

2019



FUTURE READY

ANNUAL REPORT

jack henry
& ASSOCIATES INC.®

WHAT DOES IT MEAN TO BE 'FUTURE READY'?

With the year 2020 on the horizon, there's a lot of industry buzz about the importance of having a "2020 vision." At Jack Henry & Associates, Inc.® (Jack Henry), we believe that being future ready is more than just having a vision for the coming year – it's about preparing our clients for 2020 and beyond.



THE FUTURE IS HUMAN-CENTERED

We believe that all people seek meaning and connection, and technology should be a catalyst for, not a barrier to, human interaction. Our financial institution clients don't have to sacrifice personal service for customer convenience. Personal connection is attainable through technology if the technology is crafted with humanness – the end user – in mind. We collaborate with our clients along the way, identifying challenges and opportunities and developing strategies that help consumers achieve financial confidence.



THE FUTURE IS TECH-FORWARD

The future is open – not just in terms of technology and open application programming interfaces (APIs), but in the philosophy of how vendors, third parties, and financial institutions interact and transact with each other. Being tech-forward means fostering partnerships for the betterment of our clients and our industry. It's also about using real-time data and putting end users in control of their data based on personal preferences. Ultimately, consumers trust their personal data to technology providers that are, in fact, trustworthy.



THE FUTURE IS INSIGHT-DRIVEN

Financial institutions serve diverse consumers and businesses whose financial preferences vary significantly and change dynamically. Consumers and businesses of the future will continue to expect a financial services experience that is personalized, seamless, and responsive to their evolving needs. Financial institutions should leverage powerful data and analytics to understand consumer and business behavior so they can continuously tailor their strategies to support them when, where, and how they want to interact.

BEING FUTURE READY IS NOT ABOUT PREDICTING THE FUTURE.

It's about having shared strategies with our clients and consumers, combining our dynamic technology with a steadfast commitment to get them where they want to go, no matter what the future holds.

*Read more about how our company and clients are future ready beginning on **page 7**.*

TABLE OF CONTENTS

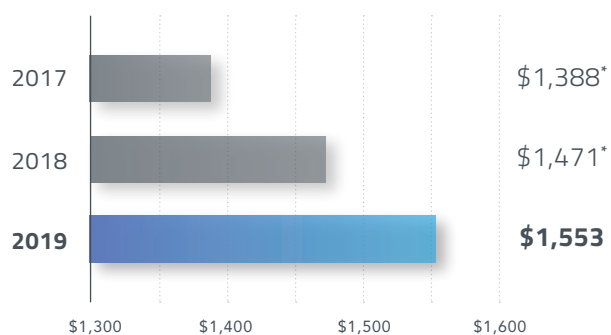
2	Financial Highlights
3	Shareholders' Letter
7	We are Future Ready
15	Market for Registrant's Common Equity
16	Performance Graph
17	Selected Financial Data
17	Management's Discussion and Analysis
29	Quantitative and Qualitative Disclosures About Market Risk
30	Financial Statements and Supplementary Data
62	Quarterly Financial Information
64	Board of Directors and Executive Officers

FORWARD-LOOKING STATEMENTS | Some of the information we provide in this document is forward-looking and therefore could change over time to reflect changes in the environment in which Jack Henry competes. Forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties which may cause actual results to differ materially from the forward-looking statements. A detailed discussion of risks and uncertainties that could cause actual results and events to differ materially from such forward-looking statements is included in the section titled "Risk Factors" in our Form 10-K for the fiscal year ended June 30, 2019 that is included as part of this Annual Report to Shareholders. We undertake no obligation to update or revise publicly any forward-looking statements, whether as a result of new information, future events, or otherwise, except as required by law.

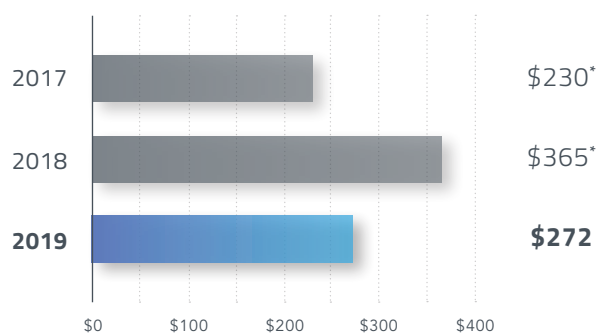
FINANCIAL HIGHLIGHTS

(In millions except per share data)

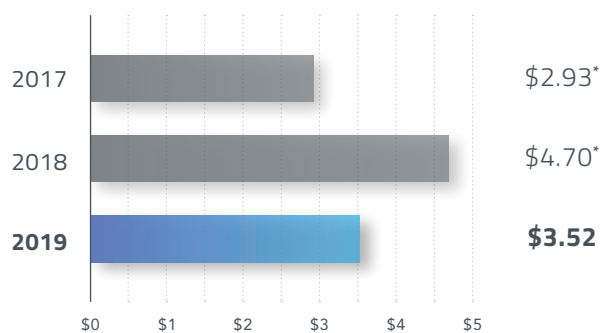
REVENUE



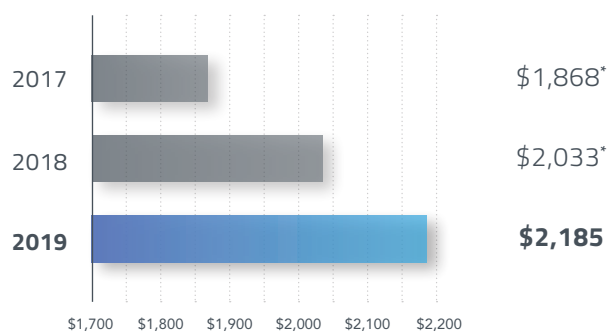
NET INCOME



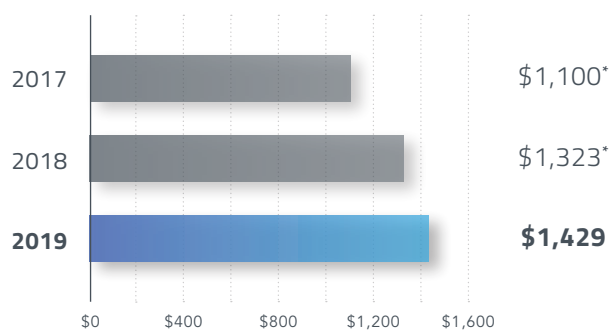
DILUTED EARNINGS PER SHARE



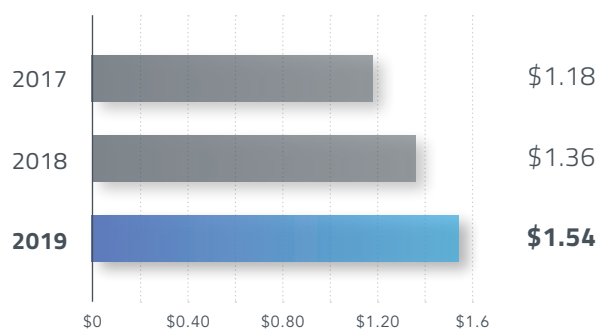
TOTAL ASSETS



STOCKHOLDERS' EQUITY



DIVIDENDS DECLARED PER SHARE



* Prior years restated for ASC606.

FELLOW SHAREHOLDERS

Fiscal year 2019 marks our 43rd year in business and another year of solid performance for Jack Henry. Our sales team exceeded their goals and our company again reached record revenue and earnings, if we adjust for the impact of the Tax Cuts and Jobs Act (TCJA). Our employees remain engaged and committed to providing exceptional levels of customer satisfaction, and that dedication once again translated into impressive returns for our shareholders. In November we were named to the S&P 500 index, and we're honored to now be recognized among this group of well-regarded companies.

"In November we were named to the S&P 500 index, and we're honored to now be recognized among this group of well-regarded companies."

As always, the lifeblood of our business is our employees, and we're pleased to report that for the third year in a row we placed on *Forbes'* list of America's Best Employers. We ranked No. 11 in the IT, Internet, Software, and Services category and No. 82 overall on the Large Companies list. We were also excited to be named among the top 50 fintech companies on *American Banker's* Best Places to Work in Fintech list, which is a testament to Jack Henry's growing recognition in the industry as a cutting-edge fintech. To be acknowledged among so many impressive companies both in the fintech space and in other industries affirms that our "associates-first" philosophy is realized and valued by our more than 6,500 employees.

We remain focused on improving our workplace in response to business needs. To that end, we made additional investments in employee development this year by further emphasizing our Leadership Framework through our performance management practices. By tying the Leadership Framework to our performance conversations, employees can directly correlate their personal development goals to the realized success of Jack Henry. We also introduced the Jack Henry MBA, an in-person educational experience focused on leadership training, industry insight, and building meaningful connections to accelerate career growth. These efforts have added depth to our organizational leadership bench and allowed our leaders to grow their careers and become stronger assets to Jack Henry.

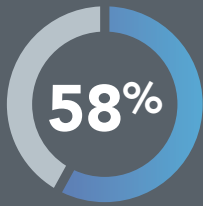
"We strengthened our Total Rewards package by creating an employee bonus plan and enhancing our 401(k) offering."

We chose to invest a portion of our savings realized through the TCJA in rewarding and recognizing the associates who help make us so successful. We strengthened our Total Rewards package by creating an employee bonus plan and enhancing our 401(k) offering.

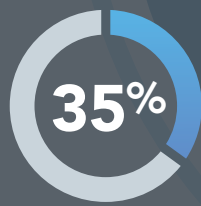
We also laid the foundation for a new Diversity and Inclusion strategy to guide the entire organization toward a more inclusive workplace. Our multi-pronged approach includes engaging senior leaders as sponsors, creating opportunities for professional development, improving our data analytics to aid in recruiting and talent management, revitalizing our commitment to corporate stewardship, and empowering our associates through their involvement in Business Innovation Groups.



Good Things Come in Threes



Today, **58%** of our total core business processes in a **hosted environment**.



Our **Payments business** is now **35%** of our total revenue.

89 NEW PROFITSTARS CLIENTS

Our **ProfitStars division** continues to thrive, adding **89 new clients** for Jack Henry during fiscal year 2019 – **nearly doubling last year's pace**.

This year, we launched our Women at JHA Business Innovation Group to foster supportive ties among women and provide them growth opportunities with additional groups to be announced in the coming year.

We fundamentally believe that our organization is built from the inside out; that by putting our employees first, we foster an exceptional workforce that ultimately leads to happy and successful clients. We see proof of this every year through our positive customer satisfaction surveys, which continue to substantiate that we're offering remarkable levels of customer service. We are excited to report that client engagement is strong, as indicated by the record attendance we saw at our Jack Henry Annual Conference (JAC) and Symitar Educational Conference (SEC) this year by existing clients and new prospects.

