

IDT Corporation



2019 Annual Report



Dear Fellow Stockholders:

IDT has incubated start-ups and other promising growth initiatives since its inception and unlocked their value for our stockholders through spinoffs, buybacks and/or dividends. We intend to continue that strategy for our stockholders going forward.

The past year saw rapid expansion of our current portfolio of new business initiatives. As we head into 2020, we continue to carefully allocate capital generated by our core offerings in the mature paid voice communications market to fuel the growth of these newer businesses.

Among the many initiatives with the potential to achieve a valuation greater than the market assigns to all of IDT today, three are relatively advanced and scaling rapidly:

- National Retail Solutions (NRS) has become a leading provider of point-of-sale store management services for independent retailers. NRS has over 8,100 POS terminals in independent retailers across the country and is building out its network rapidly. Our reach has enabled us to build multiple offerings with associated revenue streams including merchant services, loyalty software, online order fulfillment, inventory replenishment, manufacturer rebates, CPG coupons, in-store advertising and data sales...to name just a few.
- net2phone's offering in the +\$50 billion unified communications as a service (UCaaS) market has already surpassed the 100,000-seat milestone — just four years after launch. Growth is especially strong in our Latin American markets (Brazil, Argentina, Colombia and Mexico) where we have successfully leveraged our established infrastructure including our locally-based and deeply knowledgeable personnel, distribution channels and telecom expertise. As we further develop our distribution, offering and feature sets, we are laying the foundation for continued rapid growth in 2020 and beyond.
- Our money transfer service is competing and winning against some of the biggest names in the industry. Our direct-to-consumer channel more than doubled sales this year and we finally started to see very promising results from our retail channel sales. In the coming year, we will continue to build on the synergies between the D2C and retail channels and expand our global payments network.

We come to work every day excited by these opportunities and ready to face the challenges head-on. I look forward to reporting to you our progress and thank you for your investment in IDT.

Sincerely,

Shmuel Jonas
Chief Executive Officer

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

FORM 10-K

☒ Annual report pursuant to section 13 or 15(d) of the securities exchange act of 1934 for the fiscal year ended July 31, 2019.

or

☐ Transition report pursuant to section 13 or 15(d) of the securities exchange act of 1934.

Commission File Number: 1-16371

IDT Corporation

(Exact name of registrant as specified in its charter)

Delaware

22-3415036

(State or other jurisdiction of
incorporation or organization)

(I.R.S. Employer
Identification No.)

520 Broad Street, Newark, New Jersey 07102
(Address of principal executive offices, zip code)

(973) 438-1000

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Class B common stock, par value \$0.1 per share	IDT	New York Stock Exchange

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

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See 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. ☐

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

The aggregate market value of the voting and non-voting stock held by non-affiliates of the registrant, based on the adjusted closing price on January 31, 2019 (the last business day of the registrant's most recently completed second fiscal quarter) of the Class B common stock of \$7.18 per share, as reported on the New York Stock Exchange, was approximately \$148.2 million.

As of October 6, 2019, the registrant had outstanding 24,927,890 shares of Class B common stock and 1,574,326 shares of Class A common stock. Excluded from these numbers are 907,659 shares of Class B common stock and 1,698,000 shares of Class A common stock held in treasury by IDT Corporation.

DOCUMENTS INCORPORATED BY REFERENCE

The definitive proxy statement relating to the registrant's Annual Meeting of Stockholders, to be held December 12, 2019, is incorporated by reference into Part III of this Form 10-K to the extent described therein.

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IDT Corporation

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Part I

As used in this Annual Report, unless the context otherwise requires, the terms the “Company,” “IDT,” “we,” “us,” and “our” refer to IDT Corporation, a Delaware corporation, its predecessor, International Discount Telecommunications, Corp., a New York corporation, and its subsidiaries, collectively. Each reference to a fiscal year in this Annual Report refers to the fiscal year ending in the calendar year indicated (for example, fiscal 2019 refers to the fiscal year ended July 31, 2019).

Item 1. Business.

OVERVIEW

We are a multinational company with operations primarily in the telecommunications and payment industries. We have two reportable business segments, Telecom & Payment Services and net2phone (formerly net2phone-Unified Communications as a Service, or UCaaS). Our Telecom & Payment Services segment provides retail telecommunications and payment offerings as well as wholesale international long-distance traffic termination. Our net2phone segment provides unified cloud communications and telephony services to business customers. Operating segments not reportable individually are included in All Other.

For fiscal 2019, we modified the business verticals within our Telecom & Payment Services and net2phone segments to align more closely with our business strategy and operational structure. The modification to the business verticals did not change the reportable business segments.

Our Telecom & Payment Services segment comprises Core and Growth verticals:

- Core includes our three largest communications and payments offerings by revenue:
 - BOSS Revolution Calling, an international long-distance calling service marketed primarily to immigrant communities in the United States;
 - Carrier Services, which provides international long-distance termination and outsourced traffic management solutions to telecoms worldwide; and
 - Mobile Top-Up, which enables customers to transfer airtime and bundles of airtime, messaging and data credits to mobile accounts internationally and domestically.

Core also includes smaller communications and payments offerings - many in harvest mode.

- Growth is comprised of:
 - National Retail Solutions, or NRS, which operates a point-of-sale, or POS, terminal-based network for independent retailers;
 - BOSS Revolution Money Transfer, which provides an international money remittance service for customers in the United States; and
 - BOSS Revolution Mobile, a mobile virtual network operator which provides mobile phone service over a third-party network for customers in the United States.

Our net2phone segment is comprised of two verticals:

- net2phone-UCaaS, a unified cloud communications service for businesses offered globally; and
- net2phone-Platform Services, which leverages a common technology platform to provide telephony services to cable operators and other businesses.

Financial information by segment is presented in Note 24 to our Consolidated Financial Statements in Item 8 of this Annual Report.

Our headquarters are located at 520 Broad Street, Newark, New Jersey 07102. The main telephone number at our headquarters is (973) 438-1000 and our corporate web site's home page is www.idt.net.

We make available free of charge our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to these reports, and all beneficial ownership reports on Forms 3, 4 and 5 filed by directors, officers and beneficial owners of more than 10% of our equity through the investor relations page of our web site (<http://ir.idt.net/>) as soon as reasonably practicable after such

material is electronically filed with the Securities and Exchange Commission. Our web site also contains information not incorporated into this Annual Report on Form 10-K or our other filings with the Securities and Exchange Commission.

KEY EVENTS IN OUR HISTORY

1990 – Howard S. Jonas, our founder, launched International Discount Telephone to provide international call re-origination services.

1995 – We began selling wholesale carrier services to other long-distance carriers by leveraging our access to favorable international telephone rates generated by our retail calling traffic.

1996 – We successfully complete an initial public offering of our common stock.

1997 – We began marketing prepaid calling cards to provide convenient and affordable international long-distance calls.

2000 – We complete the sale of a stake in our net2phone subsidiary, a pioneer in the development and commercialization of VoIP technologies and services, to AT&T for approximately \$1.1 billion in cash. We subsequently repurchased net2phone from AT&T.

2001 – Our common stock is listed on the New York Stock Exchange, or NYSE.

2004 – We launch a retail energy business to provide electricity and natural gas to residential and small business customers in New York.

2006 – We sell our Russian telecom business, Corbina, for \$129.9 million in cash.

2007 – We complete the sale of IDT Entertainment to Liberty Media for \$220 million in cash, stock and other considerations.

2008 – We launch BOSS Revolution PIN-less, a pay-as-you-go international calling service. BOSS Revolution has since become our flagship brand, and the BOSS Revolution platform has been expanded to include payment offerings.

2009 – We spin-off our CTM Media Holdings subsidiary to our stockholders. CTM Media Holdings has been renamed IDW Media Holdings, and its stock is traded on the over-the-counter market with the ticker symbol “IDWM”.

2011 – We spin-off our Genie Energy Ltd. subsidiary, which provides electricity and natural gas and related services to residential and business customers in the US and overseas. Genie Energy’s common stock is listed on the NYSE with the ticker symbol “GNE”.

2013 – We spin-off our Straight Path Communications, Inc. subsidiary, including its wireless spectrum holdings, to our stockholders. Straight Path Communications was purchased in February 2018 by Verizon Communications Inc. for \$3.1 billion in an all-stock transaction.

- We introduce the BOSS Revolution Calling app for Android and iOS.

- We launch an international money transfer service on the BOSS Revolution platform.

2014 – We sell our stake in Fabrix, a pioneer in cloud storage and network delivery technologies, to Ericsson for \$69 million.

2015 – net2phone launches its Unified Communications as a Service, or UCaaS, offering in the United States

2016 – We spin-off our Zedge subsidiary to our stockholders. Zedge provides one of the most popular content platforms for mobile device personalization including ringtones, wallpapers, home screen icons and notification sounds. Zedge’s stock is listed on the NYSE American with the ticker symbol “ZDGE”.

- We launch NRS to provide POS-based services to independent retailers in the United States.

- net2phone initiates global expansion of its UCaaS offering with a launch in Brazil.

2017 – We introduce the BOSS Revolution Money app for Android and iOS.

- net2phone expands its cloud communications service to Argentina.

2018 – We spin-off our Rafael Holdings, Inc. subsidiary to our stockholders. Rafael Holdings holds real estate assets and stakes in early stage pharmaceuticals companies, including Rafael Pharma, a privately held, clinical-stage, metabolic oncology therapeutics company. Rafael Holdings' stock is listed on the NYSE American with the ticker symbol "RFL".

– net2phone expands its cloud communications service to Mexico, Colombia and Hong Kong, and, through its acquisition of Versature Corp., enters the Canadian market.

2019 – net2phone's cloud communications service surpasses 100,000 service seats milestone.

- NRS adds its 10,000th POS terminal to its retail network

OUR STRATEGY

Since our founding, we have focused on value creation by leveraging potentially disruptive telecommunications, payment and other technologies to challenge entrenched business models. Outside of our core businesses, we seek to select and incubate promising early stage businesses.

Since 2008, five non-core businesses have spun-off to our stockholders: CTM Media (now IDW Media Holdings) (2009), Genie Energy (2011), Straight Path Communications (2013), Zedge (2016) and Rafael Holdings (2018). Additionally, we have sold other assets to realize value for our shareholders including net2phone (subsequently repurchased), IDT Entertainment, Corbina and Fabrix.

Our current revenue and income from operations are generated predominantly by our three core offerings:

- BOSS Revolution Calling;
- Carrier Services; and
- Mobile Top-Up.

We believe that these businesses are synergistic and jointly leverage certain of our strategic assets including:

- The BOSS Revolution and IDT brands;
- A nationwide network of more than 42,000 BOSS Revolution retailers;
- Our retail customer base of more than eight million, primarily in immigrant communities within the United States;
- Our technology, global infrastructure and transaction platforms;
- Extensive VoIP and cloud services expertise; and
- Our staff of more than 1,200 working in over 20 offices on five continents.

Our core services compete primarily in the mature pay-per-minute international voice communications market. Several long-term, industry-wide trends have, for several years, been gradually reducing the size of the global market for these services including the growing popularity of low-cost or free messaging services and other non-voice communications technologies, free peer-to-peer voice calls available when both parties utilize broadband connections, and the prevalence of flat-rate international long distance plans offered both by the largest mobile network operators and niche mobile virtual network operators. We believe that these trends have pressured revenue and margin generated by our core offerings.

To counter the sectoral challenges in the pay-per-minute market, we are pursuing a multi-pronged strategy:

- Investing to scale a portfolio of what we believe to be high-margin, rapidly growing businesses that leverage our core strategic assets to provide synergistic communications and payments services, including:
 - net2phone, a provider of cloud communication services for businesses globally;
 - National Retail Solutions, or NRS, an operator of a POS platform serving independent retailers; and
 - BOSS Revolution Money Transfer, a provider of international remittances through both retail and direct-to-consumer channels.

- Diversification and enhancement of offerings in our core market including:
 - BOSS Revolution Calling: Launching new and competitive offerings such as unlimited, flat-rate calling plans;
 - BOSS Revolution Mobile, a mobile virtual network operator, or MVNO, providing wireless communication services;
 - Mobile Top-Up: Developing bundles of voice, data and messaging for recharging accounts internationally in addition to voice-only air-time top-up;
 - Carrier Services: Offering incumbent national telecoms value-added services including outsourced management of international long-distance traffic and launch of a self-service platform, IDT Express, for wholesale termination of international long-distance calls and purchase of direct inward dialing numbers, or DIDs; and
 - BOSS Revolution Calling and BOSS Revolution Money apps: both of which have strengthened our relationships with our retail customers, improved the economics of our offerings, and increased opportunities to cross-market our services.
- Reducing the underlying cost of providing our services by:
 - Utilizing new technologies; and
 - Reducing our selling, general and administrative costs.

We believe that this strategy has begun to offset the impact of the secular trends in the pay-per-minute market and to stabilize our gross profit despite continued declines in our core revenue.

BUSINESS DESCRIPTION

Telecom & Payment Services

Our Telecom & Payment Services, or TPS, segment, represented 96.6% and 97.7% of our total revenues in fiscal 2019 and fiscal 2018, respectively. TPS offerings are classified in two verticals, Core and Growth, as follows:

- Core includes our three largest communications and payments offerings by revenue:
 - BOSS Revolution Calling
 - Carrier Services; and
 - Mobile Top-Up.

Core also includes smaller communications and payments offerings.

- Growth includes high-margin, rapidly growing businesses that leverage our core strategic assets to provide synergistic communications and payments services, including:
 - NRS;
 - BOSS Revolution Money Transfer; and
 - BOSS Revolution Mobile.

During fiscal 2019, our TPS segment generated \$1,361.9 million in revenues and income from operations of \$14.3 million, as compared with revenues of \$1,511.5 million in revenues and income from operations of \$25.8 million in fiscal 2018.

Telecom & Payment Services – Core

BOSS Revolution Calling

BOSS Revolution Calling's revenue was \$490.7 million in fiscal 2019 compared to \$529.7 million in fiscal 2018 (36.0% and 35.0% of TPS' revenue in fiscal 2019 and fiscal 2018, respectively).

Our BOSS Revolution Calling business is a prepaid international long-distance calling service marketed primarily to foreign-born and underbanked consumers in the United States, with smaller retail operations serving customers in Europe, Asia, South America and Canada.

BOSS Revolution Calling offerings include our flagship 'BOSS Revolution' branded international long-distance prepaid calling service as well as disposable hard cards sold under a variety of brands. In the United States, BOSS Revolution Calling serves, as of July 31, 2019, approximately 3.7 million customers per month, of which approximately 1.3 million use the BOSS Revolution Calling app (for iOS and Android).

Usage of our BOSS Revolution Calling App has been growing rapidly. Nevertheless, the majority of our customers purchase BOSS Revolution Calling offerings through our nationwide network of approximately 42,000 BOSS Revolution resellers. These resellers are typically independent retailers serving foreign-born communities including significant unbanked or under-banked populations. BOSS Revolution Calling allows users to place international long-distance calls at affordable rates from the BOSS Revolution Calling app or by calling an access number. Regardless of how the call originates, our customers must first establish and top-up a prepaid BOSS Revolution account that is linked to their phone. Once the account is established and a call is placed, our platform recognizes the customer's phone through its network-provided automatic number identification and seamlessly links each call to the corresponding BOSS Revolution account. Callers then enter their destination phone numbers. BOSS Revolution Calling customers' account balances are debited at a fixed rate per minute or at a fixed amount for unlimited calling to a specific country over a specified time period, typically one month. In contrast to many competitors, BOSS Revolution Calling does not charge connection, usage or breakage fees. BOSS Revolution Calling's per minute rates can vary by the destination country, city, and whether the call is placed to a landline or mobile phone. Rates are published on the BOSS Revolution consumer website and within the BOSS Revolution Calling app.

Customers with a credit card, debit card or store-bought top-up voucher can open and add to their account balance directly through the BOSS Revolution Calling or BOSS Revolution Money apps, by phone, or through the BOSS Revolution consumer website (www.bossrevolution.com).

Alternatively, customers can also open and top-up their account balance at any BOSS Revolution retailer using cash, a debit card or a credit card. Our nationwide reseller network enables our customers, many of whom we believe are unbanked, to purchase our offerings with cash.

In the United States, we distribute our retail products primarily through our network of distributors that, either directly or through sub-distributors, sell to retail locations. In addition, our internal sales force sells BOSS Revolution Calling and other platform products directly to retailers. Distributors, our internal salespeople and retailers receive commissions based on the revenue generated by each transaction or fee per transaction, depending on the product.

The BOSS Revolution retailer portal can be accessed on the world wide web via a networked computer or by Android and iOS smartphones. The BOSS Revolution retailer portal enables retailers to create accounts for new customers, add funds to existing customer balances and execute sales transactions. It provides a direct, real-time interface with our retailers, resulting in a cost-effective and adaptable distribution model that allows us to target and promote services directly to distributors and retailers, to introduce and cross-sell new offerings, and to rapidly respond to changes in the business environment.

In the United States, the BOSS Revolution brand is supported by national, regional and local marketing programs that include television and radio advertising, online advertising, print media, and grass roots marketing at community and sporting events. In addition, we work closely with distributors and retailers on in-store promotional programs and events.

BOSS Revolution Calling's sales have traditionally been strongest in the Northeastern United States and in Florida because of our extensive local distribution network and their large foreign-born populations. We continue to grow distributor relationships and expand our retail network in other areas of the United States, including the Southwest and West Coast, where we historically have not had as strong of a market presence.

Carrier Services

Carrier Services' revenue was \$514.2 million in fiscal 2019 compared to \$639.0 million in fiscal 2018, contributing 37.8% and 42.3% of TPS' revenue in fiscal 2019 and fiscal 2018, respectively.

Our Carrier Services business is one of the largest wholesale carriers of international long-distance minutes in the world.

Carrier Services' telecommunications network is comprised of interconnections and commercial relationships that reach virtually every significant carrier globally. These relationships enable us to carry international telecommunications traffic to more than 190 countries around the world. The division's customers include our BOSS Revolution Calling business, net2phone, major and niche carriers around the globe, mobile network operators, and other service providers such as call aggregators. For many of these

customers, particularly the major carriers, we engage in buy-sell relationships, terminating their customers' traffic in exchange for terminating our wholesale and retail traffic with them.

We offer competitively priced international termination rates at several quality levels. We can offer competitively priced termination services in part because of the large volumes of originating minutes generated by our BOSS Revolution Calling business, our global platform powered by proprietary software, our team of professional and experienced account managers and market makers, and the global network of interconnects and relationships with other telecom system operators around the globe.

TPS terminated 22.4 billion minutes in fiscal 2019, as compared to 25.5 billion minutes in fiscal 2018. Carrier Services accounted for 17.5 billion minutes and 19.7 billion minutes of the total TPS' minutes in fiscal 2019 and fiscal 2018, respectively.

Carrier Services has a significant number of direct connections to Tier 1 providers in North America, Latin America, Asia, Africa, Europe and the Middle East. Tier 1 providers are the largest recognized licensed carriers in a country. Direct connections improve the quality of the telephone calls and reduce the cost, thereby enabling us to generate more traffic with higher margins to the associated foreign locales. We also have direct relationships with mobile network operators, reflecting their growing share of the voice traffic market.

Termination rates charged by Tier 1 and other providers of international long-distance traffic have been declining for many years. Nevertheless, termination rates charged to us by individual Tier 1 carriers and mobile operators can be volatile. Termination price volatility on heavily trafficked routes can significantly impact our minutes of use and wholesale revenues.

In addition to offering competitive rates to our carrier customers, we emphasize our ability to offer the high-quality connections that these providers often require. To that end, we offer higher-priced services in which we provide higher-quality connections, based upon a set of predetermined quality of service criteria. These services meet a growing need for higher-quality connections for some of our customers who provide services to high-value, quality-conscious retail customers. As of July 31, 2019, Carrier Services had more than 2,000 customers and has more than 340 carrier relationships globally.

Carrier Services' revenue is generated by sales to both postpaid and prepaid customers. Postpaid customers typically include Tier 1 carriers, mobile network operators and our most credit worthy customers. Prepaid customers are typically smaller telecommunication companies as well as independent call aggregators.

Carrier Services also provide outsourcing services to help fixed and mobile telephony operators enhance the profitability and value of their international voice operations. Carrier Services offers these operators customized solutions including full outsourcing, handling all inbound and outbound calls with or without switch management, and hybrid arrangements whereby the operator retains certain routes or customers directly. Pursuant to these deals, Carrier Services collaborates with the companies to provide a full range of international long-distance services to their respective customers in-country and overseas.

Mobile Top-Up

Mobile Top-Up's revenue was \$272.0 million in fiscal 2019 compared to \$253.6 million in fiscal 2018 (20.0% and 16.8% of TPS' revenue in fiscal 2019 and fiscal 2018, respectively).

Our Mobile Top-Up offerings enable customers to transfer airtime and bundles of airtime, messaging and data to recharge or 'top-up' mobile phone accounts internationally (International Mobile Top-Up, or IMTU) and domestically (Domestic Mobile Top-Up, or DMTU). Mobile Top-Up's offerings leverage our platform capabilities, our distribution reach into foreign-born communities and our relationships with mobile operators around the world.

IMTU and DMTU offerings are sold under the BOSS Revolution brand through the BOSS Revolution digital platforms, including our BOSS Revolution Calling and BOSS Revolution Money apps, as well as through mobile operator branded top-up cards sold by our retail network. We offer Mobile Top-Up service for approximately 150 different carriers in 90 countries. Most Mobile Top-Up revenue is generated by the sale of IMTU offerings.

Telecom & Payment Services – Growth

National Retail Solutions (NRS)

Our NRS business operates a point-of-sale, or POS, network that processes sales and provides business management tools and other services to independent retailers in the United States. We believe that these services help independent retailers increase sales and operate more efficiently and profitably, equipping them to compete more effectively against large retail chains.

The POS terminals integrate hardware – including cash registers, barcode scanners, retailer and customer-facing hi-definition screens, receipt printers and credit card readers – with NRS’ proprietary software that includes features such as inventory management, sales tracking, and price book management.

The primary market for NRS POS terminals is the more than 200,000 independently owned convenience, liquor, grocery and tobacco stores in the United States.

At September 30, 2019, NRS had deployed more than 10,000 POS terminals with bodegas and other retailers nationwide of which approximately 8,000 actively processed transactions during the month. NRS is currently selling an additional 900 to 1,000 new terminals to its network per quarter. NRS sales and marketing is targeted, in part, to our nationwide network of BOSS Revolution retailers. It has also secured partnerships with more than 100 wholesale distributors including some of the largest cash-and-carry wholesalers in the United States.

NRS currently generates the majority of its revenue from retailers through the sale of POS terminals and a monthly recurring fee for use of the POS software and customer support. In addition, NRS charges retailers for certain premium POS services including payment processing services and monthly subscriptions for premium POS features.

In addition, NRS leverages the nationwide scale of its POS network to generate revenues from (1) the sale of data analytics and (2) out-of-home display advertising delivered through the terminals’ consumer-facing screens.

Data Analytics: NRS captures targeted, daily POS data from independent retailers at scale. These retailers are concentrated in urban communities with significant immigrant populations and, in the aggregate, constitute a significant but largely opaque market. NRS’ network tracks more than 35 million monthly transactions in this sector that otherwise would be unavailable for analysis. NRS has built a data platform that allows third parties to analyze trends at independent retailers and gain insights into this segment of the retail economy.

Display Advertising: The 15” high-definition customer-facing screens on the NRS terminals are designed to engage customers during check-out. The screen enables retailers to offer coupon deals and promotions on in-store products, and enables NRS to provide digital-out-of-home advertisers a display for both static and video advertisements.

We believe that the NRS business is synergistic with our other communications and payment services including BOSS Revolution Calling, BOSS Revolution Money Transfer and Mobile Top-Up, all of which can be sold and provisioned by retailers directly from their NRS terminals.

BOSS Revolution Money Transfer

We believe that international money remittance is a significant economic activity among our target market of foreign-born communities. Our BOSS Revolution Money Transfer business enables customers in the United States to remit money to approximately 50 countries. The service is offered through licensed BOSS Revolution authorized money transfer agents as well as through the BOSS Revolution direct-to-consumer channel via the Boss Revolution Money app and website.

Our money transfer service leverages the BOSS Revolution retail network to afford unbanked and underbanked customers the ability to initiate transactions with cash. In order to provide our remittance service, BOSS Revolution retailers must meet certain financial and other qualifications. To date, only a fraction of the BOSS Revolution retail network has been approved to offer money transfer services. Our internal sales force is recruiting new money transfer retailers to expand our origination network, and we

continue to enhance our retail money transfer portal to facilitate adoption and utilization of the money transfer offering by BOSS Revolution retailers.

BOSS Revolution Money Transfer offers its service directly to consumers through our BOSS Revolution Money app and the BOSS Revolution website. Direct-to-consumer is the fastest growing channel, led by significant increases in transaction volumes through corridors in Africa as well as Latin America. During fiscal 2019, approximately two thirds of our transactions originated over our digital platform – primarily the BOSS Revolution Money app. The BOSS Revolution Money app works seamlessly with the BOSS Revolution Calling app to enable customers with a debit or credit card to send money transfers and mobile top-up easily and securely directly from their iOS or Android device.

BOSS Revolution Money Transfer's payment network includes payout locations in 49 countries and over 300,000 locations. In addition, remittances are offered to mobile wallets in some destinations.

BOSS Revolution Money Transfer generates revenues from a per-transaction fee charged to the customer and from foreign exchange differentials. Transaction costs include commissions paid to the retail agent, payment to the international disbursing agent, banking, compliance, foreign currency exchange costs and, in the case of direct-to-consumer transfers, credit and debit card processing fees.

Boss Revolution Mobile

We launched Boss Revolution Mobile in the third quarter of fiscal 2018. Boss Revolution Mobile is a domestic mobile service operating on Sprint's nationwide network offering an innovative, low-cost model for mobile service under our Boss Revolution brand.

International Operations

Internationally, we are a provider of prepaid calling cards including both private label and IDT-branded calling cards, which are sold through an extensive network of thousands of independent retailers as well as through our own internal sales force. Additionally, we sell BOSS Revolution Calling, IMTU and payment services in select global markets both through retailers and direct to consumers. Carrier Services' products and services are marketed and sold globally through our internal Carrier Services account management team.

In Europe, we market our prepaid calling products in the United Kingdom, the Netherlands, Spain, Germany, Belgium, Italy, Sweden, Switzerland, Denmark, Norway, Austria and Luxembourg, seeking to capitalize on the demographic opportunity presented by immigration from outside of Europe to these developed nations. Because the immigrant market is fragmented, and due to the large number of markets in which we compete, we offer over 600 different prepaid calling cards in Europe. In addition, we sell BOSS Revolution platform products through retailers, our mobile calling app, and direct-to-consumer web sites in Germany, Spain and the United Kingdom.

Our operations in Europe also include Carrier Services. We maintain our European corporate, prepaid calling and Carrier Services operations in London, England. We also operate satellite offices in Germany, Spain, Italy, Ireland and Greece.

Our European operations, including Carrier Services and BOSS Revolution Calling, generated \$405.4 million of revenues in fiscal 2019, a 5.3% decline from the \$428.1 million of revenues generated during fiscal 2018. Our European operations' revenues constituted 29.8% of TPS' revenues in fiscal 2019, as compared to 28.3% in fiscal 2018.

In Asia, we sell BOSS Revolution Calling direct to consumers online and through our app in Australia, Hong Kong and Singapore and post-paid calling services direct to consumers and small businesses in Hong Kong. In fiscal 2019, we generated \$47.7 million in revenues from our operations in the Asia-Pacific region compared to \$55.5 million in fiscal 2018, primarily through our Carrier Services business. We maintain our Asia Pacific headquarters in Hong Kong.

In Latin America, we market prepaid calling products in Argentina and Brazil. We maintain our Latin American headquarters in Buenos Aires, Argentina. In fiscal 2019, we generated \$0.7 million in revenues from the sale of prepaid calling in Latin America compared to \$1.5 million in fiscal 2018.

Sales, Marketing and Distribution

In the United States, we distribute our TPS retail products, including prepaid calling, IMTU and DMTU, money transfer and bill payment services to retail outlets. Our retail products are provisioned directly through the BOSS Revolution retailer portal or through our network of distributors and our internal sales force. In addition, our private label calling cards as well as our IDT-branded calling cards are also marketed to retail chains and outlets through our internal sales force, and from time to time, we may utilize third-party agents or brokers to acquire accounts.

We also market all of our most significant retail offerings, including BOSS Revolution Calling, IMTU and DMTU, and BOSS Revolution Money Transfer, directly to the consumer via online channels including the BOSS Revolution consumer website (www.bossrevolution.com) and mobile apps for iOS and Android.

In Europe and Latin America, we are a provider of prepaid calling cards including both private label and IDT-branded calling cards, which are sold through a network of independent retailers as well as through our own internal sales force. Additionally, we sell BOSS Revolution Calling and IMTU in select markets both through retailers and directly to consumers. In Asia, we sell BOSS Revolution Calling direct to consumers online and through our BOSS Revolution Calling app and postpaid services direct to consumers and small businesses. Carrier Services are marketed and sold through our internal account management team. In Canada, we sell BOSS Revolution platform products through retailers, our mobile calling app and direct-to-consumer web sites.

Telecommunications Network Infrastructure

We operate a global network to provide an array of telecommunications and payment services to our customers worldwide using a combination of proprietary and third-party applications. Proprietary applications include call routing and rating, customer provisioning, call management, e-commerce sites, product web pages, calling card features, and payment services features. Proprietary applications provide the flexibility to adapt to evolving marketplace demands without third-party software releases, and often provide advantages in capability or cost over third-party solutions.

Our core voice network utilizes VoIP and is interconnected, where needed, through gateways to time-division multiplexing, or TDM, networks worldwide. This hybrid IP/TDM capability allows us to interface with carriers using the lowest cost technology protocol available. To support our global reach, we operate voice switches and/or points of presence in the United States, Europe, South America, Asia and Australia. We receive and terminate voice traffic from every country in the world, including cellular, landline and satellite calls through direct and indirect interconnects. The network includes data centers located in the United States, the United Kingdom and Hong Kong, which house equipment used for both our voice and payment services, with smaller points of presence in several other countries. Our global network is monitored and operated on a continual basis by our Network Operations Center in the United States. We also make use of one of the leading cloud providers to serve as host for some of our application infrastructure.

net2phone

net2phone's revenue was \$47.3 million in fiscal 2019 compared to \$34.9 million in fiscal 2018. net2phone's loss from operations was \$6.5 million in fiscal 2019 compared to \$2.7 million in fiscal 2018.

net2phone's revenue is generated by several offerings including:

- cloud-based unified communications services offered primarily to small and mid-sized business customers;
- Session Initiation Protocol, or SIP trunking, which supports inbound and outbound domestic and international calling from an IP PBX; and
- cable telephony, which enables cable television providers to offer voice calling as part of their triple play (TV, telephony and internet) offerings.

net2phone launched its Unified Communications as a Service, or UCaaS, offering in 2015, leveraging IDT's deep expertise in VoIP communications, established technology team, and global telephony network. net2phone's UCaaS offering has become its primary growth engine and strategic focus.

The net2phone UCaaS solution converges communications across devices: desk phone, PC and mobile devices via the net2phone app, all backed by client management tools and analytics. net2phone's cloud-based platform replaces and improves upon on-premise private branch exchanges, or PBXs, which many businesses maintain to operate their legacy phone systems. net2phone's advanced feature set includes its mobile app, Web RTC, SMS/MMS, live chat widget, voicemail to email transcription, and client analytics. net2phone adds features and enhancements to its offering on a regular basis. In 2019, net2phone began deployment of its proprietary platform to enhance system reliability and facilitate the development and deployment of additional features and third-party integrations.

At its 2015 launch, net2phone's UCaaS service was offered only in the United States. In 2016, net2phone began its international expansion, offering cloud communications to businesses in Brazil. net2phone expanded to Argentina in May 2017, Colombia in May 2018 and Mexico in August 2018. In September 2018, net2phone entered the Canadian market through its acquisition of Versature Corp., a Software as a Service, or SaaS, business communications solutions and hosted VoIP provider serving the Canadian market.

We expect that net2phone will continue to grow rapidly by focusing on expansion in its overseas markets. These markets are large and characterized by low rates of UCaaS penetration, high levels of competitive fragmentation and, in many cases, by a lack of significant attention from the global market leaders. Future growth catalysts include the continued roll-out of net2phone's proprietary platform, development and deployment of new features and functionality, expansion into additional geographic markets, further customization for local markets, and, outside of Canada, the development of a direct-to-consumer channel.

Sales, Marketing and Distribution

net2phone is focused on the agent channel marketplace and acquires a substantial majority of its customers through its network of master agents, telecom agents and managed service providers in the United States and internationally. Versature historically utilized a direct-to-consumer channel model to acquire customers across Canada. In October 2019, Versature announced a channel market program, leveraging net2phone's channel relationships and experience.

net2phone's cloud-communications offering is priced on a per-seat basis, with each employee identity constituting a seat. Pricing is structured on a monthly base fee per seat, with additional option-based charges including provisioning of pre-configured VoIP phones.

Competition

Telecom & Payment Services

BOSS Revolution Calling

Like all international calling services, our BOSS Revolution Calling service is subject to fierce competition, and we do not expect to grow revenues and/or margins without a successful strategy and sound execution. While virtually any company offering communication services is a competitor, we face particularly strong competition from Tier 1 mobile network operators who offer flat-rate international calling plans, other PIN-less prepaid voice offerings, prepaid calling card providers, mobile virtual network operators, and VoIP and other "over the top", or OTT, service providers. Outside the United States, we also compete with large foreign state-owned or state sanctioned telephone companies.

Many of these companies, such as AT&T, Verizon, T-Mobile and Sprint, are substantially larger and have greater financial, technical, engineering, personnel and marketing resources, longer operating histories, greater name recognition and larger customer bases than we do. The use by these competitors of their resources in or affecting the international prepaid calling market could significantly impact our ability to compete against them successfully.

In addition to these larger competitors, we face significant competition from smaller prepaid calling providers, who from time-to-time offer rates that are substantially below our rates, and in some instances below what we believe to be the cost to provide the service, to gain market share. This type of pricing by one or more competitors can adversely affect our revenues, as they gain market share at our expense, and our gross margins, if we lower rates to better compete.

The continued growth of OTT calling and messaging services such as Skype, Viber, and WhatsApp has adversely affected the sales of BOSS Revolution and our other prepaid calling services. We expect the popularity of these IP-based services—many of which offer voice communications for free provided both the caller and recipient have a broadband connection—to continue to increase, which may result in increased substitution and pricing pressure on our BOSS Revolution and other international prepaid calling service offerings.

Many wireless operators offer unlimited international long-distance plans that include international destinations to which customers can place direct calls from their mobile phones without time limitation. These plans now include some of our most popular international destinations. The growth of these “international unlimited” plans adversely affects our revenues as these operators gain subscriber market share.

In our view, our ability to compete successfully against these operators depends on several factors. Our interconnect and termination agreements, network infrastructure and least-cost-routing system enable us to offer low-cost, high quality services. Our extensive distribution and retail networks provide us with a strong presence in communities of foreign-born residents, a significant portion of which purchase our services with cash. Our BOSS Revolution brand is often highly visible in these communities and has a reputation for quality service and competitive, transparent pricing. Finally, we also offer synergistic payment services over the BOSS Revolution platform that customers can conveniently access from their accounts. In our view, these factors represent competitive advantages.

However, some of our competitors have significantly greater financial resources and name recognition and can provide comparable service levels and pricing through established brands. Consequently, our ability to maintain and/or to capture additional market share will remain dependent upon our ability to continue to provide competitively priced services, expand our distribution and retail networks, improve our ability to reach and sell to customers through mobile devices, develop successful new products and services to fit the evolving needs of our customers, and continue to build the brand equity of BOSS Revolution.

Carrier Services

The wholesale carrier industry has numerous entities competing for the same customers, primarily based on price and quality of service.

In our Carrier Services business, we participate in a global marketplace with:

- interexchange carriers and other long-distance resellers and providers, including large carriers such as T-Mobile, AT&T and Verizon;
- historically state-owned or state-sanctioned telephone companies such as Telefonica, France Telecom and KDDI;
- on-line, spot-market trading exchanges for voice minutes;
- OTT internet telephony providers;
- other VoIP providers;
- other providers of international long-distance services; and
- alliances between large multinational carriers that provide wholesale carrier services.

