712	1,751
Payments	(1,145)		(962)	(2,107)
Changes due to foreign currency	(55)		15	(40)
Changes in estimates	(4)		_	(4)
Reclassifications due to ASU 842 implementation	_		(2,917)	(2,917)
Balance as of December 31, 2019	\$ 251	\$	74	\$ 325

The remaining restructuring accruals are expected to be paid or extinguished during 2020 and are all classified as current liabilities within Other accrued expenses in the Consolidated Balance Sheets.

Integration Charges

During the third and fourth quarters of 2017, as a result of the Connextions acquisition, certain integration activities were completed and \$5.6 million and \$3.9 million of additional expenses were incurred and paid, respectively. These integration activities included the hiring, training and licensing of a group of employees at new delivery centers as one of the acquired centers was closed during the third quarter of 2017 and one of the acquired centers was closed during the fourth quarter of 2017. In connection with these center closures, leasehold improvements of \$3.5 million were written off as a related integration expense. The Company has also incurred significant expenses related to the integration of the IT systems and has paid duplicative software costs and facilities expenses for several areas during the transition period.

Impairment Losses

During each of the periods presented, the Company evaluated the recoverability of its leasehold improvement assets at certain customer engagement centers. An asset is considered to be impaired when the anticipated undiscounted future cash flows of its asset group are estimated to be less than the asset group's carrying value. The amount of impairment recognized is the difference between the carrying value of the asset group and its fair value. To determine fair value, the Company used Level 3 inputs in its discounted cash flows analysis. Assumptions included the amount and timing of estimated future cash flows and assumed discount rates. During 2019, 2018 and 2017, the Company recognized impairment losses related to leasehold improvement assets of zero, \$1.1 million and zero, respectively, in its Engage segment.

(12) INDEBTEDNESS

Credit Facility

On February 14, 2019, the Company entered into a Fourth Amendment to its Amended and Restated Credit Agreement and Amended and Restated Security Agreement originally dated as of June 3, 2013 (collectively the "Credit Agreement") for a senior secured revolving credit facility with a syndicate of lenders led by Wells Fargo Bank, National Association, as agent, swing line and fronting lender (the "Credit Facility"). The amended Credit Agreement provides for a secured revolving Credit Facility that matures on February 14, 2024.

Other than the extension of the Credit Facility's maturity date and a few material terms outlined below, the material terms of the Credit Facility, including pricing and collateral, are substantially the same as those previously disclosed as part of the Company's <u>Annual Report on Form 10-K</u> for the period ended December 31, 2015 ("2016 Credit Facility").

The maximum commitment under the Credit Facility is \$900.0 million with an accordion feature of up to \$1.2 billion in the aggregate, if certain conditions are satisfied. The Credit Facility commitment fees are payable to the lenders in an amount equal to the unused portion of the Credit Facility multiplied by a rate per annum as determined by reference to the Company's net leverage ratio. The Credit Agreement contains customary affirmative, negative, and financial covenants, which remained unchanged from the 2016 Credit Facility, except that the Company is now obligated to maintain a maximum net leverage ratio of 3.50 to 1.00, and a minimum Interest Coverage Ratio of 2.50 to 1.00. The Credit Agreement permits accounts receivable factoring up to the greater of \$75 million or 25 percent of the average book value of all accounts receivable over the most recent twelve month period.

Base rate loans bear interest at a rate equal to the greatest of (i) Wells Fargo's prime rate, (ii) one half of 1% in excess of the federal funds effective rate, and (iii) 1.25% in excess of the one month London Interbank Offered Rate ("LIBOR"); plus in each case a margin of 0% to 0.75% based on the Company's net leverage ratio. Eurodollar loans bear interest at LIBOR plus a margin of 1.0% to 1.75% based on the Company's net leverage ratio. Alternate currency loans bear interest at rates applicable to their respective currencies.

Letter of credit fees are one eighth of 1% of the stated amount of the letter of credit on the date of issuance, renewal or amendment, plus an annual fee equal to the borrowing margin for Eurodollar loans.

The Company primarily utilizes its Credit Agreement to fund working capital, general operations, dividends, and other strategic activities, such as the acquisitions described in Note 2. As of December 31, 2019, and 2018, the Company had borrowings of \$290.0 million and \$282.0 million, respectively, under its Credit Agreement, and its average daily utilization was \$331.8 million and \$514.7 million for the years ended December 31, 2019 and 2018, respectively. Based on the current level of availability based on the covenant calculations, the Company's remaining borrowing capacity was approximately \$530.0 million as of December 31, 2019. As of December 31, 2019, the Company was in compliance with all covenants and conditions under its Credit Agreement.

(13) COMMITMENTS AND CONTINGENCIES

Letters of Credit

As of December 31, 2019, outstanding letters of credit under the Credit Agreement totaled \$3.1 million and primarily guaranteed workers' compensation and other insurance related obligations. As of December 31, 2019, letters of credit and contract performance guarantees issued outside of the Credit Agreement totaled \$0.5 million.

Guarantees

Indebtedness under the Credit Agreement is guaranteed by certain of the Company's present and future domestic subsidiaries.

Legal Proceedings

From time to time, the Company has been involved in legal actions, both as plaintiff and defendant, which arise in the ordinary course of business. The Company accrues for exposures associated with such legal actions to the extent that losses are deemed both probable and reasonably estimable. To the extent specific reserves have not been made for certain legal proceedings, their ultimate outcome, and consequently, an estimate of possible loss, if any, cannot reasonably be determined at this time.