Since last year's annual report, we completed three new acquisitions, strengthening our commercial banking and digital offerings. On October 1, 2018 we announced the acquisition of Agiletics, a Florida-based provider of solutions that help banks better serve commercial customers with sophisticated escrow, investment, and liquidity management solutions. On October 8, 2018 we announced the acquisition of BOLTS Technologies, Inc., a Pennsylvania-based developer of next-generation digital account opening technology. On July 1, 2019 we purchased Geezeo, a Boston-based provider of digital financial management solutions that help consumers and businesses have greater control over their daily and long-term finances. We're looking forward to the talent, expertise, and opportunity these acquisitions bring to Jack Henry.

We had an impressive 57 new core system wins this fiscal year across our banking and credit union businesses, and of those, six were de novo institutions. De novos, or newly chartered banks, are an encouraging sign of economic confidence and expanded opportunities for our company.

"Since last year's annual report we completed three new acquisitions, strengthening our commercial banking and digital offerings."

Our clients continue to realize the many benefits of the cloud, also referred to as hosted delivery, outsourcing, or Software-as-a Service (SaaS). Of the 57 new core system wins, most of them selected Jack Henry's private cloud, with only four institutions choosing to process in-house. Additionally, 53 of our existing banking and credit union clients migrated their core platform from an in-house delivery model to our private cloud during fiscal year 2019. Today, 58% of our total core business processes in the cloud. This shift has been a significant contributor to our recurring revenue composition which reached 86% in fiscal year 2019.

We continue our intense focus on our digital strategy as financial institutions and consumers need, and expect, one single digital strategy, ecosystem, and end-user experience. The days of referring to "online banking" and "mobile banking" as separate entities are coming to an end; the experience going forward will be singularly known as "digital banking." Our digital platform, marketed under the name Banno™, is now recognized as one of the leading digital platforms on the market today. In addition to continuing to expand our Banno platform, this

fiscal year, we also rolled out JHA OpenAnywhere™, our digital account opening solution we obtained through the BOLTS acquisition, and we continue to develop Branch Anywhere™, the in-branch solution for the digital experience. Our digital experts are dedicated to uncovering new ways to bring personal service to the digital channel, and we're excited about the opportunities this brings for our company, clients, and consumers to be future ready.

“We continue our intense focus on our digital strategy as financial institutions and consumers need – and expect – one single digital strategy, ecosystem, and end-user experience.”

Our electronic payments business continues to thrive as we strengthen our product offerings and business relationships to remain at the forefront of faster payments. We made significant progress in the migration of our card processing platform this fiscal year, migrating 355 customers and selling 59 new deals on the platform which was announced in fiscal year 2017. We also continued enhancing JHA PayCenter™, a single point of access to Zelle® by Early Warning and RTP® by The Clearing House. Payments generated approximately \$548 million in annual revenue in fiscal year 2019, or 35% of our total revenue.

Our ProfitStars division continues to thrive, adding 89 new clients for Jack Henry during fiscal year 2019 – nearly doubling last year's pace. For non-core customers, we now average more than three ProfitStars offerings per client.

We continue to enhance our JHA Treasury Management™ solution, JHA Commercial Cash Management™ solution, and our Commercial Lending Center Suite™, all of which help ensure we remain a strong player in the commercial banking space.

Our strong balance sheet and cash flow continue to generate value for our shareholders. In fiscal year 2019, we saw 6% revenue growth, with nearly 5% being organic growth. We returned \$174 million to our shareholders as we increased our annual dividends by 13% and repurchased approximately 400 thousand shares of JKHY stock in the market for the treasury.

Total revenue increased to a record \$1.55 billion. Net income was \$271.9 million or \$3.52 per diluted share, as compared to net income of \$365 million or \$4.70 per diluted share reported for fiscal year 2018. We generated strong cash flow from operating activities of \$431 million, as compared to \$412 million in fiscal year 2018. Our return on assets was 13% and return on equity was 20%. We generated strong profitability with a 22% operating margin.

This year you may have heard Jack Henry executives talking about our approach to “openness,” and being future ready. Open platform banking and open application programming interfaces (APIs) are expected to alter the banking ecosystem. While traditional banking isn't expected to go away, consumers will have more flexibility to change providers and significantly more choices when it comes to banking products and delivery channels. To embrace an open platform strategy, financial

“Fortunately, while the industry's emphasis on open banking continues to unfold, the concept here at Jack Henry isn't new. For years we've had an open approach to working with financial institutions, combining our tools and systems with long-held philosophies and methodologies that support the spirit of openness.”

institutions should develop business models and sales strategies that optimize their openness, or they could miss opportunities to gain new customers and deepen existing relationships. Fortunately, while the industry's emphasis on openness continues to unfold, the concept here at Jack Henry isn't new. For years we've had an open approach to working with financial institutions, combining our tools and systems with long-held philosophies and methodologies that support the spirit of openness. As the future unfolds and openness continues to grow in visibility and value, we are well positioned

to address our clients' evolving needs. You'll hear much more about our commitment to openness, partnership, and user centricity as we approach 2020.

Speaking of 2020, at Jack Henry we've always looked toward the future with a fond respect for our past. Our co-founders, Jack Henry and Jerry Hall, believed that strong relationships and trusted technology were the cornerstones of our success. We trust that

those foundational beliefs will continue to lead our company, clients, employees, and shareholders into the future ... and beyond.

On behalf of the Board of Directors and our leadership team, we thank you for all you've done to support us, past and present. The best is yet to come, and for that you have our sincere gratitude.



DAVID FOSS
President and Chief Executive Officer

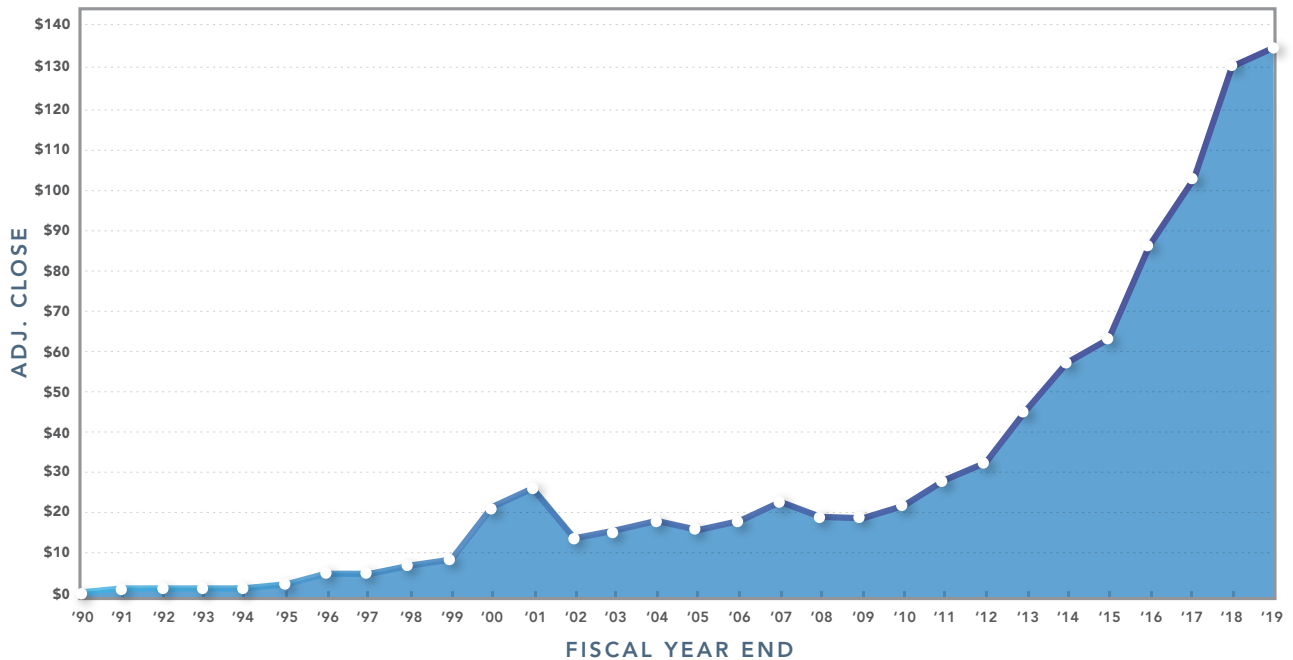


KEVIN WILLIAMS
Chief Financial Officer and Treasurer

IN NOVEMBER 2018, JACK HENRY WAS NAMED TO THE S&P 500 INDEX

We are honored to be recognized among this group of well-regarded companies.

FISCAL YEAR-END STOCK PRICE | Price adjusted for stock splits



WE ARE FUTURE READY

A closer look at the strategic priorities for our financial institutions and how Jack Henry is answering the future's call

In fiscal year 2019, Jack Henry researched the industry trends around five key strategic areas for financial institutions – Business Intelligence; Digital; Fraud, Risk and Compliance; Payments; and Service and Support. As part of this research, we performed a Technology Capabilities Roadmap Assessment which surveyed our clients about their adoption of technology in these areas. We reported the results at our 2019 Strategic Initiatives meetings so our clients could compare notes and determine the next steps they should take to improve their future readiness. As a shareholder, we hope you enjoy the insights this research provides.

SETTING THE STAGE

BANK LANDSCAPE

Community banks in 2019 are faced with market and technology trends that could have a significant effect on their day-to-day business operations. These trends are focused on:

- Expanding lending portfolios and growing deposits through digital banking.
- New technologies that are redefining the way customers bank and are serviced.
- Advanced digital payment technologies promoting real-time processing.
- Key regulatory guidance or compliance issues.
- Challenges due to operating in a highly competitive industry.

The number of banks in the U.S. has been shrinking, but total bank assets are reaching record highs – a result of consolidation based on continuing mergers and acquisitions. With this consolidation and the emergence of non-bank competitors, the battle for market share continues. Banks should have an arsenal of innovative tools that build efficiencies and deliver a better customer experience. Also, as more everyday banking activities take place on mobile devices, banks should define the role of the branch in the digital world.

Banks should have an arsenal of innovative tools that build efficiencies and deliver a better customer experience.

We expect the next few years to be interesting years of change, centered on the economy and introduction of new technologies. The hope remains for continued regulatory reform. Community banks are expected to look to financial service technology providers to deliver solutions to help them compete and promote growth.

CREDIT UNION LANDSCAPE

Credit unions have been hard at work differentiating their brands, personalizing the member experience, expanding digital services, combating fraud, and offering the latest products/services to attract new members while strengthening the relationships with existing members. And it's paying off. According to Callahan & Associates' TrendWatch 2Q 2019, total membership at U.S. credit unions surpassed 120 million members for the first time ever and average member relationships exceed \$19,000. More consumers are turning to credit unions for financial services – indicating that credit unions are embracing the challenge to grow organically and maintain market relevance. Economists predict that credit unions will maintain a strong ROA and continue to perform well with only slight declines in membership and loan growth.