We believe that our Carrier Services business derives a competitive advantage from several inter-related factors:

- our BOSS Revolution Calling business generates large volumes of originating minutes, which represents a desirable, negotiable asset that helps us win return traffic and obtain beneficial pricing which we can offer in the wholesale arena;
- the proprietary technologies powering our wholesale platform and, in particular, the software that drives voice over internet protocols enables us to scale up at a lower cost than many of our competitors;
- our professional and experienced account management; and
- our extensive network of interconnects around the globe, with the ability to connect in whichever format (IP or TDM) is most feasible.

In aggregate, we believe that these factors provide us with a competitive advantage over some participants on certain routes.

Mobile Top-Up

The major competitors to Mobile Top-Up's offerings include:

- international mobile operators, who seek to control more of their own distribution channel or create their own products that directly compete with our international airtime top-up; and
- other distributors, who develop a more comprehensive product offering than our international airtime top-up offerings or aggressively discount their product offerings that are like our international airtime top-up offerings.

BOSS Revolution Money Transfer

BOSS Revolution Money Transfer competes against traditional international money transfer services with established retail and disbursement networks including Western Union, MoneyGram and Ria, as well as many niche money transfer organizations that serve specific destination corridors. Our direct-to-consumer channel competes with these operators as well as with new entrants including Xoom, TransferWise and World-Remit that seek to disrupt the retailer-based money transfer market.

National Retail Solutions (NRS)

NRS competes against several nationwide POS companies that primarily service other retail store segments, but also service NRS' target market of independent convenience, liquor and tobacco stores in the United States. These companies include, among others, Square, Clover and NCR. NRS believes that it has a competitive advantage because other nationwide POS companies do not offer the complete suite of services that NRS has tailored to the specific needs of independent retailers. In addition, we do not believe that these competitors have NRS' reach into the ethnic retailer market where many retailers have established relationships with us and sell our BOSS Revolution offerings.

NRS also competes with smaller, regional POS companies that focus on convenience stores. However, these regional players generally do not offer a comparable suite of POS services, have limited capacity to scale their platforms, and/or are not price competitive.

net2phone

Major competitors to our net2phone offerings include other UCaaS and hosted voice providers such as Vonage Business, Nextiva, 8x8, LogMeIn and Ring Central. Due to their longevity and substantial investments in the marketplace, these providers offer more widely recognized brands, larger and more developed marketing and sales forces and/or channel agent networks, and a more advanced product sets including features such as services designed specifically for call centers, video and chat. These competitors' offerings typically also support integration of their services with other well-known, third-party customer relationship management, or CRM, vendors such as Salesforce and SugarCRM as well as with various Google applications.

REGULATION

The following summary of regulatory developments and legislation is intended to describe what we believe to be the most important, but not all, current and proposed international, federal, state and local laws, regulations, orders and legislation that are likely to materially affect us.

Regulation of Telecom in the United States

Telecommunications services are subject to extensive government regulation at both the federal and state levels in the United States. Any violations of the regulations may subject us to enforcement actions, including interest and penalties. The Federal Communications Commission, or FCC, has jurisdiction over all telecommunications common carriers to the extent they provide interstate or international communications services, including the use of local networks to originate or terminate such services. Each state regulatory commission has jurisdiction over the same carriers with respect to their provision of local and intrastate communications services. Local governments often indirectly regulate aspects of our communications business by imposing zoning requirements, taxes, permit or right-of-way procedures or franchise fees. Significant changes to the applicable laws or regulations imposed by any of these regulators could have a material adverse effect on our business, operating results and financial condition.

Regulation of Telecom by the Federal Communications Commission

Universal Service and Other Regulatory Fees and Charges

In 1997, the FCC issued an order, referred to as the Universal Service Order, that requires all telecommunications carriers providing interstate telecommunications services to contribute to universal service support programs administered by the FCC (known as the Universal Service Fund). In addition, beginning in October 2006, interconnected VoIP providers, such as our subsidiary net2phone, are required to contribute to the Universal Service Fund. These periodic contributions are currently assessed based on a percentage of each contributor's interstate and international end user telecommunications revenues reported to the FCC. We also contribute to several other regulatory funds and programs, most notably Telecommunications Relay Service, FCC Regulatory Fees, and Local Number Portability (collectively, the Other Funds). We and most of our competitors pass through Universal Service Fund and Other Funds contributions as part of the price of our services, either as part of the base rate or, to the extent allowed, as a separate surcharge on customer bills. Due to the manner in which these contributions are calculated, we cannot be assured that we fully recover from our customers all of our contributions. In addition, based on the nature of our current business, we receive certain exemptions from federal Universal Service Fund contributions. Changes in our business could eliminate our ability to qualify for some or all of these exemptions. As a result, our ability to pursue certain new business opportunities in the future may be constrained in order to maintain these exemptions, the elimination of which could materially affect the rates we would need to charge for existing services. Changes in regulation may also have an impact on the availability of some or all of these exemptions. If even some of these exemptions become unavailable, they could materially increase our federal Universal Service Fund or Other Funds' contributions and have a material adverse effect on the cost of our operations and, therefore, on our ability to continue to operate profitably, and to develop and grow our business. We cannot be certain of the stability of the contribution factors for the Other Funds. Significant increases in the contribution factor for the Other Funds in general and the Telecommunications Relay Service Fund in particular can impact our profitability. Whether these contribution factors will be stable in the future is unknown, but it is possible that we will be subject to significant increases.

Regulation of Telecom by State Public Utility Commissions

Our telecommunications services that originate and terminate within the same state, including both local and in-state long distance services are subject to the jurisdiction of that state's public utility commission. The Communications Act of 1934, as amended, generally preempts state statutes and regulations that prevent the provision of competitive services but permits state public utility commissions to regulate the rates, terms and conditions of intrastate services, so long as such regulation is not inconsistent with the requirements of federal law. We are certified to provide facilities-based and/or resold long-distance service in all 50 states and facilities-based and resold local exchange service in 45 states. In addition to requiring certification, state regulatory authorities may impose tariff and filing requirements, consumer protection measures, and obligations to contribute to universal service and other funds. Rates for intrastate switched access services, which we both pay to local exchange companies and collect from long-distance companies for terminating in-state toll calls, are subject to the jurisdiction of the state commissions. State commissions also have jurisdiction to approve negotiated rates, or establish rates through arbitration, for interconnection, including rates for unbundled network elements. Changes in those access charges or rates for unbundled network elements could have a substantial and material impact on our business.

Regulation of Telecom—International

In connection with our international operations, we have obtained licenses or are otherwise authorized to provide telecommunications services in various foreign countries. We have obtained licenses or authorizations in Argentina, Australia, Belgium, Brazil, Canada, Chile, Denmark, Germany, Hong Kong, Italy, Japan, Mexico, the Netherlands, Peru, Singapore, South Africa, Spain, Sweden, Switzerland, the United Kingdom and Uruguay. In numerous countries where we operate or plan to operate, we are subject to many local laws and regulations that, among other things, may restrict or limit the ability of telecommunications companies to provide telecommunications services in competition with state-owned or state-sanctioned dominant carriers.

Regulation of Internet Telephony

The use of the Internet and private IP networks to provide voice communications services is generally less regulated than traditional switch-based telephony within the United States and abroad and, in many

markets, is not subject to the imposition of certain taxes and fees that increase our costs. As a result, we are able, in many markets, to offer VoIP communications services at rates that are more attractive than those applicable to traditional telephone services. However, in the U.S. and abroad, there have been efforts by legislatures and regulators to harmonize the regulatory structures between traditional switch-based telephony and VoIP. This could result in additional fees, charges, taxes and regulations on IP communications services that could materially increase our costs and may limit or eliminate our competitive pricing advantages. Additionally, several foreign governments have adopted laws and/or regulations that could restrict or prohibit the provision of voice communications services over the Internet or private IP networks. These efforts could likewise harm our ability to offer VoIP communications services.

Money Transmitter and Payment Instrument Laws and Regulations

Our consumer payment services offerings include money transfer and various network branded, also called “open loop”, prepaid card offerings. These industries are heavily regulated. Accordingly, we, and the products and services that we market in consumer payment services, are subject to a variety of federal and state laws and regulations, including:

- Banking laws and regulations;
- Money transmitter and payment instrument laws and regulations;
- Anti-money laundering laws;
- Privacy and data security laws and regulations;
- Consumer protection laws and regulations;
- Unclaimed property laws; and
- Card association and network organization rules.

In connection with the development of our money transmission services and the expansion of our network branded prepaid card offerings, we have actively pursued our own money transmitter licenses. At July 31, 2019, we had received a money transmitter license in 48 of the 49 U.S. states that require such a license, as well as in Puerto Rico and Washington, D.C.

Regulation of Other Businesses

We operate other smaller or early-stage initiatives and operations, which may be subject to federal, state, local or foreign law and regulation.

INTELLECTUAL PROPERTY

We own numerous patents, trademarks, domain names and other intellectual property rights necessary to conduct our business. We actively pursue the filing and registration of patents, domain names, trademarks and service marks to protect our intellectual property rights within the United States and abroad; in particular our registered trademarks and brands: IDT®, BOSS Revolution®, and Net2Phone®. From time to time we have also acquired or licensed intellectual property relating to present and future business strategy. We believe that our technological position significantly depends on the technical experience, expertise, and creative ability of our employees to maintain both our current businesses and pursue future business development. Our corporate policies require all employees to assign intellectual property rights developed in the scope of, or in relation to our business to us, and to protect all intellectual property and proprietary information and materials as confidential.

Our global telecommunications switching and transmission infrastructure enables us to provide an array of telecommunications, Internet access and Internet telephony services to our customers worldwide. We rely upon domestic and foreign patents, patent applications, and other intellectual property rights, regarding our infrastructure and global telecommunication network for our international telecommunications traffic and the international traffic of other telecommunications companies.

EMPLOYEES

As of October 1, 2019, we had a total of approximately 1,285 employees, of which approximately 1,270 were full-time employees.

Item 1A. Risk Factors.

RISK FACTORS

Our business, operating results or financial condition could be materially adversely affected by any of the following risks as well as the other risks highlighted elsewhere in this document, particularly the discussions about regulation, competition and intellectual property. The trading price of our Class B common stock could decline due to any of these risks.

Risks Related to Our Businesses

Each of our telecommunications lines of business is highly sensitive to declining prices, which may adversely affect our revenues and margins.

The worldwide telecommunications industry is characterized by intense price competition, which has resulted in declines in both our average per-minute price realizations and our average per-minute termination costs. Many of our competitors continue to aggressively price their services. The intense competition has led to continued erosion in our pricing power, in both our retail and wholesale markets, and we have generally had to pass along all or some of the savings we achieve on our per-minute costs to our customers in the form of lower prices. In the case of some international calling locations, when average per minute termination cost decline to a nominal amount, indirect competitors, such as wireless carriers, may include calls to those locations at no extra cost, which increases our risk of losing customers. For example, in fiscal 2016 following regulatory changes intended to increase domestic competition in the Mexican telecommunications market, the cost of terminating international calls to Mexico declined significantly. As a result, many of our competitors, including some of the large U.S. mobile operators, began offering unlimited Mexico calling as part of their monthly pricing plans, which caused a substantial and severe decline in our minutes of use and revenue.

Any price increase by us may result in our prices not being as attractive, which may result in a reduction of revenue. If these trends in pricing continue or accelerate, it could have a material adverse effect on the revenues generated by our telecommunications businesses and/or our gross margins.

Because our BOSS Revolution Calling and other prepaid calling products generate a significant portion of our revenue, our results of operations are substantially dependent upon these products.

Our results of operations are substantially dependent upon our BOSS Revolution Calling and other prepaid calling products that currently generate a significant portion of our revenue. We compete in the international prepaid calling market with Tier 1 mobile network operators who offer flat rate international calling plans, other PIN-less prepaid voice offerings, prepaid calling card providers, mobile virtual network operators with aggressive international rate plans, and VoIP and other OTT service providers.

Many of these companies, such as AT&T, Verizon, T-Mobile and Sprint, are substantially larger and have greater financial, technical, engineering, personnel and marketing resources, longer operating histories, greater name recognition and larger customer bases than we do. The use by these competitors of their resources in or affecting the international prepaid calling market could significantly impact our ability to compete against them successfully.

In addition to these larger competitors, we face significant competition from smaller prepaid calling providers, who from time-to-time offer rates that are substantially below our rates, and in some instances below what we believe to be the cost to provide the service, to gain market share. This type of pricing by one or more competitors can adversely affect our revenues, as they gain market share at our expense, and our gross margins, if we lower rates to better compete.

The continued growth of OTT calling and messaging services, such as Skype, Viber, and WhatsApp has adversely affected the sales of BOSS Revolution and our other prepaid calling services. We expect the popularity of IP-based services—many of which offer voice communications for free provided both the caller and recipient have a broadband connection—to continue to increase, which will result in increased substitution and pricing pressure on our BOSS Revolution and other international prepaid calling service offerings.

Many wireless operators offer unlimited international long-distance plans that include international destinations to which customers can place direct calls from their mobile phones without time limitation. These plans now include some of our most popular international destinations. The growth of these “international unlimited” plans adversely affects our revenues as these operators gain subscriber market share.

If we are unable to compete effectively with our BOSS Revolution Calling and other prepaid calling products, it could have a material adverse effect on the revenues generated by our telecommunications businesses, our gross margins and/or our profits.

We may not be able to obtain sufficient or cost-effective termination capacity to particular destinations, which could adversely affect our revenues and profits.

Most of our telecommunications traffic is terminated through third-party providers. In order to support our minutes-of-use demands and geographic footprint, we may need to obtain additional termination capacity or destinations. We may not be able to obtain sufficient termination capacity from high-quality carriers to particular destinations or may have to pay significant amounts to obtain such capacity. This could result in our not being able to support our minutes-of-use demands or in higher cost-per-minute to particular destinations, which could adversely affect our revenues and profits.

The termination of our carrier agreements with foreign partners or our inability to enter into carrier agreements in the future could materially and adversely affect our ability to compete, which could reduce our revenues and profits.

We rely upon our carrier agreements with foreign partners in order to provide our telecommunications services to our customers. These carrier agreements are for finite terms and, therefore, there can be no guarantee that these agreements will be renewed at all or on favorable terms to us. Our ability to compete would be adversely affected if our carrier agreements were terminated or we were unable to enter into carrier agreements in the future to provide our telecommunications services to our customers, which could result in a reduction of our revenues and profits.

Our customers, particularly our Carrier Services customers, could experience financial difficulties, which could adversely affect our revenues and profitability if we experience difficulties in collecting our receivables.

As a provider of international long-distance services, we depend upon sales of transmission and termination of traffic to other long-distance providers and the collection of receivables from these customers. The wholesale telecommunications market continues to feature many smaller, less financially stable companies. If weakness in the telecommunications industry or the global economy reduces our ability to collect our accounts receivable from our major customers, particularly our wholesale customers, our profitability may be substantially reduced. While our most significant customers, from a revenue perspective, vary from quarter to quarter, our five largest Carrier Services customers collectively accounted for 8.2% and 10.3% of total consolidated revenues in fiscal 2019 and fiscal 2018, respectively. Our Carrier Services customers with the five largest receivables balances collectively accounted for 19.3% and 18.7% of the consolidated gross trade accounts receivable at July 31, 2019 and 2018, respectively. This concentration of revenues and receivables increases our exposure to non-payment by our larger customers, and we may experience significant write-offs if any of our large customers fail to pay their outstanding balances, which could adversely affect our revenues and profitability.

Our revenues and profits will suffer if our distributors and sales representatives fail to effectively market and distribute our BOSS Revolution voice and payment services, as well as our traditional disposable calling cards.

We rely on our distributors and representatives to market and distribute our BOSS Revolution products, our traditional disposable prepaid calling card products, our IMTU offerings and other payment services. We utilize a network of several hundred sub-distributors that sell our BOSS Revolution products, traditional disposable prepaid calling cards, and IMTU to retail outlets throughout most of the United States. In foreign countries, we are dependent upon our distributors and independent sales representatives, many of which sell services or products for other companies. As a result, we cannot control whether these foreign distributors and sales representatives will devote sufficient efforts to selling our services. In addition, we may not succeed

in finding capable distributors, retailers and sales representatives in new markets that we may enter. If our distributors or sales representatives fail to effectively market or distribute our BOSS Revolution products, prepaid calling card products, IMTU offerings and other services, our ability to generate revenues and profits and grow our customer base could be substantially impaired.

Natural or man-made disasters could have an adverse effect on our technological infrastructure, which could have a material adverse effect on our results of operations, financial condition, revenues and profits.

Natural disasters, terrorist acts, acts of war, cyber-attacks or other breaches of network or information technology security may cause equipment failures or disrupt our operations. Although we make significant efforts towards managing disaster recovery and business continuity plans, our inability to operate our telecommunications networks because of such events, even for a limited period of time, may result in loss of revenue, significant expenses and/or loss of market share to other communications providers, which could have a material adverse effect on our results of operations and financial condition.

Certain functions related to our business depend on a single supplier or small group of suppliers to carry out our business, and the inability to do business with some or all of these suppliers could have a materially adverse effect on our business and financial results.

If the services of any of the single suppliers or small group of suppliers that we depend on were unavailable, or available only in decreased capacity or at less advantageous terms, this could result in interruptions to our ability to provide certain services, could cause reduction in service and/or quality as the function is transitioned to an alternate provider, if an alternate provider is available, or could increase our cost, which in the current competitive environment, we may not be able to pass along to customers.

For example, and without limitation, the platforms that support our hosted PBX business and our money remittance business are each leased from a third party. These platforms are susceptible to, and have incurred, service interruptions, which can occur frequently and can be lengthy in duration. Any such service interruption of the platform could effectively temporarily cease or otherwise materially impair operations of our applicable business. In addition, if these platforms became permanently unavailable for any reason, including, without limitation, because the third-party owner of such platform no longer provided the service for any reason, then our applicable business would be materially negatively affected.

Accordingly, any of these events could materially and negatively impact our business, our revenues, our profits and our relationships with customers.

We could be harmed by network disruptions, security breaches, or other significant disruptions or failures of our IT infrastructure and related systems or of those we operate for certain of our customers, which could have a materially adverse effect on our results of operations, financial condition, revenues and profits.

To be successful, we need to continue to have available, for our and our customers' use, a high capacity, reliable and secure network. We face the risk, as does any company, of a security breach, whether through cyber-attacks, malware, computer viruses, sabotage, or other significant disruption of our IT infrastructure and related systems. As such, there is a risk of a security breach or disruption of the systems we operate, including possible unauthorized access to our and our customers' proprietary or classified information. We are also subject to breaches of our network resulting in unauthorized utilization of our services or products, which subject us to the costs of providing those products or services, which are likely not recoverable. The secure maintenance and transmission of our and our customer's information is a critical element of our operations. Our information technology and other systems that maintain and transmit customer information, or those of service providers or business partners, may be compromised by a malicious third-party penetration of our network security, or that of a third-party service provider or business partner, or impacted by advertent or inadvertent actions or inactions by our employees, or those of a third-party service provider or business partner. As a result, our or our customers' information may be lost, disclosed, accessed or taken without the customers' consent, or our products and services may be used without payment.

Although we make significant efforts to maintain the security and integrity of these types of information and systems, there can be no assurance that our security efforts and measures will be effective or that attempted security breaches or disruptions would not be successful or damaging, especially in light of the

growing sophistication of cyber-attacks and intrusions sponsored by state or other interests. We may be unable to anticipate all potential types of attacks or intrusions or to implement adequate security barriers or other preventative measures. Certain of our business units have been the subject of attempted and successful cyber-attacks in the past. We have researched the situations and do not believe any material internal or customer information has been compromised.

Network disruptions, security breaches and other significant failures of the above-described systems could (i) disrupt the proper functioning of our networks and systems and therefore our operations or those of certain of our customers; (ii) result in the unauthorized use of our services or products without payment, (iii) result in the unauthorized access to, and destruction, loss, theft, misappropriation or release of proprietary, confidential, sensitive or otherwise valuable information of ours or our customers, including trade secrets, which others could use to compete against us or for disruptive, destructive or otherwise harmful purposes and outcomes; (iv) require significant management attention or financial resources to remedy the damages that result or to change our systems and processes; (v) subject us to claims for contract breach, damages, credits, fines, penalties, termination or other remedies; or (vi) result in a loss of business, damage our reputation among our customers and the public generally, subject us to additional regulatory scrutiny or expose us to litigation. Any or all of which could have a negative impact on our results of operations, financial condition and cash flows.

We could fail to comply with requirements imposed on us by certain third parties, including regulators, which could have a materially adverse effect on our results of operations, financial condition, revenues and profits.

A significant and increasing portion of our transactions are processed using credit cards and similar payment methods. The banks, credit card companies and other relevant parties impose strict system and other requirements to participate in such parties' payment systems. We are required to comply with the privacy provisions of various federal and state privacy statutes and regulations, and the Payment Card Industry Data Security Standard, each of which is subject to change at any time. Compliance with these requirements is often difficult and costly, and our failure, or our distributors' failure, to comply may result in significant fines or civil penalties, regulatory enforcement action, liability under or termination of necessary agreements related to our payment services business, each of which could have a material adverse effect on our financial position and/or operations and that of our distributors who could be liable as well. Further, our payment services are subject to stringent requirements by regulators and trade organizations in various jurisdictions. Our payment services unit is subject to federal and state banking regulations and we are also subject to further regulation by those states in which we are licensed as a money transmitter. We may not be able to comply with all such requirements in a timely manner or remain in compliance. If we are not in compliance, we could be subject to penalties or the termination of our rights to participate in such payment systems or provide such services, which could have a material negative impact on our ability to carry on and grow our businesses and our revenues and profits.

Our U.K.-based businesses and business between the U.K. and other countries face risks related to the United Kingdom leaving the European Union ("Brexit").

We operate our business worldwide, including meaningful operations in the United Kingdom. Accordingly, we are subjected to risks from changes in the regulatory environment in various countries. On June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the European Union, or EU, (commonly referred to as "Brexit"). Thereafter, on March 29, 2017, the United Kingdom formally notified the EU of its intention to withdraw, triggering a two-year negotiation period for exiting the EU. At present, the withdrawal of the United Kingdom from the EU is scheduled to take effect on October 31, 2019. If no agreement is entered into between the United Kingdom and the EU, and no extension of Brexit is agreed upon, the withdrawal will proceed without an agreement, and transitional provisions may or may not be put in place to ease the process.

The effects of Brexit will depend on agreements, if any, the United Kingdom makes to retain access to EU markets either during a transitional period or more permanently. Brexit creates an uncertain political and economic environment in the United Kingdom and potentially across other EU member states for the foreseeable future, including while the terms of Brexit are being negotiated, and such uncertainties could impair or limit our ability to transact business in the member EU states.

Further, Brexit could adversely affect European and worldwide economic or market conditions and could contribute to instability in global financial markets, and the value of the Pound Sterling currency or other currencies, including the Euro. We are exposed to the economic, market and fiscal conditions in the United Kingdom and the EU and to changes in any of these conditions. Depending on the terms reached regarding Brexit, it is possible that there may be adverse practical and/or operational implications on our business.

A significant amount of the regulatory regime that applies to us in the United Kingdom is derived from EU directives and regulations. Brexit could change the legal and regulatory framework within the United Kingdom where we operate and is likely to lead to legal uncertainty and potentially divergent national laws and regulations as the United Kingdom determines which EU laws to replace or replicate. Consequently, no assurance can be given as to the impact of Brexit and, in particular, no assurance can be given that our operating results, financial condition and prospects would not be adversely impacted by the result.

IDT Financial Services Limited, or IDTFS, our Gibraltar-based bank, currently operates under a license from the Gibraltar Financial Services Commission. As an overseas British Territory, following Brexit, the passporting rights enjoyed by IDTFS under EU law will cease to be in effect. Absent other arrangements or accommodations provided by the EU or individual member states, IDTFS will not be permitted to provide services to customers in EU countries. We are currently seeking an e-money license issued by an EU country, but we cannot assure that any such license will be issued in a timely manner, if at all, or if the conditions of any such license that is issued will impact the operations of IDTFS. If IDTFS does not obtain a license in a timely manner, its operations and ability to service its customers would be materially and adversely affected.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results, and current and potential stockholders may lose confidence in our financial reporting which could have a negative effect on the trading price of our stock.

We are required by the Securities and Exchange Commission to establish and maintain adequate internal control over financial reporting that provides reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles. We are likewise required, on a quarterly basis, to evaluate the effectiveness of our internal controls and to disclose any changes and material weaknesses in those internal controls. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis.

In our Annual Report on Form 10-K for the year ended July 31, 2019, we reported that we had a material weakness because management's review controls associated with non-income related taxes related to one of our foreign entities were not effective. Notwithstanding the material weakness described above, we have performed additional analyses and other procedures to enable management to conclude that our financial statements included in this Form 10-K fairly present, in all material respects, our financial condition and results of operations as of and for the year ended July 31, 2019. Since July 31, 2019, we developed a remediation plan to address the identified material weakness as follows: (1) explore engaging an independent third party to assist in our evaluation of all non-income related taxes, relating to material foreign subsidiaries; (2) provide additional outside training to employees responsible for tax compliance; and (3) enhance internal documentation support related to the Company's tax position. Management and our Audit Committee will monitor these remedial measures and the effectiveness of our internal controls and procedures.

Although we believe that these efforts will strengthen our internal control over financial reporting and address the concern that gave rise to the material weakness as of July 31, 2019, we cannot be certain that our expanded knowledge and revised internal control practices will ensure that we maintain adequate internal control over our financial reporting in future periods. Any failure to maintain such internal controls could adversely impact our ability to report our financial results on a timely and accurate basis. If our financial statements are not accurate, investors may not have a complete understanding of our operations. Likewise, if our financial statements are not filed on a timely basis as required by the Securities and Exchange Commission and The New York Stock Exchange, we could face severe consequences from those authorities. In either case, there could result a material adverse effect on our business. Inferior internal

controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock.

Risks Related to Our Financial Condition

We hold cash, cash equivalents, debt securities and equity investments that are subject to various market risks.

At July 31, 2019, we had cash, cash equivalents, debt securities, and current equity investments of \$88.4 million. Debt securities and equity investments carry a degree of risk, as there can be no assurance that we can redeem the equity investments at any time and that our investment managers will be able to accurately predict the course of price movements and, in general, the securities markets have in recent years been characterized by great volatility and unpredictability. As a result of these different market risks, our holdings of cash, cash equivalents, debt securities and equity investments could be materially and adversely affected.

We may need additional capital to sustain or accelerate our operations, which we may not be able to obtain on acceptable terms or at all. If we are unable to raise additional capital, as needed, the future growth of our business and operations could be adversely affected.

We currently expect our cash from operations in fiscal 2020 and the balance of cash, cash equivalents, debt securities, and equity investments that we held on July 31, 2019 to be sufficient to meet our currently anticipated working capital and capital expenditure requirements during fiscal 2020. However, we may require, or otherwise seek, additional financing to fund operations, accelerate our growth or for other purposes. If we raise additional funds through the issuance of equity or convertible debt securities, the percentage ownership held by existing stockholders will be reduced and our stockholders may experience significant dilution. In addition, new securities may contain rights, preferences or privileges that are senior to those of our common stock. If we raise additional capital by incurring debt, this will result in increased interest expense. There can be no assurance that acceptable financing necessary to further implement our plan of operation can be obtained on suitable terms, if at all. Our ability to develop our business could suffer if we are unable to raise additional funds on acceptable terms, which would have the effect of limiting our ability to increase our revenues, develop our products or attain profitable operations.

Intellectual Property, Tax, Regulatory and Litigation Risks

We provide communications and payment services to consumers and are therefore subject to various Federal and state laws and regulations.

As a provider of communications and payment services to consumers, such as our BOSS Revolution Calling service or our BOSS Revolution Money Transfer service, we are subject to various Federal and state laws and regulations relating to the manner in which we advertise our services, describe and present the terms of our services, and communicate with our customers and consumers in general. Compliance with these laws requires us to be constantly vigilant as they often vary from state to state. Failure to comply with these laws could result in action being taken by Federal and state agencies or offices responsible for consumer protection, like the Federal Trade Commission which could have a materially adverse effect on our results of operations, financial condition, revenues and profits.

We may be adversely affected if we fail to protect our proprietary technology.

We depend on proprietary technology and other intellectual property rights in conducting our various business operations. We rely on a combination of patents, copyrights, trademarks and trade secret protection and contractual rights to establish and protect our proprietary rights. Circumstances outside our control could pose a threat to our intellectual property rights. For example, effective intellectual property protection may not be available in every country in which our products and services are distributed. Also, the efforts we have taken to protect our proprietary rights may not be sufficient or effective. Any significant impairment of our intellectual property rights could harm our business or our ability to compete. Also, protecting our intellectual property rights is costly and time consuming. Any increase in the unauthorized use of our intellectual property could make it more expensive to do business and harm our operating results. Failure of our patents, copyrights, trademarks and trade secret protection, non-disclosure agreements and other measures to provide protection of our technology and our intellectual property rights could enable

our competitors to more effectively compete with us and have an adverse effect on our business, financial condition and results of operations.

In addition, we may be required to litigate in the future to enforce our intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity. Any such litigation could result in substantial costs and diversion of resources and could have a material adverse effect on our business, financial condition or results of operations, and there can be no assurances that we will be successful in any such litigation.

We may be subject to claims of infringement of intellectual property rights of others, which could have a material adverse effect on our results of operations, financial condition, revenues and profits.

Companies in the telecommunications industry and other industries in which we compete own large numbers of patents, copyrights and trademarks and frequently enter into litigation based on allegations of infringement or other violations of intellectual property rights. As we face increasing competition, the possibility of intellectual property claims against us grows. Although we do not believe that we infringe upon the intellectual property rights of others, our technologies may not be able to withstand any third-party claims or rights against their use. From time to time we may be subject to claims and legal proceedings from third parties regarding alleged infringement by us of trademarks, copyrights, patents and other intellectual property rights. Such suits can be expensive and time consuming and could distract us and our management from focusing on our businesses. Further, loss of such suits could result in financial burdens and the requirement to modify our modes of operation, which could materially adversely affect our business.

We are subject to tax and regulatory audits which could result in the imposition of liabilities that may or may not have been reserved.

We are subject to audits by taxing and regulatory authorities with respect to certain of our income and operations. These audits can cover periods for several years prior to the date the audit is undertaken and could result in the imposition of liabilities, interest and penalties if our positions are not accepted by the auditing entity.

Our 2017 FCC Form 499-A, which reports our calendar year 2016 revenue, related to payments due to the FCC, is currently under audit by the Internal Audit Division of the Universal Service Administrative Company. At July 31, 2019, our accrued expenses included \$44.7 million for these regulatory fees for the years covered by the audit, as well as prior and subsequent years. If we do not properly calculate, or have not properly calculated, the amount payable by us to the FCC, we may be subject to interest and penalties.

We are subject to value added tax, or VAT, audits from time-to-time in various jurisdictions. In the conduct of such audits, we may be required to disclose information of a sensitive nature and, in general, to modify the way we have conducted business with our distributors until the present, which may affect our business in an adverse manner.

We are also subject to audits in various jurisdictions for various other taxes, including utility excise tax, sales and use tax, communications services tax, gross receipts tax and property tax.

We may be subject to state sales taxes that we have not paid, collected from our customers or reserved for on our financial statements, which could materially and adversely affect our business, financial condition and operating results.

On June 21, 2018, the United States Supreme Court rendered a decision in *South Dakota v. Wayfair, Inc.*, holding that a state may require a remote seller with no physical presence in the state to collect and remit sales tax on goods and services provided to purchasers in the state, overturning certain existing court precedent. We are evaluating our state tax filings with respect to the recent Wayfair decision and are in the process of reviewing our collection practices. It is possible that one or more jurisdictions may assert that we have liability for periods for which we have not collected sales, use or other similar taxes, and if such an assertion or assertions were successful it could materially and adversely affect our business, financial condition and operating results. One or more jurisdictions may change their laws or policies to apply their sales, use or other similar taxes to our operations, and if such changes were made it could materially and adversely affect our business, financial condition and operating results.

Our business is subject to strict regulation under federal law regarding anti-money laundering and anti-terrorist financing. Failure to comply with such laws, or abuse of our programs for purposes of money laundering or terrorist financing, could have a material adverse impact on our business, financial condition and operating results.

Provisions of the USA PATRIOT Act, the Bank Secrecy Act and other federal laws impose substantial regulations on financial institutions that are designed to prevent money laundering and the financing of terrorist organizations. Increasing regulatory scrutiny of our industry with respect to money laundering and terrorist financing matters could result in more aggressive enforcement of these laws or the enactment of more onerous regulation, which could have a material adverse impact on our business. In addition, abuse of our money transfer services or prepaid card programs for purposes of money laundering or terrorist financing, notwithstanding our efforts to prevent such abuse through our regulatory compliance and risk management programs, could cause reputational or other harm that would have a material adverse impact on our business, financial condition and operating results.

Our business is subject to a wide range of laws and regulations intended to help detect and prevent illegal or illicit activity and our failure, or the failure of one of our disbursement partners or payment processors to comply with those laws and regulations could harm our business, financial condition and operating results.

Our money transfer and network branded prepaid card services are subject to a strict set of legal and regulatory requirements intended to help detect and prevent money laundering, terrorist financing, fraud and other illicit activity. The interpretation of those requirements by judges, regulatory bodies and enforcement agencies is changing, often quickly and with little notice. Economic and trade sanctions programs that are administered by the U.S. Treasury Department's Office of Foreign Assets Control, or OFAC, prohibit or restrict transactions to or from or dealings with specified countries, their governments, and in certain circumstances, with individuals and entities that are specially-designated nationals of those countries, narcotics traffickers and terrorists or terrorist organizations. As federal, state and foreign legislative regulatory scrutiny and enforcement action in these areas increase, we expect our costs to comply with these requirements will increase, perhaps substantially. Failure to comply with any of these requirements by us, our regulated retailers or our disbursement partners could result in the suspension or revocation of a money transmitter license, the limitation, suspension or termination of our services, the seizure and/or forfeiture of our assets and/or the imposition of civil and criminal penalties, including fines.

Furthermore, failure by us or our agents to comply with applicable laws and regulations could also result in termination of contracts with our banks and/or merchant payment processor. Termination of services by one of our retail banks would seriously diminish our ability to collect funds from our BOSS Revolution agents. Likewise, termination of services by our merchant processor would negatively impact our ability to process payments in our digital channels.

The foregoing laws and regulations are constantly evolving, unclear and inconsistent across various jurisdictions, making compliance challenging. If we fail to update our compliance system to reflect legislative or regulatory developments, we could incur penalties. New legislation, changes in laws or regulations, implementing rules and regulations, litigation, court rulings, changes in industry practices or standards, changes in systems rules or requirements or other similar events could expose us to increased compliance costs, liability, reputational damage, and could reduce the market value of our money transfer and network branded prepaid card services or render them less profitable or obsolete.

The Dodd-Frank Act, as well as the regulations required by the Dodd-Frank Act, and the Consumer Financial Protection Bureau could harm us and the scope of our activities, and could harm our operations, results of operations and financial condition.

The Dodd-Frank Act, which became law in the United States on July 21, 2010, calls for significant structural reforms and substantive regulation across the financial services industry. In addition, the Dodd-Frank Act created the Consumer Financial Protection Bureau, or CFPB, whose purpose is to issue and enforce consumer protection initiatives governing financial products and services, including money transfer services.

We may be subject to examination by the CFPB, which has broad authority to enforce consumer financial laws. The CFPB has a large budget and staff and has broad authority with respect to our money transfer service and related business. It is authorized to collect fines and provide consumer restitution in the event

of violations, engage in consumer financial education, track consumer complaints, request data and promote the availability of financial services to underserved consumers and communities. In addition, the CFPB may adopt other regulations governing consumer financial services, including regulations defining unfair, deceptive or abusive acts or practices, and new model disclosures. The CFPB's authority to change regulations adopted in the past by other regulators, or to rescind or alter past regulatory guidance, could increase our compliance costs and litigation exposure.