Based on currently available information and advice received from counsel, the Company believes that the disposition or ultimate resolution of any current legal proceedings, except as otherwise specifically reserved for in its financial statements, will not have a material adverse effect on the Company's financial position, cash flows or results of operations.

(14) DEFERRED REVENUE AND COSTS

Deferred revenue in the accompanying Consolidated Balance Sheets consist of the following (in thousands):

	December 31,			
	 2019		2018	
Deferred Revenue - Current	\$ 39,447	\$	44,926	
Deferred Revenue - Long-term (included in Other long-term liabilities)	23,142		33,247	
Total Deferred Revenue	\$ 62,589	\$	78,173	

Deferred costs in the accompanying Consolidated Balance Sheets consist of the following (in thousands):

	December 31,			
	2019		2018	
Deferred Costs - Current (included in Prepaids and other current assets)	\$ 26,092	\$	23,539	
Deferred Costs - Long-term (included in Other long-term assets)	25,436		34,042	
Total Deferred Costs	\$ 51,528	\$	57,581	

Activity in the Company's Deferred revenue accounts consists of the following (in thousands):

Balance as of December 31, 2018	\$ 78,173	
Additions	139,021	
Amortization	(154,605))
Balance as of December 31, 2019	\$ 62,589	

(15) LEASES

The Company adopted ASU 842, Leases, as of January 1, 2019 using the effective date as the date of initial application. As a result, prior year financials were not recast under the new standard and therefore, those amounts are not presented.

Operating leases are included in our Consolidated Balance Sheet as Operating lease assets, Current operating lease liabilities and Non-current operating lease liabilities. Finance leases are included in Property, plant and equipment, Other current liabilities and Other long-term liabilities in our Consolidated Balance Sheet. The Company primarily leases real estate and equipment under various arrangements that provide the Company the right-of-use for the underlying asset that require lease payments over the lease term. The Company determines the value of each lease by computing the present value of each lease payment using the interest rate implicit in the lease, if available; otherwise the Company estimates its incremental borrowing rate over the lease term. The Company determines its incremental borrowing rate based on its estimated credit risk with adjustments for each individual leases' geographical risk and lease term. Operating lease assets also include prepaid rent, initial direct costs less any tenant improvements.

The Company's real estate portfolio typically includes one or more options to renew, with renewal terms that generally can extend the lease term from one to 10 years. The exercise of these lease renewal options is at the Company's discretion and is included in the lease term only if the Company is reasonably certain to exercise. The Company also has service arrangements whereby it controls specific space provided by a third-party service provider. These arrangements meet the definition of a lease and are accounted for under ASC 842. Lease expense for operating leases is recognized on a straight-line basis over the lease term and is included in the Consolidated Statements of Comprehensive Income (Loss). The Company's lease agreements do not contain any material residual value guarantees or restrictive guarantees.

The components of lease expense for the year ended December 31, 2019 are as follows (in thousands):

Description	Location in Statements of Comprehensive Income (Loss)	 ır Ended ber 31, 2019
Amortization of ROU assets - finance leases	Depreciation and amortization	\$ 7,157
Interest on lease liabilities - finance leases	Interest expense	141
Operating lease cost (cost resulting from lease		
payments)	Cost of services	47,269
Operating lease cost (cost resulting from lease		
payments)	Selling, general and administrative	3,731
Operating lease cost (cost resulting from lease		
payments)	Other income (expense), net	968
Short-term lease cost	Cost of services	4,338
Less: Sublease income	Selling, general and administrative	(445)
Less: Sublease income	Other income (expense), net	(1,984)
Total lease cost	,	\$ 61,175

Other supplementary information for the year ended December 31, 2019 are as follows (dollar values in thousands):

		Ended er 31, 2019
Finance lease - operating cash flows	\$	103
Finance lease - financing cash flows	\$	10,251
Operating lease - operating cash flows (fixed payments)	\$	51,898
New ROU assets - operating leases	\$	15,494
Modified ROU assets - operating leases	\$	46,543
New ROU assets - finance leases	\$	6,133
	Decemb	er 31, 2019
Weighted average remaining lease term - finance leases		2.91 yrs
Weighted average remaining lease term - operating leases		4.27 yrs
Weighted average discount rate - finance leases		1.43%
Weighted average discount rate - operating leases		7.22%

Operating and financing lease right-of-use assets and lease liabilities within our Consolidated Balance Sheet as of December 31, 2019 and January 1, 2019 (date of adoption of ASU 842) are as follows (in thousands):

					ıary 1, 2019
Description	Location in Balance Sheet	Decen	December 31, 2019		of adoption)
Assets			_		
Operating lease assets	Operating lease assets	\$	150,808	\$	129,894
Finance lease assets	Property, plant and equipment, net		18,016		18,261
Total leased assets		\$	168,824	\$	148,155
<u>Liabilities</u>					
Current					
Operating	Current operating lease liabilities	\$	45,218	\$	35,535
Finance	Other current liabilities		7,470		8,770
Non-current					
Operating	Non-current operating lease liabilities		127,395		112,754
Finance	Other long-term liabilities		8,896		10,765
Total lease liabilities		\$	188,979	\$	167,824

The future minimum operating lease and finance lease payments required under non-cancelable leases as of December 31, 2019 are as follows (in thousands):