Information technology (IT) teams are expected to be challenged with supporting appropriate IT infrastructure (some of which may move to the cloud) while remaining focused on cybersecurity and protecting member data. As more everyday banking and payment activities take place on mobile devices, credit unions should define the role of the branch. To drive innovation, many credit unions are expected to continue seeking collaborative opportunities with fintechs, and others will likely leverage emerging technologies like artificial intelligence (AI).

Of course, credit unions should be prepared to navigate the changing regulatory environment and prepare for the NCUA's 2020 examination focus. While credit unions understand the growing importance of investing in technology and digital delivery, the "people helping people" philosophy and focus on members signal that it's still a people business.

BUSINESS INTELLIGENCE

Getting the most out of data



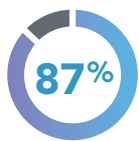
THE RESEARCH SAYS:

Between video streaming, social media, online searches, emails, texting, digital banking, and payment transactions, the amount of available data is increasing rapidly – which means now is the time for financial institutions to intensify their focus on a data strategy.

Gartner Research reported that by the year 2022, 90% of corporate strategies will clearly mention information as a critical enterprise asset, and analytics as an essential competency. The problem is that many modern technologies require a history of data to compare, contrast, and learn from. This history allows solutions to take advantage of further data advancements like AI and its subsets, machine learning and predictive analysis. AI can be used to solve payment fraud, enhance customer experience, make personalized offers, meet compliance regulations, communicate more intelligently through bots and virtual assistants, and so much more.

If financial institutions are going to meet the expanding technology needs of AI, they should start collecting data now. It's important for them to know what type of data is available, where it can be found, how to access it, and where to house the data. To tackle these tasks, the industry is most likely going to see increased levels of collaboration among fintechs, networks, and financial institutions – making it probable that data sharing agreements will need to be established. Having the proper infrastructure is expected to be paramount to connecting to internal data points and integrating third-party data. Application programming interfaces (APIs) and open banking concepts should help provide direction to promote easy data integration.

BANKS



87% of respondents plan to be in a position to **implement Machine Learning** before 2022



58% of respondents currently researching/ planning for **Predictive Analytics**

CREDIT UNIONS



89% of respondents plan to be in a position to **implement Machine Learning** before 2022



50% of respondents currently researching/ planning for **Predictive Analytics**

Source: Jack Henry's Technology Capabilities Roadmap Assessment

JACK HENRY TECHNOLOGY SPOTLIGHT: GEEZEO

The acquisition of Geezeo significantly enhanced Jack Henry's business intelligence capabilities. Geezeo helps us **make meaning of the data that is at our fingertips** by cleaning, normalizing and auto-categorizing transaction data to give consumers and financial institutions deeper insights into spending patterns and

financial behavior. Geezeo is also enriching transaction data with a proprietary categorization taxonomy unique to consumers and businesses, respectively.

Adding this data to Jack Henry's content engine ultimately provides Jack Henry with an enhanced ability to **help both**

consumers and businesses make smarter financial choices. Geezeo's data engines enable broader standardization of data across the Jack Henry enterprise and feed advanced analytics and AI applications across Jack Henry financial institutions that are expected to result in future innovations and value.

DIGITAL

Providing a personal, seamless, human digital experience

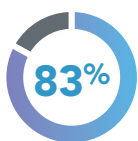


THE RESEARCH SAYS:

When it comes to a personalized digital experience, the influence of Big Tech continues to drive consumer demands – demands which have pushed many financial institutions to quicken the pace of their digital transformation projects. As automation efforts increase across delivery channels, it's important that financial institutions humanize their digital platforms.

Financial institutions should be using AI to help their staff assist customers, so they need to make sure they're providing a quick and painless avenue for customers to speak with a human when they've reached the limits of self-service. Also, if they're considering adopting digital account opening functionality, they should make sure they're mapping the customer journey and engaging further than the typical marketing "welcome program." They should look for ways to connect with new customers across every channel, making onboarding span multiple products. As personal financial management and digital wealth management platforms become further integrated into the daily digital experience, these solutions are likely to see an increase in customer use – bringing about a holistic financial picture and improved financial wellness.

BANKS



83% of respondents have not implemented a digital-only brand. 96% plan to be in a position to implement before 2022.



52% of respondents have not implemented online consumer loan origination. 92% plan to be in a position to implement before 2021.

JACK HENRY TECHNOLOGY SPOTLIGHT: JHA CONVERSATIONS

While digital technology is revolutionizing the financial services industry, service is still a major component of community financial institutions' differentiation. **Human interaction is key.**

Jack Henry has the concept of "people" built directly into our digital software. Our digital banking platform is the first to enable financial institutions to translate their personal service meaningfully inside digital channels with an industry-first JHA Conversations solution that **puts financial institution staff front and center at the customer's moment of need** with secure, encrypted, authenticated chat capabilities.

CREDIT UNIONS



38% of respondents are already developing or have a live digital-only brand, targeting a niche consumer audience.



A higher percentage of CUs under \$500 million have deployed these than CUs larger than \$500 million.

FRAUD, RISK, AND COMPLIANCE

Protecting financial institutions and their customers



THE RESEARCH SAYS:

The volume of fraud attacks in our industry is escalating – requiring financial institutions to make heavy investments in new fraud-combatting technology, create security strategies around open banking and big data, and weigh the pros and cons of talent acquisition versus outsourcing. As real-time payments fraud continues to thrive, we are observing that many financial institutions are working to not only increase the security of their mobile channels, but to also upgrade or replace ACH, wire, and card solutions while implementing real-time fraud capabilities.

Financial institutions are tasked with providing excellent security measures without negatively impacting the customer experience. Moving forward, financial institutions should be considering how to appropriately apply machine learning and AI across their products to assist with manual fraud monitoring efforts, reduce false positives, and automate rules-based decisioning.

Moving forward, financial institutions should be considering how to appropriately apply machine learning and AI across their products.



MOBILE CHANNELS



ACH, WIRE, AND CARD SOLUTIONS



REAL-TIME FRAUD CAPABILITIES

JACK HENRY TECHNOLOGY SPOTLIGHT: MYCARDRULES™

As digital self-service continues to be a growing preference among consumers, MyCardRules **puts the power of fraud protection in the cardholder's hands**. Part of the JHA Card Processing Solutions™ suite, this mobile app gives consumers a variety of card controls, **offering peace of mind through added protection and awareness**.

The app, available on Google Play™ or the App Store™ can be installed on multiple mobile devices for a wide variety of supported cards. With the app, cardholders can turn the card on and off; set per-transaction spending limits based on various factors such as dollar amount, transaction type, or merchant type; receive alerts on all transaction attempts declined; set a location boundary where the card can be used; set parental or employer controls and monitoring; and more.

PAYMENTS

Taking financial institutions into the future of payments



THE RESEARCH SAYS:

As we look toward the future of payments, several trends emerge. Real-time payments continue to grow slowly, with new players like the Federal Reserve emerging. As networks and processors work together to onboard more financial institutions, person-to-person launches are moving more quickly.

The looming threat of fintech firms like Venmo and Square remains present for financial institutions. "User experience" is a recurring buzzword, as these firms continue to introduce debit cards, deposit accounts, and mobile wallets – all intended to infiltrate the financial services market. In-app purchases, subscription-based services, and overall connected devices are heightening the importance for networks and issuers to reinvent their card strategies for the connected digital world.

As digital banking and payment technologies advance and small businesses thrive, we're observing a demand for unique business banking and payment solutions centered around digital technology. Business intelligence is a big part of this trend, with the industry making progress in how financial institutions can access and apply data. Additionally, the combination of data analytics and the proliferation of IoT (Internet of Things) devices is perfecting voice technology in the form of chatbots specifically dedicated to payments – advancing from inquiry-based activities to transactional behaviors.

JACK HENRY TECHNOLOGY SPOTLIGHT: JHA PAYCENTER™

Real-time payments are changing the industry and without them, financial institutions may have difficulty meeting consumer and business expectations or competing with looming payment disruptors.

Our JHA PayCenter payment hub **enables real-time payments to be sent and received through Jack Henry's core systems, mobile and online banking solutions, and other complementary products** with seamless connections to the Real Time Payments (RTP®) and Zelle® networks. If financial institutions were to try and build their own connections to these networks, it would be costly and cumbersome. JHA PayCenter gives them access to a ready-built infrastructure that allows them to easily meet real-time payments demands.

BANKS



95% of respondents have already deployed **debit cards**



75% of respondents are developing or have **mobile wallets**

CREDIT UNIONS



97% of respondents have already deployed **debit cards**



71% of respondents are developing or have **mobile wallets**

Source: Jack Henry's Technology Capabilities Roadmap Assessment



The Federal Reserve is an emerging player in real-time payments.

Expect an increased need for unique business banking and payment solutions centered on digital technology.

Be on the lookout for perfected voice technology for payment chatbots.

SERVICE AND SUPPORT

Delivering service with a human touch



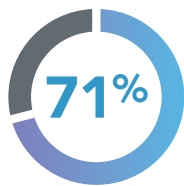
THE RESEARCH SAYS:

Financial institutions should do more than provide consumers with a place to manage their money. In order to build and maintain trust, it's important for them to be transparent about fees and services; and they should provide financial insights, guidance, and advice. Financial institutions should be prepared to serve their customers whenever and however they prefer – offering “always on” convenience because customers expect to interact with their financial institutions in ways that intersect with their daily lives. To meet this expectation, the customer experience should be a simple and seamless extension of the life experience (real-time, multi-touch, and conversational).

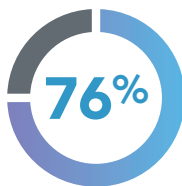
While a lot of strategies right now are centered on digital service technologies like live chat, intelligent call routing, text-enabled messaging, and virtual tellers, financial institutions shouldn't lose focus on delivering a human touch. With the right blend of human assistance and modern technology, financial institutions can provide a personal user experience.

Chatbots, for example, are being used by many organizations today to complement customer service representative support as an agent-assist companion. The agent-assist model provides answers to human agents quickly, adding more context than if they were to look up answers on their own. This leaves the human to do what they do best – build relationships. In the digital world, banking is still a people business, and serving and supporting people is where community financial institutions excel.

BANKS



CREDIT UNIONS



71% of our bank clients and **76% of our credit union clients** plan to deploy **virtual tellers** by the end of 2020.