The Dodd-Frank Act establishes a Financial Stability Oversight Counsel that is authorized to designate as "systemically important" non-bank financial companies and payment systems. Companies designated under either standard will become subject to new regulation and regulatory supervision. If we were designated under either standard, the additional regulatory and supervisory requirements could result in costly new compliance burdens or may require changes in the way we conduct business that could harm our business, financial condition and operating results.

We are subject to licensing and other requirements imposed by U.S. state regulators, and the U.S. federal government. If we were found to be subject to or in violation of any laws or regulations governing money transmitters, we could lose our licenses, be subject to liability or be forced to change our business practices, which could harm our operations, results of operations and financial condition.

A number of states and territories have enacted legislation regulating money transmitters, with 49 states requiring a license as of July 31, 2019. At July 31, 2019, we had obtained licenses to operate as a money transmitter in 48 U.S. states, Washington, D.C. and Puerto Rico. We are also registered as money services businesses with the Financial Crimes Enforcement Network of the U.S. Department of the Treasury, or FinCEN. As a licensed money transmitter, we are subject to bonding requirements, liquidity requirements, restrictions on our investment of customer funds, reporting requirements and inspection by state and foreign regulatory agencies. If we were found to be subject to and in violation of any banking or money services laws or regulations, we could be subject to liability or additional restrictions, such as increased liquidity requirements. In addition, our licenses could be revoked, or we could be forced to cease doing business or change our practices in certain states or jurisdictions or be required to obtain additional licenses or regulatory approvals that could impose a substantial cost on us. Regulators could also impose other regulatory orders and sanctions on us. Any change to our business practices that makes our service less attractive to customers or prohibits use of our services by residents of a particular jurisdiction could decrease our transaction volume and harm our business, financial condition and operating results.

Our disbursement partners generally are regulated institutions in their home jurisdiction, and money transfers are regulated by governments in both the United States and in the jurisdiction of the recipient. If our disbursement partners fail to comply with applicable laws, it could harm our business, results of operations and financial condition

Money transfers are regulated by state, federal and foreign governments. Many of our disbursement partners are banks that are heavily regulated by their home jurisdictions. Our non-bank disbursement partners are also subject to money transfer regulations. We require regulatory compliance as a condition to our continued relationship, perform due diligence on our disbursement partners and monitor them periodically with the goal of meeting regulatory expectations. However, there are limits to the extent to which we can monitor their regulatory compliance. Any determination that our disbursement partners or their sub-disbursement partners have violated laws and regulations could seriously damage our reputation, resulting in diminished revenue and profit and increased operating costs. While our services are not directly regulated by governments outside the United States, except with respect to our Gibraltar bank as discussed below, it is possible that in some cases we could be liable for the failure of our disbursement partners or their sub-disbursement partners to comply with laws, which also could harm our business, financial condition and results of operations.

Our bank in Gibraltar is regulated by the Gibraltar Financial Services Commission, or the FSC, and, as such, is subject to Gibraltar and European Union laws relating to financial institutions. As an issuer of prepaid debit cards for programs operated by other entities, commonly known as program managers, the bank is responsible, inter alia, for anti-money laundering laws oversight and compliance. If we were to fail to implement the requisite controls or follow the rules and procedures mandated by the FSC and applicable law, we could be subject to regulatory fines, and even the loss of our banking license. In fiscal

2016, a referendum took place in the United Kingdom in which a majority voted in favor of the United Kingdom's exit from the European Union – commonly referred to as “Brexit”. As a bank licensed in Europe, our bank in Gibraltar currently benefits from its ability to passport its license to operate in any European Union member state. However, as a British territory, if Brexit occurs, and no alternative arrangements are established with respect to licensing of British banks in the European Union, our bank in Gibraltar may not be able to passport its license into European Union member states.

We receive, store, process and use personal information and other data, which subjects us to governmental regulation and other legal obligations related to privacy. Our actual or perceived failure to comply with such obligations could harm our business, financial condition and results of operations.

We receive, store and process personal information and other customer data, including bank account numbers, credit and debit card information, identification numbers and images of government identification cards. As a result, we are required to comply with the privacy provisions of the Gramm-Leach-Bliley Act of 1999, or the Gramm-Leach-Bliley Act, and the Payment Card Industry Data Security Standard. There are also numerous other federal, state, local and international laws, such as the California Consumer Privacy Act (CCPA) and the European Union's General Data Protection Regulation (GDPR), regarding privacy and the storing, sharing, use, processing, disclosure and protection of personal information and other customer data, the scope of which are changing, subject to differing interpretations, and may be inconsistent among different jurisdictions or conflict with other applicable rules. It is possible that these obligations may be interpreted and applied in a manner that is inconsistent from one jurisdiction to another and may conflict with other rules or our business practices.

Additionally, with advances in computer capabilities and data protection requirements to address ongoing threats, we may be required to expend significant capital and other resources to protect against potential security breaches or to alleviate problems caused by security breaches.

Any failure or perceived failure by us to comply with our privacy policies, our privacy-related obligations to customers or other third parties, or our privacy-related legal obligations, or any compromise of security that results in the unauthorized release or transfer of personally identifiable information or other customer data, may result in governmental enforcement actions, fines or litigation. If there is a breach of credit or debit card information that we store, we could also be liable to the issuing banks for their cost of issuing new cards and related expenses. In addition, a significant breach could result in our being prohibited from processing transactions for any of the relevant network organizations, such as Visa or MasterCard, which would harm our business. If any third parties with whom we work, such as marketing partners, vendors or developers, violate applicable laws or our policies, such violations may put our customers' information at risk and could harm our business. Any negative publicity arising out of a data breach or failure to comply with applicable privacy requirements could damage our reputation and cause our customers to lose trust in us, which could harm our business, results of operations, financial position and potential for growth.

Federal and state regulations may be passed that could harm our business, financial condition and results of operations.

Our ability to provide VoIP communications services at attractive rates arises in large part from the fact that VoIP services are not currently subject to the same level of regulation as traditional, switch-based telephony. The use of the Internet and private IP networks to provide voice communications services is largely unregulated within the United States, although several foreign governments have adopted laws and/or regulations that could restrict or prohibit the provision of voice communications services over the Internet or private IP networks. If interconnected VoIP services become subject to state regulation and/or additional regulation by the FCC, such regulation will likely lead to higher costs and reduce or eliminate the competitive advantage interconnected VoIP holds, by virtue of its lesser regulatory oversight, over traditional telecommunications services. More aggressive regulation of the Internet in general, and Internet telephony providers and services specifically, may materially and adversely affect our business, financial condition and results of operations.

Our ability to offer services outside of the United States is subject to the local regulatory environment, which may be unfavorable, complicated and often uncertain.

Regulatory treatment outside the United States varies from country to country. We distribute our products and services through resellers that may be subject to telecommunications regulations in their home countries. The failure of these resellers to comply with these laws and regulations could reduce our revenue and profitability or expose us to audits and other regulatory proceedings. Regulatory developments such as these could have a material adverse effect on our operating results.

In many countries in which we operate, or our services are sold, the status of the laws that may relate to our services is unclear. We cannot be certain that our customers, resellers, or other affiliates are currently in compliance with regulatory or other legal requirements in their respective countries, that they or we will be able to comply with existing or future requirements, and/or that they or we will continue in compliance with any requirements. Our failure or the failure of those with whom we transact business to comply with these requirements could materially adversely affect our business, financial condition and results of operations.

While we expect additional regulation of our industry in some or all of these areas, and we expect continuing changes in the regulatory environment as new and proposed regulations are reviewed, revised and amended, we cannot predict with certainty what impact new laws in these areas will have on us, if any. For a complete discussion of what we believe are the most material regulations impacting our business, see Item 1 to Part I “Business-Regulation” included elsewhere in this Annual Report.

We are subject to legal proceedings in the ordinary course of business that may have a material adverse effect on our business, results of operations, cash flows or financial condition.

Various legal proceedings that have arisen or may arise in the ordinary course of business have not been finally adjudicated, which may have a material adverse effect on our results of operations, cash flows or financial condition (see Item 3 to Part I “Legal Proceedings” included elsewhere in this Annual Report).

Risks Related to Our Capital Structure

Holders of our Class B common stock have significantly less voting power than holders of our Class A common stock.

Holders of our Class B common stock are entitled to one-tenth of a vote per share on all matters on which our stockholders are entitled to vote, while holders of our Class A common stock are entitled to three votes per share. As a result, the ability of holders of our Class B common stock to influence our management is limited.

We are controlled by our principal stockholder, which limits the ability of other stockholders to affect our management.

Howard S. Jonas, our Chairman of the Board and founder, has voting power over 4,162,118 shares of our common stock (which includes 1,574,326 shares of our Class A common stock, which are convertible into shares of our Class B common stock on a 1-for-1 basis, and 2,587,792 shares of our Class B common stock), representing approximately 69.5% of the combined voting power of our outstanding capital stock, as of October 7, 2019. In addition, Mr. Jonas holds an option to purchase 1,000,000 shares of our Class B common stock, which is fully vested and exercisable. Mr. Jonas is able to control matters requiring approval by our stockholders, including the election of all of the directors and the approval of significant corporate matters, including any merger, consolidation or sale of all or substantially all of our assets. As a result, the ability of any of our other stockholders to influence our management is limited.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our headquarters is located in a building in Newark, New Jersey that is owned by Rafael Holdings. We lease approximately 80,000 square feet of office space plus a portion of the 800-car public parking garage located across the street from the building. We also lease approximately 3,600 square feet of office space in Jerusalem, Israel that is also owned by Rafael Holdings. The Newark lease expires in April 2025 and the Israel lease expires in July 2025.

We lease space in New York, New York for corporate purposes as well as a number of other locations in metropolitan areas. These leased spaces are utilized primarily to house telecommunications equipment and retail operations.

We maintain our European headquarters in London, England. We also maintain other international office locations and telecommunications facilities in regions of Europe, Latin America, the Middle East, Asia and Africa where we conduct operations.

Item 3. Legal Proceedings.

On April 12, 2019, Scarleth Samara filed a putative class action against IDT Telecom in the U.S. District Court for the Eastern District of Louisiana alleging certain violations of the Telephone Consumer Protection Act of 1991. The plaintiff alleges that in October of 2017, IDT Telecom sent unauthorized marketing messages to her cellphone. IDT Telecom filed a motion to compel arbitration. On or about August 19, 2019, the plaintiff agreed to dismiss the pending court action and the parties intend to proceed with arbitration. At this stage, we are unable to estimate our potential liability, if any. We intend to vigorously defend the claim.

On January 22, 2019, Jose Rosales filed a putative class action against IDT America, IDT Domestic Telecom and IDT International in California state court alleging certain violations of employment law. The plaintiff alleges that these companies failed to compensate members of the putative class in accordance with California law. We are evaluating the claims, and at this stage, are unable to estimate our potential liability, if any. We intend to vigorously defend the claims. In August 2019, we filed a cross complaint against Rosales alleging trade secret and other violations.

On May 21, 2018, Erik Dennis filed a putative class action against IDT Telecom and us in the U.S. District Court for the Northern District of Georgia alleging violations of Do Not Call Regulations promulgated by the U.S. Federal Trade Commission. We are evaluating the claim, and at this stage, are unable to estimate our potential liability, if any. On August 13, 2018, we and IDT Telecom filed a motion to dismiss or in the alternative to strike class allegations. The plaintiff opposed the motion. The motion to dismiss was denied. We intend to vigorously defend this matter.

On May 2, 2018, Jean Carlos Sanchez filed a putative class action against IDT Telecom in the U.S. District Court for the Northern District of Illinois alleging that we sent unauthorized marketing messages to cellphones in violation of the Telephone Consumer Protection Act of 1991. On July 26, 2018, the parties filed a stipulation of dismissal. We are evaluating the claim, and at this stage, are unable to estimate our potential liability, if any. We intend to vigorously defend this matter.

On April 24, 2018, Sprint Communications Company L.P. filed a patent infringement claim against us and certain of our affiliates in the U.S. District Court for the District of Delaware alleging infringement of U.S. Patent Nos. 6,298,064; 6,330,224; 6,343,084; 6,452,932; 6,463,052; 6,473,429; 6,563,918; 6,633,561; 6,697,340; 6,999,463; 7,286,561; 7,324,534; 7,327,728; 7,505,454; and 7,693,131. Plaintiff was seeking damages and injunctive relief. On June 28, 2018, Sprint dismissed the complaint without prejudice. We are evaluating the underlying claim, and at this stage, are unable to estimate our potential liability, if any. We intend to vigorously defend any claim of infringement of the listed patents.

On July 5, 2017, plaintiff JDS1, LLC, on behalf of itself and all other similarly situated stockholders of Straight Path, and derivatively on behalf of Straight Path as nominal defendant, filed a putative class action and derivative complaint in the Court of Chancery of the State of Delaware against the Company, The Patrick Henry Trust (a trust formed by Howard S. Jonas that held record and beneficial ownership of certain shares of Straight Path he formerly held), Howard S. Jonas, and each of Straight Path's directors. The complaint alleges that we aided and abetted Straight Path Chairman of the Board and Chief Executive Officer Davidi Jonas, and Howard S. Jonas in his capacity as controlling stockholder of Straight Path, in

breaching their fiduciary duties to Straight Path in connection with the settlement of claims between Straight Path and us related to potential indemnification claims concerning Straight Path's obligations under the Consent Decree it entered into with the FCC, as well as the sale of Straight Path's subsidiary Straight Path IP Group, Inc. to us in connection with that settlement. That action was consolidated with a similar action that was initiated by The Arbitrage Fund. The Plaintiffs are seeking, among other things, (i) a declaration that the action may be maintained as a class action or in the alternative, that demand on the Straight Path Board is excused; (ii) that the term sheet is invalid; (iii) awarding damages for the unfair price stockholders received in the merger between Straight Path and Verizon Communications Inc. for their shares of Straight Path's Class B common stock; and (iv) ordering Howard S. Jonas, Davidi Jonas, and us to disgorge any profits for the benefit of the class Plaintiffs. On August 28, 2017, the Plaintiffs filed an amended complaint. On September 24, 2017, we filed a motion to dismiss the amended complaint. Following closing of the transaction, the Delaware Chancery Court denied the motion to dismiss. On February 22, 2019, the Delaware Supreme Court affirmed the denial of the motion to dismiss. We intend to vigorously defend this matter. At this stage, we are unable to estimate our potential liability, if any.

In addition to the foregoing, we are subject to other legal proceedings that have arisen in the ordinary course of business and have not been finally adjudicated. Although there can be no assurance in this regard, we believe that none of the other legal proceedings to which we are a party will have a material adverse effect on our results of operations, cash flows or financial condition.

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 Class B common stock trades on the New York Stock Exchange under the symbol "IDT."

On October 7, 2019, there were 311 holders of record of our Class B common stock and 1 holder of record of our Class A common stock. All shares of Class A common stock are beneficially owned by Howard Jonas. The number of holders of record of our Class B common stock does not include the number of persons whose shares are in nominee or in "street name" accounts through brokers. On October 7, 2019, the last sales price reported on the New York Stock Exchange for the Class B common stock was \$8.42 per share.

Additional information regarding dividends required by this item is incorporated by reference from the Management's Discussion and Analysis section found in Item 7 and from Note 18 to the Consolidated Financial Statements.

The information required by Item 201(d) of Regulation S-K will be contained in our Proxy Statement for our Annual Stockholders Meeting, which we will file with the Securities and Exchange Commission within 120 days after July 31, 2019, and which is incorporated by reference herein.

Performance Graph of Stock

We are a smaller reporting company as defined by Rule 12b-2 of the Securities and Exchange Act of 1934 and are not required to provide the information under this item.

Issuer Purchases of Equity Securities

The following table provides information with respect to purchases by us of our shares during the fourth quarter of fiscal 2019.

	Total Number of Shares Purchased	Average Price per Share	Total Number of Shares Purchased as part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs ⁽¹⁾
May 1 – 31, 2019	—	—	—	6,903,406
June 1 – 30, 2019	—	—	—	6,903,406
July 1 – 31, 2019	—	—	—	6,903,406
Total	—	—	—	

- (1) On January 22, 2016, our Board of Directors approved a stock repurchase program to purchase up to 8.0 million shares of our Class B common stock.

Item 6. Selected Financial Data.

The selected consolidated financial data presented below at July 31, 2019, 2018 and 2017, and for each of the fiscal years then ended have been derived from our Consolidated Financial Statements, which have been audited by BDO USA, LLP, independent registered public accounting firm. The selected consolidated financial data presented below at July 31, 2016 and 2015, and for each of the fiscal years in the two-year period ended July 31, 2016, has been derived from our Consolidated Financial Statements, which have been audited by Grant Thornton LLP, independent registered public accounting firm. The selected consolidated financial data should be read in conjunction with the Consolidated Financial Statements and the Notes thereto and other financial information appearing elsewhere in this Annual Report.

Year Ended July 31, (in millions, except per share data)	2019	2018	2017	2016	2015
STATEMENT OF OPERATIONS DATA:					
Revenues ^(a)	\$ 1,409.2	\$ 1,547.5	\$ 1,501.7	\$ 1,496.3	\$ 1,596.8
Net income ^(b)	0.3	5.2	9.6	25.4	86.1
Income per common share – basic	0.01	0.17	0.35	1.03	3.69
Income per common share – diluted	0.01	0.17	0.35	1.03	3.63
Cash dividends declared per common share ^(c)	—	0.56	0.76	0.75	2.03
At July 31, (in millions)	2019	2018	2017	2016	2015
BALANCE SHEET DATA:					
Total assets	\$ 443.7	\$ 399.6	\$ 519.0	\$ 469.7	\$ 485.7

- (a) Included in revenues in fiscal 2018 was \$9.5 million related to a change in estimate for recognizing certain breakage revenue. We recorded breakage revenue when the likelihood of the customer exercising its remaining rights became remote. In the fourth quarter of 2018, we changed when we generally deemed the likelihood remote from 24 or 36 months of no activity to 12 or 24 months of no activity.
- (b) Included in net income in fiscal 2018 was a benefit from income taxes of \$3.3 million related to The Tax Cuts and Jobs Act enacted in December 2017. Included in net income in fiscal 2017 was expense of \$10.4 million related to a legal settlement and mutual release, including legal fees, and a net benefit from income taxes of \$5.5 million from the full recognition of certain deferred tax assets. Included in net income in fiscal 2016 was gain on sale of member interest in Visa Europe Ltd. of \$7.5 million and gain on sale of interest in Fabrix Systems Ltd. of \$1.1 million. Included in net income in fiscal 2015 was gain on sale of interest in Fabrix Systems Ltd. of \$76.9 million.
- (c) Cash dividends declared per common share in fiscal 2015 included special dividends of \$0.68 per share and \$0.64 per share paid in November 2014 and January 2015, respectively. In fiscal 2018, our Board of Directors discontinued our quarterly dividend, electing instead to repurchase shares of our Class B common stock when warranted by market conditions, available resources, and our business outlook and results, as well as invest in our growth business initiatives.

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

This Annual Report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934, including statements that contain the words “believes,” “anticipates,” “expects,” “plans,” “intends” and similar words and phrases. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from the results projected in any forward-looking statement. In addition to the factors specifically noted in the forward-looking statements, other important factors, risks and uncertainties that could result in those differences include, but are not limited to, those discussed under Item 1A to Part I “Risk Factors” in this Annual Report. The forward-looking statements are made as of the date of this Annual Report, and we assume no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements. Investors should consult all of the information set forth in this report and the other information set forth from time to time in our reports filed with the Securities and Exchange Commission pursuant to the Securities Act of 1933 and the Securities Exchange Act of 1934, including our reports on Forms 10-Q and 8-K.

The following discussion should be read in conjunction with the Consolidated Financial Statements and Notes thereto included in Item 8 of this Annual Report.

OVERVIEW

We are a multinational company with operations primarily in the telecommunications and payment industries. We have two reportable business segments, Telecom & Payment Services and net2phone. Our

Telecom & Payment Services segment provides retail telecommunications and payment offerings as well as wholesale international long-distance traffic termination. Our net2phone segment provides unified cloud communications and telephony services to business customers. Operating segments not reportable individually were included in All Other, which included our real estate holdings and other investments that were included in the Rafael Spin-Off.

Effective at the beginning of fiscal 2019, we modified the way we report our business verticals within our Telecom & Payment Services and net2phone segments to align more closely with our business strategy and operational structure. The modification to the business verticals did not change our reportable business segments.

Concentration of Customers

Our most significant customers typically include telecom carriers to whom we provide carrier services and distributors of our retail calling products. While they may vary from quarter to quarter, our five largest customers collectively accounted for 13.6%, 12.5% and 12.4% of total consolidated revenues in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. Our customers with the five largest receivables balance collectively accounted for 20.6% and 18.7% of the consolidated gross trade accounts receivable at July 31, 2019 and 2018, respectively. This concentration of customers increases our risk associated with nonpayment by those customers. In an effort to reduce our risk, we perform ongoing credit evaluations of our significant customers, and in some cases, do not offer credit terms to customers, choosing instead to require prepayment. Historically, when we have issued credit, we have not required collateral to support trade accounts receivables from our customers. However, when necessary, we have imposed stricter credit restrictions on our customers. In some cases, this has resulted in our sharply curtailing, or ceasing completely, sales to certain customers. We attempt to mitigate our credit risk related to specific carrier services customers by also buying services from the customer, in order to create an opportunity to offset our payables and receivables with the customer. In this way, we can continue to sell services to these customers while reducing our receivable exposure risk. When it is practical to do so, we will increase our purchases from carrier services customers with receivable balances that exceed our applicable payables in order to maximize the offset and reduce our credit risk.

Rafael Spin-Off

On March 26, 2018, we completed the Rafael Spin-Off, which was a pro rata distribution of the common stock of our subsidiary, Rafael, to our stockholders of record as of the close of business on March 13, 2018. The Rafael Spin-Off did not meet the criteria to be reported as a discontinued operation and accordingly, Rafael's assets, liabilities, results of operations and cash flows have not been reclassified. At the time of the Rafael Spin-Off, Rafael owned the commercial real estate assets and interests in two clinical stage pharmaceutical companies that we previously held. The commercial real estate holdings consisted of our headquarters building and its associated public garage in Newark, New Jersey, an office/data center building in Piscataway, New Jersey and a portion of a building in Israel that hosts offices for us and certain affiliates. The pharmaceutical holdings included debt interests and warrants in Rafael Pharma, which, at the time, was a clinical stage, oncology-focused pharmaceutical company committed to the development and commercialization of therapies that exploit the metabolic differences between normal cells and cancer cells, and a majority equity interest in Lipomedix, which at the time, was a pharmaceutical development company based in Israel. In addition, prior to the Rafael Spin-Off, we transferred assets to Rafael such that, at the time of the Rafael Spin-Off, Rafael had \$42.3 million in cash, cash equivalents, and marketable securities, plus approximately \$6 million in hedge fund and other investments.

We lease office space and parking in Rafael's building and parking garage located at 520 Broad St, Newark, New Jersey. We also lease office space in Israel from Rafael. The Newark lease expires in April 2025 and the Israel lease expires in July 2025. In fiscal 2019, and fiscal 2018 subsequent to the Rafael Spin-Off, we incurred rent expense of \$1.8 million and \$0.6 million, respectively, in connection with the Rafael leases.

CRITICAL ACCOUNTING POLICIES

Our financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP. The preparation of financial statements requires management 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. Critical accounting policies are those that require application of management's most subjective or complex judgments, often as a result of matters that are inherently uncertain and may change in subsequent periods. Our critical accounting policies include those related to the allowance for doubtful accounts, goodwill, valuation of long-lived assets, income taxes and regulatory agency fees, and direct cost of revenues—disputed amounts. Management bases its estimates and judgments on historical experience and other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions. See Note 1 to the Consolidated Financial Statements in this Annual Report for a complete discussion of our significant accounting policies.

Allowance for Doubtful Accounts

Our allowance for doubtful accounts was \$5.4 million at July 31, 2019 and 2018. The allowance for doubtful accounts as a percentage of gross trade accounts receivable increased to 8.6% at July 31, 2019 from 7.0% at July 31, 2018. We estimate the balance of our allowance for doubtful accounts by analyzing accounts receivable balances by age and applying historical write-off and collection trend rates. Our estimates include separately providing for customer receivables based on specific circumstances and credit conditions, and when it is deemed probable that the balance is uncollectible. Account balances are written off against the allowance when it is determined that the receivable will not be recovered. Our estimates of recoverability of customer accounts may change due to new developments, changes in assumptions or changes in our strategy, which may impact our allowance for doubtful accounts balance. We continually assess the likelihood of potential amounts or ranges of recoverability and adjust our allowance accordingly; however, actual collections and write-offs of trade accounts receivables may materially differ from our estimates.

Goodwill

Our goodwill balance of \$11.2 million and \$11.3 million at July 31, 2019 and 2018, respectively, was attributable to our Retail Communications reporting unit in our Telecom & Payment Services segment. Goodwill is not amortized. Instead, goodwill is reviewed annually (or more frequently under various conditions) for impairment using a fair value approach.

We perform our annual, or interim, goodwill impairment test by comparing the fair value of our reporting unit with its carrying amount. We would recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized would not exceed the total amount of goodwill allocated to the reporting unit. Additionally, we consider income tax effects from any tax-deductible goodwill on the carrying amount of our reporting unit when measuring the goodwill impairment loss, if applicable. The fair value of the reporting unit is estimated using discounted cash flow methodologies, as well as considering third party market value indicators.

The annual impairment tests for Retail Communications in fiscal 2019, fiscal 2018 and fiscal 2017 resulted in no goodwill impairment, since its estimated fair value substantially exceeded its carrying value at those times. In addition, we do not believe Retail Communications is currently at risk of goodwill impairment. Calculating the fair value of the reporting unit requires significant estimates and assumptions by management. Should the estimates and assumptions regarding the fair value of the reporting unit prove to be incorrect, we may be required to record impairments to our goodwill in future periods and such impairments could be material.

We have the option to perform a qualitative assessment to determine whether it is necessary to perform the quantitative goodwill impairment test. However, we may elect to perform the quantitative goodwill impairment test even if no indications of a potential impairment exist.

Valuation of Long-Lived Assets

We test the recoverability of our long-lived assets whenever events or changes in circumstances indicate that the carrying value of any such asset may not be recoverable. Such events or changes in circumstances include:

- significant actual underperformance relative to expected performance or projected future operating results;

- significant changes in the manner or use of the asset or the strategy of our overall business;
- significant adverse changes in the business climate in which we operate; and
- loss of a significant contract.

If we determine that the carrying value of certain long-lived assets may not be recoverable, we test for impairment based on the projected undiscounted cash flows to be derived from such asset. If the projected undiscounted future cash flows are less than the carrying value of the asset, we will record an impairment loss based on the difference between the estimated fair value and the carrying value of the asset. We generally measure fair value by considering sale prices for similar assets or by discounting estimated future cash flows from the asset using an appropriate discount rate. Cash flow projections and fair value estimates require significant estimates and assumptions by management. Should our estimates and assumptions prove to be incorrect, we may be required to record impairments in future periods and such impairments could be material.

Income Taxes and Regulatory Agency Fees

Our current and deferred income taxes and associated valuation allowance, as well as telecom regulatory agency fee accruals, are impacted by events and transactions arising in the normal course of business as well as in connection with special and non-routine items. Assessment of the appropriate amount and classification of income taxes and certain regulatory agency fees is dependent on several factors, including estimates of the timing and realization of deferred income tax assets, the results of regulatory fee-related audits, changes in tax laws or regulatory agency rules and regulations, as well as unanticipated future actions impacting related accruals of regulatory agency fees.

The valuation allowance on our deferred income tax assets was \$74.2 million and \$76.0 million at July 31, 2019 and 2018, respectively.

Our cumulative undistributed foreign earnings included in accumulated deficit in our consolidated balance sheets were approximately \$337 million and \$395 million at July 31, 2019 and 2018, respectively.

Our 2017 FCC Form 499-A, which reports our calendar year 2016 revenue, related to payments due to the FCC, is currently under audit by the Internal Audit Division of the Universal Service Administrative Company. At July 31, 2019 and 2018, our accrued expenses included \$44.7 million and \$43.9 million, respectively, for these regulatory fees for the years covered by the audit, as well as prior and subsequent years. If we do not properly calculate, or have not properly calculated, the amount payable by us, we may be subject to interest and penalties.

Direct Cost of Revenues—Disputed Amounts

Our direct cost of revenues includes estimated amounts for pending disputes with other carriers. The billing disputes typically arise from differences in minutes of use and/or rates charged by carriers that provide service to us. At July 31, 2019 and 2018, there was \$22.4 million and \$22.6 million, respectively, in outstanding carrier payable disputes, for which we recorded direct cost of revenues of \$9.4 million and \$9.3 million, respectively. We consider various factors to determine the amount to accrue for pending disputes, including (1) our historical experience in dispute resolution, (2) the basis of disputes, (3) the financial status and our current relationship with vendors, and (4) our aging of prior disputes. Subsequent adjustments to our estimates may occur when disputes are resolved or abandoned, but these adjustments are generally not material to our results of operations. However, there can be no assurance that revisions to our estimates will not be material to our results of operations in the future.

RECENTLY ISSUED ACCOUNTING STANDARD ADOPTED SUBSEQUENT TO FISCAL 2019

On August 1, 2019, we adopted Accounting Standards Update, or ASU, No. 2016-02, *Leases (Topic 842)*, and the amendments thereto, related to the accounting for leases, which we collectively referred to as ASC 842. ASC 842 establishes a right-of-use, or ROU, model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases are classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. Entities have the option to continue

to apply historical accounting under Topic 840, including its disclosure requirements, in comparative periods presented in the year of adoption. An entity that elects this option will recognize a cumulative effect adjustment to the opening balance of retained earnings in the period of adoption instead of the earliest period presented. We elected to apply the optional ASC 842 transition provisions beginning on August 1, 2019. Accordingly, we will continue to apply Topic 840 prior to August 1, 2019, including Topic 840 disclosure requirements, in the comparative periods presented. We elected the package of practical expedients for all our leases that commenced before August 1, 2019. Based on our current agreements, we expect that we will report an operating lease liability of \$12.4 million and corresponding ROU assets as of August 1, 2019 based on the present value of the remaining minimum rental payments associated with our leases. As our leases do not provide an implicit rate, nor is one readily available, we used our incremental borrowing rate based on information available at August 1, 2019 to determine the present value of our future minimum rental payments. The adoption of ASC 842 will not have a material impact on our results of operations or total cash flows.

RECENTLY ISSUED ACCOUNTING STANDARD NOT YET ADOPTED

In June 2016, the Financial Accounting Standards Board, or FASB, issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments*, that changes the impairment model for most financial assets and certain other instruments. For receivables, loans and other instruments, entities will be required to use a new forward-looking “expected loss” model that generally will result in the earlier recognition of allowance for losses. For available-for-sale debt securities with unrealized losses, entities will measure credit losses in a manner similar to current practice, except the losses will be recognized as allowances instead of reductions in the amortized cost of the securities. In addition, an entity will have to disclose significantly more information about allowances, credit quality indicators and past due securities. The new provisions will be applied as a cumulative-effect adjustment to retained earnings. We will adopt the new standard on August 1, 2020. We are evaluating the impact that the new standard will have on our consolidated financial statements.

RESULTS OF OPERATIONS

Year Ended July 31, 2019 compared to Years Ended July 31, 2018 and 2017

The following table sets forth certain items in our statements of income as a percentage of our total revenues:

Year ended July 31,	2019	2018	2017
REVENUES:			
Telecom & Payment Services	96.6%	97.7%	97.9%
net2phone	3.4	2.2	2.0
All Other	—	0.1	0.1
TOTAL REVENUES	100.0	100.0	100.0
COSTS AND EXPENSES:			
Direct cost of revenues (exclusive of depreciation and amortization)	83.3	84.4	85.0
Selling, general and administrative	14.5	13.1	12.5
Depreciation and amortization	1.6	1.5	1.4
Severance	0.1	0.3	—
TOTAL COSTS AND EXPENSES	99.5	99.3	98.9
Other operating expense, net	(0.6)	(0.2)	(0.7)
(LOSS) INCOME FROM OPERATIONS	(0.1)	0.5	0.4
Interest income, net	0.1	0.1	0.1
Other income (expense), net	—	(0.1)	—
INCOME BEFORE INCOME TAXES	—%	0.5%	0.5%

We evaluate the performance of our operating business segments based primarily on income (loss) from operations. Accordingly, the income and expense line items below income (loss) from operations are only included in our discussion of the consolidated results of operations.

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, and has since issued amendments thereto, which we collectively referred to as ASC 606. The core principle of

ASC 606 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services, and the guidance defines a five-step process to achieve this core principle. The five-step process to achieve this principle is as follows: (i) identify the contract(s) with a customer, (ii) identify the performance obligations in the contract(s), (iii) determine the transaction price, (iv) allocate the transaction price to the performance obligations in the contract(s), and (v) recognize revenue when, or as, the entity satisfies a performance obligation. ASC 606 also mandates additional disclosure about the nature, amount, timing and uncertainty of revenues and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract.

We applied ASC 606 to those contracts that were not completed as of August 1, 2018. For incomplete contracts that were modified before August 1, 2018, we elected to use the practical expedient available under the modified retrospective method, which allows us to aggregate the effect of all modifications when identifying satisfied and unsatisfied performance obligations, determining the transaction price and allocating transaction price to the satisfied and unsatisfied performance obligations for the modified contract at transition. Results for the reporting periods beginning after August 1, 2018 are presented under ASC 606, while prior period results are not adjusted and continue to be reported in accordance with historic accounting under ASC Topic 605.

We adopted ASC 606 as of August 1, 2018, using the modified retrospective method. As this method requires that the cumulative effect of initially applying ASC 606 be recognized at the date of adoption, at August 1, 2018, we recorded an aggregate \$9.1 million reduction to “Accumulated deficit”, for the cumulative effect of the adoption. The cumulative effect adjustment included changes to the accounting for breakage and the costs to obtain and fulfill contracts with customers.

The adjustment for the change in accounting for breakage was primarily from our BOSS Revolution Calling service, traditional calling cards, and Mobile Top-Up. A customer’s nonrefundable prepayment gives the customer a right to receive a good or service in the future (and obliges us to stand ready to transfer a good or service). However, customers may not exercise all of their contractual rights. Those unexercised rights are referred to as breakage. Prior to the adoption of ASC 606, we recorded breakage revenue when the likelihood of the customer exercising its remaining rights became remote. We generally deemed the likelihood remote after 12 or 24 months of no activity. Per ASC 606, if an entity expects to be entitled to a breakage amount, the entity should recognize the expected breakage amount as revenue in proportion to the pattern of rights exercised by the customer, but only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the breakage is subsequently resolved. We determined that \$8.6 million included in our opening balance of “Deferred revenue” would have been recognized as breakage revenue under ASC 606 in prior periods, and accordingly, as of August 1, 2018, recorded an \$8.6 million reduction to “Deferred revenue”, a \$0.8 million decrease in “Deferred income tax assets,” and an offsetting \$7.8 million reduction to “Accumulated deficit.”

ASC 606 changed the accounting for costs to obtain and fulfill contracts with customers such that incremental costs of obtaining and direct costs of fulfilling contracts with customers are deferred and amortized consistent with the transfer of the related good or service. We incur incremental costs of obtaining a customer contract, we do not incur direct costs to fulfill contracts. We determined that the cumulative effect of initially applying ASC 606 to defer our incremental costs of obtaining a customer contract was \$1.3 million, primarily related to our net2phone-UCaaS business. Accordingly, as of August 1, 2018, we recorded an increase in “Other current assets” of \$0.6 million and an increase in “Other assets” of \$0.7 million, with an offsetting reduction to “Accumulated deficit” of \$1.3 million.

Telecom & Payment Services Segment

Our Telecom & Payment Services segment, which represented 96.6%, 97.7% and 97.9% of our total revenues in fiscal 2019, fiscal 2018 and fiscal 2017, respectively, markets and distributes the following communications and payment services:

- Core includes our three largest communications and payments offerings by revenue: BOSS Revolution Calling, an international long-distance calling service marketed primarily to immigrant communities in the United States, Carrier Services, which provides international

long-distance termination and outsourced traffic management solutions to telecoms worldwide, and Mobile Top-Up, which enables customers to transfer airtime and bundles of airtime, messaging and data credits to mobile accounts internationally and domestically. Core also includes smaller communications and payments offerings, many in harvest mode.