	Operating Leases	Sub-lease Income	Finance Leases
Year 1	\$ 54,903	\$ (2,976)	\$ 7,594
Year 2	47,892	(621)	5,587
Year 3	43,590	(345)	2,139
Year 4	28,124	(201)	1,109
Year 5	14,494	_	331
Thereafter	14,734	_	_
Total minimum lease payments	\$ 203,737	\$ (4,143)	\$ 16,760
Less imputed interest	(31,124)		(394)
Total lease liability	\$ 172,613		\$ 16,366

The future minimum rental and capital lease payments under non-cancelable leases as of December 31, 2018 are as follows (in thousands):

	Operating Leases	Sub-lease Income	Capital Leases
Year 1	\$ 47,379	\$ (2,624)	\$ 8,770
Year 2	36,045	(2,631)	5,548
Year 3	30,678	(276)	3,798
Year 4	26,584	_	1,005
Year 5	17,226	_	414
Thereafter	25,362	_	_
Total minimum lease payments	\$ 183,274	\$ (5,531)	\$ 19,535
Less imputed interest			
Total lease liability			\$ 19,535

In 2008, the Company sub-leased one of its customer engagement centers to a third party for the remaining term of the original lease. The sub-lease began on January 1, 2009 and rental income is recognized on a straight-line basis over the term of the sub-lease through 2021. In 2017, the Company sub-leased one of its office spaces for the remaining term of the original lease. The sub-lease began on November 6, 2017 and ends May 31, 2021. In 2019, the Company sub-leased one of its office spaces for the remaining term of the original lease. The sub-lease began on March 1, 2019 and ends July 31, 2023.

Asset Retirement Obligations

The Company records asset retirement obligations ("ARO") for several of its customer engagement center leases. Capitalized costs related to ARO's are included in Other long-term assets in the accompanying Consolidated Balance Sheets while the ARO liability is included in Other long-term liabilities in the accompanying Consolidated Balance Sheets. Following is a summary of the amounts recorded (in thousands):

	 llance at ember 31, 2018		ions and	Accretion Settlements				Balance at December 31, 2019		
ARO liability total	\$ 2,482	\$	788	\$	26	\$	(292)	\$	3,004	
	 Balance at December 31, 2017		Additions and Modifications		Accretion		lements	Balance at December 31, s 2018		
ARO liability total	\$ 1,938	\$	1,153	\$	14	\$	(623)	\$	2,482	

Increases to ARO result from a new lease agreement or modifications on an ARO from a preexisting lease agreement. Modifications to ARO liabilities and accumulated accretion occur when lease agreements are amended or when assumptions change, such as the rate of inflation. Modifications are accounted for prospectively as changes in estimates. Settlements occur when leased premises are vacated and the actual cost of restoration is paid. Differences between the actual costs of restoration and the balance recorded as ARO liabilities are recognized as gains or losses in the accompanying Consolidated Statements of Comprehensive Income (Loss).

(16) OTHER LONG-TERM LIABILITIES

The components of Other long-term liabilities as of December 31, 2019 and 2018 are as follows (in thousands):

	December 31, 2019			December 31, 2018		
Deferred revenue	\$	23,142	\$	33,247		
Deferred compensation plan		20,370		14,836		
Payable for remaining portion of acquisition		_		37,756		
Other		36,129		40,693		
Total	\$	79,641	\$	126,532		

(17) ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The following table presents changes in the accumulated balance for each component of Other comprehensive income (loss), including current period other comprehensive income (loss) and reclassifications out of accumulated other comprehensive income (loss) (in thousands):

	Foreign Currency Translation Adjustment		Currency Derivative Translation Valuation, Net		Other, Net of Tax		Totals
Accumulated other comprehensive income (loss) at December 31, 2016	\$	(92,008)	\$	(32,393)	\$	(2,563)	\$ (126,964)
Other comprehensive income (loss) before reclassifications Amounts reclassified from accumulated other comprehensive income (loss)		7,908		31,053 (14,406)		575 (470)	39,536 (14,876)
Net current period other comprehensive (income) loss		7,908		16,647		105	24,660
Accumulated other comprehensive income (loss) at December 31, 2017	\$	(84,100)	\$	(15,746)	\$	(2,458)	\$ (102,304)
Accumulated other comprehensive income (loss) at December 31, 2017	\$	(84,100)	\$	(15,746)	\$	(2,458)	\$ (102,304)
Other comprehensive income (loss) before reclassifications Amounts reclassified from accumulated other comprehensive income		(30,068)		20,278		712	(9,078)
(loss) Net current period other comprehensive income (loss)		(30,068)		12,810) 7,468	_	(404) 308	(13,214) (22,292)
Accumulated other comprehensive income (loss) at December 31, 2018	\$	(114,168)	\$	(8,278)	\$	(2,150)	\$ (124,596)
Accumulated other comprehensive income (loss) at December 31, 2018	\$	(114,168)	\$	(8,278)	\$	(2,150)	\$ (124,596)
Other comprehensive income (loss) before reclassifications Amounts reclassified from accumulated other comprehensive income		6,688		15,545		(588)	21,645
(loss) Net current period other comprehensive income (loss)		6,688		(3,085) 12,460		(198) (786)	(3,283) 18,362
Accumulated other comprehensive income (loss) at December 31, 2019	\$	(107,480)	\$	4,182	\$	(2,936)	\$ (106,234)

The following table presents the classification and amount of the reclassifications from Accumulated other comprehensive income (loss) to the Statement of Comprehensive Income (Loss) (in thousands):