Source: Jack Henry's Technology Capabilities Roadmap Assessment

In the digital world, banking is still a people business, and serving and supporting people is where community financial institutions excel.

JACK HENRY TECHNOLOGY SPOTLIGHT: *jha*CALL CENTER™

Consumers want access to competent staff at the very moment they need help. Our *jha*Call Center solution provides banks and credit unions with “always on” support so their **customers can receive personal telephone service at any time, day or night.**

We provide full call center services. Financial institutions can install our in-house call center software or contract for a variety of outsourced services which include after hours, holiday, and weekend support as well as back-office services and supplemental coverage during events like mergers, acquisitions, or product changes when call volume is higher.

MOVING FORWARD

Between all five categories in our Technology Capabilities Roadmap Assessment performed in 2019, several financial institutions excelled across the board. One trend that emerged shows that a majority of our clients are future ready in the payments and risk management and compliance categories while many have yet to implement service and support solutions. We also observed that most of our clients have not deployed business intelligence solutions.

Many of our clients have demonstrated that they are future ready by sharing their plans to deliver game-changing capabilities to their account holders in these strategic areas. And Jack Henry has demonstrated that we are the future-focused technology strategists to drive their success.

BAI Banking Outlook 2019 reported that 64% of financial institutions plan to collaborate with fintechs in 2019. Our commitment to openness and partnership continues to connect our clients with others in the fintech space to drive innovation in community-based banking.

Moving forward, we will continue to monitor the market and industry trends so we are providing the technology and support that empower our clients and generate value for our shareholders.

A majority of our clients are **future ready** in the **payments and risk management and compliance** categories.

The future is around the corner, and together, **we are ready.**

FUTURE READY



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

The Company's common stock is quoted on the NASDAQ Global Select Market ("NASDAQ") under the symbol "JKHY".

The Company established a practice of paying quarterly dividends at the end of fiscal 1990 and has paid dividends with respect to every quarter since that time. The declaration and payment of any future dividends will continue to be at the discretion of our Board of Directors and will depend upon, among other factors, our earnings, capital requirements, contractual restrictions, and operating and financial condition. The Company does not currently foresee any changes in its dividend practices.

On August 15, 2019, there were approximately 145,300 holders of the Company's common stock, including individual participants in security position listings. On that same date the last sale price of the common shares as reported on NASDAQ was \$141.94 per share.

Issuer Purchases of Equity Securities

The following shares of the Company were repurchased during the quarter ended June 30, 2019:

	Total Number of Shares Purchased ⁽¹⁾	Average Price of Share	Total Number of Shares Purchased as Part of Publicly Announced Plans ⁽¹⁾	Maximum Number of Shares that May Yet Be Purchased Under the Plans ⁽²⁾
April 1 - April 30, 2019	—	\$ —	—	3,732,713
May 1 - May 31, 2019	250,000	\$ 134.35	250,000	3,482,713
June 1 - June 30, 2019	—	\$ —	—	3,482,713
Total	250,000	\$ 134.35	250,000	3,482,713

⁽¹⁾ 250,000 shares were purchased through a publicly announced repurchase plan. There were no shares surrendered to the Company to satisfy tax withholding obligations in connection with employee restricted stock awards.

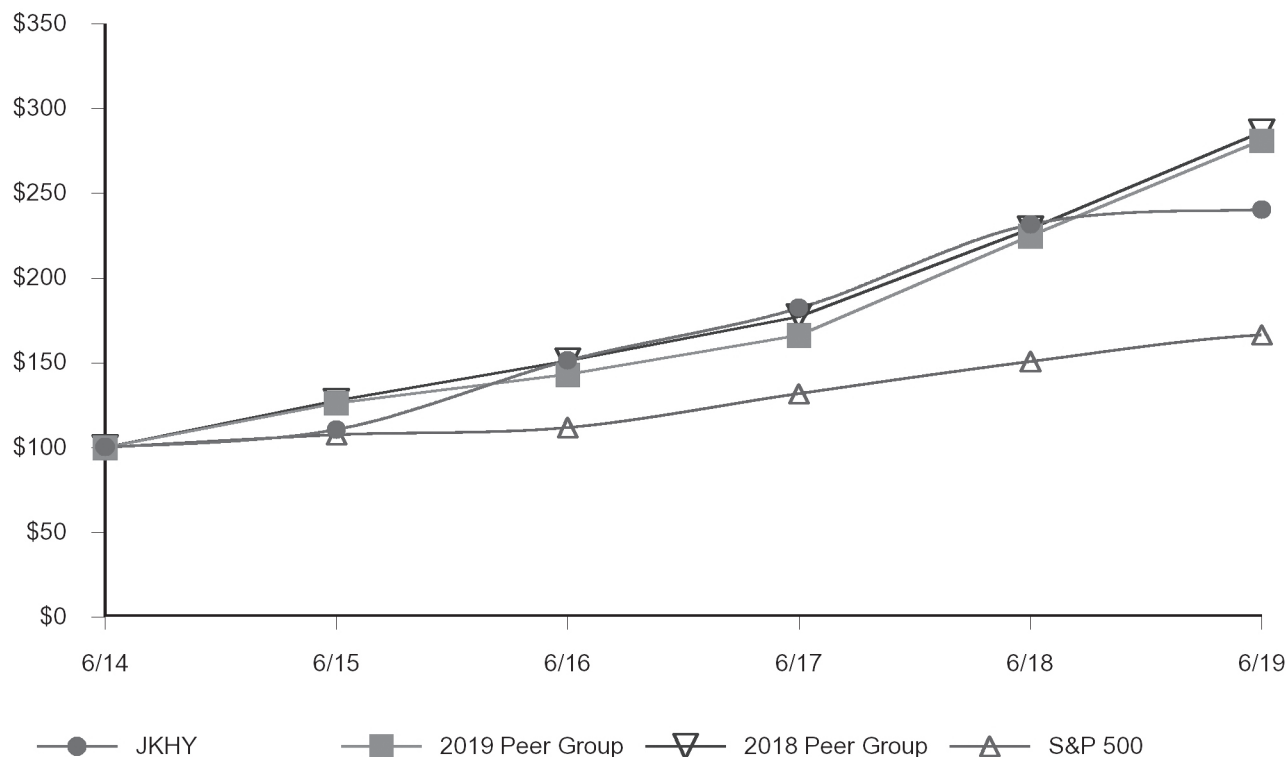
⁽²⁾ Total stock repurchase authorizations approved by the Company's Board of Directors as of February 17, 2015 were for 30.0 million shares. These authorizations have no specific dollar or share price targets and no expiration dates.

Performance Graph

The following chart presents a comparison for the five-year period ended June 30, 2019, of the market performance of the Company's common stock with the S&P 500 Index and an index of peer companies selected by the Company. Historic stock price performance is not necessarily indicative of future stock price performance.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

Among Jack Henry & Associates, Inc., the S&P 500 Index, and a Peer Group



The following information depicts a line graph with the following values:

	2014	2015	2016	2017	2018	2019
JKHY	100.00	110.51	151.12	182.15	231.36	240.29
2019 Peer Group	100.00	126.23	142.94	166.15	224.73	281.09
2018 Peer Group	100.00	127.40	151.16	177.26	228.97	286.22
S&P 500	100.00	107.42	111.71	131.70	150.64	166.33

This comparison assumes \$100 was invested on June 30, 2014, and assumes reinvestments of dividends. Total returns are calculated according to market capitalization of peer group members at the beginning of each period. Peer companies selected are in the business of providing specialized computer software, hardware and related services to financial institutions and other businesses.

Some peer participant companies were different for fiscal year ended 2019 compared to fiscal year ended 2018. The Company's Compensation Committee of the Board of Directors adjusted the peer participants due to consolidations within the industry during the 2019 fiscal year.

Companies in the 2019 peer group are ACI Worldwide, Inc.; Black Knight, Inc.; Bottomline Technologies, Inc.; Broadridge Financial Solutions, Inc.; Cardtronics plc; CoreLogic, Inc.; Euronet Worldwide, Inc.; ExlService Holdings, Inc.; Fair Isaac Corp.; Fidelity National Information Services, Inc.; Fiserv, Inc.; Fleetcor Technologies, Inc.; Global Payments, Inc.; Square, Inc.; SS&C Technologies Holdings, Inc.; Total System Services, Inc.; Tyler Technologies, Inc.; Verint Systems, Inc.; and WEX, Inc.

Companies in the 2018 peer group were ACI Worldwide, Inc.; Bottomline Technology, Inc.; Broadridge Financial Solutions; Cardtronics, Inc.; Corelogic, Inc.; Euronet Worldwide, Inc.; Fair Isaac Corp.; Fidelity National Information Services, Inc.; Fiserv, Inc.; Global Payments, Inc.; Moneygram International, Inc.; SS&C Technologies Holdings, Inc.; Total Systems Services, Inc.; Tyler Technologies, Inc.; Verifone

Systems, Inc.; and WEX, Inc. DST Systems, Inc., which had previously been part of the 2018 peer group, was acquired in 2018 and is no longer a public company. As a result, DST Systems, Inc. was removed from the 2018 peer group and stock performance graph.

The stock performance graph shall not be deemed “filed” for purposes of Section 18 of the Exchange Act, or incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

SELECTED FINANCIAL DATA

The following data should be read in conjunction with the consolidated financial statements and accompanying notes included elsewhere in the Annual Report on Form 10-K. Fiscal 2018 and 2017 have been recast to reflect the Company’s retrospective adoption of Accounting Standards Update (“ASU”) 2014-09, *Revenue from Contracts with Customers*, and related amendments, collectively referred to as Accounting Standards Codification (“ASC”) 606. Fiscal 2016 and 2015 were not recast. Net income for fiscal 2018 and 2019 has been impacted by the reduced U.S. corporate tax rate enacted by the Tax Cuts and Jobs Act (“TCJA”) of 2017, and fiscal 2018 net income contains the related adjustment for the re-measurement of deferred taxes. Acquisitions have affected revenue and net income in fiscal 2019 as well as the historical periods presented.

Selected Financial Data (In Thousands, Except Per Share Data)

	YEAR ENDED JUNE 30,				
	2019	2018	2017	2016	2015
Income Statement Data					
Revenue ⁽¹⁾	\$ 1,552,691	\$ 1,470,797	\$ 1,388,290	\$ 1,354,646	\$ 1,256,190
Net Income	\$ 271,885	\$ 365,034	\$ 229,561	\$ 248,867	\$ 211,221
Basic earnings per share	\$ 3.52	\$ 4.73	\$ 2.95	\$ 3.13	\$ 2.60
Diluted earnings per share	\$ 3.52	\$ 4.70	\$ 2.93	\$ 3.12	\$ 2.59
Dividends declared per share	\$ 1.54	\$ 1.36	\$ 1.18	\$ 1.06	\$ 0.94
Balance Sheet Data					
Total deferred revenue	\$ 394,306	\$ 369,915	\$ 368,151	\$ 521,054	\$ 531,987
Total assets	\$ 2,184,829	\$ 2,033,058	\$ 1,868,199	\$ 1,815,512	\$ 1,836,835
Long-term debt	\$ —	\$ —	\$ 50,000	\$ —	\$ 50,102
Stockholders’ equity	\$ 1,429,013	\$ 1,322,844	\$ 1,099,693	\$ 996,210	\$ 991,534

⁽¹⁾ Revenue includes license sales, support and service revenues, and hardware sales, less returns and allowances.

MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following section provides management’s view of the Company’s financial condition and results of operations and should be read in conjunction with the Selected Financial Data, the audited Consolidated Financial Statements, and related notes included elsewhere in this report. All dollar and share amounts, except per share amounts, are in thousands and discussions compare fiscal 2019 to fiscal 2018 and compare fiscal 2018 to fiscal 2017.

OVERVIEW

Jack Henry & Associates, Inc. (JHA) is headquartered in Monett, Missouri, employs approximately 6,500 associates nationwide, and is a leading provider of technology solutions and payment processing services primarily for financial services organizations. Its solutions serve over 9,000 customers and are marketed and supported through three primary brands. Jack Henry Banking® is a top provider of information and transaction processing solutions to U.S. banks ranging from community banks to multi-billion-dollar asset institutions with assets up to \$50 billion. Symitar® is a leading provider of information and transaction processing solutions for credit unions of all sizes. ProfitStars® provides highly specialized products and services that enable financial institutions of every asset size and charter, and diverse corporate entities outside the financial services industry, to mitigate and control risks, optimize revenue and growth opportunities, and contain costs. JHA’s integrated solutions are available for in-house installation and outsourced delivery in our private cloud.

Each of our brands share the fundamental commitment to provide high-quality business solutions, service levels that consistently exceed customer expectations, integration of solutions and practical new technologies. The quality of our solutions, our high service standards,

and the fundamental way we do business typically foster long-term customer relationships, attract prospective customers, and have enabled us to capture substantial market share.

Through internal product development, disciplined acquisitions, and alliances with companies offering niche solutions that complement our proprietary solutions, we regularly introduce new products and services and generate new cross-sales opportunities across our three primary marketed brands. We provide compatible computer hardware for our in-house installations and secure processing environments for our outsourced solutions in our private cloud. We perform data conversions, software implementations, initial and ongoing customer training, and ongoing customer support services.

We believe our primary competitive advantage is customer service. Our support infrastructure and strict standards provide service levels we believe to be the highest in the markets we serve and generate high levels of customer satisfaction and retention. We consistently measure customer satisfaction using comprehensive annual surveys and randomly generated daily surveys we receive in our everyday business. Dedicated surveys are also used to grade specific aspects of our customer experience, including product implementation, education, and consulting services.

Our two primary revenue streams are “Services and support” and “Processing”. Services and support includes: “Outsourcing and cloud” fees that predominantly have contract terms of five years or longer at inception; “Product delivery and services” revenue, which includes revenue from the sales of licenses, implementation services, deconversion fees, consulting, and hardware; and “In-house support” revenue, which is composed of maintenance fees which primarily contain annual contract terms. Processing revenue includes: “Remittance” revenue from payment processing, remote capture, and automated clearing house (ACH) transactions; “Card” fees, including card transaction processing and monthly fees; and “Transaction and digital” revenue, which includes transaction and mobile processing fees. We continually seek opportunities to increase revenue while at the same time containing costs to expand margins.

We have four reportable segments: Core, Payments, Complementary, and Corporate and Other. The respective segments include all related revenues along with the related cost of sales.

We continue to focus on our objective of providing the best integrated solutions, products and customer service to our clients. We are cautiously optimistic regarding ongoing economic improvement and expect our clients to continue investing in our products and services to improve their operating efficiencies and performance. We anticipate that consolidation within the financial services industry will continue. Regulatory conditions and legislation will continue to impact financial institutions’ discretionary spending.

A detailed discussion of the major components of the results of operations follows.

RESULTS OF OPERATIONS

FISCAL 2019 COMPARED TO FISCAL 2018

In fiscal 2019, revenues increased 6% or \$81,894 compared to fiscal 2018. Deconversion fees decreased \$15,941 compared to the prior fiscal year. Revenue from fiscal 2019 acquisitions totaled \$1,052. Excluding these factors, total revenue increased 7%, with growth in each of our revenue streams as discussed in detail below.

Operating expenses increased 8% year over year, primarily due to increased salaries and benefits in fiscal 2019, partly due to increased headcount compared to fiscal 2018, costs related to our new card payment processing platform, bonuses provided by the Company in response to the lower tax rate resulting from the TCJA, the Ensenta acquisition, increased rent expense related to new facilities, and increased amortization expense.

The TCJA had a large impact on our fiscal 2018 provision/ (benefit) for income taxes and net income, which impacted year-over-year comparison as discussed below.

We move into fiscal 2020 following a strong performance in fiscal 2019. Significant portions of our business continue to provide recurring revenue and our healthy sales pipeline is also encouraging. Our customers continue to face regulatory and operational challenges which our products and services address, and in these times, they have an even greater need for our solutions that directly address institutional profitability, efficiency, and security. We believe our strong balance sheet, access to extensive lines of credit, the strength of our existing product line and an unwavering commitment to superior customer service position us well to address current and future opportunities.

A detailed discussion of the major components of the results of operations for the fiscal year ended June 30, 2019 follows. Fiscal years 2018 and 2017 have been recast to reflect our retrospective adoption of Accounting Standards Update (“ASU”) 2014-09, *Revenue from Contracts with Customers*, and related amendments, collectively referred to as Accounting Standards Codification (“ASC”) 606.

REVENUE

Services and Support Revenue

	Year Ended June 30,		<u>% Change</u>
	<u>2019</u>	<u>2018</u>	
Services and Support	\$ 958,489	\$ 920,739	4%
Percentage of total revenue	62%	63%	

Services and support includes: “Outsourcing and cloud” fees that predominantly have contract terms of five years or greater at inception; “Product delivery & services” revenue, which includes revenue from the sales of licenses, implementation services, deconversion fees, consulting, and hardware; and “In-house support” revenue, which is composed of maintenance fees which primarily contain annual contract terms.

In the fiscal year ended June 30, 2019, services and support revenue grew 4% over the prior fiscal year. Excluding deconversion fees, which totaled \$30,230 in fiscal 2019 and \$46,171 in fiscal 2018, and excluding revenue from fiscal 2019 acquisitions totaling \$944, services and support revenue grew 6%. The increase was primarily driven by an increase in outsourcing and cloud revenue resulting from organic growth in hosting and data processing fees complemented by added revenue from Ensenta. In-house support revenue also contributed to the increase, primarily from higher software usage revenue resulting partially from the addition of new customers. These increases were partially offset by decreased product delivery and services revenue due to reduced license and in-house implementation revenue as more customers opted for outsourced delivery.

Processing Revenue	Year Ended June 30,		<u>% Change</u>
	<u>2019</u>	<u>2018</u>	
Processing	\$ 594,202	\$ 550,058	8%
Percentage of total revenue	38%	37%	

Processing revenue includes: “Remittance” revenue from payment processing, remote capture, and automated clearing house (ACH) transactions; “Card” fees, including card transaction processing and monthly fees; and “Transaction and digital” revenue, which includes transaction and mobile processing fees. We continually seek opportunities to increase revenue while at the same time containing costs to expand margins.

Processing revenue increased 8% for the fiscal year ended June 30, 2019 as compared to the fiscal year ended June 30, 2018, with strong organic growth in each component, complemented by added remittance revenue from Ensenta.

OPERATING EXPENSES

Cost of Revenue	Year Ended June 30,		<u>% Change</u>
	<u>2019</u>	<u>2018</u>	
Cost of Revenue	\$ 923,030	\$ 853,138	8%
Percentage of total revenue	59%	58%	

Cost of Revenue increased 8% compared to fiscal 2018, and increased 1% as a percentage of total revenue. Excluding costs related to deconversions, fiscal 2019 acquisitions, and bonuses provided by the Company in response to the lower tax rate resulting from the TCJA, cost of revenue increased 7%. The increase was driven by increased salaries and benefits; higher direct costs of product, including spending related to the ongoing project to expand our credit and debit card platform; increased amortization expense; and higher rent expense related to new facilities. The Company continues to focus on cost management.

Research & Development	Year Ended June 30,		<u>% Change</u>
	<u>2019</u>	<u>2018</u>	
Research & Development	\$ 96,378	\$ 90,340	7%
Percentage of total revenue	6%	6%	

We devote significant effort and expense to develop new software, service products and continually upgrade and enhance our existing offerings. We believe our research and development efforts are highly efficient because of the extensive experience of our research and development staff and because our product development is highly customer-driven.

Research and development expenses increased 7% primarily due to increased salary and benefit expenses, in part due to a 3% increase in headcount, but were consistent with the prior year as a percentage of total revenue. Excluding the bonuses provided by the Company in response to the lower tax rate following the TCJA and costs attributable to companies acquired in fiscal 2019, research and development expense increased 4%.

Selling, General, and Administrative	Year Ended June 30,		<u>% Change</u>
	<u>2019</u>	<u>2018</u>	
Selling, General, and Administrative	\$ 185,998	\$ 171,710	8%
Percentage of total revenue	12%	12%	

Selling, general and administrative costs included all expenses related to sales efforts, commissions, finance, legal, and human resources, plus all administrative costs. Excluding bonuses provided by the Company in response to the lower tax rate resulting from the TCJA, selling, general, and administrative expense increased 6%. These expenses increased primarily due to increased commissions, salaries, and benefits.

Gains on Disposal of Businesses

No businesses were disposed during fiscal 2019. In fiscal 2018, we recognized gains on the disposal of businesses totaling \$1,894 due to the sales of our ATM Manager and jhaDirect product lines.

INTEREST INCOME AND EXPENSE	Year Ended June 30,		<u>% Change</u>
	<u>2019</u>	<u>2018</u>	
Interest Income	\$ 876	\$ 575	52%
Interest Expense	\$ (926)	\$ (1,920)	(52)%

Interest income fluctuated due to changes in invested balances and yields on invested balances. Interest expense decreased in fiscal 2019 due mainly to lower amounts borrowed on our revolving credit facility during the year.