- Growth, which is comprised of National Retail Solutions, which operates a POS terminal-based network for independent retailers, BOSS Revolution Money Transfer, which provides an international money remittance service for customers in the United States, and BOSS Revolution Mobile, a mobile virtual network operator which provides mobile phone service over a third-party network for customers in the United States.

Our Telecom & Payment Services segment's most significant revenue streams are from BOSS Revolution Calling, Mobile Top-Up, and Carrier Services. BOSS Revolution Calling and Mobile Top-Up are sold direct-to-consumers and through distributors and retailers. We receive payments for BOSS Revolution Calling, traditional calling cards, and Mobile Top-Up prior to providing the services. We recognize the revenue when services are provided to the customer. International prepaid calling revenues tend to be somewhat seasonal, with the second fiscal quarter (which contains Christmas and New Year's Day) and the fourth fiscal quarter (which contains Mother's Day and Father's Day) typically showing higher minute volumes.

(in millions)				2019 change from 2018		2018 change from 2017	
Year ended July 31,	2019	2018	2017	\$	%	\$	%
Revenues	\$ 1,361.9	\$ 1,511.5	\$ 1,470.0	\$ (149.6)	(9.9)%	\$ 41.5	2.8%
Direct cost of revenues	1,161.2	1,294.8	1,263.8	(133.6)	(10.3)	31.0	2.5
Selling, general and administrative	161.1	170.1	164.5	(9.0)	(5.3)	5.6	3.4
Depreciation and amortization	16.1	16.3	16.1	(0.2)	(1.4)	0.2	1.1
Severance	1.4	4.5	—	(3.1)	(68.3)	4.5	nm
Other operating expense, net	7.8	—	0.1	7.8	nm	(0.1)	(100.0)
Income from operations	\$ 14.3	\$ 25.8	\$ 25.5	\$ (11.5)	(44.5)%	\$ 0.3	1.2%

nm—not meaningful

Revenues. Telecom & Payment Services' revenues and minutes of use for fiscal 2019, fiscal 2018 and fiscal 2017 consisted of the following:

(in millions)				2019 change from 2018		2018 change from 2017	
Year ended July 31,	2019	2018	2017	\$/#	%	\$/#	%
Core Operations:							
BOSS Revolution Calling	\$ 490.7	\$ 529.7	\$ 549.3	\$ (39.0)	(7.4)%	\$ (19.6)	(3.6)%
Carrier Services	514.2	639.0	599.9	(124.8)	(19.5)	39.1	6.5
Mobile Top-Up	272.0	253.6	219.8	18.4	7.3	33.8	15.4
Other	55.6	67.9	85.8	(12.3)	(18.1)	(17.9)	(20.9)
Growth	29.4	21.3	15.2	8.1	38.1	6.1	40.5
Total revenues	\$ 1,361.9	\$ 1,511.5	\$ 1,470.0	\$ (149.6)	(9.9)%	\$ 41.5	2.8%
Minutes of use							
BOSS Revolution Calling	4,317	4,805	5,605	(488)	(10.1)%	(800)	(14.3)%
Carrier Services	17,500	19,723	19,767	(2,223)	(11.3)	(44)	(0.2)

Revenues and minutes of use from our BOSS Revolution Calling decreased in fiscal 2019 and fiscal 2018 compared to the prior fiscal year in line with our expectations. BOSS Revolution Calling continues to be impacted by persistent, market-wide trends, including the proliferation of unlimited calling plans offered by wireless carriers and mobile virtual network operators, and the increasing penetration of free and paid over-the-top voice and messaging services.

Revenues and minutes of use from Carrier Services decreased in fiscal 2019 compared to fiscal 2018. Over the long-term, we expect that Carrier Services will continue to be adversely impacted as communications globally transition away from traditional international long-distance voice operators. However, Carrier

Services' minutes of use and revenues will likely continue to fluctuate significantly from quarter-to-quarter, as we seek to maximize economics rather than necessarily sustain minutes of use or revenues. Carrier Services' revenue increased in fiscal 2018 compared to fiscal 2017, although Carrier Services' minutes of use decreased slightly in fiscal 2018 compared to fiscal 2017, primarily due to an increase in traditional carrier minutes of use and revenues.

Revenues from Mobile Top-Up increased in fiscal 2019 and fiscal 2018 compared to the prior fiscal year due to growth from new mobile partners and expanded bundled offerings of minutes, text and data.

Revenues from our Growth initiatives increased in fiscal 2019 and fiscal 2018 compared to the prior fiscal year. Revenues from BOSS Revolution Money Transfer through direct-to-consumer channels increased 113% and 285% in fiscal 2019 and fiscal 2018, respectively, compared to the prior fiscal year due to expansion of our international disbursement network, enhanced transaction fulfillment technology, and intensified marketing. Direct-to-consumer channels now contribute most of our money transfer revenue. National Retail Solutions' revenues increased 56% and 75% in fiscal 2019 and fiscal 2018, respectively, compared to the prior fiscal year driven by expansion of its POS network to additional retailers and new revenue sources that supplement the monthly recurring fees generated by the use of its terminals. The new revenue sources include sales of advertising capacity to digital-out-of-home advertisers and sales of transaction data to data analytics and consumer package goods marketers.

Year ended July 31,	2019	2018	2017	2019 change from 2018	2018 change from 2017
Telecom & Payment Services					
Direct cost of revenues as a percentage of revenues	85.3%	85.7%	86.0%	(0.4)%	(0.3)%

Direct Cost of Revenues. Direct cost of revenues in Telecom & Payment Services decreased in fiscal 2019 compared to fiscal 2018 primarily due to decreases in Carrier Services' and BOSS Revolution Calling's direct cost of revenues in fiscal 2019 compared to fiscal 2018, partially offset by an increase in Mobile Top-Up's direct cost of revenues in fiscal 2019 compared to fiscal 2018. Direct cost of revenues in Telecom & Payment Services increased in fiscal 2018 compared to fiscal 2017 due to increases in Carrier Services' and Mobile Top-Up's direct cost of revenues in fiscal 2018 compared to fiscal 2017, partially offset by a decrease in BOSS Revolution Calling's direct cost of revenues in fiscal 2018 compared to fiscal 2017. Direct cost of revenues as a percentage of revenues in Telecom & Payment Services decreased 40 basis points in fiscal 2019 compared to fiscal 2018 primarily due to the continued migration of BOSS Revolution Calling customers to the direct-to-consumer channel and, in Carrier Services, by a shift to relatively higher margin traffic resulting from the implementation of an outsourcing agreement in a key calling corridor. Direct cost of revenues as a percentage of revenues in Telecom & Payment Services decreased 30 basis points in fiscal 2018 compared to fiscal 2017 primarily because of declines in BOSS Revolution Calling's and Mobile Top-Up's direct cost of revenues as a percentage of revenues in fiscal 2018 compared to fiscal 2017.

In the fourth quarter of fiscal 2018, we changed our estimates for recognizing certain breakage revenue and accrued regulatory fee expense, which increased revenues and direct cost of revenues \$9.5 million and \$4.5 million, respectively. We recorded breakage revenue when the likelihood of the customer exercising its remaining rights became remote. In the fourth quarter of 2018, we changed when we generally deemed the likelihood remote from 24 or 36 months of no activity to 12 or 24 months of no activity. The estimated accrued regulatory fee expense also changed as a result of rate increases.

Selling, General and Administrative. Selling, general and administrative expense in our Telecom & Payment Services segment decreased in fiscal 2019 compared to fiscal 2018 primarily due to decreases in employee compensation, stock-based compensation, legal fees and sales commissions, partially offset by an increase in consulting expense. The increase in consulting expense in fiscal 2019 compared to fiscal 2018 was primarily due to a reduction in the capitalization of consulting costs for technology development leading to greater expense being recognized as incurred. Selling, general and administrative expense in our Telecom & Payment Services segment increased in fiscal 2018 compared to fiscal 2017 primarily due to increases in employee compensation and credit card charges, partially offset by a decrease in marketing expense. The increase in credit card charges related to increases in BOSS Revolution Calling and BOSS Revolution Money Transfer direct to consumer transactions. As a percentage of Telecom & Payment Services' revenues, Telecom & Payment Services' selling, general and administrative expenses were 11.8%, 11.3% and 11.2% in fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

Depreciation and Amortization. Depreciation and amortization expense in our Telecom & Payment Services segment decreased in fiscal 2019 compared to fiscal 2018 as more of our property, plant and equipment became fully depreciated, partially offset by depreciation of equipment added to our telecommunications network and capitalized costs of consultants and employees developing internal use software. The increase in depreciation and amortization expense in fiscal 2018 compared to fiscal 2017 was due to an increase in depreciation of capitalized costs of consultants and employees developing internal use software.

Severance Expense. In fiscal 2019, Telecom & Payment Services incurred severance expense of \$1.4 million. In fiscal 2018, Telecom & Payment Services adjusted its workforce and incurred severance expense of \$4.5 million.

Other Operating Expense, net. In fiscal 2019, Telecom & Payment Services recorded an \$8.0 million accrual for non-income related taxes related to one of its foreign subsidiaries, net of other operating gain of \$0.2 million from the sale of a calling card business in Asia. In fiscal 2017, we recorded a \$0.1 million reduction to the gain on the sale of our member interest in Visa Europe, which was recorded in fiscal 2016.

net2phone Segment

Our net2phone segment, which represented 3.4%, 2.2% and 2.0% of our total revenues in fiscal 2019, fiscal 2018 and fiscal 2017, respectively, is comprised of two verticals:

- net2phone-UCaaS, a unified cloud communications service for businesses offered globally; and
- net2phone-Platform Services which leverages a common technology platform to provide telephony services to cable operators and other businesses.

(in millions) Year ended July 31,				2019 change from 2018		2018 change from 2017	
	2019	2018	2017	\$	%	\$	%
Revenues	\$ 47.3	\$ 34.9	\$ 29.5	\$ 12.4	35.6%	\$ 5.4	18.4%
Direct cost of revenues	12.9	11.3	12.0	1.6	13.9	(0.7)	(5.6)
Selling, general and administrative	34.1	20.9	15.5	13.2	63.4	5.4	34.7
Depreciation and amortization	6.5	5.3	3.9	1.2	24.1	1.4	36.0
Other operating expense, net	0.3	0.1	—	0.2	130.5	0.1	nm
Loss from operations	\$ (6.5)	\$ (2.7)	\$ (1.9)	\$ (3.8)	(142.0)%	\$ (0.8)	(43.6)%

nm—not meaningful

Revenues. net2phone's revenues for fiscal 2019, fiscal 2018 and fiscal 2017 consisted of the following:

(in millions) Year ended July 31,				2019 change from 2018		2018 change from 2017	
	2019	2018	2017	\$	%	\$	%
net2phone-UCaaS	\$ 24.5	\$ 13.3	\$ 7.1	\$ 11.2	84.4%	\$ 6.2	88.7%
net2phone-Platform Services	22.8	21.6	22.4	1.2	5.6	(0.8)	(3.7)
Total revenues	\$ 47.3	\$ 34.9	\$ 29.5	\$ 12.4	35.6%	\$ 5.4	18.4%

net2phone-UCaaS' revenues increased in fiscal 2019 compared to fiscal 2018 driven by the expansion of its U.S. channel partner network and growth in South American markets. In August 2018, net2phone-UCaaS launched its service in Mexico, and on September 14, 2018, net2phone-UCaaS entered the Canadian market through the acquisition of Versature Corp. Versature contributed \$5.1 million in revenue in fiscal 2019 after its acquisition. net2phone-UCaaS' revenues increased in fiscal 2018 compared to fiscal 2017 primarily due to continued growth in the U.S. and in South America. In light of the strong growth in the cloud-based communications offering in Brazil and Argentina that were launched in January 2017 and May 2017, respectively, net2phone-UCaaS introduced its cloud-based communications offering in Colombia in May 2018.

Year ended July 31,	2019	2018	2017	2019 change from 2018	2018 change from 2017
net2phone-UCaaS					
Direct cost of revenues as a percentage of revenues	27.2%	32.4%	40.6%	(5.2)%	(8.2)%

Direct Cost of Revenues. Direct cost of revenues increased in fiscal 2019 compared to fiscal 2018 primarily because of an increase in the direct cost of revenues in net2phone-UCaaS, partially offset by a decrease in the direct cost of revenues in net2phone-Platform Services. Direct cost of revenues decreased in fiscal 2018 compared to fiscal 2017 primarily because of a decrease in the direct cost of revenues in net2phone-Platform Services, partially offset by an increase in the direct cost of revenues in net2phone-UCaaS. Direct cost of revenues as a percentage of revenues decreased 520 and 820 basis points in fiscal 2019 and fiscal 2018, respectively, compared to the prior fiscal year because of decreases in direct cost of revenues as a percentage of revenues in both net2phone-UCaaS and net2phone-Platform Services.

Selling, General and Administrative. Selling, general and administrative expense increased in fiscal 2019 compared to fiscal 2018 due to increases in employee compensation, marketing expense and sales commissions. Selling, general and administrative expense increased in fiscal 2018 compared to fiscal 2017 due to an increase in employee compensation, resulting from an increase in the number of sales and information technology employees, as well as an increase in sales commissions. As a percentage of net2phone's revenues, net2phone's selling, general and administrative expenses were 72.1%, 59.8% and 52.6% in fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

Depreciation and Amortization. The increase in depreciation and amortization expense in fiscal 2019 compared to fiscal 2018 was due to increases in depreciation of net2phone-UCaaS' customer premises equipment, additional depreciation and amortization due to the acquisition of Versature, and capitalized costs of consultants and employees developing internal use software to support our new products. The increase in depreciation and amortization expense in fiscal 2018 compared to fiscal 2017 was due to increases in depreciation of capitalized costs of consultants and employees developing internal use software to support our new products.

Other Operating Expense, net. Other operating expense, net of \$0.3 million in fiscal 2019 was primarily due to our indemnification of a net2phone cable telephony customer related to patent infringement claims brought against the customer.

All Other

Operating segments not reportable individually are included in All Other, which included the real estate holdings and other investments that were included in the Rafael Spin-Off.

(in millions) Year ended July 31,				2019 change from 2018		2018 change from 2017	
	2019	2018	2017	\$	%	\$	%
Revenues	\$ —	\$ 1.2	\$ 2.3	\$ (1.2)	(100.0)%	\$ (1.1)	(49.1)%
Direct cost of revenues	—	—	—	—	—	—	—
Selling, general and administrative	—	2.6	0.5	(2.6)	(100.0)	2.1	446.5
Depreciation	—	1.2	1.7	(1.2)	(100.0)	\$ (0.5)	(27.9)
(Loss) income from operations	\$ —	\$ (2.6)	\$ 0.1	\$ 2.6	100.0	\$ (2.7)	nm

nm—not meaningful

Revenues. In April 2016, a subsidiary of Rafael entered into two leases with tenants for space in Rafael's building at 520 Broad Street, Newark, New Jersey. Rental income from the first lease commenced in December 2016, and rental income from the second lease commenced in March 2017. In addition, in April 2017, a subsidiary of Rafael entered into a third lease for space in Rafael's building at 520 Broad Street. Rental income from the third lease commenced in March 2018. Effective with the Rafael Spin-Off, we no longer own the 520 Broad Street building and its associated public garage, and we no longer record rental income from the building.

Selling, General and Administrative. Selling, general and administrative expense increased in fiscal 2018 compared to fiscal 2017 primarily due to an increase in expenses related to Rafael, including its commercial real estate and Lipomedix. Rafael began consolidating Lipomedix in November 2017 after Rafael purchased additional shares and increased its ownership to 50.6% of the issued and outstanding ordinary shares of Lipomedix. Selling, general and administrative expense of Lipomedix in fiscal 2018 was \$0.6 million.

Corporate

(in millions)				2019 change from 2018		2018 change from 2017	
Year ended July 31,	2019	2018	2017	\$	%	\$	%
General and administrative expenses	\$ (9.2)	\$ (9.8)	\$ (7.8)	\$ (0.6)	(6.2)%	\$ 2.0	25.2%
Severance expense	—	(0.1)	—	(0.1)	(100.0)	0.1	nm
Other operating gains (expense), net	0.3	(2.3)	(10.4)	(2.6)	(114.3)	(8.1)	(78.1)
Loss from operations	\$ (8.9)	\$ (12.2)	\$ (18.2)	\$ 3.3	27.2%	\$ 6.0	33.3%

nm—not meaningful

Corporate costs include compensation, consulting fees, treasury and accounts payable, tax and accounting services, human resources and payroll, corporate purchasing, corporate governance including Board of Directors' fees, internal and external audit, investor relations, corporate insurance, corporate legal, charitable contributions, travel and other corporate-related general and administrative expenses. Corporate does not generate any revenues, nor does it incur any direct cost of revenues.

General and Administrative. Corporate general and administrative expense decreased in fiscal 2019 compared to fiscal 2018 primarily because of decreases in stock-based compensation and legal fees, partially offset by an increase in employee compensation. The increase in Corporate general and administrative expense in fiscal 2018 compared to fiscal 2017 was primarily due to increases in legal fees and employee compensation. As a percentage of our total consolidated revenues, Corporate general and administrative expenses were 0.7%, 0.6% and 0.5% in fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

Severance expense. In fiscal 2018, Corporate incurred severance expense of \$0.1 million related to an adjustment to our workforce.

Other Operating Gains (Expense), net. On July 31, 2013, we completed a pro rata distribution of the common stock of our former subsidiary Straight Path Communications Inc., or Straight Path, to our stockholders. In fiscal 2019 and fiscal 2018, we incurred legal fees of \$2.0 million and \$1.7 million, respectively, related to the Straight Path stockholders' putative class action and derivative complaint (see Item 3 to Part I "Legal Proceedings" in this Annual Report). Also, in fiscal 2019, we recorded insurance proceeds for this matter of \$2.3 million. In addition, in fiscal 2018, we incurred fees of \$0.6 million related to other legal matters. In April 2017, we recorded a liability of \$10.0 million for the settlement and mutual release of potential liabilities and claims that may exist or arise under the Separation and Distribution Agreement between us and Straight Path. In addition, in fiscal 2017, we incurred legal fees of \$0.9 million related to the FCC investigation of potential license violations by Straight Path Spectrum LLC (formerly a subsidiary of ours) and the settlement and mutual release, and we received insurance proceeds related to the FCC investigation of \$0.5 million.

Consolidated

The following is a discussion of our consolidated stock-based compensation expense, and our consolidated income and expense line items below income from operations.

Stock-Based Compensation Expense. Stock-based compensation expense included in consolidated selling, general and administrative expenses was \$2.2 million, \$3.6 million and \$3.7 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. At July 31, 2019, unrecognized compensation cost related to

non-vested stock-based compensation was an aggregate of \$5.3 million, which included cost related to deferred stock units granted in June 2019. The unrecognized compensation cost is expected to be recognized over the remaining vesting period that ends in 2022.

(in millions) Year ended July 31,				2019 change from 2018		2018 change from 2017	
	2019	2018	2017	\$	%	\$	%
(Loss) income from operations	\$ (1.0)	\$ 8.4	\$ 5.5	\$ (9.4)	(112.0)%	\$ 2.9	51.0%
Interest income, net	0.8	1.1	1.3	(0.3)	(27.5)	(0.2)	(14.6)
Other income (expense), net	0.7	(1.4)	0.8	2.1	150.6	(2.2)	(265.0)
(Provision for) benefit from income taxes	(0.2)	(2.9)	2.0	2.7	95.8	(4.9)	(243.6)
Net income	0.3	5.2	9.6	(4.9)	(93.7)	(4.4)	(46.1)
Net income attributable to noncontrolling interests	(0.2)	(1.0)	(1.4)	0.8	80.2	0.4	32.3
Net income attributable to IDT Corporation	\$ 0.1	\$ 4.2	\$ 8.2	\$ (4.1)	(96.8)%	\$ (4.0)	(48.5)%

Other Income (Expense), net. Other income (expense), net consists of the following:

(in millions) Year ended July 31,	2019	2018	2017
Foreign currency transaction (losses) gains	\$ (0.7)	\$ (2.1)	\$ 0.3
Gain on marketable securities	—	—	0.3
Gain on investments	1.8	—	0.4
Other	(0.4)	0.7	(0.2)
TOTAL	\$ 0.7	\$ (1.4)	\$ 0.8

Income Taxes. The change in income tax expense in fiscal 2019 and fiscal 2018 compared to the prior fiscal year, excluding income tax benefits in fiscal 2018 and fiscal 2017, was primarily due to differences in the amount of income earned in the various taxing jurisdictions. In fiscal 2018, we recorded a noncurrent receivable and an income tax benefit of \$3.3 million for the anticipated refund of an AMT credit carry-over because of “The Tax Cuts and Jobs Act,” or the Tax Act. In fiscal 2017, we determined that our valuation allowance on the losses of Elmion Netherlands B.V., or Elmion, a Netherlands subsidiary, was no longer required due to an internal reorganization that generated income and a projection that the income would continue. We recorded a benefit from income taxes of \$16.6 million in fiscal 2017 from the full recognition of the Elmion deferred tax assets.

The Tax Act, enacted on December 22, 2017 provides for comprehensive tax legislation that reduced the U.S. federal statutory corporate tax rate from 35.0% to 21.0% effective January 1, 2018, required companies to pay a one-time repatriation tax, or transition tax, on earnings of certain foreign subsidiaries that were previously tax deferred, and made other changes to the U.S. income tax code. Due to our July 31 fiscal year-end, the lower corporate income tax rate is phased in, resulting in a blended U.S. federal statutory tax rate of approximately 26.9% for our fiscal 2018, and 21.0% for our fiscal years thereafter. The reduction in the corporate tax rate did not impact our results of operations or financial position because the income tax benefit from the reduced rate was offset by the valuation allowance.

The transition tax is based on total post-1986 earnings and profits which were previously deferred from U.S. income taxes. In fiscal 2018, we estimated that we would utilize \$12 million of federal net operating loss carryforwards to offset the transition tax that we expected to incur. In fiscal 2019, we adjusted this amount to \$11 million of federal net operating loss carryforwards usage. These net operating loss carryforwards have a full valuation allowance and as such there was no impact on our results of operations.

The global intangible low taxed income, or GILTI, and base erosion anti-abuse tax, or BEAT, became effective for us on August 1, 2018. We booked an inclusion to our U.S. income of \$0.6 million to reflect the impact. As a result of our fully reserved net operating losses in the United States, there was no impact on our tax provision as a result of GILTI. We also had no impact from the BEAT.

We anticipate that our assumptions may change as a result of future guidance and interpretation from the Internal Revenue Service or other taxing jurisdictions, and any additional adjustments will be made at that time.

Our cumulative undistributed foreign earnings are included in accumulated deficit in our consolidated balance sheets and consisted of approximately \$337 million at July 31, 2019. We concluded that the earnings remain permanently reinvested. The Tax Act moved toward a territorial tax system through the provision of a 100% dividends received deduction for the foreign-source portions of dividends received from controlled foreign subsidiaries.

Net Income Attributable to Noncontrolling Interests. The change in the net income attributable to noncontrolling interests in fiscal 2019 compared to fiscal 2018 was primarily due to a correction to the noncontrolling interests and accumulated deficit of one of our subsidiaries in fiscal 2019. The net loss attributable to noncontrolling interests for this subsidiary had not been recorded since its inception in fiscal 2016. Accordingly, as of August 1, 2018, we recorded a reduction in “Noncontrolling interests” and an offsetting reduction to “Accumulated deficit” of \$2.0 million. In fiscal 2019, the net loss attributable to noncontrolling interests for this subsidiary was \$0.9 million. In addition, the change in the net income attributable to noncontrolling interests in fiscal 2019 compared to fiscal 2018 was due to a decrease in the net income attributable to the noncontrolling interests in certain subsidiaries as the result of a decrease in the net income of these subsidiaries, partially offset by the reduction in the net loss attributable to the noncontrolling interests in Rafael as a result of the Rafael Spin-Off. The change in the net income attributable to noncontrolling interests in fiscal 2018 compared to fiscal 2017 was primarily due to a decrease in the net income attributable to noncontrolling interests in certain subsidiaries due to a decrease in the net income of these subsidiaries, partially offset by the net loss attributable to the noncontrolling interests in Lipomedix in fiscal 2018. Rafael began consolidating Lipomedix in November 2017.

LIQUIDITY AND CAPITAL RESOURCES

General

We currently expect our cash from operations in fiscal 2020 and the balance of cash, cash equivalents, debt securities, and current equity investments that we held on July 31, 2019 to be sufficient to meet our currently anticipated working capital and capital expenditure requirements during fiscal 2020.

At July 31, 2019, we had cash, cash equivalents, debt securities, and current equity investments of \$88.4 million and a working capital deficit (current liabilities in excess of current assets) of \$20.6 million.

We treat unrestricted cash and cash equivalents held by IDT Payment Services as substantially restricted and unavailable for other purposes. At July 31, 2019, “Cash and cash equivalents” in our consolidated balance sheet included an aggregate of \$13.4 million held by IDT Payment Services that was unavailable for other purposes.

(in millions)			
Year ended July 31,	2019	2018	2017
Cash flows provided by (used in)			
Operating activities	\$ 85.1	\$ 20.4	\$ 36.1
Investing activities	(26.2)	(1.6)	(39.6)
Financing activities	7.2	(26.6)	6.8
Effect of exchange rate changes on cash and cash equivalents	(12.1)	(1.0)	0.3
Increase (decrease) in cash, cash equivalents, and restricted cash and cash equivalents	\$ 54.0	\$ (8.8)	\$ 3.6

Operating Activities

Our cash flow from operations varies significantly from quarter to quarter and from year to year, depending on our operating results and the timing of operating cash receipts and payments, specifically trade accounts receivable and trade accounts payable.

Gross trade accounts receivable decreased to \$63.5 million at July 31, 2019 from \$76.1 million at July 31, 2018 primarily due to collections in fiscal 2019 in excess of amounts billed during the period. Gross trade accounts receivable increased to \$76.1 million at July 31, 2018 from \$72.0 million at July 31, 2017 primarily due to amounts billed in fiscal 2018 in excess of collections during the period.

Deferred revenue arises from sales of prepaid products and varies from period to period depending on the mix and the timing of revenues. Deferred revenue decreased to \$42.5 million at July 31, 2019 and \$55.0 million at July 31, 2018 from \$76.5 million at July 31, 2017. The decrease from July 31, 2018 to July 31, 2019 was primarily due to the \$8.6 million non-cash reduction to deferred revenue, with an offsetting reduction to accumulated deficit, for the cumulative effect of the adoption of ASC 606 as of August 1, 2018. In addition, the decrease from July 31, 2017 to July 31, 2018 and July 31, 2019 was due to decreases in the BOSS Revolution international calling service and traditional calling cards deferred revenue balances.

The Separation and Distribution Agreement related to the spin-off of Straight Path provides for us and Straight Path to indemnify each other for certain liabilities. We and Straight Path each communicated that it was entitled to indemnification from the other in connection with an inquiry by the Enforcement Bureau of the FCC and related matters. On October 24, 2017, we, Straight Path, Straight Path IP Group, Inc., or SPIP, and PR-SP IP Holdings LLC, or PR-SP, an entity owned by Howard S. Jonas, entered into a Settlement Agreement and Release that provides for, among other things, the settlement and mutual release of potential liabilities and claims that may exist or arise under the Separation and Distribution Agreement between us and Straight Path. In exchange for the mutual release, in October 2017, we paid Straight Path an aggregate of \$16 million in cash, Straight Path transferred to us its majority ownership interest in Straight Path IP Group Holding, Inc., or New SPIP, which holds the equity of SPIP, the entity that holds intellectual property primarily related to communications over computer networks, subject to the right to receive 22% of the net proceeds, if any, received by SPIP from licenses, settlements, awards or judgments involving any of the patent rights and certain transfers of the patents or related rights, that will be retained by Straight Path's stockholders (such equity interest, subject to the retained interest right, the "IP Interest"), and we undertook certain funding and other obligations related to SPIP. The Settlement Agreement and Release allocates (i) \$10 million of the payment and the retained interest right to the settlement of claims and the mutual release and (ii) \$6 million to the transfer of the IP Interest. In the accompanying consolidated statement of cash flows in fiscal 2018, \$10 million of the aggregate payment to Straight Path was included in operating activities and \$6 million of the aggregate payment was included in investing activities.

On June 21, 2018, in *South Dakota v. Wayfair Inc.*, the United States Supreme Court held that states may charge sales tax on purchases made from out-of-state sellers, even if the seller does not have a physical presence in the taxing state. We are evaluating our state tax filings with respect to the recent Wayfair decision and are in the process of reviewing our collection practices. It is possible that one or more jurisdictions may assert that we have liability for periods for which we have not collected sales, use or other similar taxes, and if such an assertion or assertions were successful it could adversely affect our business, financial condition and operating results. One or more jurisdictions may change their laws or policies to apply their sales, use or other similar taxes to our operations, and if such changes were made it could materially and adversely affect our business, financial condition and operating results.

In August 2017, we entered into a Reciprocal Services Agreement with a telecom operator in Central America for a full range of services, including, but not limited to, termination of inbound and outbound international long-distance voice calls. We have committed to pay such telecom operator monthly committed amounts during the term of the agreement. In addition, under certain limited circumstances, the parties may renegotiate the amount of the monthly payments. In the event the parties do not agree on re-pricing terms after good faith negotiations, then either party has the right to terminate the agreement. Pursuant to the agreement, in fiscal 2018, we deposited \$9.2 million into an escrow account as security for the benefit of the telecom operator, which was included in operating activities in the accompanying consolidated statement of cash flows. The \$9.2 million escrow account balance is included in "Other current assets" in the accompanying consolidated balance sheet based on the terms and conditions of the agreement.

Investing Activities

Our capital expenditures were \$18.7 million in fiscal 2019 compared to \$20.6 million in fiscal 2018 and \$22.9 million in fiscal 2017. We currently anticipate that total capital expenditures in fiscal 2020 will be \$20 million to \$22 million. We expect to fund our capital expenditures with our net cash provided by operating activities and cash, cash equivalents, debt securities, and current equity investments on hand.

On October 24, 2017, we sold our entire majority interests in New SPIP to PR-SP in exchange for \$6 million and the assumption by PR-SP of our funding and other obligations. As described above, \$6 million of the aggregate payment to Straight Path that was allocated to the transfer of the IP Interest was included in investing activities in fiscal 2018.

On September 14, 2018, we acquired 100% of the outstanding shares of Versature, a UCaaS provider serving the Canadian market. The cash paid for the acquisition net of cash acquired was \$5.5 million.

On December 23, 2016, we acquired all of the outstanding shares of Live Ninja, a business communications company that provides chat and messaging capabilities for small and medium-sized businesses with the ability to transfer a conversation from one channel of communications (for example, the web) to another (such as a mobile phone). The cash paid for the acquisition, net of cash acquired was \$1.8 million.

In fiscal 2019, fiscal 2018 and fiscal 2017, we used cash of \$1.0 million, \$53,000, and \$9.4 million, respectively, for additional investments. In September 2016, Rafael Pharma issued to our former 50%-owned subsidiary, CS Pharma Holdings, LLC, or CS Pharma, its convertible Series D Note with a principal amount of \$10 million, representing the \$8 million investment funded on such date plus the conversion of \$2 million principal amount convertible promissory notes issued in connection with a prior funding. In addition, in fiscal 2017, we used cash of \$1.4 million for additional investments in our former subsidiary, Lipomedix.

In fiscal 2019, fiscal 2018 and fiscal 2017, proceeds from redemption of investments was \$1.0 million, nil, and \$15,000, respectively.

In fiscal 2019, fiscal 2018 and fiscal 2017, we used cash of \$7.3 million, \$22.5 million, and \$53.4 million, respectively, to purchase marketable securities.

Proceeds from maturities and sales of marketable securities were \$5.3 million, \$41.5 million, and \$48.0 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

Financing Activities

In fiscal 2018, we paid aggregate cash dividends of \$0.56 per share on our Class A common stock and Class B common stock, or \$13.9 million in total. In fiscal 2017, we paid aggregate cash dividends of \$0.76 per share on our Class A common stock and Class B common stock, or \$17.9 million in total. In fiscal 2018, our Board of Directors discontinued our quarterly dividend, electing instead to repurchase shares of our Class B common stock when warranted by market conditions, available resources, and our business outlook and results, as well as invest in our early stage business initiatives.

We distributed cash of \$1.5 million, \$1.0 million, and \$1.5 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively, to the noncontrolling interests in certain of our subsidiaries.

At the time of the acquisition in September 2018, Versature had financing-related other liabilities of \$0.7 million. During the period from the acquisition to July 31, 2019, we repaid \$0.7 million of these liabilities.

On December 21, 2018, we sold 2,546,689 shares of our Class B common stock that were held in treasury to Howard S. Jonas for aggregate consideration of \$14.8 million. The price per share of \$5.89 was equal to the closing price of our Class B common stock on April 16, 2018, the last closing price before approval of the sale by our Board of Directors and its Corporate Governance Committee. On May 31, 2018, Mr. Jonas paid \$1.5 million of the purchase price, and he paid the balance of the purchase price on December 21, 2018 after approval of the sale by the Company's stockholders at the 2018 annual meeting of stockholders. The purchase price was reduced by approximately \$0.2 million, which was the amount of dividends paid on 2,546,689 shares of our Class B common stock whose record date was between April 16, 2018 and the issuance of the shares.

On June 9, 2017, we sold 1.0 million shares of our Class B common stock to Howard S. Jonas for aggregate consideration of \$14.9 million. The price per share of \$14.93 was equal to the closing price of our Class B common stock on May 1, 2017, the day prior to the approval of the sale by our Board of Directors and Corporate Governance Committee. On April 11, 2017, we sold 728,332 treasury shares of our Class B

common stock to Howard S. Jonas for aggregate consideration of \$10.0 million. The price per share of \$13.73 was equal to the closing price of our Class B common stock on April 10, 2017.

On March 2, 2017, we sold 10% of our direct and indirect interests and rights in Rafael Pharma to Howard S. Jonas for a purchase price of \$1 million.

In connection with our investment in Rafael Pharma, our former subsidiary, CS Pharma Holdings, LLC, or CS Pharma, issued member interests to third parties in exchange for cash investments. In fiscal 2017, we received cash of \$1.3 million from third parties for member interests in CS Pharma.

On March 26, 2018, we completed the Rafael Spin-Off. The Rafael Spin-Off did not meet the criteria to be reported as a discontinued operation and accordingly, Rafael's assets, liabilities, results of operations and cash flows have not been reclassified. At the time of the Rafael Spin-Off, Rafael owned the commercial real estate assets and interests in two clinical stage pharmaceutical companies that were held by us. Prior to the Rafael Spin-Off, we transferred to Rafael cash, cash equivalents, marketable securities, and hedge fund and other investments. As a result of the Rafael Spin-Off, in fiscal 2018, we deconsolidated cash and cash equivalents of \$9.3 million, and net assets excluding cash and cash equivalents of \$105.6 million.

We received proceeds from the exercise of our stock options of \$0.8 million in fiscal 2017, for which we issued 73,471 shares of our Class B common stock. There were no stock option exercises in fiscal 2019 or fiscal 2018.

IDT Telecom had a credit agreement, dated as of October 31, 2018, with TD Bank, N.A. for a line of credit facility for up to a maximum principal amount of \$25.0 million until its maturity on July 15, 2019. The principal outstanding incurred interest per annum at the LIBOR rate adjusted by the Regulation D maximum reserve requirement plus 125 basis points. In fiscal 2019, we borrowed and repaid an aggregate of \$3.0 million under the facility. IDT Telecom paid a quarterly unused commitment fee of 0.3% per annum on the average daily balance of the unused portion of the \$25.0 million commitment.

IDT Telecom had a credit agreement, dated July 12, 2012, with TD Bank, N.A. for a line of credit facility for up to a maximum principal amount of \$25.0 million. The credit agreement was terminated on July 20, 2018. The principal outstanding incurred interest per annum, at the option of IDT Telecom, at either (a) the U.S. Prime Rate less 125 basis points, or (b) the LIBOR rate adjusted by the Regulation D maximum reserve requirement plus 125 basis points. In fiscal 2018, we borrowed and repaid an aggregate of \$22.3 million under the facility. There were no amounts borrowed under the facility in fiscal 2017. IDT Telecom paid a quarterly unused commitment fee of 0.325% per annum on the average daily balance of the unused portion of the \$25.0 million commitment.