	F	or the Ye	ar E	Statement of Comprehensive Income			
		2019 2018 2017		(Loss) Classification			
Derivative valuation							
Loss on foreign currency forward exchange contracts	\$	(4,228)	\$	(17,548)	\$ ((22,792)	Revenue
Loss on interest rate swaps		_		_		(115)	Interest expense
Tax effect		1,143		4,738		8,501	Provision for income taxes
	\$	(3,085)	\$	(12,810)	\$ ((14,406)	Net income (loss)
Other							
Actuarial loss on defined benefit plan	\$	(221)	\$	(446)	\$	(522)	Cost of services
Tax effect		23		42		52	Provision for income taxes
	\$	(198)	\$	(404)	\$	(470)	Net income (loss)

(18) NET INCOME PER SHARE

The following table sets forth the computation of basic and diluted shares for the periods indicated (in thousands):

	Year Ended December 31,			
	2019	2018	2017	
			45.000	
Shares used in basic earnings per share calculation	46,373	46,064	45,826	
Effect of dilutive securities:				
Stock options	_	6	10	
Restricted stock units	349	314	536	
Performance-based restricted stock units	36	1	10	
Total effects of dilutive securities	385	321	556	
Shares used in dilutive earnings per share calculation	46,758	46,385	46,382	

For the years ended December 31, 2019, 2018 and 2017, there were no options to purchase shares of common stock or performance-based restricted stock that were outstanding but not included in the computation of diluted net income per share because the exercise price exceeded the value of the shares and the effect would have been anti-dilutive. For the years ended December 31, 2019, 2018 and 2017, restricted stock units of 28 thousand, 212 thousand, and 21 thousand, respectively, were outstanding but not included in the computation of diluted net income per share because the effect would have been anti-dilutive.

(19) EMPLOYEE COMPENSATION PLANS

Employee Benefit Plan

The Company currently has a 401(k) profit-sharing plan that allows participation by U.S. employees who have completed six months of service, as defined, and are 21 years of age or older. Participants may defer up to 75% of their gross pay, up to a maximum limit determined by U.S. federal law. Participants are also eligible for a matching contribution. The Company may from time to time, at its discretion, make a "matching contribution" based on the amount and rate of the elective deferrals. The Company determines how much, if any, it will contribute for each dollar of elective deferrals. Participants vest in matching contributions over a three-year period. Company matching contributions to the 401(k) plan(s) totaled \$6.7 million, \$5.2 million and \$5.7 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Equity Compensation Plans

In May 2010, the Company adopted the TeleTech Holdings, Inc. 2010 Equity Incentive Plan, renamed TTEC Holdings, Inc. 2010 Incentive Plan in 2018 (the "2010 Plan"). An aggregate of 4.0 million shares of common stock has been reserved for issuance under the 2010 Plan, which permits the award of incentive stock options, non-qualified stock options, stock appreciation rights, shares of restricted common stock and RSUs. The 2010 Plan also provides for annual equity-based compensation grants to members of the Company's Board of Directors. Options granted to employees generally vest over four to five years and have a contractual life of ten years. Options issued to Directors vest over one year and have a contractual life of ten years. As of December 31, 2019, a total of 4.0 million shares were authorized and 1.1 million shares were available for issuance under the 2010 Plan. The 2010 Plan expires in 2020 and additional shares cannot be issued under the plan starting March 30, 2020.

In February 2020, the Company adopted the TTEC Holdings, Inc., 2020 Equity Incentive Plan (the "2020 Plan"), which permits awards of incentive stock options, non-qualified stock options, stock appreciation rights, shares of restricted common stock, performance stock units and restricted stock units. The 2020 Plan will also provide for annual equity-based compensation grants to members of the Company's Board of Directors. Options granted to employees under the 2020 Plan generally vest over three to five years and have a contractual life of ten years. Options issued to Directors vest over one year and have a contractual life of ten years. As part of the 2020 Annual Stockholder Meeting, the Company plans to seek shareholder approval for the 2020 Plan, including 4.0 million shares of common stock to be reserved for issuance under the Plan.

For the years ended December 31, 2019, 2018, and 2017, the Company recorded total equity-based compensation expense under all equity-based arrangements (stock options and RSUs) of \$12.8 million, \$12.1 million and \$11.9 million, respectively. For 2019, 2018 and 2017, of the total compensation expense, \$4.7 million, \$4.7 million and \$4.1 million was recognized in Cost of services and \$8.1 million, \$7.4 million and \$7.8 million, was recognized in Selling, general and administrative in the Consolidated Statements of Comprehensive Income (Loss), respectively. For the years ended December 31, 2019, 2018, and 2017, the Company recognized a tax benefit under all equity-based arrangements (stock options and RSUs) of \$4.2 million, \$3.7 million and \$6.8 million, respectively.

Restricted Stock Units

2017, 2018 and 2019 RSU Awards: The Company granted RSUs in 2017, 2018 and 2019 to new and existing employees that vest over four or five years. The Company also granted RSUs in 2017, 2018 and 2019 to members of the Board of Directors that vest over one year.

During 2015, the Company granted performance-based RSUs to an executive the amount of which is determinable based on a reporting segment of the Company achieving incremental operating income for each year from 2015-2017. During 2015 and 2016, based on operating income performance for reporting segment of the Company, approximately \$0.4 million and \$0.1 million of RSUs were earned. These RSUs were granted in March 2016 and March 2017, respectively, and will vest 12 months from the grant date. During 2017, the Company cancelled the 2017 performance grant.