PROVISION/ (BENEFIT) FOR INCOME TAXES	Year Ended June 30,		<u>% Change</u>
	<u>2019</u>	<u>2018</u>	
Provision/ (Benefit) for Income Taxes	\$ 75,350	\$ (8,876)	949%
Effective Rate	21.7%	(2.5)%	

The increase in the effective tax rate was primarily the result of the significant tax benefit recognized in the prior fiscal year as a result of the re-measurement of net deferred tax liabilities upon enactment of the TCJA on December 22, 2017. That increase in the provision/ (benefit) for income taxes is partially offset by the reduced U.S. federal corporate tax rate of 21% effective for the current year, and increased excess tax benefits from share-based payments recognized during fiscal 2019. Excluding the fiscal 2018 TCJA tax benefit resulting from the re-measurement of net deferred tax liabilities, provision/ (benefit) for income taxes decreased 23%.

NET INCOME

Net income decreased 26% to \$271,885, or \$3.52 per diluted share, in fiscal 2019 from \$365,034, or \$4.70 per diluted share, in fiscal 2018. The significant decrease is primarily attributable to the TCJA impacts on the prior year provision/ (benefit) for income taxes, as well as decreased deconversion revenue in fiscal 2019.

FISCAL 2018 COMPARED TO FISCAL 2017

In fiscal 2018, revenues increased 6% or \$82,507 compared to fiscal 2017. Deconversion fees increased \$7,343 compared to the prior fiscal year. Revenue from fiscal 2018 acquisitions totaled \$17,368. Fiscal 2017 included \$10,897 of revenue from divested companies. Excluding these factors, total revenue increased 5%, with growth in each of our revenue streams as discussed in detail below.

Operating expenses increased 6%, due to increased headcount driving increased salaries and benefits, costs related to fiscal 2018 acquisitions, and professional services expenses incurred due to contracting with outside experts in preparation for our adoption of the new Accounting Standards Codification ("ASC") Topic 606 revenue standard. Excluding costs related to deconversion fees from each year, expenses related to fiscal 2018 acquisitions, fiscal 2017 costs related to divestitures, and gains on the disposal of businesses from each year, operating expenses increased 5%.

The TCJA had a large impact on our provision/ (benefit) for income taxes and net income, which are discussed below.

REVENUE

Services and Support	Year Ended June 30,		<u>% Change</u>
	<u>2018</u>	<u>2017</u>	
Services and Support	\$ 920,739	\$ 881,735	4%
Percentage of total revenue	63%	64%	

Services and support revenue grew 4% in fiscal 2018. Excluding deconversion fees, revenue from fiscal 2018 acquisitions totaling \$9,074, and fiscal 2017 revenue related to divestitures of \$10,745, services and support revenue grew 4%. The growth was due mainly to increased outsourcing and cloud revenue, as well as growth within our in-house support revenue component due to higher software usage revenue.

Processing	Year Ended June 30,		<u>% Change</u>
	<u>2018</u>	<u>2017</u>	
Processing	\$ 550,058	\$ 506,555	9%
Percentage of total revenue	37%	36%	

Processing revenue increased 9% in fiscal 2018, with strong growth in each of its three components. Ensenta contributed to the growth with added remittance revenue. Excluding \$8,294 of revenue from fiscal 2018 acquisitions, and excluding fiscal 2017 revenue related to divestitures totaling \$152, processing revenue increased 7% for the year with significant increases in each of its three components.

OPERATING EXPENSES

Cost of Revenue	Year Ended June 30,		<u>% Change</u>
	<u>2018</u>	<u>2017</u>	
Cost of Revenue	\$ 853,138	\$ 805,855	6%
Percentage of total revenue	58%	58%	

Cost of revenue for fiscal 2018 increased 6% compared to fiscal 2017, in line with the revenue increase, and remained a consistent percentage of total revenue in each year.

Research and Development	Year Ended June 30,		<u>% Change</u>
	<u>2018</u>	<u>2017</u>	
Research and Development	\$ 90,340	\$ 84,753	7%
Percentage of total revenue	6%	6%	

Research and development expenses increased primarily due to a 4% increase in headcount, but were consistent with the prior year as a percentage of total revenue.

Selling, General, and Administrative	Year Ended June 30,		<u>% Change</u>
	<u>2018</u>	<u>2017</u>	
Selling, General, and Administrative	\$ 171,710	\$ 159,235	8%
Percentage of total revenue	12%	11%	

Selling, general, and administrative expenses increased in fiscal 2018 primarily due to increased commissions, salaries, and benefits, and higher professional services expenses incurred due to contracting with outside experts in preparation for our adoption of the ASC 606 revenue standard.

Gain on Disposal of Businesses

In fiscal 2018, we recognized gains on disposal of businesses totaling \$1,894, due to the sales of our ATM Manager and jhaDirect product lines.

In fiscal 2017, we recognized gains on the disposal of businesses totaling \$3,270. \$2,136 was related to the fiscal 2016 sale of Alogent, and \$1,134 related to the sale of our Regulatory Filing products to Fed Reporter on May 1, 2017.

INTEREST INCOME AND EXPENSE	Year Ended June 30,		<u>% Change</u>
	<u>2018</u>	<u>2017</u>	
Interest Income	\$ 575	\$ 248	132%
Interest Expense	\$ (1,920)	\$ (996)	93%

Interest income fluctuated due to changes in invested balances and yields on invested balances. Interest expense increased in fiscal 2018 due mainly to increased borrowing, which was primarily used for the acquisition of Ensenta Corporation, and has now been re-paid.

PROVISION/ (BENEFIT) FOR INCOME TAXES	Year Ended June 30,		<u>% Change</u>
	<u>2018</u>	<u>2017</u>	
Provision/ (Benefit) for Income Taxes	\$ (8,876)	\$ 111,408	(108)
Effective Rate	(2.5)%	32.7%	

The significant decrease in the effective tax rate was primarily a result of the TCJA enacted December 22, 2017, which included a reduction to the U.S. federal statutory income tax rate to 21% effective January 1, 2018. A blended 28% U.S. federal statutory income tax rate was applied to fiscal 2018. We recorded a net tax benefit of \$106,801 related to the re-measurement of our net deferred tax liabilities and \$21,551 related to the impacts on current year operations.

NET INCOME

Net income increased 59% to \$365,034, or \$4.70 per diluted share, in fiscal 2018 from \$229,561, or \$2.93 per diluted share, in fiscal 2017. The significant increase is primarily attributable to the TCJA.

REPORTABLE SEGMENT DISCUSSION

The Company is a leading provider of technology solutions and payment processing services primarily for financial services organizations.

Beginning in the first quarter of fiscal 2018, JHA changed its reportable segment structure from two customer-centric segments, Bank and Credit Union, to four product-centric segments. The change was made based on the view of our Chief Executive Officer, who is also our Chief Operating Decision Maker, that the Company could be more effectively managed using a product-centric approach and was driven by the first budgetary process under his administration.

The Company's operations are classified into four reportable segments: Core, Payments, Complementary, and Corporate and Other. The Core segment provides core information processing platforms to banks and credit unions, which consist of integrated applications required to process deposit, loan, and general ledger transactions, and maintain centralized customer/member information. The Payments segment provides secure payment processing tools and services, including ATM, debit, and credit card processing services; online and mobile bill pay solutions; ACH origination and remote deposit capture processing; and risk management products and services. The Complementary segment provides additional software, processing platforms, and services that can be integrated with our core solutions or used independently. The Corporate & Other segment includes revenue and costs from hardware and other products not attributed to any of the other three segments, as well as operating costs not directly attributable to the other three segments.

The fiscal 2017 period presented below has been retroactively recast to conform to the new segment structure adopted July 1, 2017. Both prior year periods presented have also been recast to reflect the Company's retrospective adoption of ASC 606.

Core	<u>2019</u>	<u>% Change</u>	<u>2018</u>	<u>% Change</u>	<u>2017</u>
	Revenue	\$ 534,429	5%	\$ 509,821	7%
Cost of Revenue	\$ 243,989	5%	\$ 232,868	6%	\$ 219,440

In fiscal 2019, revenue in the Core segment increased 5% compared to fiscal 2018, driven by increases in outsourcing and cloud revenue and in-house support revenue. Excluding deconversion fees, which totaled \$14,907 and \$22,161, for fiscal 2019 and 2018, respectively, and excluding revenue of \$923 from fiscal 2019 acquisitions, revenue in the Core segment increased 6%, due to increased outsourcing and cloud and in-house support revenue. Cost of revenue remained a consistent percentage of revenue for fiscal 2019 and fiscal 2018.

In fiscal 2018, revenue in the Core segment increased 7%, primarily due to increased revenue within each component of our services and support revenue stream. Cost of revenue increased 6% for fiscal 2018 compared to fiscal 2017, but remained consistent as a percentage of revenue.

Payments

	<u>2019</u>	<u>% Change</u>	<u>2018</u>	<u>% Change</u>	<u>2017</u>
Revenue	\$ 548,319	8%	\$ 508,331	8%	\$ 471,988
Cost of Revenue	\$ 273,261	11%	\$ 245,269	10%	\$ 222,685

In fiscal 2019, revenue in the Payments segment increased 8% compared to fiscal 2018. Excluding deconversion revenue of \$8,603 and \$13,004, respectively, revenue increased 9% in the Payments segment, due to organic growth within remittance and card processing, as well as added revenue from Ensenta. Cost of revenue increased 11%, partially due to increased headcount and amortization expenses related to Ensenta, as well as increased spending related to the ongoing project to expand our credit and debit card platform. Cost of revenue increased 2% as a percentage of revenue in fiscal 2019 as compared to fiscal 2018.

In fiscal 2018, revenue in the Payments segment increased compared to fiscal 2017, due primarily to increased card and remittance processing revenue. The increases were partially due to the acquisition of Ensenta. Cost of revenue increased 10%, and increased 1% as a percentage of revenue.

Complementary

	<u>2019</u>	<u>% Change</u>	<u>2018</u>	<u>% Change</u>	<u>2017</u>
Revenue	\$ 418,215	6%	\$ 395,419	5%	\$ 375,811
Cost of Revenue	\$ 175,737	7%	\$ 163,905	6%	\$ 155,084

Revenue in the Complementary segment increased 6% for the fiscal year ended June 30, 2019 compared to the prior year. After excluding deconversion revenue from each period, which totaled \$6,672 and \$10,855 for the fiscal years ended June 30, 2019 and 2018, respectively, and excluding revenue of \$126 from fiscal 2019 acquisitions, revenue increased 7%. The increase was driven by increases in outsourcing and cloud revenue and in-house support within our services and support revenue stream, as well as transaction and digital processing revenue within our processing revenue stream. Cost of revenue increased 7% for the year, and increased 1% as a percentage of revenue.

In fiscal 2018, revenue in the Complementary segment increased 5%, due to higher outsourcing and cloud revenue within services and support, as well as increased transaction and digital processing revenue. Cost of revenue increased 6% for fiscal 2018 compared to fiscal 2017, but remained a consistent percentage of revenue.