We have an existing stock repurchase program authorized by our Board of Directors for the repurchase of up to an aggregate of 8.0 million shares of our Class B common stock. In fiscal 2019, we repurchased 729,110 shares of our Class B common stock for an aggregate purchase price of \$3.9 million. In fiscal 2018, we repurchased 367,484 shares of our Class B common stock for an aggregate purchase price of \$1.9 million. There were no repurchases under the program in fiscal 2017. At July 31, 2019, 6.9 million shares remained available for repurchase under the stock repurchase program.

In fiscal 2019, fiscal 2018 and fiscal 2017, we paid \$28,000, \$0.4 million, and \$1.8 million, respectively to repurchase 3,748; 57,081; and 94,338 shares, respectively of our Class B common stock that were tendered by employees of ours to satisfy the employees' tax withholding obligations in connection with the lapsing of restrictions on awards of restricted stock. Such shares are repurchased by us based on their fair market value on the trading day immediately prior to the vesting date.

Other Sources and Uses of Resources

We intend to, where appropriate, make other strategic investments and acquisitions to complement, expand, and/or enter into new businesses. In considering acquisitions and investments, we search for opportunities to profitably grow our existing businesses and/or to add qualitatively to the range and diversification of businesses in our portfolio. At this time, we cannot guarantee that we will be presented with other acquisition opportunities that meet our return on investment criteria, or that our efforts to make acquisitions that meet our criteria will be successful.

CONTRACTUAL OBLIGATIONS AND OTHER COMMERCIAL COMMITMENTS

The following table quantifies our future contractual obligations and commercial commitments at July 31, 2019:

Payments Due by Period

(in millions)		Total	Less than 1 year	1—3 years	4—5 years	After 5 years
Operating leases	\$	18.5	\$ 6.9	\$ 6.1	\$ 4.0	\$ 1.5
Purchase commitments ⁽¹⁾		36.1	36.1	—	—	—
TOTAL CONTRACTUAL OBLIGATIONS⁽²⁾	\$	54.6	\$ 43.0	\$ 6.1	\$ 4.0	\$ 1.5

(1) Purchase commitments include the aggregate commitments under telecom services commitments with telecom operators in Central America, including, but not limited to, termination of inbound and outbound international long-distance voice calls.

(2) The above table does not include an aggregate of \$16.4 million in performance bonds due to the uncertainty of the amount and/or timing of any such payments.

OFF-BALANCE SHEET ARRANGEMENTS

We do not have any “off-balance sheet arrangements,” as defined in relevant SEC regulations that are reasonably likely to have a current or future effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources, other than the following.

In connection with the Rafael Spin-Off in March 2018, we and Rafael entered into various agreements prior to the spin-off including a Separation and Distribution Agreement to effect the separation and provide a framework for our relationship with Rafael after the spin-off, and a Tax Separation Agreement, which sets forth the responsibilities of us and Rafael with respect to, among other things, liabilities for federal, state, local and foreign taxes for periods before and including the spin-off, the preparation and filing of tax returns for such periods and disputes with taxing authorities regarding taxes for such periods. Pursuant to the Separation and Distribution Agreement, we indemnify Rafael and Rafael indemnifies us for losses related to the failure of the other to pay, perform or otherwise discharge, any of the liabilities and obligations set forth in the agreement. Pursuant to the Tax Separation Agreement, we indemnify Rafael from all liability for taxes of ours, other than Rafael and its subsidiaries, for any taxable period, and from all liability for taxes due to the spin-off.

In connection with our spin-off of Straight Path, in July 2013, we and Straight Path entered into various agreements prior to the spin-off including a Separation and Distribution Agreement to effect the separation and provide a framework for our relationship with Straight Path after the spin-off, and a Tax Separation Agreement, which sets forth the responsibilities of us and Straight Path with respect to, among other things, liabilities for federal, state, local and foreign taxes for periods before and including the spin-off, the preparation and filing of tax returns for such periods and disputes with taxing authorities regarding taxes for such periods. Pursuant to the Separation and Distribution Agreement, we indemnify Straight Path and Straight Path indemnifies us for losses related to the failure of the other to pay, perform or otherwise discharge, any of the liabilities and obligations set forth in the agreement. Pursuant to the Tax Separation Agreement, we indemnify Straight Path from all liability for taxes of Straight Path or any of its subsidiaries or relating to the Straight Path business with respect to taxable periods ending on or before the spin-off, from all liability for taxes of ours, other than Straight Path and its subsidiaries, for any taxable period, and from all liability for taxes due to the spin-off. (See Notes 13 and 21 to the Consolidated Financial Statements included in Item 8 to Part II of this Annual Report).

We have performance bonds issued through third parties for the benefit of various states in order to comply with the states’ financial requirements for money remittance licenses and telecommunications resellers. At July 31, 2019, we had aggregate performance bonds of \$16.4 million outstanding.

Item 7A. Quantitative and Qualitative Disclosures about Market Risks.

FOREIGN CURRENCY RISK

Revenues from our international operations were 34%, 32% and 31% of our consolidated revenues in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. A significant portion of these revenues is in currencies other

than the U.S. Dollar. Our foreign currency exchange risk is somewhat mitigated by our ability to offset a portion of these non-U.S. Dollar-denominated revenues with operating expenses that are paid in the same currencies. While the impact from fluctuations in foreign exchange rates affects our revenues and expenses denominated in foreign currencies, the net amount of our exposure to foreign currency exchange rate changes at the end of each reporting period is generally not material.

INVESTMENT RISK

In addition to, but separate from our primary business, we hold a portion of our assets in debt securities and equity investments, including hedge funds, for strategic and speculative purposes. At July 31, 2019, the carrying value of our debt securities and equity investments were \$2.5 million and \$15.0 million, respectively. Debt securities and equity investments carry a degree of risk and depend to a great extent on correct assessments of the future course of price movements. There can be no assurance that our investment managers will be able to accurately predict these price movements. The securities markets have in recent years been characterized by great volatility and unpredictability. Accordingly, the value of our investments may go down as well as up and we may not receive the amounts originally invested upon redemption.

Item 8. Financial Statements and Supplementary Data.

The Consolidated Financial Statements of the Company and the reports of the independent registered public accounting firms thereon starting on page F-1 are included herein.

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

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our Chief Executive Officer and Chief Financial Officer have evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as amended), as of the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were not effective as of July 31, 2019 because of a material weakness in our internal control over financial reporting relating to management review controls associated with non-income related taxes related to one of our foreign entities.

Report of Management on Internal Control over Financial Reporting

We, the management of IDT Corporation and subsidiaries (the “Company”), are responsible for establishing and maintaining adequate internal control over financial reporting of the Company.

The Company’s internal control over financial reporting is defined in Rule 13a-15(f) and 15d-15(f) promulgated under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, the Company’s principal executive and principal financial officers and effected by the Company’s board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company’s financial statements for external purposes in accordance with generally accepted accounting principles in the United States and includes those policies and procedures that:

1. Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of assets of the Company;
2. Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
3. Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company’s assets that could have a material effect on the financial statements.

Management has assessed the effectiveness of the Company's internal control over financial reporting as of July 31, 2019. In making this assessment, the Company's management used the criteria established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our internal control over financial reporting, as prescribed above, as of July 31, 2019. Based on our evaluation, our principal executive officer and principal financial officer concluded that the Company's internal control over financial reporting as of July 31, 2019 was not effective due to the existence of the material weakness as described below.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis.

Deficiency in our Internal Control Over Financial Reporting

Based on an evaluation of the effectiveness of the design and operation of its controls and procedures conducted by the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, the Company has concluded that, due to the below material weakness in financial reporting, these controls and procedures were not effective as of July 31, 2019.

We have identified the following material weakness in our controls:

- Management review controls associated with non-income related taxes related to one of our foreign entities were not effective.

Remediation

As set forth below, following the Audit Committee's independent review, the Company's management plans to take the following steps to remediate the material weakness identified above and improve internal control over financial reporting. Notwithstanding the material weakness described above, we have performed additional analyses and other procedures to enable management to conclude that our financial statements included in this Form 10-K fairly present, in all material respects, our financial condition and results of operations as of and for the year ended July 31, 2019.

- Explore engaging an independent third party to assist in our evaluation of all non-income related taxes, relating to material foreign subsidiaries;
- Provide additional outside training to employees responsible for tax compliance; and
- Enhance internal documentation support related to the Company's tax position.

Management and our Audit Committee will monitor these remedial measures and the effectiveness of our internal controls and procedures.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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.

BDO USA, LLP has provided an attestation report on the Company's internal control over financial reporting as of July 31, 2019.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the fourth quarter of fiscal 2019 that have materially affected, or are 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 following is a list of our directors and executive officers along with the specific information required by Rule 14a-3 of the Securities Exchange Act of 1934:

Executive Officers

Howard S. Jonas—Chairman of the Board
Shmuel Jonas—Chief Executive Officer
Marcelo Fischer—Chief Financial Officer
Bill Pereira—President and Chief Operating Officer
Mitch Silberman—Chief Accounting Officer and Controller
Joyce J. Mason—Executive Vice President, General Counsel and Corporate Secretary
Menachem Ash—Executive Vice President of Strategy and Legal Affairs
Nadine Shea—Executive Vice President of Global Human Resources
David Wartell —Chief Technology Officer

Directors

Howard S. Jonas—Chairman of the Board

Bill Pereira— President and Chief Operating Officer

Michael Chenkin—Certified Public Accountant; previously worked in the Audit Department of Coopers and Lybrand and as a consultant to the securities industry

Eric F. Cosentino—Former Rector of the Episcopal Church of the Divine Love, Montrose, New York

Judah Schorr—Founder of Judah Schorr MD PC, an anesthesia provider to hospitals, ambulatory surgery centers and medical offices, and has been its President and owner since its inception

The remaining information required by this Item will be contained in our Proxy Statement for our Annual Stockholders Meeting, which will be filed with the Securities and Exchange Commission within 120 days after July 31, 2019, and which is incorporated by reference herein.

Corporate Governance

We have included as exhibits to this Annual Report on Form 10-K certificates of our Chief Executive Officer and Principal Financial Officer certifying the quality of our public disclosure.

We make available free of charge through the investor relations page of our web site (www.idt.net/ir) our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports, and all beneficial ownership reports on Forms 3, 4 and 5 filed by directors, officers and beneficial owners of more than 10% of our equity, as soon as reasonably practicable after such reports are electronically filed with the Securities and Exchange Commission. We have adopted codes of business conduct and ethics for all of our employees, including our principal executive officer, principal financial officer and principal accounting officer. Copies of the codes of business conduct and ethics are available on our web site.

Our web site and the information contained therein or incorporated therein are not intended to be incorporated into this Annual Report on Form 10-K or our other filings with the Securities and Exchange Commission.

Item 11. Executive Compensation.

The information required by this Item will be contained in our Proxy Statement for our Annual Stockholders Meeting, which will be filed with the Securities and Exchange Commission within 120 days after July 31, 2019, and which is incorporated by reference herein.

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

The information required by this Item will be contained in our Proxy Statement for our Annual Stockholders Meeting, which will be filed with the Securities and Exchange Commission within 120 days after July 31, 2019, and which is incorporated by reference herein.

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

The information required by this Item will be contained in our Proxy Statement for our Annual Stockholders Meeting, which will be filed with the Securities and Exchange Commission within 120 days after July 31, 2019, and which is incorporated by reference herein.

Item 14. Principal Accounting Fees and Services.

The information required by this Item will be contained in our Proxy Statement for our Annual Stockholders Meeting, which will be filed with the Securities and Exchange Commission within 120 days after July 31, 2019, and which is incorporated by reference herein.

Part IV

Item 15. Exhibits, Financial Statement Schedules.

(a) The following documents are filed as part of this Report:

1. Report of Management on Internal Control Over Financial Reporting

Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting

Report of Independent Registered Public Accounting Firm on Consolidated Financial Statements

Consolidated Financial Statements covered by Report of Independent Registered Public Accounting Firm

2. Financial Statement Schedule.

All schedules have been omitted since they are either included in the Notes to Consolidated Financial Statements or not required or not applicable.

3. Exhibits. Exhibit Numbers 10.01, 10.02, 10.03, 10.04, 10.05 and 10.06 are management contracts or compensatory plans or arrangements.

The exhibits listed in paragraph (b) of this item are filed, furnished, or incorporated by reference as part of this Form 10—K.

Certain of the agreements filed as exhibits to this Form 10-K contain representations and warranties by the parties to the agreements that have been made solely for the benefit of the parties to the agreement. These representations and warranties:

- may have been qualified by disclosures that were made to the other parties in connection with the negotiation of the agreements, which disclosures are not necessarily reflected in the agreements;
- may apply standards of materiality that differ from those of a reasonable investor; and
- were made only as of specified dates contained in the agreements and are subject to subsequent developments and changed circumstances.

Accordingly, these representations and warranties may not describe the actual state of affairs as of the date that these representations and warranties were made or at any other time. Investors should not rely on them as statements of fact.

(b) Exhibits.

Exhibit Number	Description of Exhibits
3.01(1)	Third Restated Certificate of Incorporation of the Registrant.
3.02(2)	Fourth Amended and Restated By-laws of the Registrant.
10.01(3)	Fourth Amended and Restated Employment Agreement, dated December 14, 2016, between the Registrant and Howard S. Jonas.
10.02(4)	2005 Stock Option and Incentive Plan, as amended and restated, of IDT Corporation.
10.03(5)	2015 Stock Option and Incentive Plan of IDT Corporation.
10.04(6)	Employment Agreement, dated January 12, 2015, between IDT Telecom and Bill Pereira.
10.05(7)	Agreement, dated December 5, 2017, between IDT Corporation, Bill Pereira and IDT Telecom.
10.06(8)	Stock Option Agreement between the Registrant and Howard Jonas, dated May 2, 2017.
10.07(8)	Assignment Agreement between the Registrant and Howard Jonas, dated September 19, 2017.
21.01*	Subsidiaries of the Registrant.
23.01*	Consent of BDO USA, LLP
31.01*	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.02*	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.01*	Certification of Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.02*	Certification of Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

* filed herewith.

(1) Incorporated by reference to Form 8-K, filed April 5, 2011.

(2) Incorporated by reference to Form 8-K, filed September 23, 2009.

(3) Incorporated by reference to Form 8-K, filed December 20, 2016.

(4) Incorporated by reference to Schedule 14A, filed November 5, 2013.

(5) Incorporated by reference to Form S-8, filed October 14, 2016.

(6) Incorporated by reference to Form 8-K, filed January 14, 2015.

(7) Incorporated by reference to Form 8-K, filed December 5, 2017

(8) Incorporated by reference to Form 10-K for the fiscal year ended July 31, 2017, filed October 16, 2017.

Item 16. Form 10-K Summary.

None.

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

IDT CORPORATION

By: /s/ Shmuel Jonas
Shmuel Jonas
Chief Executive Officer

Date: October 11, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this Annual Report on Form 10-K has been signed by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Titles	Date
<u>/s/ Shmuel Jonas</u> Shmuel Jonas	Chief Executive Officer (Principal Executive Officer)	October 11, 2019
<u>/s/ Howard S. Jonas</u> Howard S. Jonas	Chairman of the Board	October 11, 2019
<u>/s/ Marcelo Fischer</u> Marcelo Fischer	Chief Financial Officer (Principal Financial Officer)	October 11, 2019
<u>/s/ Mitch Silberman</u> Mitch Silberman	Chief Accounting Officer and Controller (Principal Accounting Officer)	October 11, 2019
<u>/s/ Bill Pereira</u> Bill Pereira	Director	October 11, 2019
<u>/s/ Michael Chenkin</u> Michael Chenkin	Director	October 11, 2019
<u>/s/ Eric F. Cosentino</u> Eric F. Cosentino	Director	October 11, 2019
<u>/s/ Judah Schorr</u> Judah Schorr	Director	October 11, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders
IDT Corporation
Newark, New Jersey

Opinion on Internal Control over Financial Reporting

We have audited IDT Corporation (a Delaware Corporation) and Subsidiaries (the “Company’s”) internal control over financial reporting as of July 31, 2019, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the “COSO criteria”). In our opinion, the Company did not maintain, in all material respects, effective internal control over financial reporting as of July 31, 2019, based on the COSO criteria.

We do not express an opinion or any other form of assurance on management’s statements referring to any corrective actions taken by the Company after the date of management’s assessment.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the consolidated balance sheets of the Company as of July 31, 2019 and 2018, the related consolidated statements of income and comprehensive income, stockholders’ equity, and cash flows for each of the three years in the period ended July 31, 2019, and the related notes (collectively referred to as “the financial statements”) and our report dated October 11, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying “Item 9A, Management’s Report on Internal Control over Financial Reporting”. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

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

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company’s annual or interim financial statements will not be prevented or detected on a timely basis. A material weakness regarding management review controls associated with non-income related taxes has been identified and described in management’s assessment. This material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the fiscal 2019 financial statements, and this report does not affect our report dated October 11, 2019 on those financial statements.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and

that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ BDO USA, LLP

Woodbridge, New Jersey
October 11, 2019

IDT Corporation

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Board of Directors and Stockholders
IDT Corporation
Newark, New Jersey

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of IDT Corporation (a Delaware Corporation) and subsidiaries (the “Company”) as of July 31, 2019 and 2018, the related consolidated statements of income and comprehensive income, stockholders’ equity, and cash flows for each of the three years in the period ended July 31, 2019, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at July 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended July 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of July 31, 2019, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) and our report dated October 11, 2019 expressed an adverse opinion thereon.

Change in Accounting Principle

On August 1, 2018, the Company adopted Accounting Standards Update 2014-09, Revenue from Contracts with Customers (Topic 606). The effects of adoption are described in Note 2 to the consolidated financial statements.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the 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. We believe that our audits provide a reasonable basis for our opinion.

/s/ BDO USA, LLP

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

Woodbridge, New Jersey
October 11, 2019

IDT CORPORATION
CONSOLIDATED BALANCE SHEETS

July 31 (in thousands, except per share data)	2019	2018
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 80,168	\$ 73,981
Restricted cash and cash equivalents	177,031	129,216
Debt securities	2,534	5,612
Equity investments	5,688	360
Trade accounts receivable, net of allowance for doubtful accounts of \$5,444 and \$5,358 at July 31, 2019 and 2018, respectively	58,060	70,746
Prepaid expenses	20,276	20,566
Other current assets	24,704	28,400
TOTAL CURRENT ASSETS	368,461	328,881
Property, plant and equipment, net	34,355	36,080
Goodwill	11,209	11,315
Other intangibles, net	4,196	496
Equity investments	9,319	6,633
Deferred income tax assets, net	4,589	5,668
Other assets	11,574	10,524
TOTAL ASSETS	\$ 443,703	\$ 399,597
LIABILITIES AND EQUITY		
CURRENT LIABILITIES:		
Trade accounts payable	\$ 37,077	\$ 45,900
Accrued expenses	127,834	130,225
Deferred revenue	42,479	55,015
Customer deposits	175,028	127,571
Other current liabilities	6,652	8,273
TOTAL CURRENT LIABILITIES	389,070	366,984
Other liabilities	1,076	1,310
TOTAL LIABILITIES	390,146	368,294
Commitments and contingencies		
EQUITY:		
IDT Corporation stockholders' equity:		
Preferred stock, \$.01 par value; authorized shares—10,000; no shares issued	—	—
Class A common stock, \$.01 par value; authorized shares—35,000; 3,272 shares issued and 1,574 shares outstanding at July 31, 2019 and 2018	33	33
Class B common stock, \$.01 par value; authorized shares—200,000; 25,803 and 25,594 shares issued and 24,895 and 22,872 shares outstanding at July 31, 2019 and 2018, respectively	258	256
Additional paid-in capital	273,313	294,047
Treasury stock, at cost, consisting of 1,698 and 1,698 shares of Class A common stock and 908 and 2,722 shares of Class B common stock at July 31, 2019 and 2018, respectively	(51,739)	(85,597)
Accumulated other comprehensive loss	(4,858)	(4,972)
Accumulated deficit	(160,763)	(173,103)
Total IDT Corporation stockholders' equity	56,244	30,664
Noncontrolling interests	(2,687)	639
TOTAL EQUITY	53,557	31,303
TOTAL LIABILITIES AND EQUITY	\$ 443,703	\$ 399,597

See accompanying notes to consolidated financial statements.

IDT CORPORATION

CONSOLIDATED STATEMENTS OF INCOME

Year ended July 31 (in thousands, except per share data)	2019	2018	2017
REVENUES	\$ 1,409,172	\$ 1,547,495	\$ 1,501,729
COSTS AND EXPENSES:			
Direct cost of revenues (exclusive of depreciation and amortization)	1,174,015	1,306,037	1,275,708
Selling, general and administrative (i)	204,366	203,251	188,293
Depreciation and amortization	22,632	22,801	21,704
Severance	1,438	4,630	—
TOTAL COSTS AND EXPENSES	1,402,451	1,536,719	1,485,705
Other operating expense, net (see Note 13)	(7,726)	(2,398)	(10,475)
(Loss) income from operations	(1,005)	8,378	5,549
Interest income, net	776	1,071	1,254
Other income (expense), net	682	(1,348)	817
Income before income taxes	453	8,101	7,620
(Provision for) benefit from income taxes	(123)	(2,902)	2,021
NET INCOME	330	5,199	9,641
Net income attributable to noncontrolling interests	(196)	(991)	(1,464)
NET INCOME ATTRIBUTABLE TO IDT CORPORATION	\$ 134	\$ 4,208	\$ 8,177
Earnings per share attributable to IDT Corporation common stockholders:			
Basic	\$ 0.01	\$ 0.17	\$ 0.35
Diluted	\$ 0.01	\$ 0.17	\$ 0.35
Weighted-average number of shares used in calculation of earnings per share:			
Basic	25,293	24,655	23,182
Diluted	25,308	24,718	23,309
(i) Stock-based compensation included in selling, general and administrative expenses	\$ 2,236	\$ 3,581	\$ 3,740

See accompanying notes to consolidated financial statements.

IDT CORPORATION

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Year ended July 31
(in thousands)

	2019	2018	2017
NET INCOME	\$ 330	\$ 5,199	\$ 9,641
Other comprehensive income (loss):			
Change in unrealized gain (loss) on available-for-sale securities	1	(177)	2,126
Foreign currency translation adjustments	80	(182)	(725)
Other comprehensive income (loss)	81	(359)	1,401
COMPREHENSIVE INCOME	411	4,840	11,042
Comprehensive income attributable to noncontrolling interests	(196)	(991)	(1,464)
COMPREHENSIVE INCOME ATTRIBUTABLE TO IDT CORPORATION	\$ 215	\$ 3,849	\$ 9,578

See accompanying notes to consolidated financial statements.

IDT CORPORATION

CONSOLIDATED STATEMENTS OF EQUITY (in thousands)

	IDT Corporation Stockholders										Total Equity
	Class A		Class B		Additional Paid-In Capital	Treasury Stock	Accumulated		Noncontrolling Interests		
	Common Stock	Shares	Common Stock	Amount			Comprehensive Loss	Deficit			
BALANCE AT JULY 31, 2016	3,272	\$ 33	25,383	\$ 254	\$ 396,243	\$ (115,316)	\$ (3,744)	\$ (153,673)	\$ 406	\$ 124,203	
Dividends declared (\$0.76 per share)	—	—	—	—	—	—	—	(17,874)	—	(17,874)	
Restricted Class B common stock purchased from employees	—	—	—	—	—	(1,838)	—	—	—	(1,838)	
Exercise of stock options	—	—	73	1	835	—	—	—	—	836	
Stock-based compensation	—	—	105	1	3,739	—	—	—	—	3,740	
Sale of Class B common stock to Howard S. Jonas	—	—	—	—	(8,920)	33,850	—	—	—	24,930	
Sale of interest and rights in Rafael Pharmaceuticals, Inc. to Howard S. Jonas (see Note 4)	—	—	—	—	(185)	—	—	—	1,185	1,000	
Issuance of member interests in CS Pharma Holdings, LLC (see Note 4)	—	—	—	—	2,750	—	—	—	7,250	10,000	
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(1,482)	(1,482)	
Other comprehensive income	—	—	—	—	—	—	1,401	—	—	1,401	
Net income for the year ended July 31, 2017	—	—	—	—	—	—	—	8,177	1,464	9,641	
BALANCE AT JULY 31, 2017	3,272	\$ 33	25,561	\$ 256	\$ 394,462	\$ (83,304)	\$ (2,343)	\$ (163,370)	\$ 8,823	\$ 154,557	
Dividends declared (\$0.56 per share)	—	—	—	—	—	—	—	(13,941)	—	(13,941)	
Restricted Class B common stock purchased from employees	—	—	—	—	—	(362)	—	—	—	(362)	
Repurchases of Class B common stock through repurchase program	—	—	—	—	—	(1,931)	—	—	—	(1,931)	
Stock-based compensation	—	—	33	—	3,581	—	—	—	—	3,581	
Transfer of right to receive equity to Howard S. Jonas	—	—	—	—	—	—	—	—	(40)	(40)	
Consolidation of Lipomedix Pharmaceuticals, Inc.	—	—	—	—	—	—	—	—	558	558	
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(1,040)	(1,040)	
Rafael Spin-Off	—	—	—	—	(103,996)	—	(2,270)	—	(8,653)	(114,919)	
Other comprehensive loss	—	—	—	—	—	—	(359)	—	—	(359)	
Net income for the year ended July 31, 2018	—	—	—	—	—	—	—	4,208	991	5,199	
BALANCE AT JULY 31, 2018	3,272	\$ 33	25,594	\$ 256	\$ 294,047	\$ (85,597)	\$ (4,972)	\$ (173,103)	\$ 639	\$ 31,303	

IDT CORPORATION

CONSOLIDATED STATEMENTS OF EQUITY (in thousands)—(Continued)

	IDT Corporation Stockholders										Total Equity
	Class A			Class B			Accumulated				
	Common Stock		Additional Paid-In Capital	Common Stock		Treasury Stock	Comprehensive Loss	Accumulated Deficit	Noncontrolling Interests		
Shares	Amount	Shares		Amount							
BALANCE AT JULY 31, 2018	3,272	\$ 33	25,594	\$ 256	\$ 294,047	\$ (85,597)	\$ (4,972)	\$ (173,103)	\$ 639	\$ 31,303	
Adjustment from the adoption of change in revenue recognition (see Note 2)	—	—	—	—	—	—	—	9,064	—	—	9,064
Adjustment from the adoption of change in accounting for equity investments (see Note 8)	—	—	—	—	—	—	33	1,140	—	—	1,173
BALANCE AT AUGUST 1, 2018	3,272	\$ 33	25,594	\$ 256	\$ 294,047	\$ (85,597)	\$ (4,939)	\$ (162,899)	\$ 639	\$ 41,540	
Correction of noncontrolling interests (see Note 18)	—	—	—	—	—	—	—	2,002	(2,002)	—	—
Repurchases of Class B common stock through repurchase program	—	—	—	—	—	(3,854)	—	—	—	—	(3,854)
Sale of Class B common stock to Howard S. Jonas	—	—	—	—	(22,968)	37,740	—	—	—	—	14,772
Restricted Class B common stock purchased from employees	—	—	—	—	—	(28)	—	—	—	—	(28)
Stock-based compensation	—	—	209	2	2,234	—	—	—	—	—	2,236
Distributions to noncontrolling interests	—	—	—	—	—	—	—	—	(1,520)	—	(1,520)
Other comprehensive income	—	—	—	—	—	—	81	—	—	—	81
Net income for the year ended July 31, 2019	—	—	—	—	—	—	—	134	196	330	
BALANCE AT JULY 31, 2019	3,272	\$ 33	25,803	\$ 258	\$ 273,313	\$ (51,739)	\$ (4,858)	\$ (160,763)	\$ (2,687)	\$ 53,557	

See accompanying notes to consolidated financial statements.

IDT CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

Year ended July 31 (in thousands)	2019	2018	2017
OPERATING ACTIVITIES			
Net income	\$ 330	\$ 5,199	\$ 9,641
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	22,632	22,801	21,704
Deferred income taxes	285	6,174	(2,329)
Provision for doubtful accounts receivable	2,028	2,199	686
Stock-based compensation	2,236	3,581	3,740
Other	(1,765)	7	(679)
Change in assets and liabilities:			
Trade accounts receivable	7,594	(6,668)	(17,972)
Prepaid expenses, other current assets, and other assets	4,119	(18,889)	(4,856)
Trade accounts payable, accrued expenses, other current liabilities, and other liabilities	(7,546)	12,769	16,722
Customer deposits at IDT Financial Services Limited, our Gibraltar-based bank	59,077	14,660	18,980
Deferred revenue	(3,853)	(21,439)	(9,543)
Net cash provided by operating activities	85,137	20,394	36,094
INVESTING ACTIVITIES			
Capital expenditures	(18,681)	(20,567)	(22,949)
Proceeds from sale of interest in Straight Path IP Group Holding, Inc.	—	6,000	—
Purchase of IP interest from Straight Path Communications Inc.	—	(6,000)	—
Payments for acquisitions, net of cash acquired	(5,526)	—	(1,827)
Cash used for purchase of investments	(1,000)	(53)	(9,438)
Proceeds from redemptions of investments	1,000	—	15
Purchases of marketable securities	(7,276)	(22,523)	(53,402)
Proceeds from maturities and sales of marketable securities	5,312	41,502	47,996
Net cash used in investing activities	(26,171)	(1,641)	(39,605)
FINANCING ACTIVITIES			
Dividends paid	—	(13,941)	(17,874)
Distributions to noncontrolling interests	(1,520)	(1,040)	(1,482)
Repayment of other liabilities acquired	(654)	—	—
Proceeds from sales of Class B common stock to Howard S. Jonas	13,272	—	24,930
Proceeds from sale of interest and rights in Rafael Pharmaceuticals, Inc. to Howard S. Jonas	—	—	1,000
Proceeds from sale of member interests in CS Pharma Holdings, LLC	—	—	1,250
Cash of Rafael deconsolidated as a result of spin-off	—	(9,287)	—
Proceeds from exercise of stock options	—	—	836
Proceeds from borrowings under revolving credit facility	3,000	22,320	—
Repayments of borrowings under revolving credit facility	(3,000)	(22,320)	—
Repurchases of Class B common stock	(3,882)	(2,293)	(1,838)
Net cash provided by (used in) financing activities	7,216	(26,561)	6,822
Effect of exchange rate changes on cash, cash equivalents, and restricted cash and cash equivalents	(12,180)	(957)	293
Net increase (decrease) in cash, cash equivalents, and restricted cash and cash equivalents	54,002	(8,765)	3,604
Cash, cash equivalents, and restricted cash and cash equivalents at beginning of year	203,197	211,962	208,358
Cash, cash equivalents, and restricted cash and cash equivalents at end of year	\$ 257,199	\$ 203,197	\$ 211,962
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION			
Cash payments made for interest	\$ 186	\$ 94	\$ 288
Cash payments made for income taxes	\$ 46	\$ 192	\$ 576
SUPPLEMENTAL SCHEDULE OF NON-CASH FINANCING AND INVESTING ACTIVITIES			
Howard S. Jonas's advance payment used for sale of Class B common stock	\$ 1,500	\$ —	\$ —
Net assets excluding cash and cash equivalents of Rafael deconsolidated as a result of spin-off	\$ —	\$ (105,632)	\$ —
Reclassification of liability for member interests in CS Pharma Holdings, LLC	\$ —	\$ —	\$ 8,750

See accompanying notes to consolidated financial statements.

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1—Description of Business and Summary of Significant Accounting Policies

Description of Business

IDT Corporation (the “Company”) is a multinational company with operations primarily in the telecommunications and payment industries.

The Company has two reportable business segments, Telecom & Payment Services and net2phone (formerly net2phone-Unified Communications as a Service (“UCaaS”)). The Telecom & Payment Services segment provides retail telecommunications and payment offerings as well as wholesale international long-distance traffic termination. The net2phone segment provides unified cloud communications and telephony services to business customers. Operating segments not reportable individually were included in All Other.

Basis of Consolidation and Accounting for Investments

The method of accounting applied to long-term investments, whether consolidated, equity or cost, involves an evaluation of the significant terms of each investment that explicitly grant or suggest evidence of control or influence over the operations of the investee and also includes the identification of any variable interests in which the Company is the primary beneficiary. The consolidated financial statements include the Company’s controlled subsidiaries. All significant intercompany accounts and transactions between the consolidated subsidiaries are eliminated.

Investments in businesses that the Company does not control, but in which the Company has the ability to exercise significant influence over operating and financial matters, are accounted for using the equity method. Investments in which the Company does not have the ability to exercise significant influence over operating and financial matters are accounted for using the cost method. Investments in hedge funds are accounted for using the equity method unless the Company’s interest is so minor that it has virtually no influence over operating and financial policies, in which case these investments are accounted for using the cost method. At July 31, 2019 and 2018, the Company had \$5.4 million and \$4.7 million, respectively, in investments accounted for using the equity method, and nil and \$1.9 million, respectively, in investments accounted for using the cost method. Equity and cost method investments are included in noncurrent “Equity investments” in the accompanying consolidated balance sheets. The Company periodically evaluates its equity and cost method investments for impairment due to declines considered to be other than temporary. If the Company determines that a decline in fair value is other than temporary, then a charge to earnings is recorded in “Other income (expense), net” in the accompanying consolidated statements of income, and a new basis in the investment is established.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (“U.S. GAAP”) requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates.

Revenue Recognition

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, and has since issued amendments thereto (collectively referred to as “ASC 606”). Results for the reporting periods beginning after August 1, 2018 are presented under ASC 606 (see Note 2), while prior period results are not adjusted and continue to be reported in accordance with historic accounting under ASC Topic 605. The Company applied ASC 606 only to those contracts that were not completed as of August 1, 2018. The core principle of ASC 606 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services, and the guidance defines a five-step process to achieve this core principle. The five-step process to achieve this principle is as follows: (i) identify the contract(s) with a customer, (ii) identify the performance obligations in the contract(s), (iii) determine the transaction price, (iv) allocate

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

the transaction price to the performance obligations in the contract(s), and (v) recognize revenue when, or as, the entity satisfies a performance obligation. ASC 606 also mandates additional disclosure about the nature, amount, timing and uncertainty of revenues and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract.

Prior to August 1, 2018, the Company applied ASC Topic 605 as follows. Telephone service, which includes domestic and international long distance, local service, and wholesale carrier telephony service, was recognized as revenue when services were provided, primarily based on usage and/or the assessment of fees. Revenue from BOSS Revolution international calling service and from sales of calling cards, net of customer discounts, was deferred until the service or the cards were used or, calling card administrative fees were imposed, thereby reducing the Company's outstanding obligation to the customer, at which time revenue was recognized. Domestic and international airtime top-up revenue was recognized upon redemption. International airtime top-up enables customers to purchase airtime for a prepaid mobile telephone in another country.

The Company enters into Notification of Reciprocal Transmission ("NORT") transactions, in which the Company commits to purchase a specific number of wholesale carrier minutes to other specific destinations at specified rates, and the counterparty commits to purchase from the Company a specific number of minutes to specific destinations at specified rates. The number of minutes purchased and sold is not necessarily the same. The rates in these reciprocal transactions are generally not at prevailing market rates, and the amounts paid to the counterparty in excess of market rates are reflected as a reduction in revenue received from the customer. In addition, the Company enters into transactions in which it swaps minutes with another carrier. The Company recognized revenue and the related direct cost of revenue for these reciprocal and swap transactions based on the fair value of the minutes.

Direct Cost of Revenues

Direct cost of revenues consists primarily of termination and origination costs, toll-free costs, and network costs—including customer/carrier interconnect charges and leased fiber circuit charges. These costs include an estimate of charges for which invoices have not yet been received, and estimated amounts for pending disputes with other carriers. Direct cost of revenues also includes the cost of airtime top-up minutes. Direct cost of revenues excludes depreciation and amortization expense.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents.

Company Restricted Cash and Cash Equivalents

The Company treats unrestricted cash and cash equivalents held by IDT Payment Services, which provides the Company's international money transfer services in the United States, as substantially restricted and unavailable for other purposes. At July 31, 2019 and 2018, "Cash and cash equivalents" in the Company's consolidated balance sheets included an aggregate of \$13.4 million and \$10.7 million, respectively, held by IDT Payment Services that was unavailable for other purposes.