Summary of RSUs: Settlement of the RSUs shall be made in shares of the Company's common stock by delivery of one share of common stock for each RSU then being settled. The Company calculates the fair value for RSUs based on the closing price of the Company's stock on the date of grant and records compensation expense over the vesting period using a straight-line method. The Company factors an estimated forfeiture rate in calculating compensation expense on RSUs and adjusts for actual forfeitures upon the vesting of each tranche of RSUs. The Company also factors in the present value of the estimated dividend payments that will have accrued as these RSUs are vesting.

The weighted average grant-date fair value of RSUs, including performance-based RSUs, granted during the years ended December 31, 2019, 2018, and 2017 was \$40.10, \$35.15, and \$29.56, respectively. The total intrinsic value and fair value of RSUs vested during the years ended December 31, 2019, 2018, and 2017 was \$12.5 million, \$12.5 million, and \$10.6 million, respectively.

Performance Based Restricted Stock Unit Grants

During the quarter ended June 30, 2019, the Company awarded performance restricted stock units ("PRSUs") that are subject to service and performance vesting conditions. If defined minimum targets are met, the annual value of the PRSUs issued will be between \$0.4 million and \$1.4 million and vest immediately. If the defined minimum targets are not met, then no shares will be issued. The award amounts are based on the Company's annual adjusted operating income for the fiscal years 2019, 2020 and 2021. Each fiscal year's adjusted operating income will determine the award amount. The Company recognized compensation expense related to PRSUs of \$1.4 million for the year ended December 31, 2019.

A summary of the status of the Company's non-vested RSUs and performance-based RSUs and activity for the year ended December 31, 2019 is as follows:

	Shares	Av Gra	eighted verage ant Date ir Value
Unvested as of December 31, 2018	1,141,438	\$	30.78
Granted	150,070	\$	40.10
Vested	(425,456)	\$	29.41
Cancellations/expirations	(97,580)	\$	32.72
Unvested as of December 31, 2019	768,472	\$	33.11

All RSUs vested during the year ended December 31, 2019 were issued out of treasury stock. As of December 31, 2019, there was approximately \$16.5 million of total unrecognized compensation expense and approximately \$30.4 million in total intrinsic value related to non-vested RSU grants. The unrecognized compensation expense will be recognized over the remaining weighted-average vesting period of 1.3 years using the straight-line method.

Stock Options

There were no stock options granted during 2019, 2018 or 2017. The total intrinsic value of options exercised during the years ended December 31, 2019, 2018 and 2017 was zero, \$156 thousand and \$194 thousand, respectively. The total fair value of stock options vested during the years ended December 31, 2019, 2018 and 2017 was zero, respectively.

Cash received from option exercises under the Plans for the years ended December 31, 2019, 2018 and 2017 was zero, \$0.2 million and \$2.1 million, respectively. The recognized tax benefit from option exercises for the years ended December 31, 2019, 2018 and 2017 was zero, \$0.0 million and \$0.0 million, respectively.

(20) STOCK REPURCHASE PROGRAM

Stock Repurchase Program

The Company has a stock repurchase program, which was initially authorized by the Company's Board of Directors in November 2001. As of December 31, 2019, the cumulative authorized repurchase allowance was \$762.3 million. During the year ended December 31, 2019, the Company purchased no additional shares. Since inception of the program, the Company has purchased 46.1 million shares for \$735.8 million. As of December 31, 2019, the remaining allowance under the program was approximately \$26.6 million. For the period from January 1, 2019 through February 28, 2020, the Company did not purchase additional shares. The stock repurchase program does not have an expiration date.

(21) RELATED PARTY TRANSACTIONS

The Company entered into an agreement under which Avion, LLC ("Avion") and Airmax LLC ("Airmax") provide certain aviation flight services as requested by the Company. Such services include the use of an aircraft and flight crew. Kenneth D. Tuchman, Chairman and Chief Executive Officer of the Company, has a direct 100% beneficial ownership interest in Avion and Airmax. During 2019, 2018 and 2017, the Company expensed \$1.1 million, \$1.1 million and \$1.1 million, respectively, to Avion and Airmax for services provided to the Company. There was \$200 thousand in payments due and outstanding to Avion and Airmax as of December 31, 2019.

During 2014, the Company entered into a vendor contract with Convercent Inc. to provide learning management and web and telephony based global helpline solutions. This contract was renewed, after an arms-length market pricing review, in the fourth quarter of 2019. A minority owner of Convercent is a company which is owned and controlled by Kenneth D. Tuchman, Chairman and Chief Executive Officer of the Company. During 2019, 2018 and 2017, the Company expensed \$60 thousand, \$60 thousand and \$70 thousand, respectively, to Convercent.

During 2015, the Company entered into a contract to purchase software from CaféX, in which the Company holds a 17.8% equity investment. During 2019, 2018 and 2017, the Company purchased \$50 thousand, \$61 thousand and \$72 thousand, respectively, of software from CaféX. See Note 2 for further information regarding this investment

Ms. Regina M. Paolillo, Chief Financial and Administrative Officer of the Company, is a member of the board of directors of Welltok, Inc., a consumer health SaaS company, and partner of the Company in a joint venture. During the years ended December 31, 2019, 2018 and 2017, the Company recorded revenue of \$5.3 million, \$5.7 million and \$5.5 million, respectively, in connection with work performed through the joint venture.