Corporate and Other

	<u>2019</u>	<u>% Change</u>	<u>2018</u>	<u>% Change</u>	<u>2017</u>
Revenue	\$ 51,728	(10)%	\$ 57,226	(9)%	\$ 62,886
Cost of Revenue	\$ 230,043	9%	\$ 211,096	1%	\$ 208,646

The decrease in revenue in the Corporate and Other segment for the fiscal year ended June 30, 2019 was due to decreased services and support revenue. This is in part due to the sale of our jhaDirect product line, which was sold during the first quarter of fiscal 2018.

The decreased revenue in fiscal 2018 compared to fiscal 2017 in the Corporate and Other segment is largely due to the loss of revenue following the sale of our jhaDirect product. Fiscal 2017 included revenue from jhaDirect totaling \$6,571.

Cost of revenue for the Corporate and Other segment includes operating costs not directly attributable to any of the other three segments. The increased cost of revenue in fiscal 2019 is primarily related to bonuses provided by the Company in response to the lower tax rate resulting from the TCJA and increased rent and maintenance contract expenses related to new facilities.

LIQUIDITY AND CAPITAL RESOURCES

The Company's cash and cash equivalents increased to \$93,628 at June 30, 2019 from \$31,440 at June 30, 2018. Cash at the end of fiscal 2018 was lower due primarily to the acquisition of Ensenta and higher repayment of debt in fiscal 2018.

The following table summarizes net cash from operating activities in the statement of cash flows:

	Year Ended	
	June 30,	
	<u>2019</u>	<u>2018</u>
Net income	\$ 271,885	\$ 365,034
Non-cash expenses	180,987	87,906
Change in receivables	(11,777)	21,489
Change in deferred revenue	23,656	1,255
Change in other assets and liabilities	(33,623)	(63,542)
Net cash provided by operating activities	<u>\$ 431,128</u>	<u>\$ 412,142</u>

Cash provided by operating activities increased 5% compared to fiscal 2018. Cash from operations is primarily used to repay debt, pay dividends and repurchase stock, and for capital expenditures.

Cash used in investing activities for fiscal 2019 totaled \$190,635 and included: \$111,114 for the ongoing enhancements and development of existing and new product and service offerings; capital expenditures on facilities and equipment of \$53,598, mainly for the purchase of computer equipment; \$19,981, net of cash acquired, for the purchases of BOLTS Technologies, Inc. and Agiletics, Inc.; \$6,049 for the purchase and development of internal use software; and \$20 for customer contracts. This was partially offset by \$127 of proceeds from asset sales.

Cash used in investing activities for fiscal 2018 totaled \$291,826 and included: \$137,562, net of cash acquired, for the purchases of Ensenta Corporation and Vanguard Software Group; \$96,647 for the development of software; capital expenditures on facilities and equipment of \$40,135, mainly for the purchase of computer equipment; \$13,138 for the purchase and development of internal use software; and \$5,000 for the purchase of preferred stock of Automated Bookkeeping, Inc. These expenditures were partially offset by \$350 of proceeds from the sale of businesses and \$306 of proceeds from the sale of assets.

Financing activities used cash of \$178,305 for fiscal 2019. Cash used was \$118,745 for dividends paid to stockholders; \$54,864 for the purchase of treasury shares; and \$4,696 of net cash outflow from the issuance of stock and tax related to stock-based compensation. Borrowings and re-payments on our revolving credit facility netted to \$0.

Financing activities used cash in fiscal 2018 of \$203,641. Cash used was \$175,000 for repayment on our revolving credit facility; dividends paid to stockholders of \$105,021; and \$48,986 for the purchase of treasury shares. This was partially offset by borrowings of \$125,000 on our revolving credit facility and \$366 of net cash inflow from the issuance of stock and tax related to stock-based compensation.

Capital Requirements and Resources

The Company generally uses existing resources and funds generated from operations to meet its capital requirements. Capital expenditures totaling \$53,598 and \$40,135 for fiscal years ended June 30, 2019 and June 30, 2018, respectively, were made primarily for additional equipment and the improvement of existing facilities. These additions were funded from cash generated by operations. At June 30, 2019, the Company had an estimated \$2,673 of outstanding purchase commitments related to property and equipment.

The Board of Directors has authorized the Company to repurchase shares of its common stock. Under this authorization, the Company may finance its share repurchases with available cash reserves or short-term borrowings on its existing credit facilities. The share repurchase program does not include specific price targets or timetables and may be suspended at any time. At June 30, 2019, there were 26,508 shares in treasury stock and the Company had the remaining authority to repurchase up to 3,483 additional shares. The total cost of treasury shares at June 30, 2019 is \$1,110,124. During fiscal 2019, the Company repurchased 400 treasury shares for \$54,864. At June 30, 2018, there were 26,108 shares in treasury stock and the Company had authority to repurchase up to 3,883 additional shares.

Revolving credit facility

The revolving credit facility allows for borrowings of up to \$300,000, which may be increased by the Company at any time until maturity to \$600,000. The credit facility bears interest at a variable rate equal to (a) a rate based on LIBOR or (b) an alternate base rate (the highest of (i) the Prime Rate for such day, (ii) the sum of the Federal Funds Effective Rate for such day plus 0.50% and (iii) the Eurocurrency Rate for a one-month Interest Period on such day for dollars plus 1.0%), plus an applicable percentage in each case determined by the Company's leverage ratio. The credit facility is guaranteed by certain subsidiaries of the Company. The credit facility is subject to various financial covenants that require the Company to maintain certain financial ratios as defined in the agreement. As of June 30, 2019, the Company was in compliance with all such covenants. The revolving credit facility terminates February 20, 2020 and at June 30, 2019 there was no outstanding balance. Prior to termination, the Company plans to renew the current credit facility or replace it with a similar credit facility.

Other lines of credit

The Company renewed an unsecured bank credit line on May 1, 2019 which provides for funding of up to \$5,000 and bears interest at the prime rate less 1%. The credit line was renewed through April 30, 2021. At June 30, 2019, no amount was outstanding.

OFF-BALANCE SHEET ARRANGEMENTS AND CONTRACTUAL OBLIGATIONS

At June 30, 2019, the Company's total off-balance sheet contractual obligations were \$665,107. This balance consists of \$71,633 of long-term operating leases for various facilities and equipment which expire from 2020 to 2030 and \$593,474 of purchase commitments. In fiscal 2017, JHA entered a strategic services agreement with First Data® and PSCU® to provide full-service debit and credit card processing on a single platform to all existing core bank and credit union customers, as well as expand its card processing platform to financial institutions outside our core customer base. This agreement includes a purchase commitment of \$555,754 over the remaining term of the contract. The remainder of the purchase commitments relate mainly to open purchase orders. The contractual obligations table below excludes \$12,009 of liabilities for uncertain tax positions as we are unable to reasonably estimate the ultimate amount or timing of settlement.

Contractual obligations by period as of June 30, 2019	Less than 1 year	1-3 years	3-5 years	More than 5 years	TOTAL
Operating lease obligations	\$ 15,559	\$ 25,399	\$ 19,004	\$ 11,671	\$ 71,633
Purchase obligations	62,637	86,875	107,188	336,774	593,474
Total	<u>\$ 78,196</u>	<u>\$ 112,274</u>	<u>\$ 126,192</u>	<u>\$ 348,445</u>	<u>\$ 665,107</u>

The operating lease obligations included on this table will be recorded on the balance sheet beginning in fiscal 2020 due to the Company's adoption of ASU No. 2016-02, issued by the FASB in February 2016 and effective for the Company on July 1, 2019.

RECENT ACCOUNTING PRONOUNCEMENTS

Recently Adopted Accounting Guidance

The Financial Accounting Standards Board ("FASB") issued ASU No. 2014-09, *Revenue from Contracts with Customers*, in May 2014. This standard (and related amendments collectively referred to as "ASC 606") is part of an effort to create a common revenue standard for U.S. GAAP and International Financial Reporting Standards ("IFRS"). The new standard has superseded much of the authoritative literature for revenue recognition. The new model enacts a five-step process for achieving the core principle, which 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. The standard was effective for the Company on July 1, 2018. Entities are allowed to transition to the new standard by either recasting prior periods (full retrospective) or recognizing the cumulative effect as of the beginning of the period of adoption (modified retrospective).

The Company adopted the new standard using the full retrospective transition approach, using certain practical expedients. The Company has not disclosed the amount of transaction price allocated to remaining performance obligations for reporting periods presented before the date of initial application. Also, the Company did not separately consider the effects of contract modifications that occurred before the beginning of the earliest reporting period presented, but reflects the aggregate effect of all modifications that occurred before the beginning of the earliest period presented. As a result, all fiscal 2018 and fiscal 2017 financial information has been adjusted for the effects of applying ASC 606. The details of the significant changes are disclosed below:

Software Revenue Recognition

The Company previously recognized software license and related services within the scope of ASC Topic 985-605, which required the establishment of vendor-specific objective evidence ("VSOE") of fair value in order to separately recognize revenue for each software-related good or service. Due to the inability to establish VSOE, the Company had previously deferred all revenue on software-related goods and services on a master contract until all the goods and services had been delivered. Under ASC 606, VSOE is no longer required for separation of otherwise distinct performance obligations within a revenue arrangement. This change has resulted in earlier recognition of revenue for the Company's software-related goods and services, leading to a decrease in deferred revenue balances within its adjusted consolidated balance sheets.

Impacts on Financial Statements

See tables in Item 8, Note 1 to the Consolidated Financial Statements for the impacts ASC 606 had on prior period financial statements.

ASU 2016-15 issued by the FASB in August 2016 clarifies cash flow classification of eight specific cash flow issues and is effective for our annual reporting period beginning July 1, 2018. The adoption of this standard did not have any impact on our financial statements.

Not Yet Adopted

The FASB issued ASU No. 2016-02, *Leases*, in February 2016. This ASU aims to increase transparency and comparability among organizations by recognizing lease assets and liabilities on the balance sheet and requiring disclosure of key information regarding leasing arrangements to enable users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. Specifically, the standard requires operating lease commitments to be recorded on the balance sheet as operating lease liabilities and right-

of-use assets, and the cost of those operating leases to be amortized on a straight-line basis. ASU No. 2016-02 will be effective for JHA's annual reporting period beginning July 1, 2019. The Company established a cross-functional team to implement this standard and evaluated arrangements that would be subject to the standard, implemented software to meet the reporting and disclosure requirements of the standard, and assessed the impact of the standard on its processes and internal controls. The Company will adopt the new standard using the optional transition method in ASU 2018-11. Under this method, the Company will not adjust its comparative period financial statements for the effects of the new standard or make the new, expanded required disclosures for periods prior to the effective date. The Company will recognize a cumulative-effect adjustment, as necessary, to the opening balance of retained earnings for fiscal 2020 upon adoption of the standard.