Debt Securities

The Company's investments in debt securities are classified as "available-for-sale." Available-for-sale debt securities are required to be carried at their fair value, with unrealized gains and losses (net of income taxes) that are considered temporary in nature recorded in "Accumulated other comprehensive loss" in the accompanying consolidated balance sheets. The Company uses the specific identification method in computing the gross realized gains and gross realized losses on the sales of marketable securities. The Company periodically evaluates its investments in debt securities for impairment due to declines in market value considered to be other than temporary. Such impairment evaluations include, in addition to persistent,

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

declining market prices, general economic and Company-specific evaluations. If the Company determines that a decline in market value is other than temporary, then a charge to operations is recorded in “Other income (expense), net” in the accompanying consolidated statements of income and a new cost basis in the investment is established.

Equity Investments

On August 1, 2018, the Company adopted ASU No. 2016-01, *Financial Instruments—Overall (Subtopic 825-10), Recognition and Measurement of Financial Assets and Financial Liabilities*, that requires the Company to provide more information about recognition, measurement, presentation and disclosure of financial instruments. The ASU included, among other changes, the following: (1) equity investments (except those accounted for under the equity method or that result in consolidation) will be measured at fair value with changes in fair value recognized in net income, (2) a qualitative assessment each reporting period to identify impairment of equity investments without readily determinable fair values, (3) financial assets and financial liabilities will be presented separately by measurement category and form of financial asset on the balance sheet or the notes to the financial statements, and (4) an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the entity’s other deferred tax assets. Entities will no longer recognize unrealized holding gains and losses on equity securities classified as available-for-sale in other comprehensive income. In addition, a practicability exception is available for equity investments that do not have readily determinable fair values and do not qualify for the net asset value practical expedient (the “measurement alternative”). These investments may be measured at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for an identical or similar investment of the same issuer. Entities will have to reassess at each reporting period whether an investment qualifies for this practicability exception.

Property, Plant and Equipment and Intangible Assets

Equipment, computer software, and furniture and fixtures are recorded at cost and are depreciated on a straight-line basis over their estimated useful lives, which range as follows: equipment—5, 7 or 20 years; computer software—2, 3 or 5 years; and furniture and fixtures—5, 7 or 10 years. Leasehold improvements are recorded at cost and are depreciated on a straight-line basis over the term of their lease or their estimated useful lives, whichever is shorter.

The fair value of non-compete agreement, customer relationships and tradename acquired in a business combination accounted for under the purchase method are amortized over their estimated useful lives (see Notes 6 and 12).

The Company tests the recoverability of its property, plant and equipment and intangible assets with finite useful lives whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable. The Company tests for recoverability based on the projected undiscounted cash flows to be derived from such asset. If the projected undiscounted future cash flows are less than the carrying value of the asset, the Company will record an impairment loss, if any, based on the difference between the estimated fair value and the carrying value of the asset. The Company generally measures fair value by considering sale prices for similar assets or by discounting estimated future cash flows from such asset using an appropriate discount rate. Cash flow projections and fair value estimates require significant estimates and assumptions by management. Should the estimates and assumptions prove to be incorrect, the Company may be required to record impairments in future periods and such impairments could be material.

Goodwill

Goodwill is the excess of the acquisition cost of businesses over the fair value of the identifiable net assets acquired. Goodwill and other indefinite lived intangible assets are not amortized. These assets are reviewed annually (or more frequently under various conditions) for impairment using a fair value approach. The Company performs its annual, or interim, goodwill impairment test by comparing the fair value of its reporting units with their carrying amounts. The Company would recognize an impairment charge for the

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized would not exceed the total amount of goodwill allocated to that reporting unit. Additionally, the Company considers income tax effects from any tax-deductible goodwill on the carrying amount of its reporting unit when measuring the goodwill impairment loss, if applicable. The fair value of the reporting units is estimated using discounted cash flow methodologies, as well as considering third party market value indicators. The Company's use of a discounted cash flow methodology includes estimates of future revenue based upon budgets and projections. The Company also develops estimates for future levels of gross and operating profits and projected capital expenditures. The Company's methodology also includes the use of estimated discount rates based upon industry and competitor analysis as well as other factors. Calculating the fair value of the reporting units requires significant estimates and assumptions by management. Should the estimates and assumptions regarding the fair value of the reporting units prove to be incorrect, the Company may be required to record impairments to its goodwill in future periods and such impairments could be material.

The Company has the option to perform a qualitative assessment to determine whether it is necessary to perform the quantitative goodwill impairment test. However, the Company may elect to perform the quantitative goodwill impairment test even if no indications of a potential impairment exist.

Advertising Expense

Cost of advertising is charged to selling, general and administrative expenses in the period in which it is incurred. In fiscal 2019, fiscal 2018 and fiscal 2017, advertising expense was \$17.7 million, \$16.3 million and \$17.4 million, respectively.

Capitalized Internal Use Software Costs

The Company capitalizes the cost of internal-use software that has a useful life in excess of one year. These costs consist of payments made to third parties and the salaries of employees working on such software development. Subsequent additions, modifications or upgrades to internal-use software are capitalized only to the extent that they allow the software to perform a task it previously did not perform. Software maintenance and training costs are expensed in the period in which they are incurred. Capitalized internal use software costs are amortized on a straight-line basis over their estimated useful lives. Amortization expense related to such capitalized software in fiscal 2019, fiscal 2018 and fiscal 2017 was \$16.3 million, \$16.1 million and \$14.2 million, respectively. Unamortized capitalized internal use software costs at July 31, 2019 and 2018 were \$21.9 million and \$24.9 million, respectively.

Repairs and Maintenance

The Company charges the cost of repairs and maintenance, including the cost of replacing minor items not constituting substantial betterment, to selling, general and administrative expenses as these costs are incurred.

Foreign Currency Translation

Assets and liabilities of foreign subsidiaries denominated in foreign currencies are translated to U.S. Dollars at end-of-period rates of exchange, and their monthly results of operations are translated to U.S. Dollars at the average rates of exchange for that month. Gains or losses resulting from such foreign currency translations are recorded in "Accumulated other comprehensive loss" in the accompanying consolidated balance sheets. Foreign currency transaction gains and losses are reported in "Other income (expense), net" in the accompanying consolidated statements of income.

Income Taxes

The Company recognizes deferred tax assets and liabilities for the future tax consequences attributable to temporary differences between the financial statements carrying amounts of existing assets and liabilities and their respective tax bases. A valuation allowance is provided when it is more likely than not that some portion or all of a deferred tax asset will not be realized. The ultimate realization of deferred tax

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

assets depends on the generation of future taxable income during the period in which related temporary differences become deductible. The Company considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in its assessment of a valuation allowance. Deferred tax assets and liabilities are measured using the enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date of such change.

The Company uses a two-step approach for recognizing and measuring tax benefits taken or expected to be taken in a tax return. The Company determines whether it is more-likely-than-not that a tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. In evaluating whether a tax position has met the more-likely-than-not recognition threshold, the Company presumes that the position will be examined by the appropriate taxing authority that has full knowledge of all relevant information. Tax positions that meet the more-likely-than-not recognition threshold are measured to determine the amount of tax benefit to recognize in the financial statements. The tax position is measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon ultimate settlement. Differences between tax positions taken in a tax return and amounts recognized in the financial statements will generally result in one or more of the following: an increase in a liability for income taxes payable, a reduction of an income tax refund receivable, a reduction in a deferred tax asset, or an increase in a deferred tax liability.

The Company classifies interest and penalties on income taxes as a component of income tax expense.

Contingencies

The Company accrues for loss contingencies when both (a) information available prior to issuance of the financial statements indicates that it is probable that a liability had been incurred at the date of the financial statements and (b) the amount of loss can reasonably be estimated. When the Company accrues for loss contingencies and the reasonable estimate of the loss is within a range, the Company records its best estimate within the range. When no amount within the range is a better estimate than any other amount, the Company accrues the minimum amount in the range. The Company discloses an estimated possible loss or a range of loss when it is at least reasonably possible that a loss may have been incurred.

Earnings Per Share

Basic earnings per share is computed by dividing net income attributable to all classes of common stockholders of the Company by the weighted average number of shares of all classes of common stock outstanding during the applicable period. Diluted earnings per share is determined in the same manner as basic earnings per share, except that the number of shares is increased to include restricted stock still subject to risk of forfeiture and to assume exercise of potentially dilutive stock options using the treasury stock method, unless the effect of such increase is anti-dilutive.

The weighted-average number of shares used in the calculation of basic and diluted earnings per share attributable to the Company's common stockholders consists of the following:

Year ended July 31 (in thousands)	2019	2018	2017
Basic weighted-average number of shares	25,293	24,655	23,182
Effect of dilutive securities:			
Stock options	—	9	44
Non-vested restricted Class B common stock	15	54	83
Diluted weighted-average number of shares	25,308	24,718	23,309

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following outstanding stock options were excluded from the calculation of diluted earnings per share because the exercise prices of the stock options were greater than the average market price of the Company's stock during the period:

Year ended July 31 (in thousands)	2019	2018	2017
Shares excluded from the calculation of diluted earnings per share	1,204	1,142	22

Stock-Based Compensation

The Company recognizes compensation expense for all of its grants of stock-based awards based on the estimated fair value on the grant date. Compensation cost for awards is recognized using the straight-line method over the vesting period. Stock-based compensation is included in selling, general and administrative expense.

On August 1, 2019, the Company adopted ASU No. 2018-07, *Compensation—Stock Compensation (Topic 718), Improvements to Nonemployee Share-Based Payment Accounting*, which simplifies several aspects of the accounting for nonemployee share-based payment transactions by expanding the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. The requirements of Topic 718 are applied to nonemployee awards except for specific guidance on inputs to an option pricing model and the attribution of cost (that is, the period of time over which share-based payment awards vest and the pattern of cost recognition over that period). The amendments specify that Topic 718 applies to all share-based payment transactions in which a grantor acquires goods or services to be used or consumed in a grantor's own operations by issuing share-based payment awards. The amendments also clarify that Topic 718 does not apply to share-based payments used to effectively provide (1) financing to the issuer or (2) awards granted in conjunction with selling goods or services to customers as part of a contract accounted for under Topic 606, *Revenue from Contracts with Customers*. The adoption of this ASU will not impact the Company's consolidated financial statements.

Vulnerability Due to Certain Concentrations

Financial instruments that potentially subject the Company to concentration of credit risk consist principally of cash, cash equivalents, restricted cash and cash equivalents, debt securities, equity investments, and trade accounts receivable. The Company holds cash and cash equivalents at several major financial institutions, which often exceed FDIC insurance limits. Historically, the Company has not experienced any losses due to such concentration of credit risk. The Company's temporary cash investments policy is to limit the dollar amount of investments with any one financial institution and monitor the credit ratings of those institutions. While the Company may be exposed to credit losses due to the nonperformance of the holders of its deposits, the Company does not expect the settlement of these transactions to have a material effect on its results of operations, cash flows or financial condition.

Concentration of credit risk with respect to trade accounts receivable is limited due to the large number of customers in various geographic regions and industry segments comprising the Company's customer base. No single customer accounted for more than 10% of consolidated revenues in fiscal 2019, fiscal 2018 or fiscal 2017. However, the Company's five largest customers collectively accounted for 13.6%, 12.5% and 12.4% of its consolidated revenues in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. The Company's customers with the five largest receivables balances collectively accounted for 20.6% and 18.7% of the consolidated gross trade accounts receivable at July 31, 2019 and 2018, respectively. This concentration of customers increases the Company's risk associated with nonpayment by those customers. In an effort to reduce such risk, the Company performs ongoing credit evaluations of its significant customers. In addition, the Company attempts to mitigate the credit risk related to specific carrier services customers by also buying services from the customer, in order to create an opportunity to offset its payables and receivables and reduce its net trade receivable exposure risk. When it is practical to do so, the Company will increase its purchases from carrier services customers with receivable balances that exceed the Company's applicable payables in order to maximize the offset and reduce its credit risk.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Allowance for Doubtful Accounts

The Company estimates the balance of its allowance for doubtful accounts by analyzing accounts receivable balances by age and applying historical write-off and collection trend rates. The Company's estimates include separately providing for customer receivables based on specific circumstances and credit conditions, and when it is deemed probable that the balance is uncollectible. Account balances are written off against the allowance when it is determined that the receivable will not be recovered. The change in the allowance for doubtful accounts is as follows:

Year ended July 31 (in thousands)	Balance at beginning of year	Additions charged to costs and expenses	Deductions ⁽¹⁾	Balance at end of year
2019				
Reserves deducted from accounts receivable:				
Allowance for doubtful accounts	\$ 5,358	\$ 2,028	\$ (1,942)	\$ 5,444
2018				
Reserves deducted from accounts receivable:				
Allowance for doubtful accounts	\$ 5,207	\$ 2,199	\$ (2,048)	\$ 5,358
2017				
Reserves deducted from accounts receivable:				
Allowance for doubtful accounts	\$ 4,818	\$ 686	\$ (297)	\$ 5,207

(1) Primarily uncollectible accounts written off, net of recoveries.

Fair Value Measurements

Fair value of financial and non-financial assets and liabilities is defined as an exit price, which is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The three-tier hierarchy for inputs used to measure fair value, which prioritizes the inputs to valuation techniques used to measure fair value, is as follows:

- Level 1 – quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 – quoted prices for similar assets and liabilities in active markets or inputs that are observable for the asset or liability, either directly or indirectly through market corroboration, for substantially the full term of the financial instrument.
- Level 3 – unobservable inputs based on the Company's assumptions used to measure assets and liabilities at fair value.

A financial asset or liability's classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement. The assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the valuation of the assets and liabilities being measured and their placement within the fair value hierarchy.

In fiscal 2019, the Company adopted ASU No. 2018-13, *Fair Value Measurement (Topic 820), Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*, that modifies the disclosure requirements for fair value measurements. The adoption of this ASU did not impact the fair value measurement disclosures in the Company's consolidated financial statements for fiscal 2019.

Leases

On August 1, 2019, the Company adopted ASU No. 2016-02, *Leases (Topic 842)*, and the amendments thereto, related to the accounting for leases (collectively referred to as "ASC 842"). ASC 842 establishes a right-of-use ("ROU") model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases are classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. Entities have the option to continue to apply historical accounting under Topic 840, including its disclosure requirements, in comparative periods presented in the year of adoption. An entity that elects this option will recognize a cumulative effect adjustment to the opening balance of retained earnings in the period of adoption instead of the earliest period presented. The Company elected to apply the optional ASC 842 transition provisions beginning on August 1, 2019. Accordingly, the Company will continue to apply Topic 840 prior to August 1, 2019, including Topic 840 disclosure requirements, in the comparative periods presented. The Company elected the package of practical expedients for all its leases that commenced before August 1, 2019. Based on the Company's current agreements, the Company expects that it will report an operating lease liability of \$12.4 million and corresponding ROU assets as of August 1, 2019 based on the present value of the remaining minimum rental payments associated with the Company's leases. As the Company's leases do not provide an implicit rate, nor is one readily available, the Company used its incremental borrowing rate based on information available at August 1, 2019 to determine the present value of its future minimum rental payments. The adoption of ASC 842 will not have a material impact on the Company's results of operations or total cash flows.

Hedge Accounting

On August 1, 2019, the Company adopted ASU No. 2017-12, *Derivatives and Hedging (Topic 815), Targeted Improvements to Accounting for Hedging Activities*, which is intended to improve the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements. In addition, the ASU includes certain targeted improvements to simplify the application of hedge accounting guidance in U.S. GAAP. Entities will apply the amendments to cash flow and net investment hedge relationships that exist on the date of adoption using a modified retrospective approach. The presentation and disclosure requirements will be applied prospectively. The adoption of this ASU will not impact the Company's consolidated financial statements at adoption.

Recently Issued Accounting Standard Not Yet Adopted

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments*, that changes the impairment model for most financial assets and certain other instruments. For receivables, loans and other instruments, entities will be required to use a new forward-looking "expected loss" model that generally will result in the earlier recognition of allowance for losses. For available-for-sale debt securities with unrealized losses, entities will measure credit losses in a manner similar to current practice, except the losses will be recognized as allowances instead of reductions in the amortized cost of the securities. In addition, an entity will have to disclose significantly more information about allowances, credit quality indicators and past due securities. The new provisions will be applied as a cumulative-effect adjustment to retained earnings. The Company will adopt the new standard on August 1, 2020. The Company is evaluating the impact that the new standard will have on its consolidated financial statements.

Note 2—Revenue Recognition

Modified Retrospective Method of Adoption and Cumulative Effect Adjustment

The Company adopted ASC 606 as of August 1, 2018, using the modified retrospective method. As this method requires that the cumulative effect of initially applying ASC 606 be recognized at the date of adoption, at August 1, 2018, the Company recorded an aggregate \$9.1 million reduction to "Accumulated deficit" for the cumulative effect of the adoption. The cumulative effect adjustment included changes to the accounting for breakage and the costs to obtain and fulfill contracts with customers.

The adjustment for the change in accounting for breakage was primarily from the Company's BOSS Revolution international calling service, traditional calling cards, and international and domestic Mobile Top-Up. A customer's nonrefundable prepayment gives the customer a right to receive a good or service in

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

the future (and obliges the Company to stand ready to transfer that good or service). However, customers may not exercise all of their contractual rights to receive that good or service. Those unexercised rights are referred to as breakage. Prior to the adoption of ASC 606, the Company recorded breakage revenue when the likelihood of the customer exercising its remaining rights became remote. The Company generally deemed the likelihood remote after 12 or 24 months of no activity (depending on the revenue stream). Per ASC 606, if an entity expects to be entitled to a breakage amount, the entity should recognize the expected breakage amount as revenue in proportion to the pattern of rights exercised by the customer, but only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the breakage is subsequently resolved. The Company determined that \$8.6 million included in its opening balance of “Deferred revenue” would have been recognized as breakage revenue under ASC 606 in prior periods, and accordingly, as of August 1, 2018, recorded an \$8.6 million reduction to “Deferred revenue”, a \$0.8 million decrease in “Deferred income tax assets,” and an offsetting \$7.8 million reduction to “Accumulated deficit.”

ASC 606 changed the accounting for costs to obtain and fulfill contracts with customers such that incremental costs of obtaining and direct costs of fulfilling contracts with customers are deferred and amortized consistent with the transfer of the related good or service. The Company incurs incremental costs of obtaining a customer contract, it does not incur direct costs to fulfill contracts. The Company determined that the cumulative effect of initially applying ASC 606 to defer its incremental costs of obtaining a customer contract was \$1.3 million, primarily related to its net2phone-UCaaS business. Accordingly, as of August 1, 2018, the Company recorded an increase in “Other current assets” of \$0.6 million and an increase in “Other assets” of \$0.7 million, with an offsetting reduction to “Accumulated deficit” of \$1.3 million.

Breakage Revenue: Methods, Inputs and Assumptions

The Company’s inputs for recording breakage revenue was its aging of the deferred revenue balance for its BOSS Revolution international calling service, traditional calling cards, Mobile Top-Up, and other revenue streams with deferred revenue balances. Upon the adoption of ASC 606, the Company’s method changed to an estimate of expected breakage revenue by revenue stream recorded each month, based on inputs and assumptions about usage of the deferred revenue balances. The Company used its historical deferred revenue usage data by revenue stream to calculate the percentage of deferred revenue by month that will become breakage. The historical data indicated that customers utilize a very high percentage of minutes purchased in the first three months. The Company reviews its estimates quarterly based on updated data and adjusts the monthly estimates accordingly.

Contracts with Customers

The Company earns revenue from contracts with customers, primarily through the provision of retail telecommunications and payment offerings as well as wholesale international long-distance traffic termination. The Telecom & Payment Services segment markets and distributes the following communications and payment services: (1) retail communications, which includes international long-distance calling products primarily to foreign-born communities, with its core markets in the United States; (2) wholesale carrier services terminating international long distance calls around the world for Tier 1 fixed line and mobile network operators, as well as other service providers; and (3) payment services, such as Mobile Top-Up, domestic bill payment and international money transfer, and National Retail Solutions, the Company’s merchant services offerings through point-of-sale terminals. The net2phone segment is comprised of cloud-based communications services, Session Initiation Protocol (“SIP”) trunking, and cable telephony.

The Company’s most significant revenue streams are from its BOSS Revolution international calling service, Mobile Top-Up, and wholesale termination provided by its Carrier Services business. The BOSS Revolution international calling service and Mobile Top-Up are sold direct-to-consumers and through distributors and retailers.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

BOSS Revolution international calling service direct-to-consumers

BOSS Revolution international calling service direct-to-consumers is offered on a pay-as-you-go basis or in unlimited plans. The customer prepays for service in both cases, which results in a contract liability (deferred revenue). The contract term for pay-as-you-go plans is minute-to-minute that includes separate performance obligations for the series of material rights to renew the contract. The performance obligation is satisfied immediately after it arises, and the amount of consideration is known when the obligation is satisfied. Since the Company's satisfaction of its performance obligation and the customer's use of the service occur simultaneously, the Company recognizes revenue at the point in time when minutes are utilized, since the customer obtained control and the Company has a present right to payment. For unlimited plans, the Company has a stand ready obligation to provide service over time for an agreed upon term. Unlimited plans include fixed consideration over the term. Plan fees for unlimited plans are generally refundable up to three days after payment if there was no usage. Since the Company's satisfaction of its performance obligation and the customer's use of the service occur over the term, the Company recognizes revenue over a period of time as the service is rendered. The Company uses an output method as time elapses because it reflects the pattern by which the Company satisfies its performance obligation through the transfer of service to the customer. The fixed upfront consideration is recognized evenly over the service period, which is generally 24 hours, 7 days, or one month.

BOSS Revolution international calling service sold through distributors and retailers

BOSS Revolution international calling service sold through distributors and retailers is the same service as BOSS Revolution international calling service direct-to-consumers. The Company sells capacity to international calling minutes to retailers, or to distributors who resell to retailers. The retailer or distributor is the Company's customer in these transactions. The Company's sales price to retailers and distributors is less than the end user rate for BOSS Revolution international calling service minutes. The customer or the Company may terminate their agreement at any time upon thirty days written notice without penalty. Retailers may sell the BOSS Revolution international calling service on a pay-as-you-go basis or in unlimited plans. As described above, for pay-as-you-go, the Company recognizes revenue at the point in time when minutes are utilized, and for unlimited plans, the Company recognizes revenue over a period of time as the service is rendered. Retailers and distributors also receive renewal commissions when certain end users subsequently purchase minutes directly from the Company. Renewal commission payments are accounted for as a reduction of the transaction price over time as the end user uses the service.

Mobile Top-Up

Mobile Top-Up is sold direct-to-consumers and through distributors and retailers in the same manner as the BOSS Revolution international calling service. The Company does not terminate the minutes in its Mobile Top-Up transactions. The Company's performance obligation is to recharge (top-up) the airtime balance of a mobile account on behalf of the Company's customer. The Company has contracts with various mobile operators or aggregators to provide the Mobile Top-Up service. The Company determined that it is the principal in primarily all its Mobile Top-Up transactions as the Company controls the service to top-up a mobile account on behalf of the Company's customer. However, for a portion of its domestic Mobile Top-Up business where the Company has no customer service responsibilities, no inventory risk, and does not establish the price, the Company determined that, as the Company is not considered to control the arrangement, it acts as an agent of the mobile operators. The Company records gross revenues based on the amount billed to the customer when it is the principal in the arrangement and records revenue net of the associated costs incurred when it acts as an agent in the arrangement. The performance obligation is satisfied, and revenue is recognized when the recharge of the mobile account occurs. Accordingly, transfer of control happens at the point in time that the airtime is recharged, which is when the Company has a right to payment and the customer has accepted the service.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Carrier Services

Carrier Services are offered to both postpaid and prepaid customers. Postpaid customers are billed in arrears and typically consist of credit-worthy companies such as Tier 1 carriers and mobile network operators. Prepaid customers are typically smaller communications companies and independent call aggregators. There is no performance obligation until the transport and termination of international long-distance calls commences. The initial contract durations range from six months to one year with successive extensions. During the initial term, the contract can only be terminated in certain instances (such as bankruptcy of either party, damage to the other party's network, fraud, or breach of contract). However, no penalties are applied if the agreement is terminated in the initial term. After the initial term has expired, either party may terminate the agreement with notice of 30 days to 60 days depending on the agreement. The term of the contract is essentially minute-to-minute as there is no penalty for an early termination and no obligation to send traffic.

Each iteration is a separate optional purchase that is occurring over the contract duration (that is, minute-by-minute). The satisfaction of the performance obligation is occurring at a point in time (as the minutes are transferred) because the provision of the service and the satisfaction of the performance obligation are essentially occurring simultaneously. Revenue is recognized at the point in time upon delivery of the service.

The Company has not generally entered into contracts that have retroactive pricing features. Additionally, as the performance obligations are considered minute-by-minute obligations in the original contract, any modification of the original contract that leads to a conclusion that there is a new contract would not result in any adjustment related to the original contract's consideration.

The Company provides discounts to its larger customers based on the expectation of a significant volume of minutes that are consistent with that class of customer in the wholesale carrier market. The discounts do not provide a material right to the customer because the customer receives the same pricing for all usage under the contract.

Carrier Services' contracts may include tiered pricing based on minute volumes. The Company determined that its retroactive tiered pricing should be accounted for as variable consideration because the final transaction price is unknown until the customer completes or fails to complete the specified threshold. Currently, contracts with retroactive tiered pricing are not material. The Company estimates the amount of variable consideration to include in the transaction price only to the extent that it is probable that a subsequent change in the estimate would not result in a significant revenue reversal.

Carrier Services' NORT contracts include the promise of minimum guaranteed amounts of traffic. The performance obligation represents a stand ready obligation to provide the specified number of minutes over the contractual term. The initial terms of NORT contracts generally range from one month to six months. Since the Company's satisfaction of its performance obligation of routing calls to their destination includes a minimum guaranteed amount of traffic, the Company recognizes revenue over a period of time as the service is rendered. The customer simultaneously receives and consumes the benefits provided by the Company's performance as the Company performs. The Company uses an output method as the usage of minutes occur because it reflects the pattern by which the Company satisfies its performance obligation through the transfer of service to the customer.

Disaggregated Revenues

The Company's core operations are mostly minute-based, paid-voice communications services, and revenue is primarily recognized at a point in time. The Company's Telecom & Payment Services' growth initiatives and net2phone-UCaaS are technology-driven, synergistic businesses that leverage the core assets, and revenue in some cases is recognized over time.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following table shows the Company's revenues disaggregated by business segment and service offered to customers:

Year ended July 31 (in thousands)	2019	2018	2017
Core Operations:			
BOSS Revolution Calling	\$ 490,649	\$ 529,713	\$ 549,312
Carrier Services	514,202	639,028	599,934
Mobile Top-Up	271,995	253,524	219,763
Other	55,629	67,903	85,812
Growth	29,433	21,305	15,166
Total Telecom & Payment Services	1,361,908	1,511,473	1,469,987
net2phone-UCaaS	24,482	13,276	7,037
net2phone-Platform Services	22,782	21,581	22,413
Total net2phone	47,264	34,857	29,450
All Other	—	1,165	2,292
TOTAL	\$ 1,409,172	\$ 1,547,495	\$ 1,501,729

The following tables show the Company's revenues disaggregated by geographic region, which is determined based on selling location:

(in thousands)	Telecom & Payment Services	net2phone	All Other	Total
Year ended July 31, 2019				
United States	\$ 901,997	\$ 33,857	\$ —	\$ 935,854
Outside the United States:				
United Kingdom	195,661	21	—	195,682
Netherlands	192,284	—	—	192,284
Other	71,966	13,386	—	85,352
Total outside the United States	459,911	13,407	—	473,318
TOTAL	\$ 1,361,908	\$ 47,264	\$ —	\$ 1,409,172
Year ended July 31, 2018				
United States	\$ 1,021,004	\$ 27,161	\$ 1,165	\$ 1,049,330
Outside the United States:				
United Kingdom	220,257	3	—	220,260
Netherlands	191,076	—	—	191,076
Other	79,136	7,693	—	86,829
Total outside the United States	490,469	7,696	—	498,165
TOTAL	\$ 1,511,473	\$ 34,857	\$ 1,165	\$ 1,547,495
Year ended July 31, 2017				
United States	\$ 1,009,194	\$ 22,309	\$ 2,292	\$ 1,033,795
Outside the United States:				
United Kingdom	211,249	—	—	211,249
Netherlands	175,869	—	—	175,869
Other	73,675	7,141	—	80,816
Total outside the United States	460,793	7,141	—	467,934
TOTAL	\$ 1,469,987	\$ 29,450	\$ 2,292	\$ 1,501,729

Remaining Performance Obligations

The Company's revenue is generally recognized in the same period that its performance obligations are satisfied. The Company does not have any significant revenue from performance obligations satisfied or partially satisfied in previous reporting periods, or transaction price to be allocated to performance obligations that are unsatisfied (or partially unsatisfied) at the end of a reporting period.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Accounts Receivable and Contract Balances

The timing of revenue recognition may differ from the time of billing to the Company's customers. Trade accounts receivable in the Company's consolidated balance sheets represent unconditional rights to consideration. An entity records a contract asset when revenue is recognized in advance of the entity's right to bill and receive consideration. The Company has not identified any contract assets.

Contract liabilities arise when the Company receives consideration or bills its customers prior to providing the goods or services promised in the contract. The primary component of the Company's contract liability balance is the payments received for its prepaid BOSS Revolution international calling service, traditional calling cards, and Mobile Top-Up services. Contract liabilities are recognized as revenue when services are provided to the customer. The contract liability balances are presented in the Company's consolidated balance sheet as "Deferred revenue". The Company's revenue recognized in fiscal 2019 from amounts included in the contract liability balance at August 1, 2018 was \$41.3 million.

Deferred Customer Contract Acquisition and Fulfillment Costs

ASC 606 changed the accounting for costs to obtain and fulfill contracts with customers such that incremental costs of obtaining and direct costs of fulfilling contracts with customers are deferred and amortized consistent with the transfer of the related good or service. The Company's incremental costs of obtaining a customer contract are sales commissions paid to acquire customers. For Telecom & Payment Services, the Company applies the practical expedient whereby the Company primarily charges these costs to expense when incurred because the amortization period would be one year or less for the asset that would have been recognized from deferring these costs. For net2phone-UCaaS sales, employees and third parties receive commissions on sales to end users. The Company amortizes the deferred costs over the expected customer relationship period when it is expected to exceed one year.

At July 31, 2019, the Company's deferred customer contract acquisition costs were \$3.2 million, of which \$1.5 million were included in "Other current assets" and \$1.7 million were included in "Other assets" in the Company's consolidated balance sheet. For fiscal 2019, the Company amortized \$1.8 million of deferred customer contract acquisition costs.

Note 3—Cash, Cash Equivalents, and Restricted Cash and Cash Equivalents

On August 1, 2018, the Company adopted ASU No. 2016-18, *Statement of Cash Flows (Topic 230), Restricted Cash*, related to the classification and presentation of changes in restricted cash in the statement of cash flows. The following table provides a reconciliation of cash, cash equivalents, and restricted cash and cash equivalents reported in the consolidated balance sheet that equals the total of the same amounts reported in the consolidated statement of cash flows:

July 31 (in thousands)	2019	2018
Cash and cash equivalents	\$ 80,168	\$ 73,981
Restricted cash and cash equivalents	177,031	129,216
TOTAL CASH, CASH EQUIVALENTS, AND RESTRICTED CASH AND CASH EQUIVALENTS	\$ 257,199	\$ 203,197

At July 31, 2019 and 2018, restricted cash and cash equivalents included \$176.8 million and \$128.9 million, respectively, in cash and cash equivalents held by IDT Financial Services Limited, the Company's Gibraltar-based bank.

Note 4—Rafael Holdings, Inc. Spin-Off

On March 26, 2018, the Company completed a pro rata distribution of the common stock that the Company held in the Company's subsidiary, Rafael Holdings, Inc. ("Rafael"), to the Company's stockholders of record as of the close of business on March 13, 2018 (the "Rafael Spin-Off"). The Rafael Spin-Off did not meet the criteria to be reported as a discontinued operation and accordingly, Rafael's

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

assets, liabilities, results of operations and cash flows have not been reclassified. In connection with the Rafael Spin-Off, each of the Company's stockholders received one share of Rafael Class A common stock for every two shares of the Company's Class A common stock and one share of Rafael Class B common stock for every two shares of the Company's Class B common stock, held of record as of the close of business on March 13, 2018. The Company received a legal opinion that the Rafael Spin-Off should qualify as a tax-free transaction for U.S. federal income tax purposes.

At the time of the Rafael Spin-Off, Rafael owned the commercial real estate assets and interests in two clinical stage pharmaceutical companies that were previously held by the Company. The commercial real estate holdings consisted of the Company's headquarters building and its associated public garage in Newark, New Jersey, an office/data center building in Piscataway, New Jersey and a portion of a building in Israel that hosts offices for the Company and certain affiliates. The pharmaceutical holdings included debt interests and warrants in Rafael Pharmaceuticals, Inc. ("Rafael Pharma"), which, at the time, was a clinical stage, oncology-focused pharmaceutical company committed to the development and commercialization of therapies that exploit the metabolic differences between normal cells and cancer cells, and a majority equity interest in Lipomedix Pharmaceuticals Ltd. ("Lipomedix"), which, at the time, was a pharmaceutical development company based in Israel.

In March 2018, in connection with the Rafael Spin-Off, each holder of options to purchase an aggregate of 1.3 million shares of the Company's Class B common stock shared ratably in a pool of options to purchase 0.6 million shares of Rafael Class B common stock. The Company accounted for the grant of the new options in Rafael as a modification. In fiscal 2018, the Company recorded stock-based compensation expense for the aggregate incremental value from the modification of \$0.2 million.

The carrying amounts of Rafael's assets and liabilities included as part of the disposal group in the Rafael Spin-Off were as follows:

(in thousands)	
Cash and cash equivalents	\$ 9,287
Debt securities	32,989
Trade accounts receivable	53
Other current assets	2,329
Property, plant and equipment, net	50,624
Investments	17,650
Other assets	2,240
Current liabilities	(159)
Other liabilities	(94)
Noncontrolling interests	(8,653)
Rafael equity	\$ 106,266

Rafael's (loss) income before income taxes and (loss) income before income taxes attributable to the Company, which was included in the accompanying consolidated statements of income, were as follows:

Year ended July 31 (in thousands)	2019	2018	2017
(LOSS) INCOME BEFORE INCOME TAXES	\$ —	\$ (2,410)	\$ 520
(LOSS) INCOME BEFORE INCOME TAXES ATTRIBUTABLE TO IDT CORPORATION	\$ —	\$ (2,107)	\$ 517

In September 2016, Rafael Pharma issued to the Company's controlled 50%-owned subsidiary, CS Pharma Holdings, LLC ("CS Pharma"), a convertible promissory note with a principal amount of \$10 million representing the \$8 million investment funded on such date plus the conversion of the \$2 million principal amount convertible promissory notes issued in connection with a prior funding.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

On March 2, 2017, the Company sold 10% of the Company's direct and indirect interests and rights in Rafael Pharma to Howard S. Jonas, the Company's Chairman of the Board, and Chairman of the Board of Rafael, for a purchase price of \$1 million. As a result of this transaction, the Company recorded an increase of \$1.2 million in "Noncontrolling interests" and a decrease of \$0.2 million in "Additional paid-in capital" in the accompanying consolidated balance sheet.

The Company's former 90%-owned non-operating subsidiary, IDT-Rafael Holdings, LLC ("IDT-Rafael Holdings"), had the contractual right to receive additional shares of Rafael Pharma representing 10% of the outstanding capital stock of Rafael Pharma that will be issued upon the occurrence of certain events, none of which had been satisfied at the time of the Rafael Spin-Off. On September 14, 2017, IDT-Rafael Holdings distributed this right to its members on a pro rata basis such that the Company received the right to 9% of the outstanding capital stock of Rafael Pharma and Howard S. Jonas received the right to 1% of the outstanding capital stock of Rafael Pharma. In addition, as compensation for assuming the role of Chairman of the Board of Rafael Pharma, and to create additional incentive to contribute to the success of Rafael Pharma, on September 19, 2017, the Company transferred its right to receive 9% of the outstanding capital stock of Rafael Pharma to Mr. Jonas.