(22) OTHER FINANCIAL INFORMATION

Self-insurance liabilities of the Company which are included in Accrued employee compensation and benefits and Other accrued expenses in the accompanying Consolidated Balance Sheets were as follows (in thousands):

	Decem	December 31,		
	2019	2018		
Employee health and dental insurance	\$ 5,871	\$ 3,987		
Workers compensation	1,791	1,802		
Total self-insurance liabilities	\$ 7,662	\$ 5,789		

(23) QUARTERLY FINANCIAL DATA (UNAUDITED)

The following tables present certain quarterly financial data for the year ended December 31, 2019 (in thousands except per share amounts).

	 First Quarter	Second Quarter	 Third Quarter	Fourth Quarter
Revenue	\$ 394,356	\$ 392,515	\$ 395,507	\$ 461,326
Cost of services	293,334	299,237	304,622	345,694
Selling, general and administrative	49,720	50,864	48,062	53,894
Depreciation and amortization	16,743	17,050	16,659	18,634
Restructuring and integration charges, net	961	428	183	175
Impairment losses	1,506	2,063	_	166
Income from operations	32,092	22,873	25,981	42,763
Other income (expense)	(4,150)	(1,914)	(806)	(6,428)
Provision for income taxes	(7,466)	(7,345)	(5,196)	(5,670)
Non-controlling interest	(1,474)	(1,816)	(1,878)	(2,402)
Net income attributable to TTEC stockholders	\$ 19,002	\$ 11,798	\$ 18,101	\$ 28,263
Weighted average shares outstanding				
Basic	46,203	46,318	46,481	46,487
Diluted	46,590	46,684	46,768	46,831
Net income per share attributable to TTEC stockholders				
Basic	\$ 0.41	\$ 0.25	\$ 0.39	\$ 0.61
Diluted	\$ 0.41	\$ 0.25	\$ 0.39	\$ 0.60

Included in Other income (expense) in the second quarter is a \$2.4 million benefit related to the fair value adjustment of contingent consideration for an acquisition.

Included in Other income (expense) in the third quarter is a \$1.4 million benefit on recovery of receivables in connection with the consulting business that is being wound down and a \$0.7 million benefit on the sale of trademarks.

Included in Other Income (expense) for each of the quarters is an interest expense charge related to the future purchase for the remaining 30% of the Motif acquisition - \$1.3 million, \$0.5 million, \$0.8 million and \$2.1 million in the first, second, third and fourth quarters, respectively.

Included in the Provision for Income Taxes is: a \$0.2 million expense in the fourth quarter, a \$0.2 million expense in the third quarter, a \$0.1 million expense in the second quarter, and a \$0.2 million expense in the first quarter related to changes in tax contingent liabilities; a \$1.6 million benefit in the fourth quarter, a \$0.2 million benefit in the third quarter, a \$0.1 million benefit in the second quarter and a \$0.1 million expense in the first quarter related to return to provision adjustments; a \$2.8 million benefit in the fourth quarter related to tax rate changes; a \$2.2 million expense in the fourth quarter, and a \$2.3 million expense in the second quarter related to changes in valuation allowances; a \$0.2 million benefit in the second quarter and a \$0.7 million benefit in the first quarter related to restructuring charges; and a \$0.1 million benefit in the fourth quarter, a \$0.2 million expense in the third quarter, a \$0.1 million expense in the second quarter, and a \$0.1 million expense in the first quarter of other items. Without these items our effective tax rate for the year ended December 31, 2019 would have been 22.9%.

The following tables present certain quarterly financial data for the year ended December 31, 2018 (in thousands except per share amounts).

	_(First Quarter	Second Quarter	 Third Quarter	Fourth Quarter
Revenue	\$	375,249	\$ 349,853	\$ 364,936	\$ 419,133
Cost of services		283,370	274,260	286,925	313,372
Selling, general and administrative		47,045	44,245	43,321	47,817
Depreciation and amortization		17,924	16,811	17,317	17,127
Restructuring and integration charges, net		849	1,034	2,716	1,532
Impairment losses		1,120	_		332
Income from operations		24,941	13,503	14,657	 38,953
Other income (expense)		(16,907)	(6,553)	(6,020)	(6,336)
Provision for income taxes		(2,102)	(653)	(1,893)	(11,835)
Non-controlling interest		(1,341)	(779)	(1,369)	(449)
Net income (loss) attributable to TTEC stockholders	\$	4,591	\$ 5,518	\$ 5,375	\$ 20,333
Weighted average shares outstanding					
Basic		45,871	46,016	46,172	46,193
Diluted		46,452	46,401	46,316	46,390
Net income per share attributable to TTEC stockholders					
Basic	\$	0.10	\$ 0.12	\$ 0.12	\$ 0.44
Diluted	\$	0.10	\$ 0.12	\$ 0.12	\$ 0.44

Included in Other income (expense) in the first quarter is a \$15.6 million expense related to the impairment of the full value of an equity investment and related bridge loan. Also included is a \$0.7 million gain on the purchase of an acquisition.

Included in Other income (expense) in the second quarter and fourth quarter was a \$2.0 million loss and a \$0.4 million gain, respectively, related to a business unit which was classified as assets held for sale but subsequently reclassified to assets held and used.

Included in Other Income (expense) for each of the quarters is an interest expense charge related to the future purchase for the remaining 30% of the Motif acquisition - \$1.9 million, \$3.1 million, \$3.0 million and \$1.9 million in the first, second, third and fourth quarters, respectively.

Included in the Provision for Income Taxes is a \$3.6 million expense in the fourth quarter, a \$1.1 million benefit in the third quarter, a \$1.0 million benefit in the second quarter related to changes in tax contingent liabilities, a \$3.0 million benefit in the fourth quarter, a \$0.2 million expense in the third quarter, a \$0.5 million benefit in the second quarter related to return to provision adjustments, a \$4.2 million benefit in the first quarter related to impairment of an equity investment, a \$0.2 million expense in the first quarter, \$0.1 million of expense in the second quarter, \$0.1 million of expense in the fourth quarter related to the disposition of assets, a \$1.5 million expense in the fourth quarter related to changes in valuation allowances, a \$0.1 million benefit in the first quarter, a \$0.2 million benefit in the second quarter and a \$0.4 million benefit in the third quarter, a \$0.7 million benefit in the third quarter, a \$0.2 million benefit in the second quarter, a \$0.6 million benefit in the first quarter related to restructuring charges, a \$0.9 million benefit in the fourth quarter, \$0.1 million of expense in the third quarter and a \$0.2 million expense in the first quarter of other items. Without these items our effective tax rate for the year ended December 31, 2018 would have been 25.6%.

DESCRIPTION OF SECURITIES

The following is a description of TTEC Holdings, Inc. (the "Company," "TTEC") securities that are registered under Section 12 of the Securities Exchange Act of 1934, as amended, and does not purport to be complete. For a complete description of the terms and provisions of such securities, refer to our restated certificate of incorporation, as amended (the "Certificate of Incorporation"), and our amended and restated bylaws (the "Bylaws"), each of which is included as an exhibit to the Annual Report on Form 10-K of which this exhibit is a part. This summary is qualified in its entirety by reference to these documents.

General

Under the Certificate of Incorporation, we are authorized to issue up to 150,000,000 shares of common stock, par value \$0.01 per share, and 10,000,000 shares of preferred stock, par value \$0.01 per share. As of December 31, 2019 there were 46,488,938 shares of common stock outstanding and no shares of preferred stock outstanding.

Common Stock

The holders of our common stock are entitled to one vote per share on all matters to be voted upon by the stockholders. Stockholders may not cumulate their votes in the election of directors. Subject to preferences that may be applicable to any outstanding preferred stock, the holders of common stock are entitled to receive ratably such dividends, if any, as may be declared from time to time by the Board of Directors out of funds legally available, therefore. In 2015, our Board of Directors adopted a dividend policy, with the intent to distribute a periodic cash dividend to stockholders of our common stock, after consideration of, among other things, TTEC's performance, cash flows from operations, capital needs and liquidity factors. The Company paid the initial dividend in 2015 and has continued to pay a semi-annual dividend in October and April of each vear.

In the event of liquidation, dissolution or winding up of TTEC, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to prior distribution rights of preferred stock, if any, then outstanding. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and non-assessable.

Preferred Stock

Our Board of Directors has the authority to issue our preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting any series or the designation of such series, without further vote or action by the stockholders. The issuance of preferred stock may have the effect of delaying, deferring or preventing a change in control of TTEC without further action by the stockholders and may adversely affect the voting and other rights of the holders of common stock. Holders of preferred stock may be entitled to receive dividends (other than dividends of common stock) before any dividends are payable to holders of common stock.

Anti-Takeover Effects of Delaware General Corporation Law and Our Certificate of Incorporation and Bylaws

Delaware Law. TTEC is subject to the "business combination" provisions of Section 203 of the Delaware General Corporation Law. In general, such provisions prohibit a publicly held Delaware corporation from engaging in various "business combination" transactions with any interested stockholder for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

 the business combination transaction or the transaction which resulted in the stockholder becoming an interested stockholder is approved by the Board of Directors prior to the date the interested stockholder obtained such status; • upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for the purpose of determining the number of shares outstanding those shares owned by the corporation's officers and directors and by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

on or subsequent to such date the business combination is approved by the Board of Directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least 66²³% of

the outstanding voting stock which is not owned by the interested stockholder.

A "business combination" is defined to include mergers, asset sales and other transactions resulting in financial benefit to a stockholder. In general, an "interested stockholder" is a person who, together with affiliates and associates, owns (or within three years, did own) 15% or more of a corporation's voting stock. The statute could prohibit or delay mergers or other takeover or change in control attempts with respect to TTEC and, accordingly, may discourage attempts to acquire TTEC even though such a transaction may offer TTEC's stockholders the opportunity to sell their stock at a price above the prevailing market price.

Certificate of Incorporation and Bylaws. Various provisions contained in the Certificate of Incorporation and the Bylaws could delay or discourage stockholder actions with respect to transactions involving an actual or potential change of control of us or a change in our management and may limit the ability of our stockholders to remove current management or approve transactions that our stockholders may deem to be in their best interests. Among other things, these provisions:

- provide that special meetings of stockholders may be called only by the Board of Directors, the Chairman of the Board of Directors or by the Chief Executive Officer of TTEC and not by the stockholders;
- provide that any stockholder wishing to nominate persons for election as directors at, or bring other business before, an annual meeting must deliver to our secretary advance written notice of the stockholder's intention to do so;
- establish that state courts located within the State of Delaware (or, if no state court located within the State of Delaware has jurisdiction, the federal district court for the District of Delaware) are the sole and exclusive forum for certain disputes;
- provide that the Board of Directors may, by resolution adopted by a majority of the directors, increase or decrease the number of directors on the Board so long as the number of directors is not less than two nor more than eleven;
- do not permit cumulative voting for directors; and
- provide that vacancies in our Board of Directors may be filled only by the affirmative vote of a majority of the remaining directors.