The Company and CS Pharma held warrants to purchase shares of capital stock of Rafael Pharma representing in the aggregate up to 56% of the then issued and outstanding capital stock of Rafael Pharma, on an as-converted and fully diluted basis.

Rafael Pharma was a variable interest entity, however, the Company determined that it was not the primary beneficiary as the Company did not have the power to direct the activities of Rafael Pharma that most significantly impacted Rafael Pharma's economic performance.

In addition to interests issued to the Company, CS Pharma issued member interests to third parties in exchange for cash investment in CS Pharma of \$10 million. In fiscal 2017, the Company recorded additional paid-in capital of \$2.8 million and noncontrolling interests of \$7.2 million upon the issuance of these member interests.

In November 2017, the Company purchased additional shares of Lipomedix that increased the Company's ownership to 50.6% of the issued and outstanding ordinary shares of Lipomedix. The Company began consolidating Lipomedix because of this share purchase.

Note 5—IDT Financial Services Holding Limited Previously Recorded as Held for Sale

On June 22, 2017, the Company's wholly-owned subsidiary IDT Telecom, Inc. ("IDT Telecom") entered into a Share Purchase Agreement (the "Agreement") with JAR Fintech Limited ("JAR Fintech") and JAR Capital Limited to sell the capital stock of IDT Financial Services Holding Limited, a company incorporated under the laws of Gibraltar and a wholly-owned subsidiary of IDT Telecom ("IDTFS Holding"), to JAR Fintech. IDTFS Holding is the sole shareholder of IDT Financial Services Limited, a Gibraltar-based bank and e-money issuer, providing prepaid card solutions across the European Economic Area. The sale was subject to regulatory approval and other conditions. The proposed sale of IDTFS Holding did not meet the criteria to be reported as a discontinued operation and accordingly, its results of operations and cash flows were not reclassified. Beginning in fiscal 2017, IDTFS Holding's assets and liabilities were classified as held for sale in the consolidated balance sheet.

In April 2019, Brexit (the withdrawal of the U.K. from the EU) was postponed. The pending nature of Brexit necessitated negotiation of further changes to the terms of the sale. As a result of the continued uncertainty pertaining to Brexit, the significant passage of time since the termination of the Agreement, and absence of any formal binding agreement with the buyer, the Company determined that the sale was no longer probable to close within twelve months. As a result, as of April 30, 2019, IDTFS Holding was reclassified as held and used in the consolidated balance sheet for all periods presented. There was no impact on the Company's results of operations, cash flows, and segments. The Company is no longer pursuing a transaction with JAR Fintech and the Company is continuing to invest in and operate IDT Financial Services Limited as part of its portfolio of businesses.

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 6—Acquisition of Versature Corp.

On September 14, 2018, the Company acquired 100% of the outstanding shares of Versature Corp., a UCaaS provider serving the Canadian market, for cash of \$5.9 million. The acquisition expanded the Company's UCaaS business into Canada. Versature's operating results from the date of acquisition, which were not significant, are included in the Company's consolidated financial statements.

The impact of the acquisition's purchase price allocations on the Company's consolidated balance sheet and the acquisition date fair value of the total consideration transferred were as follows (in thousands):

(in thousands)	
Trade accounts receivable	\$ 370
Prepaid expenses	65
Property, plant and equipment	1,826
Non-compete agreement	600
Customer relationships	3,003
Tradename	490
Other assets	486
Trade accounts payable	(81)
Accrued expenses	(523)
Other liabilities	(710)
Net assets excluding cash acquired	\$ 5,526
Supplemental information:	
Cash paid	\$ 5,943
Cash acquired	(417)
Total consideration, net of cash acquired	\$ 5,526

The following table presents unaudited pro forma information of the Company as if the acquisition occurred on August 1, 2016:

Year ended July 31 (in thousands)	2019	2018	2017
Revenues	\$ 1,410,056	\$ 1,553,815	\$ 1,506,758
Net income	\$ 121	\$ 5,148	\$ 9,185

Note 7—Debt Securities

The following is a summary of marketable debt securities:

(in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Available-for-sale securities:				
July 31, 2019				
Certificates of deposit*	\$ 2,234	\$ —	\$ —	\$ 2,234
Municipal bonds	300	—	—	300
TOTAL	\$ 2,534	\$ —	\$ —	\$ 2,534
July 31, 2018				
Certificates of deposit*	\$ 3,032	\$ —	\$ —	\$ 3,032
U.S. Treasury notes	1,693	—	(1)	1,692
Municipal bonds	888	—	—	888
TOTAL	\$ 5,613	\$ —	\$ (1)	\$ 5,612

* Each of the Company's certificates of deposit has a CUSIP, was purchased in the secondary market through a broker and may be sold in the secondary market.

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Equity securities with a fair value of \$0.4 million at July 31, 2018 were reclassified to current “Equity investments” to conform to the current year presentation (see Note 8).

Proceeds from maturities and sales of available-for-sale securities were \$5.3 million, \$41.5 million and \$48.0 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. Realized gains from sales of available-for-sale securities were nil, nil and \$0.3 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. Realized losses from sales of available-for-sale securities were nil, \$16,000 and nil in fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

The contractual maturities of the Company’s available-for-sale debt securities at July 31, 2019 were as follows:

(in thousands)	Fair Value
Within one year	\$ 2,534
After one year through five years	—
After five years through ten years	—
After ten years	—
TOTAL	\$ 2,534

The following available-for-sale debt securities were in an unrealized loss position for which other-than-temporary impairments were not recognized:

(in thousands)	Unrealized Losses	Fair Value
July 31, 2018		
U.S. Treasury notes	\$ 1	\$ 1,692

At July 31, 2019 and 2018, there were no securities in a continuous unrealized loss position for 12 months or longer.

Note 8—Equity Investments

At August 1, 2018, the cumulative effect of adopting ASU No. 2016-01, *Financial Instruments—Overall (Subtopic 825-10), Recognition and Measurement of Financial Assets and Financial Liabilities* (see Note 1) was a \$1.2 million increase in noncurrent “Equity investments”, a \$33,000 decrease in “Accumulated other comprehensive loss” and a \$1.1 million decrease in “Accumulated deficit”, primarily from the measurement at fair value of the Company’s shares of Visa Inc. Series C Convertible Participating Preferred Stock (“Visa Series C Preferred”) and the derecognition of unrealized holding losses on equity securities classified as available-for-sale.

Equity investments consist of the following:

July 31 (dollars in thousands)	2019	2018
Zedge, Inc. Class B common stock, 42,282 shares at July 31, 2019 and 2018	\$ 68	\$ 125
Rafael Class B common stock, 27,419 and 25,803 shares at July 31, 2019 and 2018, respectively	567	235
Mutual funds	5,053	—
Current “Equity investments”	\$ 5,688	\$ 360
Visa Series C Preferred	\$ 3,619	\$ 1,580
Hedge funds	5,475	4,787
Other	225	266
Noncurrent “Equity investments”	\$ 9,319	\$ 6,633

On June 1, 2016, the Company completed a pro rata distribution of the common stock that the Company held in the Company’s subsidiary Zedge, Inc. to the Company’s stockholders of record as of the close of business on May 26, 2016 (the “Zedge Spin-Off”). The Company received the Zedge and Rafael shares

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

in connection with the lapsing of restrictions on Zedge and Rafael restricted stock held by certain of the Company's employees and the Company's payment of taxes related thereto.

In June 2016, upon the acquisition of Visa Europe Limited by Visa, Inc., IDT Financial Services Limited received 1,830 shares of Visa Series C Preferred among other consideration. Each share of Visa Series C Preferred is convertible into 13.886 shares of Visa Class A common stock at Visa's option starting in June 2020 and will be convertible at the holder's option beginning in June 2028.

The changes in the carrying value of the Company's equity investments without readily determinable fair values for which the Company elected the measurement alternative was as follows:

Year ended July 31, 2019
(in thousands)

Balance at July 31, 2018	\$	1,883
Adoption of change in accounting for equity investments		1,213
Balance at August 1, 2018		3,096
Adjustment for observable transactions involving a similar investment from the same issuer		826
Redemptions		(3)
Impairments		—
BALANCE AT JULY 31, 2019	\$	3,919

In fiscal 2019, the Company increased the carrying value of the 1,830 shares of Visa Series C Preferred it held by \$0.8 million based on the fair value of Visa Class A common stock and a discount for lack of current marketability.

Unrealized gains and losses for all equity investments included the following:

Year ended July 31
(in thousands)

	2019	2018	2017
Net gains (losses) recognized during the period on equity investments	\$ 1,779	\$ (6)	\$ 355
Less: net gains recognized during the period on equity investments redeemed during the period	—	—	(378)
Unrealized gains (losses) recognized during the period on equity investments still held at the reporting date	\$ 1,779	\$ (6)	\$ (23)

Note 9—Fair Value Measurements

The following table presents the balance of assets measured at fair value on a recurring basis:

(in thousands)	Level 1	Level 2	Level 3	Total
July 31, 2019				
Debt securities	\$ —	\$ 2,534	\$ —	\$ 2,534
Equity investments included in current assets	5,688	—	—	5,688
Equity investments included in noncurrent assets	—	—	3,619	3,619
TOTAL	\$ 5,688	\$ 2,534	\$ 3,619	\$ 11,841
July 31, 2018				
Debt securities	\$ 1,692	\$ 3,920	\$ —	\$ 5,612
Equity investments included in current assets	360	—	—	360
TOTAL	\$ 2,052	\$ 3,920	\$ —	\$ 5,972

At July 31, 2019 and 2018, the Company had \$5.5 million and \$4.8 million, respectively, in investments in hedge funds, which were included in noncurrent "Equity investments" in the accompanying consolidated balance sheets. The Company's investments in hedge funds were accounted for using the equity method, therefore they were not measured at fair value.

At July 31, 2019 and 2018, the Company did not have any liabilities measured at fair value on a recurring basis.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The following tables summarize the change in the balance of the Company's assets measured at fair value on a recurring basis using significant unobservable inputs (Level 3). There were no liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) in fiscal 2019, 2018 or 2017.

Year ended July 31, (in thousands)	2019	2018	2017
Balance, beginning of period	\$ —	\$ 6,300	\$ 2,000
Transfer into Level 3 from adoption of change in accounting for equity investments	2,793	—	—
Total gains included in "Other income (expense), net"	826	—	—
Total gains included in other comprehensive income	—	—	2,100
Purchases	—	—	2,200
Rafael Spin-Off	—	(6,300)	—
BALANCE, END OF PERIOD	\$ 3,619	\$ —	\$ 6,300
Change in unrealized gains or losses for the period included in earnings for assets held at the end of the period	\$ 826	\$ —	\$ —

At July 31, 2017, the fair value of the Rafael Pharma convertible promissory notes, which were classified as Level 3, was estimated based on a valuation of Rafael Pharma and other factors that could not be corroborated by the market.

Fair Value of Other Financial Instruments

The estimated fair value of the Company's other financial instruments was determined using available market information or other appropriate valuation methodologies. However, considerable judgment is required in interpreting these data to develop estimates of fair value. Consequently, the estimates are not necessarily indicative of the amounts that could be realized or would be paid in a current market exchange.

Cash and cash equivalents, restricted cash and cash equivalents, other current assets, customer deposits, and other current liabilities. At July 31, 2019 and 2018, the carrying amount of these assets and liabilities approximated fair value because of the short period of time to maturity. The fair value estimates for cash, cash equivalents and restricted cash and cash equivalents were classified as Level 1 and other current assets, customer deposits, and other current liabilities were classified as Level 2 of the fair value hierarchy.

Other assets and other liabilities. At July 31, 2019 and 2018, the carrying amount of these assets and liabilities approximated fair value. The fair values were estimated based on the Company's assumptions, which were classified as Level 3 of the fair value hierarchy.

Note 10—Property, Plant and Equipment

Property, plant and equipment consist of the following:

July 31 (in thousands)	2019	2018
Equipment	\$ 78,172	\$ 73,872
Computer software	122,289	107,223
Leasehold improvements	1,384	839
Furniture and fixtures	403	351
	202,248	182,285
Less accumulated depreciation and amortization	(167,893)	(146,205)
Property, plant and equipment, net	\$ 34,355	\$ 36,080

Depreciation and amortization expense of property, plant and equipment was \$22.3 million, \$22.7 million and \$21.4 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 11—Goodwill

The table below reconciles the change in the carrying amount of goodwill by operating segment for the period from July 31, 2017 to July 31, 2019:

(in thousands)	Telecom & Payment Services
Balance as of July 31, 2017	\$ 11,326
Foreign currency translation adjustments	(11)
Balance as of July 31, 2018	11,315
Foreign currency translation adjustments	(106)
Balance as of July 31, 2019	\$ 11,209

Note 12—Other Intangible Assets

The table below presents information on the Company's amortized intangible assets:

(in thousands)	Weighted Average Amortization Period	Gross Carrying Amount	Accumulated Amortization	Net Balance
July 31, 2019				
Tradename	17.0 years	\$ 970	\$ (320)	\$ 650
Non-compete agreement	5.0 years	595	(104)	491
Customer relationships	11.9 years	6,136	(3,081)	3,055
TOTAL	12.0 years	\$ 7,701	\$ (3,505)	\$ 4,196
July 31, 2018				
Tradename	4.7 years	\$ 398	\$ (173)	\$ 225
Customer relationships	4.8 years	3,154	(2,883)	271
TOTAL	4.8 years	\$ 3,552	\$ (3,056)	\$ 496

Amortization expense of intangible assets was \$0.3 million, \$0.1 million and \$0.3 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. The Company estimates that amortization expense of intangible assets with finite lives will be \$0.4 million, \$0.4 million, \$0.3 million, \$0.3 million and \$0.2 million in fiscal 2020, fiscal 2021, fiscal 2022, fiscal 2023 and fiscal 2024, respectively.

Note 13—Other Operating Expense, Net

The following table summarizes the other operating expense, net by business segment:

Year ended July 31 (in thousands)	2019	2018	2017
Corporate—gain (losses) related to Straight Path Communications Inc.	\$ 326	\$ (1,655)	\$ (10,436)
Corporate—gain (losses) related to other legal matters	—	(628)	24
net2phone—indemnification claim and other, net	(267)	(115)	—
Telecom & Payment Services—accrual for non-income related taxes related to a foreign subsidiary	(8,000)	—	—
Telecom & Payment Services—gain on sale of calling card business in Asia	215	—	—
Telecom & Payment Services—adjustment to gain on sale of member interest in Visa Europe Ltd.	—	—	(63)
TOTAL	\$ (7,726)	\$ (2,398)	\$ (10,475)

Straight Path Communications Inc. Class Action

On July 31, 2013, the Company completed a pro rata distribution of the common stock of the Company's subsidiary Straight Path Communications Inc. ("Straight Path") to the Company's stockholders of record as of the close of business on July 25, 2013 (the "Straight Path Spin-Off"). As discussed in Note 21, a

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

putative class action on behalf of Straight Path's stockholders and derivative complaint was filed naming the Company, among others. In fiscal 2019 and fiscal 2018, the Company incurred legal fees of \$2.0 million and \$1.7 million, respectively, related to this action. Also, in fiscal 2019, the Company recorded insurance proceeds for this matter of \$2.3 million.

Indemnification Claim

In June 2019, as part of a commercial resolution, the Company indemnified a net2phone cable telephony customer related to patent infringement claims brought against the customer. The Company recorded expense of \$0.3 million in fiscal 2019 for this indemnification.

Accrual for Non-Income Related Taxes

In fiscal 2019, the Company recorded an \$8.0 million accrual for non-income related taxes related to one of its foreign subsidiaries. A portion of the accrual related to each of the fiscal quarters in fiscal 2019 as follows:

Quarter Ended (in thousands)		Other operating expense		Accrued expense		Deferred income tax assets		Provision for income taxes	
									Increase (Decrease)
2019:									
October 31	\$	1,100	\$	1,100	\$	250	\$	(250)	
January 31		2,000		2,000		500		(500)	
April 30		2,300		2,300		600		(600)	
July 31		2,600		2,600		650		(650)	
TOTAL	\$	8,000	\$	8,000	\$	2,000	\$	(2,000)	

Accordingly, the Company corrected its consolidated financial statements for its fiscal quarters ended October 31, 2018, January 31, 2019, and April 30, 2019 to include the accrued expense and the related income tax benefit. The Company has determined that the adjustments were not material to its previously issued quarterly financial statements. The impact of the correction on the Company's previously issued consolidated financial statements was as follows:

Quarter Ended October 31, 2018 (in thousands, except per share data)		Previously Reported		Error Correction		As Adjusted
Consolidated Statement of Income:						
Other operating expense	\$	(195)	\$	(1,100)	\$	(1,295)
Provision for income taxes	\$	(1,189)	\$	250	\$	(939)
Net loss	\$	(1,148)	\$	(850)	\$	(1,998)
Net loss attributable to IDT Corporation	\$	(1,449)	\$	(850)	\$	(2,299)
Loss per share attributable to IDT Corporation common stockholders:						
Basic	\$	(0.06)	\$	(0.04)	\$	(0.10)
Diluted	\$	(0.06)	\$	(0.04)	\$	(0.10)

Quarter Ended January 31, 2019 (in thousands, except per share data)		Previously Reported		Error Correction		As Adjusted
Consolidated Statement of Income:						
Other operating expense	\$	(90)	\$	(2,000)	\$	(2,090)
Provision for income taxes	\$	(1,736)	\$	500	\$	(1,236)
Net income (loss)	\$	489	\$	(1,500)	\$	(1,011)
Net income (loss) attributable to IDT Corporation	\$	189	\$	(1,500)	\$	(1,311)
Earnings (loss) per share attributable to IDT Corporation common stockholders:						
Basic	\$	0.01	\$	(0.06)	\$	(0.05)
Diluted	\$	0.01	\$	(0.06)	\$	(0.05)

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Quarter Ended April 30, 2019 (in thousands, except per share data)	Previously Reported	Error Correction	As Adjusted
Consolidated Statement of Income:			
Other operating expense	\$ (120)	\$ (2,300)	\$ (2,420)
Benefit from income taxes	\$ 871	\$ 600	\$ 1,471
Net income	\$ 4,157	\$ (1,700)	\$ 2,457
Net income attributable to IDT Corporation	\$ 3,870	\$ (1,700)	\$ 2,170
Earnings per share attributable to IDT Corporation common stockholders:			
Basic	\$ 0.15	\$ (0.07)	\$ 0.08
Diluted	\$ 0.15	\$ (0.07)	\$ 0.08

Straight Path Communications Inc. Settlement Agreement and Mutual Release

The Company entered into various agreements with Straight Path prior to the Straight Path Spin-Off including a Separation and Distribution Agreement to affect the separation and provide a framework for the Company's relationship with Straight Path after the spin-off. On September 20, 2016, the Company received a letter of inquiry from the Enforcement Bureau of the Federal Communications Commission ("FCC") requesting certain information and materials related to an investigation of potential violations by Straight Path Spectrum LLC (formerly a subsidiary of the Company and Straight Path) in connection with licenses to operate on the 28 GHz and 39 GHz bands of the Fixed Microwave Services. The Company has cooperated with the FCC in this matter and has responded to the letter of inquiry. If the FCC were to pursue separate action against the Company, the FCC could seek to fine or impose regulatory penalties or civil liability on the Company related to activities during the period of ownership by the Company.

The Separation and Distribution Agreement provides for the Company and Straight Path to indemnify each other for certain liabilities. The Company and Straight Path each communicated that it was entitled to indemnification from the other in connection with the inquiry described above and related matters. On October 24, 2017, the Company, Straight Path, Straight Path IP Group, Inc. ("SPIP") and PR-SP IP Holdings LLC ("PR-SP"), an entity owned by Howard S. Jonas, entered into a Settlement Agreement and Release that provides for, among other things, the settlement and mutual release of potential liabilities and claims that may exist or arise under the Separation and Distribution Agreement between the Company and Straight Path. In exchange for the mutual release, in October 2017, the Company paid Straight Path an aggregate of \$16 million in cash, Straight Path transferred to the Company its majority ownership interest in Straight Path IP Group Holding, Inc. ("New SPIP"), which holds the equity of SPIP, the entity that holds intellectual property primarily related to communications over computer networks, subject to the right to receive 22% of the net proceeds, if any, received by SPIP from licenses, settlements, awards or judgments involving any of the patent rights and certain transfers of the patents or related rights, that will be retained by Straight Path's stockholders (such equity interest, subject to the retained interest right, the "IP Interest"), and the Company undertook certain funding and other obligations related to SPIP. The Settlement Agreement and Release allocates (i) \$10 million of the payment and the retained interest right to the settlement of claims and the mutual release and (ii) \$6 million to the transfer of the IP Interest. In fiscal 2017, the Company recorded a liability of \$10.0 million related to this settlement and mutual release. In addition, in fiscal 2017, the Company incurred legal fees of \$0.9 million related to the FCC investigation and the settlement and mutual release, and the Company received insurance proceeds related to the FCC investigation of \$0.5 million.

On October 24, 2017, the Company sold its entire majority interests in New SPIP to PR-SP in exchange for \$6 million and the assumption by PR-SP of the funding and other obligations undertaken by the Company.

Note 14—Revolving Credit Facility

IDT Telecom had a credit agreement, dated as of October 31, 2018, with TD Bank, N.A. for a line of credit facility for up to a maximum principal amount of \$25.0 million until its maturity date on July 15, 2019. The principal outstanding incurred interest per annum at the LIBOR rate adjusted by the Regulation D

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

maximum reserve requirement plus 125 basis points. IDT Telecom paid a quarterly unused commitment fee of 0.3% per annum on the average daily balance of the unused portion of the \$25.0 million commitment.

IDT Telecom entered into a credit agreement, dated July 12, 2012, with TD Bank, N.A. for a line of credit facility for up to a maximum principal amount of \$25.0 million. The credit agreement was terminated on July 20, 2018. The principal outstanding incurred interest per annum, at the option of IDT Telecom, at either (a) the U.S. Prime Rate less 125 basis points, or (b) the LIBOR rate adjusted by the Regulation D maximum reserve requirement plus 125 basis points. IDT Telecom paid a quarterly unused commitment fee of 0.325% per annum on the average daily balance of the unused portion of the \$25.0 million commitment.

Note 15—Accrued Expenses

Accrued expenses consist of the following:

July 31 (in thousands)		2019		2018
Carrier minutes termination	\$	39,155	\$	49,289
Carrier network connectivity, toll-free and 800 services		1,569		1,753
Regulatory fees and taxes		55,005		45,771
Compensation costs		12,971		12,552
Legal and professional fees		3,249		5,247
Other		15,885		15,613
TOTAL	\$	127,834	\$	130,225

Note 16—Other Income (Expense), Net

Other income (expense), net consists of the following:

Year ended July 31 (in thousands)		2019		2018		2017
Foreign currency transaction (losses) gains	\$	(696)	\$	(2,107)	\$	287
(Loss) gain on marketable securities		—		(16)		323
Gain (loss) on investments		1,779		(6)		355
Other		(401)		781		(148)
TOTAL	\$	682	\$	(1,348)	\$	817

Note 17—Income Taxes

On December 22, 2017, the U.S. government enacted “An Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018”, which is commonly referred to as “The Tax Cuts and Jobs Act” (the “Tax Act”). The Tax Act reduced the U.S. federal statutory corporate tax rate from 35.0% to 21.0% effective January 1, 2018, required companies to pay a one-time repatriation tax on earnings of certain foreign subsidiaries that were previously tax deferred (“transition tax”), and made other changes to the U.S. income tax code. Due to the Company’s July 31 fiscal year-end, the lower corporate income tax rate is phased in, resulting in a blended U.S. federal statutory tax rate of approximately 26.9% for the Company’s fiscal 2018, and 21.0% for the Company’s fiscal years thereafter.

The Company has completed its accounting for the income tax effects of the Tax Act. In fiscal 2018, the Company estimated the effect of the Tax Act on its existing AMT credit carry-over and transition tax. Because the AMT credit will be refundable if not utilized in the four years subsequent to fiscal 2018, the Company reversed the valuation allowance that offset the AMT credit. As a result, the Company recorded a noncurrent receivable and an income tax benefit of \$3.3 million for the anticipated refund. The reduction in the corporate tax rate did not impact the Company’s results of operations or financial position because the income tax benefit from the reduced rate was offset by the valuation allowance.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The transition tax is based on total post-1986 earnings and profits which were previously deferred from U.S. income taxes. In fiscal 2018, the Company estimated that it would utilize \$12 million of federal net operating loss carryforwards to offset the transition tax that it expected to incur. In fiscal 2019, the Company adjusted this amount to \$11 million of federal net operating loss carryforwards usage. These net operating loss carryforwards have a full valuation allowance and as such there was no impact on the Company's results of operations.

The global intangible low taxed income ("GILTI") and base erosion anti-abuse tax ("BEAT") became effective for the Company on August 1, 2018. The Company booked an inclusion to its U.S. income of \$0.6 million to reflect the impact. As a result of the Company's fully reserved net operating losses in the United States, there was no impact on its tax provision as a result of GILTI. The Company also had no impact from the BEAT.

The Company anticipates that its assumptions may change as a result of future guidance and interpretation from the Internal Revenue Service or other taxing jurisdictions, and any additional adjustments will be made at that time.

The Company's cumulative undistributed foreign earnings are included in accumulated deficit in the Company's consolidated balance sheets and consisted of approximately \$337 million at July 31, 2019. The Company has concluded that the earnings remain permanently reinvested. The Tax Act moved toward a territorial tax system through the provision of a 100% dividends received deduction for the foreign-source portions of dividends received from controlled foreign subsidiaries.

The components of income before income taxes are as follows:

Year ended July 31 (in thousands)	2019	2018	2017
Domestic	\$ 6,827	\$ 910	\$ (3,161)
Foreign	(6,374)	7,191	10,781
INCOME BEFORE INCOME TAXES	\$ 453	\$ 8,101	\$ 7,620

Significant components of the Company's deferred income tax assets consist of the following:

July 31 (in thousands)	2019	2018
Deferred income tax assets:		
Bad debt reserve	\$ 540	\$ 455
Accrued expenses	3,134	3,758
Stock options and restricted stock	866	1,070
Charitable contributions	734	946
Depreciation	151	349
Unrealized gain	(231)	—
Net operating loss	72,625	75,110
Transaction taxes	2,000	—
Deferred revenue	(1,060)	—
Total deferred income tax assets	78,759	81,688
Valuation allowance	(74,170)	(76,020)
NET DEFERRED INCOME TAX ASSETS	\$ 4,589	\$ 5,668

In fiscal 2018, in addition to the reduction in the Company's deferred tax assets as a result of the reduction in the corporate tax rate and the transition tax, the Company's deferred tax assets and offsetting valuation allowance each decreased by \$6 million due to the Rafael Spin-Off.

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The (provision for) benefit from income taxes consists of the following:

Year ended July 31 (in thousands)	2019	2018	2017
Current:			
Federal	\$ —	\$ 3,294	\$ —
State and local	(15)	(34)	(26)
Foreign	971	11	(282)
	956	3,271	(308)
Deferred:			
Federal	—	—	(9,536)
State and local	1	12	(66)
Foreign	(1,080)	(6,185)	11,931
	(1,079)	(6,173)	2,329
(PROVISION FOR) BENEFIT FROM INCOME TAXES	\$ (123)	\$ (2,902)	\$ 2,021

The differences between income taxes expected at the U.S. federal statutory income tax rate and income taxes provided are as follows:

Year ended July 31 (in thousands)	2019	2018	2017
U.S. federal income tax at statutory rate	\$ (95)	\$ (2,186)	\$ (2,667)
Transition tax on foreign earnings	92	(3,360)	—
Valuation allowance	2,008	58,798	626
Foreign tax rate differential	(2,835)	(4,272)	3,107
Nondeductible expenses	(657)	213	457
Other	1	(23)	64
Prior year tax benefit	2,271	575	494
Tax law changes	(896)	(52,631)	—
State and local income tax, net of federal benefit	(12)	(16)	(60)
(PROVISION FOR) BENEFIT FROM INCOME TAXES	\$ (123)	\$ (2,902)	\$ 2,021

At July 31, 2019, the Company had federal net operating loss carryforwards of approximately \$155 million. These carry-forward losses are available to offset future U.S. federal taxable income. The net operating loss carryforwards started to expire in fiscal 2018. The Company has foreign net operating losses of approximately \$143 million, of which approximately \$120 million does not expire, approximately \$22 million expires in two to ten years and \$1 million expires in twenty years. These foreign net operating losses are available to offset future taxable income in the countries in which the losses were incurred. The Company's subsidiary, net2phone, which provides voice over Internet protocol communications services, has additional federal net operating losses of approximately \$70 million, which will expire through fiscal 2027. With the reacquisition of net2phone by the Company in March 2006, its losses were limited under Internal Revenue Code Section 382 to approximately \$7 million per year. The net operating losses do not include any excess benefits related to stock options or restricted stock.

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The change in the valuation allowance is as follows:

Year ended July 31 (in thousands)	Balance at beginning of year	Additions charged to costs and expenses	Deductions	Balance at end of year
2019				
Reserves deducted from deferred income taxes, net:				
Valuation allowance	\$ 76,020	\$ —	\$ (1,850)	\$ 74,170
2018				
Reserves deducted from deferred income taxes, net:				
Valuation allowance	\$ 129,872	\$ —	\$ (53,852)	\$ 76,020
2017				
Reserves deducted from deferred income taxes, net:				
Valuation allowance	\$ 130,498	\$ 16,017	\$ (16,643)	\$ 129,872

In fiscal 2017, the Company determined that its valuation allowance on the losses of Elmion Netherlands B.V., a Netherlands subsidiary, was no longer required due to an internal reorganization that generated income and a projection of net income in future periods. The Company recorded a benefit from income taxes of \$16.6 million in fiscal 2017 from the full recognition of the Elmion Netherlands B.V. deferred tax assets. In addition, in fiscal 2017, the Company determined that it would not be able to utilize its deferred tax assets in the United States and recorded a valuation allowance of \$11.1 million against them.

At July 31, 2019 and 2018, the Company did not have any unrecognized income tax benefits. There were no changes in the balance of unrecognized income tax benefits in fiscal 2019, fiscal 2018 and fiscal 2017. At July 31, 2019, the Company did not expect any changes in unrecognized income tax benefits during the next twelve months. In fiscal 2019, fiscal 2018 and fiscal 2017, the Company did not record any interest and penalties on income taxes. At July 31, 2019 and 2018, there was no accrued interest included in current income taxes payable.

In September 2017, the Company, IDT Domestic Telecom, Inc. (a subsidiary of the Company) and certain other affiliates, were certified by the New Jersey Economic Development Authority as having met all of the requirements of the Grow New Jersey Assistance Act Tax Credit Program. The corporation business tax credits to be received are a maximum of \$21.1 million. The Company may claim a portion of the tax credit each tax year for ten years beginning in 2018. The tax credit can be applied to 100% of the Company's New Jersey tax liability each year, and the unused amount of the annual credit can be carried forward. In addition, the Company may apply for a tax credit transfer certificate to sell unused tax credits to another business. The tax credits must be sold for no less than 75% of the value of the tax credits. The tax credits are subject to reduction, forfeiture and recapture if, among other things, the number of full-time employees declines below the program or statewide minimum. The Company has yet to receive the credit.

The Company currently remains subject to examinations of its tax returns as follows: U.S. federal tax returns for fiscal 2016 to fiscal 2019, state and local tax returns generally for fiscal 2015 to fiscal 2019 and foreign tax returns generally for fiscal 2015 to fiscal 2019.

Note 18—Equity

Correction of Noncontrolling Interests

In the fourth quarter of fiscal 2019, the Company corrected the noncontrolling interests and the accumulated deficit of one of its subsidiaries. The net loss attributable to noncontrolling interests for this subsidiary had not been recorded since its inception in fiscal 2016. Accordingly, as of August 1, 2018, the Company recorded a reduction in “Noncontrolling interests” and an offsetting reduction to “Accumulated deficit” of \$2.0 million.

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Class A Common Stock and Class B Common Stock

The rights of holders of Class A common stock and Class B common stock are identical except for certain voting and conversion rights and restrictions on transferability. The holders of Class A common stock and Class B common stock receive identical dividends per share when and if declared by the Company's Board of Directors. In addition, the holders of Class A common stock and Class B common stock have identical and equal priority rights per share in liquidation. The Class A common stock and Class B common stock do not have any other contractual participation rights. The holders of Class A common stock are entitled to three votes per share and the holders of Class B common stock are entitled to one-tenth of a vote per share. Each share of Class A common stock may be converted into one share of Class B common stock, at any time, at the option of the holder. Shares of Class A common stock are subject to certain limitations on transferability that do not apply to shares of Class B common stock.

Dividend Payments

In fiscal 2018, the Company paid aggregate cash dividends of \$0.56 per share on its Class A common stock and Class B common stock, or \$13.9 million in total. In fiscal 2017, the Company paid aggregate cash dividends of \$0.76 per share on its Class A common stock and Class B common stock, or \$17.9 million in total. In fiscal 2018, the Company's Board of Directors discontinued the Company's quarterly dividend, electing instead to repurchase shares of the Company's Class B common stock when warranted by market conditions, available resources, and the Company's business outlook and results, as well as invest in the Company's growth business initiatives. Accordingly, no dividends were paid in fiscal 2019.

Sales of Shares of Class B Common Stock to Howard S. Jonas

On December 21, 2018, the Company sold 2,546,689 shares of its Class B common stock that were held in treasury to Howard S. Jonas for aggregate consideration of \$14.8 million. The price per share of \$5.89 was equal to the closing price of the Company's Class B common stock on April 16, 2018, the last closing price before approval of the sale by the Company's Board of Directors and its Corporate Governance Committee. On May 31, 2018, Mr. Jonas paid \$1.5 million of the purchase price, and he paid the balance of the purchase price on December 21, 2018 after approval of the sale by the Company's stockholders at the 2018 annual meeting of stockholders. The purchase price was reduced by approximately \$0.2 million, which was the amount of dividends paid on 2,546,689 shares of the Company's Class B common stock whose record date was between April 16, 2018 and the issuance of the shares.

On June 9, 2017, the Company sold 1.0 million shares of its Class B common stock to Howard S. Jonas for aggregate consideration of \$14.9 million. The price per share of \$14.93 was equal to the closing price of the Class B common stock on May 1, 2017, the day prior to the approval of the sale by the Company's Board of Directors and Corporate Governance Committee.

On April 11, 2017, the Company sold 728,332 treasury shares of its Class B common stock to Howard S. Jonas for aggregate consideration of \$10.0 million. The price per share of \$13.73 was equal to the closing price of the Company's Class B common stock on April 10, 2017.

Stock Repurchases

The Company has an existing stock repurchase program authorized by its Board of Directors for the repurchase of up to an aggregate of 8.0 million shares of the Company's Class B common stock. In fiscal 2019, the Company repurchased 729,110 shares of Class B common stock for an aggregate purchase price of \$3.9 million. In fiscal 2018, the Company repurchased 367,484 shares of Class B common stock for an aggregate purchase price of \$1.9 million. There were no repurchases under the program in fiscal 2017. At July 31, 2019, 6.9 million shares remained available for repurchase under the stock repurchase program.

In fiscal 2019, fiscal 2018 and fiscal 2017, the Company paid \$28,000, \$0.4 million and \$1.8 million, respectively, to repurchase shares of Class B common stock that were tendered by employees of the Company to satisfy the employees' tax withholding obligations in connection with the lapsing of restrictions on awards of restricted stock. Such shares are repurchased by the Company based on their fair market value on the

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

trading day immediately prior to the vesting date. In fiscal 2019, fiscal 2018 and fiscal 2017, the Company repurchased 3,748; 57,081 and 94,338 shares of Class B common stock, respectively, from employees.

Note 19—Stock-Based Compensation

Stock-Based Compensation Plan

The 2015 Stock Option and Incentive Plan is intended to provide incentives to officers, employees, directors and consultants of the Company, including stock options, stock appreciation rights, limited rights, deferred stock units, and restricted stock. On December 13, 2018 and December 14, 2017, the Company's stockholders approved amendments to the Company's 2015 Stock Option and Incentive Plan to increase the number of shares of the Company's Class B common stock available for the grant of awards thereunder by an additional 0.1 million and 0.3 million shares, respectively. At July 31, 2019, the Company had 1.1 million shares of Class B common stock reserved for award under its 2015 Stock Option and Incentive Plan and 0.3 million shares were available for future grants.