List of Subsidiaries

Cubaidianu	Turiodiation
Subsidiary	Jurisdiction
TTEC Services Corporation	Colorado, USA
TTEC Government Solutions, LLC	Colorado, USA
TTEC Digital, LLC	Colorado, USA
TTEC Healthcare Solutions, Inc.	Delaware, USA
TTEC@Home, LLC	Colorado, USA
TTEC Financial Services Management, LLC	Delaware, USA
Percepta, LLC	Delaware, USA
First Call Resolution, LLC	Colorado, USA
Serendebyte Inc.	Delaware, USA
TTEC Canada Solutions, Inc.	Canada
TTEC Europe B.V.	Netherlands
TTEC CX Solutions Mexico, S.A. de C.V.	Mexico
TTEC India Customer Solutions Private Limited	India
TTEC Brasil Servicos Ltda.	Brazil
TTEC Eastern Europe EAD	Bulgaria
TTEC International Pty Ltd	NSW, Australia
TeleTech Customer Care Management Philippines, Inc.	Philippines
TTEC Consulting (UK) Limited	United Kingdom
TTEC Customer Care Management (Ireland) Limited	Ireland
TeleTech Offshore Investments B.V. – Philippine Branch	Philippines

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-232756) and Form S-8 (No. 333-167300) of TTEC Holdings, Inc. of our report dated March 4, 2020 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Denver, Colorado March 4, 2020

POWER OF ATTORNEY

Each person whose signature appears below does hereby make, constitute and appoint each of Kenneth D. Tuchman, Regina M. Paolillo and Margaret B. McLean, acting individually, as such person's true and lawful attorney-in-fact and agent, with full power of substitution, re-substitution and revocation to execute, deliver and file with the U.S. Securities and Exchange Commission, and the securities regulatory agency in each other country where a registration or filing may be necessary or advised in connection with any offering of the Company's securities, including but not limited to: Brazil, Bulgaria, Canada, India, Ireland, Mexico, the Philippines, Singapore, the United Arab Emirates, and the United Kingdom, for and on such person's behalf, and in any and all capacities,

- 1. The Annual Report on Form 10-K of TTEC Holdings, Inc. for the year ended December 31, 2019, any and all amendments (including post-effective amendments) thereto with all exhibits thereto and other documents in connection therewith, or foreign jurisdiction equivalent reports and statements;
- 2. A Prospectus for use in the member nations of the European Union pursuant to the EU Prospectus Directions and any and all amendments thereto with all exhibits and other documents in connection therewith; and
- 3. Such annual or other periodic reports on business, prospects, financial and results of operations as may be required in any such other country granting unto each of said attorneys-in fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done as fully to all intents and purposes as such person might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent or such person's substitute or substitutes may lawfully do or cause to be done by virtue hereof.

<u>/s/ Kenneth D. Tuchman</u> Kenneth D. Tuchman	Feb. 27, 2020	/s/ Steven J. Anenen Steven J. Anenen	Feb. 27, 2020
_/s/ Tracy L. Bahl Tracy L. Bahl	Feb. 27, 2020	/s/ Gregory A. Conley Gregory A. Conley	Feb. 27, 2020
/s/ Robert N. Frerichs Robert N. Frerichs	Feb. 27, 2020	/s/ Marc L. Holtzman Marc L. Holtzman	Feb. 27, 2020
/s/ Ekta Singh-Bushell Ekta Singh-Bushell	Feb. 27, 2020		

CERTIFICATION

- I, Kenneth D. Tuchman, certify that:
- 1. I have reviewed this Annual Report on Form 10-K of TTEC Holdings, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(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:
 - 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):
 - 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
 - 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.

By: /s/ Kenneth D. Tuchman
Kenneth D. Tuchman
Chairman and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION

- I, Regina M. Paolillo, certify that:
- 1. I have reviewed this Annual Report on Form 10-K of TTEC Holdings, Inc.;
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
- 4. The registrant's other certifying officer(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:
 - 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):
 - 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
 - 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.

By: /s/ Regina M. Paolillo
Regina M. Paolillo
Chief Financial Officer
(Principal Financial and Accounting Officer)

Written Statement of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350)

The undersigned, the Chief Executive Officer of TTEC Holdings, Inc. (the "Company"), hereby certifies that, to his knowledge on the date hereof:

- a. The Annual Report on Form 10-K of the Company for the year ended December 31, 2019 filed on the date hereof
 with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or
 15(d) of the Securities Exchange Act of 1934; and
- b. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Ву:	/s/ Kenneth D. Tuchman
-	Kenneth D. Tuchman
	Chief Executive Officer

Written Statement of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350)

The undersigned, the Chief Financial Officer of TTEC Holdings, Inc. (the "Company"), hereby certifies that, to his knowledge on the date hereof:

- The Annual Report on Form 10-K of the Company for the year ended December 31, 2019 filed on the date hereof
 with the Securities and Exchange Commission (the "Report") fully complies with the requirements of Section 13(a) or
 15(d) of the Securities Exchange Act of 1934; and
- b. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

By:	/s/ Regina M. Paolillo	
	Regina M. Paolillo	
	Chief Financial Officer	