On September 12, 2019, the Company's Board of Directors amended the Company's 2015 Stock Option and Incentive Plan to increase the number of shares of the Company's Class B common stock available for the grant of awards thereunder by an additional 0.4 million shares. The amendment is subject to approval by the Company's stockholders at its annual meeting of stockholders on December 12, 2019.

In fiscal 2019, fiscal 2018 and fiscal 2017, there was no income tax benefit resulting from tax deductions in excess of the compensation cost recognized for the Company's stock-based compensation.

Stock Options

Option awards are generally granted with an exercise price equal to the market price of the Company's stock on the date of grant. Option awards generally vest on a graded basis over three years of service and have ten-year contractual terms. The fair value of stock options was estimated on the date of the grant using a Black-Scholes valuation model and the assumptions in the following table. No option awards were granted in fiscal 2019 or fiscal 2018. Expected volatility is based on historical volatility of the Company's Class B common stock and other factors. The Company uses historical data on exercise of stock options, post vesting forfeitures and other factors to estimate the expected term of the stock-based payments granted. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant.

Year ended July 31	2017
ASSUMPTIONS	
Average risk-free interest rate	1.82%
Expected dividend yield	5.09%
Expected volatility	40.0%
Expected term	4.0 years
Weighted-average grant date fair value	\$ 3.26

A summary of stock option activity for the Company is as follows:

	Number of Options (in thousands)	Weighted- Average Exercise Price	Weighted- Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at July 31, 2018	1,243	\$ 14.23		
Granted	—	—		
Exercised	—	—		
Cancelled / Forfeited	(20)	13.72		
OUTSTANDING AT JULY 31, 2019	1,223	\$ 14.23	3.0	\$ —
EXERCISABLE AT JULY 31, 2019	861	\$ 14.15	3.0	\$ —

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The total intrinsic value of options exercised during fiscal 2019, fiscal 2018 and fiscal 2017 was nil, nil, and \$0.4 million, respectively. At July 31, 2019, there was \$0.8 million of total unrecognized compensation cost related to non-vested stock options, which is expected to be recognized over a weighted-average period of 0.5 years.

On December 14, 2017, the Company's stockholders ratified the grant to Howard S. Jonas of options to purchase up to 1.0 million shares of the Company's Class B common stock at an exercise price of \$14.93 per share. The options were immediately exercisable and will expire on May 1, 2022. Subject to certain vesting provisions in Mr. Jonas' employment agreement with the Company, the unexercised portion of the options will terminate should Mr. Jonas cease to provide services as an officer or director of the Company or one or more of its subsidiaries. The Company will have the right to repurchase the Class B common stock issued upon exercise of the options at a purchase price equal to the exercise price of the option should Mr. Jonas cease to provide services as an officer or director of the Company or one or more of its subsidiaries. The Company's repurchase right will lapse as to 333,334 shares underlying the option on May 2, 2020. Mr. Jonas will be prohibited from transferring any shares of the Class B common stock issued on exercise of the option that are subject to the Company's repurchase right. The Company's repurchase right is essentially a forfeiture provision. The options were not granted under the Company's 2015 Stock Option and Incentive Plan, but, except to the extent otherwise provided in the related grant agreement, are subject to the terms of the 2015 Stock Option and Incentive Plan. The Company estimated that the fair value of the options on the date of grant was \$3.3 million, which is being recognized on a straight-line basis over the requisite three-year service period ending in May 2020.

Restricted Stock

The fair value of restricted shares of the Company's Class B common stock is determined based on the closing price of the Company's Class B common stock on the grant date. Share awards generally vest on a graded basis over three years of service.

A summary of the status of the Company's grants of restricted shares of Class B common stock is presented below:

(in thousands)	Number of Non-vested Shares	Weighted- Average Grant-Date Fair Value
Non-vested shares at July 31, 2018	49	\$ 16.28
Granted	208	4.41
Vested	(51)	14.37
Forfeited	—	—
NON-VESTED SHARES AT JULY 31, 2019	206	\$ 4.84

At July 31, 2019, there was \$0.8 million of total unrecognized compensation cost related to non-vested stock-based compensation arrangements, which is expected to be recognized over a weighted-average period of 1.2 years. The total grant date fair value of shares vested in fiscal 2019, fiscal 2018 and fiscal 2017 was \$0.7 million, \$3.4 million and \$4.1 million, respectively.

Effective as of June 19, 2019, the Compensation Committee of the Company's Board of Directors approved an equity grant of 170,000 restricted shares of the Company's Class B common stock to Shmuel Jonas, the Company's Chief Executive Officer, and 20,000 restricted shares of the Company's Class B common stock to the Company's Executive Vice President of Strategy and Legal Affairs, which vest in full on January 5, 2022 only if the closing price of the Company's Class B common stock on the preceding trading day is \$13.00 or above. The minimum price of \$13.00 per share shall be adjusted by the Compensation Committee if there is a spin-off or significant stock buybacks prior to January 5, 2022.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Deferred Stock Units Equity Incentive Program

On June 5, 2019, the Compensation Committee of the Company's Board of Directors approved an equity incentive program in the form of deferred stock units ("DSUs") that, upon vesting, will entitle the grantees to receive shares of the Company's Class B common stock. In June 2019, the Company granted 410,900 DSUs to certain of its executive officers and employees. Subject to continued full time employment or other service to the Company, the DSUs will vest in three equal amounts on each of January 6, 2020, January 5, 2021, and January 5, 2022. The number of shares that will be issuable on each vesting date will vary between 50% to 200% of the number of DSUs that vest on that vesting date, depending on the market price for the underlying Class B common stock on the vesting date relative to the market price at the time of the grant. In addition, the grantee will have the right to elect a later vesting date no later than November 29, 2019 for the January 6, 2020 vesting date, and no later than November 30, 2020 for the January 5, 2021 vesting date. A grantee will have the option to elect a later vesting date for one-half or all of the shares scheduled to vest on the then upcoming vesting date.

The Company estimated that the fair value of the DSUs on the date of grant was \$4.3 million, which will be recognized on a graded vesting basis over the requisite service periods ending in January 2022. The Company used a Monte Carlo simulation in its fair value estimate. The weighted average grant date fair value per DSU was \$10.35. At July 31, 2019, there was \$3.6 million of total unrecognized compensation cost related to non-vested DSUs, which is expected to be recognized over a weighted-average period of 0.9 years.

Note 20—Accumulated Other Comprehensive Loss

The accumulated balances for each classification of other comprehensive income (loss) were as follows:

(in thousands)	Unrealized (loss) gain on available-for- sale securities	Foreign currency translation	Accumulated other comprehensive income (loss)	Location of (Gain) Loss Recognized
Balance at July 31, 2016	\$ 8	\$ (3,752)	\$ (3,744)	
Other comprehensive income (loss) attributable to IDT Corporation before reclassification	2,449	(725)	1,724	
Less: reclassification for gain included in net income	(323)	—	(323)	Other income (expense), net
Net other comprehensive income (loss) attributable to IDT Corporation ⁽¹⁾	2,126	(725)	1,401	
Balance at July 31, 2017	2,134	(4,477)	(2,343)	
Rafael Spin-Off	(1,991)	(279)	(2,270)	
Other comprehensive loss attributable to IDT Corporation before reclassification	(193)	(182)	(375)	
Less: reclassification for loss included in net income	16	—	16	Other income (expense), net
Net other comprehensive loss attributable to IDT Corporation	(177)	(182)	(359)	
Balance at July 31, 2018	(34)	(4,938)	(4,972)	
Adjustment from the adoption of change in accounting for equity investments (see Note 8)	33	—	33	
Adjusted balance at August 1, 2018	(1)	(4,938)	(4,939)	
Other comprehensive income attributable to IDT Corporation	1	80	81	
BALANCE AT JULY 31, 2019	\$ —	\$ (4,858)	\$ (4,858)	

(1) In fiscal 2017, net other comprehensive income attributable to IDT Corporation from unrealized gains on available-for-sale securities included unrealized gains on the Rafael convertible promissory notes of \$2.1 million and unrealized gains, net on marketable securities of \$26,000.

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Note 21—Commitments and Contingencies

Legal Proceedings

On April 12, 2019, Scarleth Samara filed a putative class action against IDT Telecom in the U.S. District Court for the Eastern District of Louisiana alleging certain violations of the Telephone Consumer Protection Act of 1991. Plaintiff alleges that in October of 2017, IDT Telecom sent unauthorized marketing messages to her cellphone. IDT Telecom filed a motion to compel arbitration. On or about August 19, 2019, the plaintiff agreed to dismiss the pending court action and the parties intend to proceed with arbitration. At this stage, the Company is unable to estimate its potential liability, if any. The Company intends to vigorously defend the claim.

On January 22, 2019, Jose Rosales filed a putative class action against IDT America, IDT Domestic Telecom and IDT International in California state court alleging certain violations of employment law. Plaintiff alleges that these companies failed to compensate members of the putative class in accordance with California law. The Company is evaluating the claims, and at this stage, is unable to estimate its potential liability, if any. The Company intends to vigorously defend the claims. In August 2019, the Company filed a cross complaint against Rosales alleging trade secret and other violations.

On May 21, 2018, Erik Dennis filed a putative class action against IDT Telecom and the Company in the U.S. District Court for the Northern District of Georgia alleging violations of Do Not Call Regulations promulgated by the U.S. Federal Trade Commission. The Company is evaluating the claim, and at this stage, is unable to estimate its potential liability, if any. On August 13, 2018, IDT Telecom and the Company filed a motion to dismiss or in the alternative to strike class allegations. The plaintiff opposed the motion. The motion to dismiss was denied. The Company intends to vigorously defend this matter.

On May 2, 2018, Jean Carlos Sanchez filed a putative class action against IDT Telecom in the U.S. District Court for the Northern District of Illinois alleging that the Company sent unauthorized marketing messages to cellphones in violation of the Telephone Consumer Protection Act of 1991. On July 26, 2018, the parties filed a stipulation of dismissal. The Company is evaluating the claim, and at this stage, is unable to estimate its potential liability, if any. The Company intends to vigorously defend this matter.

On April 24, 2018, Sprint Communications Company L.P. filed a patent infringement claim against the Company and certain of its affiliates in the U.S. District Court for the District of Delaware alleging infringement of U.S. Patent Nos. 6,298,064; 6,330,224; 6,343,084; 6,452,932; 6,463,052; 6,473,429; 6,563,918; 6,633,561; 6,697,340; 6,999,463; 7,286,561; 7,324,534; 7,327,728; 7,505,454; and 7,693,131. Plaintiff was seeking damages and injunctive relief. On June 28, 2018, Sprint dismissed the complaint without prejudice. The Company is evaluating the underlying claim, and at this stage, is unable to estimate its potential liability, if any. The Company intends to vigorously defend any claim of infringement of the listed patents.

On July 5, 2017, plaintiff JDS1, LLC, on behalf of itself and all other similarly situated stockholders of Straight Path, and derivatively on behalf of Straight Path as nominal defendant, filed a putative class action and derivative complaint in the Court of Chancery of the State of Delaware against the Company, The Patrick Henry Trust (a trust formed by Howard S. Jonas that held record and beneficial ownership of certain shares of Straight Path he formerly held), Howard S. Jonas, and each of Straight Path's directors. The complaint alleges that the Company aided and abetted Straight Path Chairman of the Board and Chief Executive Officer Davidi Jonas, and Howard S. Jonas in his capacity as controlling stockholder of Straight Path, in breaching their fiduciary duties to Straight Path in connection with the settlement of claims between Straight Path and the Company related to potential indemnification claims concerning Straight Path's obligations under the Consent Decree it entered into with the Federal Communications Commission ("FCC"), as well as the sale of Straight Path's subsidiary Straight Path IP Group, Inc. to the Company in connection with that settlement. That action was consolidated with a similar action that was initiated by The Arbitrage Fund. The Plaintiffs are seeking, among other things, (i) a declaration that the action may

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

be maintained as a class action or in the alternative, that demand on the Straight Path Board is excused; (ii) that the term sheet is invalid; (iii) awarding damages for the unfair price stockholders received in the merger between Straight Path and Verizon Communications Inc. for their shares of Straight Path's Class B common stock; and (iv) ordering Howard S. Jonas, Davidi Jonas, and the Company to disgorge any profits for the benefit of the class Plaintiffs. On August 28, 2017, the Plaintiffs filed an amended complaint. On September 24, 2017, the Company filed a motion to dismiss the amended complaint. Following closing of the transaction, the Delaware Chancery Court denied the motion to dismiss. On February 22, 2019, the Delaware Supreme Court affirmed the denial of the motion to dismiss. The Company intends to vigorously defend this matter. In fiscal 2019 and fiscal 2018, the Company incurred legal fees of \$2.0 million and \$1.7 million, respectively, related to this putative class action. Also, in fiscal 2019, the Company recorded insurance proceeds for this matter of \$2.3 million (see Note 13). At this stage, the Company is unable to estimate its potential liability, if any.

In addition to the foregoing, the Company is subject to other legal proceedings that have arisen in the ordinary course of business and have not been finally adjudicated. Although there can be no assurance in this regard, the Company believes that none of the other legal proceedings to which the Company is a party will have a material adverse effect on the Company's results of operations, cash flows or financial condition.

Sales Tax Contingency

On June 21, 2018, the United States Supreme Court rendered a decision in *South Dakota v. Wayfair, Inc.*, holding that a state may require a remote seller with no physical presence in the state to collect and remit sales tax on goods and services provided to purchasers in the state, overturning certain existing court precedent. The Company is evaluating its state tax filings with respect to the recent Wayfair decision and is in the process of reviewing its collection practices. It is possible that one or more jurisdictions may assert that the Company has liability for periods for which it has not collected sales, use or other similar taxes, and if such an assertion or assertions were successful it could materially and adversely affect the Company's business, financial condition and operating results. One or more jurisdictions may change their laws or policies to apply their sales, use or other similar taxes to the Company's operations, and if such changes were made it could materially and adversely affect the Company's business, financial condition and operating results.

Regulatory Fees Audit

The Company's 2017 FCC Form 499-A, which reports its calendar year 2016 revenue, related to payments due to the FCC, is currently under audit by the Internal Audit Division of the Universal Service Administrative Company. At July 31, 2019 and 2018, the Company's accrued expenses included \$44.7 million and \$43.9 million, respectively, for these regulatory fees for the year covered by the audit, as well as prior and subsequent years.

Purchase Commitments

At July 31, 2019, the Company had purchase commitments of \$39.2 million, including the aggregate commitment of \$36.1 million under the telecom services commitments described below.

Telecom Services Commitments

In May 2019, the Company entered into a MOU with a telecom operator in Central America for among other things, termination of inbound and outbound international long-distance voice calls. The MOU is effective until December 31, 2019, unless superseded by the execution of a definitive agreement. The Company has committed to pay such telecom operator monthly committed amounts during the term of the MOU. The parties intend to draft and execute a definitive agreement as soon as practicable.

In August 2017, the Company entered into a Reciprocal Services Agreement with a telecom operator in Central America for a full range of services, including, but not limited to, termination of inbound and outbound international long-distance voice calls. The Company has committed to pay such telecom

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

operator monthly committed amounts during the term of the agreement. In addition, under certain limited circumstances, the parties may renegotiate the amount of the monthly payments. In the event the parties do not agree on re-pricing terms after good faith negotiations, then either party has the right to terminate the agreement. Pursuant to the agreement, the Company deposited \$9.2 million into an escrow account as security for the benefit of the telecom operator, which is included in “Other current assets” in the accompanying consolidated balance sheet based on the terms and conditions of the agreement.

Lease Commitments

The future minimum payments for operating leases as of July 31, 2019 were as follows:

(in thousands)

Year ending July 31:		
2020	\$	6,876
2021		3,558
2022		2,585
2023		2,108
2024		1,869
Thereafter		1,459
Total payments	\$	18,455

Rental expense under operating leases was \$4.8 million, \$2.7 million and \$2.9 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. In addition, connectivity charges under service agreements were \$4.4 million, \$5.0 million and \$6.4 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

The Company leases office space and parking in Rafael’s building and parking garage located at 520 Broad St, Newark, New Jersey. The Company also leases office space in Israel from Rafael. The Newark lease expires in April 2025 and the Israel lease expires in July 2025. The future minimum payments for these leases are included in the table above. In fiscal 2019, and fiscal 2018 (after the Rafael Spin-Off), the Company incurred rent expense of \$1.8 million and \$0.6 million, respectively, in connection with the Rafael leases, which is included in the total rent expense above.

Performance Bonds

The Company has performance bonds issued through third parties for the benefit of various states in order to comply with the states’ financial requirements for money remittance licenses and telecommunications resellers. At July 31, 2019, the Company had aggregate performance bonds of \$16.4 million outstanding.

Note 22—Related Party Transactions

Rafael Holdings, Inc. including Rafael Pharmaceuticals, Inc.

The Company entered into various agreements with Rafael prior to the Rafael Spin-Off including a Separation and Distribution Agreement to effect the separation and provide a framework for the Company’s relationship with Rafael after the Rafael Spin-Off, and a Tax Separation Agreement, which sets forth the responsibilities of the Company and Rafael with respect to, among other things, liabilities for federal, state, local and foreign taxes for periods before and including the Rafael Spin-Off, the preparation and filing of tax returns for such periods and disputes with taxing authorities regarding taxes for such periods. Pursuant to the Separation and Distribution Agreement, the Company indemnifies Rafael and Rafael indemnifies the Company for losses related to the failure of the other to pay, perform or otherwise discharge, any of the liabilities and obligations set forth in the agreement. Pursuant to the Tax Separation Agreement, the Company indemnifies Rafael from all liability for the Company’s taxes, other than Rafael and its subsidiaries, for any taxable period, and from all liability for taxes due to the Rafael Spin-Off.

In connection with the Rafael Spin-Off, the Company and Rafael entered into a Transition Services Agreement pursuant to which the Company provides to Rafael certain administrative and other services.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The Company charged Rafael \$0.4 million in fiscal 2019 and \$0.2 million in fiscal 2018 subsequent to the Rafael Spin-Off for services provided. In addition, in fiscal 2019 and fiscal 2018 subsequent to the Rafael Spin-Off, the Company collected cash of \$0.2 million and \$0.3 million, respectively, on behalf of Rafael related to Rafael's parking garage and third-party tenants, while Rafael was in the process of changing its billing and collection systems. At July 31, 2019, other current assets reported in the Company's consolidated balance sheet included net receivable from Rafael of \$0.1 million. At July 31, 2018, the Company owed Rafael \$0.4 million for cash collected in excess of services rendered.

At July 31, 2019 and 2018, the Company held 27,419 and 25,803 shares, respectively, of Rafael Class B common stock (see Note 8).

The Company provided certain administrative and other services to Rafael Pharma. The Company charged Rafael Pharma \$0.4 million and \$0.6 million in fiscal 2018 and fiscal 2017, respectively, for services. At July 31, 2018, other current assets reported in the Company's consolidated balance sheet included receivable from Rafael Pharma of \$1.0 million.

See Note 4 for certain transactions between the Company and Howard S. Jonas related to Rafael. See Note 21 for the Company's lease commitments with Rafael.

Zedge, Inc.

In connection with the Zedge Spin-Off, the Company and Zedge entered into a Transition Services Agreement pursuant to which the Company provides to Zedge certain administrative and other services. The Company charged Zedge \$0.1 million, \$0.3 million and \$1.0 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively, for services provided. In addition, in fiscal 2019, Zedge charged the Company \$0.1 million for certain services. At July 31, 2019 and 2018, other current assets reported in the Company's consolidated balance sheet included receivables from Zedge of \$16,000 and \$34,000, respectively.

At July 31, 2019 and 2018, the Company held 42,282 shares of Zedge Class B common stock (see Note 8).

Straight Path Communications Inc.

The Company entered into various agreements with Straight Path prior to the Straight Path Spin-Off including a Separation and Distribution Agreement to effect the separation and provide a framework for the Company's relationship with Straight Path after the spin-off, and a Tax Separation Agreement, which sets forth the responsibilities of the Company and Straight Path with respect to, among other things, liabilities for federal, state, local and foreign taxes for periods before and including the spin-off, the preparation and filing of tax returns for such periods and disputes with taxing authorities regarding taxes for such periods. Pursuant to the Separation and Distribution Agreement, the Company indemnifies Straight Path and Straight Path indemnifies the Company for losses related to the failure of the other to pay, perform or otherwise discharge, any of the liabilities and obligations set forth in the agreement. Pursuant to the Tax Separation Agreement, the Company indemnifies Straight Path from all liability for taxes of Straight Path or any of its subsidiaries or relating to the Straight Path business with respect to taxable periods ending on or before the Straight Path Spin-Off, from all liability for taxes of the Company, other than Straight Path and its subsidiaries, for any taxable period, and from all liability for taxes due to the Straight Path Spin-Off.

On April 9, 2017, the Company and Straight Path entered into a binding term sheet providing for the settlement and mutual release of potential indemnification and other claims asserted by each of the Company and Straight Path (see Note 13). In addition, on July 5, 2017, certain of Straight Path stockholders filed a putative class action and derivative complaint against the Company and others (see Note 21).

See Note 13 for the Company's sale of its ownership interest in New SPIP to PR-SP.

Genie Energy Ltd.

On October 28, 2011, the Company completed a pro rata distribution of the common stock of the Company's subsidiary, Genie Energy Ltd. ("Genie"), to the Company's stockholders of record as of the close

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

of business on October 21, 2011 (the “Genie Spin-Off”). The Company entered into a Transition Services Agreement with Genie prior to the Genie Spin-Off, which provides for certain services to be performed by the Company and Genie. The Company charged Genie \$1.0 million, \$1.3 million and \$1.6 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively, for services provided and other items, net of the amounts charged by Genie to the Company. At July 31, 2019 and 2018, other current assets reported in the Company’s consolidated balance sheet included receivables from Genie of \$0.2 million and \$0.3 million, respectively.

Other Related Party Transactions

The Company provides office space, certain connectivity and other services to Jonas Media Group, a publishing firm owned by Howard S. Jonas. Billings for such services were \$15,000, \$17,000 and \$22,000 in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. The balance owed to the Company by Jonas Media Group was \$15,000 and \$17,000 as of July 31, 2019 and 2018, respectively.

The Company obtains insurance policies from several insurance brokers, one of which is IGM Brokerage Corp. (“IGM”). IGM was, until his death in October 2009, owned by Irwin Jonas, father of Howard S. Jonas, and the Company’s General Counsel, Joyce J. Mason. IGM is currently owned by Irwin Jonas’ widow—the mother of Howard S. Jonas and Joyce Mason. Jonathan Mason, husband of Joyce Mason and brother-in-law of Howard S. Jonas, provides insurance brokerage services via IGM. Based on information the Company received from IGM, the Company believes that IGM received commissions and fees from payments made by the Company to third party brokers in the aggregate amounts of \$29,000 in fiscal 2019, \$29,000 in fiscal 2018, and \$24,000 in fiscal 2017, which fees and commissions inured to the benefit of Mr. Mason. Neither Howard S. Jonas nor Joyce Mason has any ownership or other interest in IGM or the commissions paid to IGM other than via the familial relationships with their mother and Jonathan Mason.

Mason and Company Consulting, LLC (“Mason and Co.”), a company owned solely by Jonathan Mason, receives an annual fee for the insurance brokerage referral and placement of the Company’s health benefit plan with Brown & Brown Metro, Inc. Based on information the Company received from Jonathan Mason, the Company believes that Mason and Co. received from Brown & Brown Metro, Inc. commissions and fees from payments made by the Company in the amount of \$24,000 in fiscal 2019, \$22,000 in fiscal 2018, and \$22,000 in fiscal 2017. Neither Howard S. Jonas nor Joyce Mason has any ownership or other interest in Mason and Co. or the commissions paid to Mason and Co., other than via the familial relationships with Jonathan Mason.

Since August 2009, IDT Domestic Telecom, Inc., a subsidiary of the Company, has leased space in a building in the Bronx, New York. Howard S. Jonas and Shmuel Jonas are members of the limited liability company that owns the building. The latest lease, which became effective November 1, 2012, had a one-year term with a one-year renewal option. The parties have continued IDT Domestic Telecom’s occupancy of the space on the same terms. Aggregate annual rent under the lease was \$60,900.

The Company had loans receivable outstanding from employees aggregating \$0.2 million at July 31, 2019 and 2018, which are included in “Other current assets” in the accompanying consolidated balance sheets.

See Note 18 for sales of shares of the Company’s Class B Common Stock to Howard S. Jonas. See Note 19 for the grant to Howard S. Jonas of options to purchase shares of the Company’s Class B Common Stock.

Note 23—Defined Contribution Plans

The Company maintains a 401(k) Plan available to all employees meeting certain eligibility criteria. The Plan permits participants to contribute up to 20% of their salary, not to exceed the limits established by the Internal Revenue Code. The Plan provides for discretionary matching contributions of 50%, up to the first 6% of compensation. The discretionary matching contributions vest over the first five years of employment. The Plan permits the discretionary matching contributions to be granted as of December 31 of each year. All contributions made by participants vest immediately into the participant’s account. In fiscal

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

2019, fiscal 2018 and fiscal 2017, the Company's expense related to the Plan was \$1.2 million, \$1.1 million and \$1.2 million, respectively. The Company's Class A common stock and Class B common stock are not investment options for the Plan's participants.

Note 24—Business Segment Information

The Company has two reportable business segments, Telecom & Payment Services and net2phone. The Company's reportable segments are distinguished by types of service, customers and methods used to provide their services. The operating results of these business segments are regularly reviewed by the Company's chief operating decision maker. The accounting policies of the segments are the same as the accounting policies of the Company as a whole. The Company evaluates the performance of its business segments based primarily on income (loss) from operations.

Effective at the beginning of fiscal 2019, the Company modified the way it reports its business verticals within its Telecom & Payment Services and net2phone segments to align more closely with its business strategy and operational structure. The modification to the business verticals did not change the reportable business segments.

The Telecom & Payment Services segment provides retail telecommunications and payment offerings as well as wholesale international long-distance traffic termination. The net2phone segment provides unified cloud communications and telephony services to business customers. Depreciation and amortization are allocated to Telecom & Payment Services and net2phone because the related assets are not tracked separately by segment. There are no other significant asymmetrical allocations to segments.

Operating segments that are not reportable individually are included in All Other, which included the Company's real estate holdings and other investments that were included in the Rafael Spin-Off.

Corporate costs include compensation, consulting fees, treasury and accounts payable, tax and accounting services, human resources and payroll, corporate purchasing, corporate governance including Board of Directors' fees, internal and external audit, investor relations, corporate insurance, corporate legal, business development, charitable contributions, travel and other corporate-related general and administrative expenses. Corporate does not generate any revenues, nor does it incur any direct cost of revenues.

Operating results for the business segments of the Company were as follows:

(in thousands)	Telecom & Payment Services	net2phone	All Other	Corporate	Total
Year ended July 31, 2019					
Revenues	\$ 1,361,908	\$ 47,264	\$ —	\$ —	\$ 1,409,172
Income (loss) from operations	14,330	(6,479)	—	(8,856)	(1,005)
Depreciation and amortization	16,084	6,544	—	4	22,632
Severance	1,438	—	—	—	1,438
Other operating (expense) gains, net	(7,785)	(267)	—	326	(7,726)
Year ended July 31, 2018					
Revenues	\$ 1,511,473	\$ 34,857	\$ 1,165	\$ —	\$ 1,547,495
Income (loss) from operations	25,821	(2,677)	(2,600)	(12,166)	8,378
Depreciation and amortization	16,312	5,271	1,214	4	22,801
Severance	4,534	—	—	96	4,630
Other operating expense	—	(115)	—	(2,283)	(2,398)
Year ended July 31, 2017					
Revenues	\$ 1,469,987	\$ 29,450	\$ 2,292	\$ —	\$ 1,501,729
Income (loss) from operations	25,513	(1,865)	142	(18,241)	5,549
Depreciation and amortization	16,134	3,875	1,683	12	21,704
Other operating expense, net	(63)	—	—	(10,412)	(10,475)

IDT CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Total assets for the reportable segments are not provided because a significant portion of the Company's assets are servicing multiple segments and the Company does not track such assets separately by segment.

Geographic Information

Net long-lived assets and total assets held outside of the United States, which are located primarily in Western Europe, were as follows:

(in thousands)		United States	Foreign Countries	Total
July 31, 2019				
Long-lived assets, net	\$	25,797	\$ 8,558	\$ 34,355
Total assets		103,113	340,590	443,703
July 31, 2018				
Long-lived assets, net	\$	31,400	\$ 4,680	\$ 36,080
Total assets		82,400	317,197	399,597
July 31, 2017				
Long-lived assets, net	\$	82,706	\$ 6,312	\$ 89,018
Total assets		203,548	315,415	518,963

Note 25—Selected Quarterly Financial Data (Unaudited)

The table below presents selected quarterly financial data of the Company for its fiscal quarters in fiscal 2019 and fiscal 2018:

Quarter Ended (in thousands, except per share data)	Revenues	Direct cost of revenues	Income (loss) from operations	Net (loss) income	Net (loss) income attributable to IDT Corporation	Net (loss) income per share— basic	Net (loss) income per share— diluted
2019^(a):							
October 31 ^(b)	\$ 362,316	\$ 304,693	\$ 182	\$ (1,998)	\$ (2,299)	\$ (0.10)	\$ (0.10)
January 31	349,473	291,178	(457)	(1,011)	(1,311)	(0.05)	(0.05)
April 30	341,255	282,791	449	2,457	2,170	0.08	0.08
July 31 ^(c)	356,128	295,353	(1,179)	882	1,574	0.06	0.06
TOTAL	\$ 1,409,172	\$ 1,174,015	\$ (1,005)	\$ 330	\$ 134	\$ 0.01	\$ 0.01
2018:							
October 31	\$ 393,555	\$ 336,510	\$ 83	\$ (1,797)	\$ (2,092)	\$ (0.08)	\$ (0.08)
January 31 ^(d)	395,883	337,229	(480)	1,690	1,516	0.06	0.06
April 30 ^(e)	365,410	307,165	(1,693)	(3,230)	(3,458)	(0.14)	(0.14)
July 31 ^(f)	392,647	325,133	10,468	8,536	8,242	0.33	0.33
TOTAL	\$ 1,547,495	\$ 1,306,037	\$ 8,378	\$ 5,199	\$ 4,208	\$ 0.17	\$ 0.17

(a) In fiscal 2019, the Company recorded an \$8.0 million accrual for non-income related taxes related to one of its foreign subsidiaries. A portion of the accrual related to each of the fiscal quarters in fiscal 2019 (see Note 13). Accordingly, the Company corrected its consolidated financial statements for its fiscal quarters ended October 31, 2018, January 31, 2019, and April 30, 2019 to include the accrued expense and the related income tax benefit. The Company has determined that the adjustments were not material to its previously issued quarterly financial statements.

(b) Included in net loss was foreign currency transaction losses of \$1.2 million and provision for income taxes of \$1.2 million.

(c) Included in net income was gain on investments of \$1.1 million and included in net income attributable to IDT Corporation was net loss attributable to noncontrolling interests of \$0.7 million.

(d) Included in net income was a benefit from income taxes of \$3.3 million for an anticipated AMT credit refund.

(e) Included in loss from operations was severance expense of \$3.7 million.

(f) Included in revenues was \$9.5 million related to a change in estimate for recognizing certain breakage revenue. The Company recorded breakage revenue when the likelihood of the customer exercising its remaining rights became remote. In the fourth quarter of 2018, the Company changed when it generally deemed the likelihood remote from 24 or 36 months of no activity to 12 or 24 months of no activity. Included in income from operations was severance expense of \$0.3 million and other operating losses, net of \$0.4 million.

DOMESTIC SUBSIDIARIES

IDT America, Corp. (New Jersey)	IDT Telecom, Inc. (Delaware)
IDT Domestic Telecom, Inc. (Delaware)	Intergrated Online Security, Inc. (Delaware)
IDT Financial Services, LLC (Delaware)	Net2Phone, Inc. (Delaware)
IDT Payment Services of New York, LLC (Delaware)	Net2Phone Global Services, LLC (Delaware)
IDT Payment Services, Inc. (Delaware)	National Retail Solutions, Inc. (Delaware)

FOREIGN SUBSIDIARIES

Name	Country of Formation
IDT Corporation de Argentina S.A.	Argentina
IDT Telecom Asia Pacific (Australia) PTY. LTD.	Australia
IDT Technologies OOO	Belarus
IDT Brasil Telecomunicações Ltda	Brazil
IDT Brazil Limitada	Brazil
IDT Telecom Canada Corp.	Canada
Versature Corp.	Canada
IDT Germany GmbH	Germany
IDT Financial Services Limited	Gibraltar
IDT Telecom Asia Pacific Limited	Hong Kong
IDT Italia S.R.L.	Italy
DirectTel Dutch Holdings B.V.	Netherlands
DYP C.V.	Netherlands
Elmion Netherlands B.V.	Netherlands
IDT Dutch Holdings B.V.	Netherlands
IDT Netherlands B.V.	Netherlands
MJP C.V.	Netherlands
Pryd Dutch Holdings B.V.	Netherlands
STA Dutch Holdings B.V.	Netherlands
Strategic Dutch Holdings B.V.	Netherlands
IDT Spain S.L.	Spain
IDT Global Limited	United Kingdom
IDT Retail Europe Limited	United Kingdom

Consent of Independent Registered Public Accounting Firm

IDT Corporation
Newark, NJ

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-104286, 333-115403, 333-11910, 333-37141, 333-43501, 333-45199, 333-53719, 333-61565, 333-71991, 333-77395, 333-80133 and 333-86261) and Form S-8 (No. 333-100424, 333-105865, 333-110657, 333-116266, 333-130287, 333-130562, 333-146718, 333-154257, 333-177247, 333-19727, 333-199299, 333-208447, 333-214105, 333-220982, 333-42267, 333-49150, 333-63282 and 333-73167) of IDT Corporation of our reports dated October 11, 2019, relating to the consolidated financial statements (which report on the consolidated financial statements expresses an unqualified opinion and includes an emphasis-of-matter paragraph regarding the adoption of FASB Accounting Standards Update 2014-09, Revenue from Contracts with Customers (Topic 606)), and the effectiveness of IDT Corporation's internal control over financial reporting, which appear in this Form 10-K. Our report on the effectiveness of internal control over financial reporting expresses an adverse opinion on the effectiveness of IDT Corporation's internal control over financial reporting as of July 31, 2019.

/s/ BDO USA, LLP
Woodbridge, NJ

October 11, 2019

**Certification of Chief Executive Officer
pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Shmuel Jonas, certify that:

1. I have reviewed this Annual Report on Form 10-K of IDT Corporation;
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 11, 2019

/s/ Shmuel Jonas

Shmuel Jonas
Chief Executive Officer

**Certification of Principal Financial Officer
pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Marcelo Fischer, certify that:

1. I have reviewed this Annual Report on Form 10-K of IDT Corporation;
2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 11, 2019

/s/ Marcelo Fischer

Marcelo Fischer
Chief Financial Officer
(Principal Financial Officer)

IDT CORPORATION

Certification Pursuant to
18 U.S.C. Section 1350
(as Adopted Pursuant to Section 906 of
the Sarbanes-Oxley Act Of 2002)

In connection with the Annual Report of IDT Corporation (the “Company”) on Form 10-K for fiscal 2019 as filed with the Securities and Exchange Commission (the “Report”), I, Shmuel Jonas, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 11, 2019

/s/ Shmuel Jonas

Shmuel Jonas
Chief Executive Officer

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to IDT Corporation and will be retained by IDT Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

IDT CORPORATION

Certification Pursuant to
18 U.S.C. Section 1350
(as Adopted Pursuant to Section 906 of
the Sarbanes-Oxley Act Of 2002)

In connection with the Annual Report of IDT Corporation (the “Company”) on Form 10-K for fiscal 2019 as filed with the Securities and Exchange Commission (the “Report”), I, Marcelo Fischer, Principal Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 11, 2019

/s/ Marcelo Fischer
Marcelo Fischer
Chief Financial Officer
(Principal Financial Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to IDT Corporation and will be retained by IDT Corporation and furnished to the Securities and Exchange Commission or its staff upon request.