We will take advantage of the transition package of practical expedients permitted within the new standard, which among other things, allows us to carryforward the historical lease classification. In addition, we will make an accounting policy election that will keep leases with an initial term of twelve months or less off of the balance sheet. The Company also elected the practical expedient not to separate the non-lease components of a contract from the lease component to which they relate.

Upon adoption of the standard, the Company will record right-of-use assets of approximately \$70,000 to \$73,000 and lease obligations of approximately \$73,000 to \$75,000 on its balance sheet as of July 1, 2019. Adoption of the standard is not expected to significantly impact the Company's net income and is not expected to have a material impact on the Company's compliance with the financial covenants under its credit facility.

In August of 2018, the FASB issued ASU No. 2018-15, Intangibles, Goodwill and Other - Internal-Use Software (Subtopic 350-40), which broadens the scope of Subtopic 350-40 to include costs incurred to implement a hosting arrangement that is a service contract. The costs are capitalized or expensed depending on the nature of the costs and the project stage during which they are incurred, consistent with costs for internal-use software. The amendments in this update can be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. The ASU will be effective for the Company on July 1, 2020, with early adoption permitted. The Company is currently evaluating the impact that the guidance will have on its financial statements.

CRITICAL ACCOUNTING POLICIES

We prepare our consolidated financial statements in accordance with U.S. GAAP. The significant accounting policies are discussed in Note 1 to the consolidated financial statements. The preparation of consolidated financial statements in accordance with U.S. GAAP requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, as well as disclosure of contingent assets and liabilities. We base our estimates and judgments upon historical experience and other factors believed to be reasonable under the circumstances. Changes in estimates or assumptions could result in a material adjustment to the consolidated financial statements.

We have identified several critical accounting estimates. An accounting estimate is considered critical if both: (a) the nature of the estimates or assumptions is material due to the levels of subjectivity and judgment involved, and (b) the impact of changes in the estimates and assumptions would have a material effect on the consolidated financial statements.

Revenue Recognition

We generate revenue from data processing, transaction processing, software licensing and related services, professional services, and hardware sales.

Significant Judgments in Application of the Guidance

Identification of Performance Obligations

We enter into contracts with customers that may include multiple types of goods and services. At contract inception, we assess the solutions and services promised in its contracts with customers and identifies a performance obligation for each promise to transfer to the customer a solution or service (or bundle of solutions or services) that is distinct - that is, if the solution or service is separately identifiable from other items in the arrangement and if the customer can benefit from the solution or service on its own or together with other resources that are readily available. Significant judgment is used in the identification and accounting for all performance obligations. We recognize revenue when or as we satisfy each performance obligation by transferring control of a solution or service to the customer.

Determination of Transaction Price

The amount of revenue recognized is based on the consideration we expect to receive in exchange for transferring goods and services to the customer. Our contracts with our customers frequently contain some component of variable consideration. We estimate variable consideration in our contracts primarily using the expected value method, based on both historical and current information. Where appropriate, we may constrain the estimated variable consideration included in the transaction price in the event of a high degree of uncertainty as to the final consideration amount. Significant judgment is used in the estimate of variable consideration of customer contracts that are long-term and include uncertain transactional volumes.

Taxes collected from customers and remitted to governmental authorities are not included in revenue. We include reimbursements from customers for expenses incurred in providing services (such as for postage, travel and telecommunications costs) in revenue, while the related costs are included in cost of revenue.

Technology or service components from third parties are frequently included in or combined with our applications or service offerings. Whether we recognize revenue based on the gross amount billed to the customer or the net amount retained involves judgment in determining whether we control the good or service before it is transferred to the customer. This assessment is made at the performance obligation level.

Allocation of Transaction Price

The transaction price, once determined, is allocated between the various performance obligations in the contract based upon their relative standalone selling prices. The standalone selling prices are determined based on the prices at which we separately sell each good or service. For items that are not sold separately, we estimate the standalone selling prices using all information that is reasonably available, including reference to historical pricing data.

The following describes the nature of our primary types of revenue:

Processing

Processing revenue is generated from transaction-based fees for electronic deposit and payment services, electronic funds transfers and debit and credit card processing. Our arrangements for these services typically require us to “stand-ready” to provide specific services on a when and if needed basis by processing an unspecified number of transactions over the contractual term. The fees for these services may be fixed or variable (based upon performing an unspecified quantity of services), and pricing may include tiered pricing structures. Amounts of revenue allocated to these services are recognized as those services are performed. Customers are typically billed monthly for transactions processed during the month. We evaluate tiered pricing to determine if a material right exists. If, after that evaluation, we determine a material right does exist, we assign value to the material right based upon standalone selling price after estimation of breakage associated with the material right.

Outsourcing and Cloud

Outsourcing and cloud revenue is generated from data and item processing services and hosting fees. Our arrangements for these services typically require us to “stand-ready” to provide specific services on a when and if needed basis. The fees for these services may be fixed or variable (based upon performing an unspecified quantity of services), and pricing may include tiered pricing structures. Amounts of revenue allocated to these services are recognized as those services are performed. Data and item processing services are typically billed monthly. We evaluate tiered pricing to determine if a material right exists. If, after that evaluation, we determine a material right does exist, we assign value to the material right based upon standalone selling price.

Product Delivery and Services

Product delivery and services revenue is generated primarily from software licensing and related professional services and hardware delivery. Software licenses, along with any professional services from which they are not considered distinct, are recognized as they are delivered to the customer. Hardware revenue is recognized upon delivery. Professional services that are distinct are recognized as the services are performed. Deconversion fees are also included within product delivery and services, and are considered a contract modification. Therefore, we recognize these fees over the remaining modified contract term.

In-House Support

In-house support revenue is generated from software maintenance for ongoing client support and software usage, which includes a license and ongoing client support. Our arrangements for these services typically require us to “stand-ready” to provide specific services on a when and if needed basis. The fees for these services may be fixed or variable (based upon performing an unspecified quantity of services). Software maintenance fees are typically billed to the customer annually in advance and recognized ratably over the maintenance term. Software usage is typically billed annually in advance, with the license delivered and recognized at the outset, and the maintenance fee recognized ratably over the maintenance term. Accordingly, we utilize the practical expedient which allows entities to disregard the effects of a financing component when the contract period is one year or less.

Contract Costs

We incur incremental costs to obtain a contract as well as costs to fulfill contracts with customers that are expected to be recovered. These costs consist primarily of sales commissions, which are incurred only if a contract is obtained, and customer conversion or implementation-related costs.

Capitalized costs are amortized based on the transfer of goods or services to which the asset relates, in line with the percentage of revenue recognized for each performance obligation to which the costs are allocated.

Depreciation and Amortization Expense

The calculation of depreciation and amortization expense is based on the estimated economic lives of the underlying property, plant and equipment and intangible assets, which have been examined for their useful life and determined that no impairment exists. We believe it is unlikely that any significant changes to the useful lives of our tangible and intangible assets will occur in the near term, but rapid changes in technology or changes in market conditions could result in revisions to such estimates that could materially affect the carrying value

of these assets and our future consolidated operating results. For long-lived assets, we consider whether any impairment indicators are present. If impairment indicators are identified, we test the recoverability of the long-lived assets. If this recoverability test is failed, we determine the fair value of the long-lived assets and recognize an impairment loss if the fair value is less than its carrying value.

Capitalization of software development costs

We capitalize certain costs incurred to develop commercial software products. For software that is to be sold, significant areas of judgment include: establishing when technological feasibility has been met and costs should be capitalized, determining the appropriate period over which to amortize the capitalized costs based on the estimated useful lives, estimating the marketability of the commercial software products and related future revenues, and assessing the unamortized cost balances for impairment. Costs incurred prior to establishing technological feasibility are expensed as incurred. Amortization begins on the date of general release and the appropriate amortization period is based on estimates of future revenues from sales of the products. We consider various factors to project marketability and future revenues, including an assessment of alternative solutions or products, current and historical demand for the product, and anticipated changes in technology that may make the product obsolete.

For internal use software, capitalization begins at the beginning of application development. Costs incurred prior to this are expensed as incurred. Significant estimates and assumptions include determining the appropriate amortization period based on the estimated useful life and assessing the unamortized cost balances for impairment. Amortization begins on the date the software is placed in service and the amortization period is based on estimated useful life.

A significant change in an estimate related to one or more software products could result in a material change to our results of operations.

Estimates used to determine current and deferred income taxes

We make certain estimates and judgments in determining income tax expense for financial statement purposes. These estimates and judgments occur in the calculation of certain tax assets and liabilities, which arise from differences in the timing of recognition of revenue and expense for tax and financial statement purposes. We also must determine the likelihood of recoverability of deferred tax assets, and adjust any valuation allowances accordingly. Considerations include the period of expiration of the tax asset, planned use of the tax asset, and historical and projected taxable income as well as tax liabilities for the tax jurisdiction to which the tax asset relates. Valuation allowances are evaluated periodically and will be subject to change in each future reporting period as a result of changes in one or more of these factors. Also, liabilities for uncertain tax positions require significant judgment in determining what constitutes an individual tax position as well as assessing the outcome of each tax position. Changes in judgment as to recognition or measurement of tax positions can materially affect the estimate of the effective tax rate and consequently, affect our financial results.

Assumptions related to purchase accounting and goodwill

We account for our acquisitions using the purchase method of accounting. This method requires estimates to determine the fair values of assets and liabilities acquired, including judgments to determine any acquired intangible assets such as customer-related intangibles, as well as assessments of the fair value of existing assets such as property and equipment. Liabilities acquired can include balances for litigation and other contingency reserves established prior to or at the time of acquisition, and require judgment in ascertaining a reasonable value. Third-party valuation firms may be used to assist in the appraisal of certain assets and liabilities, but even those determinations would be based on significant estimates provided by us, such as forecast revenues or profits on contract-related intangibles. Numerous factors are typically considered in the purchase accounting assessments, which are conducted by Company professionals from legal, finance, human resources, information systems, program management and other disciplines. Changes in assumptions and estimates of the acquired assets and liabilities would result in changes to the fair values, resulting in an offsetting change to the goodwill balance associated with the business acquired.

As goodwill is not amortized, goodwill balances are regularly assessed for potential impairment. Such assessments include a qualitative assessment of factors that may indicate a potential for impairment, such as: macroeconomic conditions, industry and market changes, our overall financial performance, changes in share price, and an assessment of other events or changes in circumstances that could negatively impact us. If that qualitative assessment indicates a potential for impairment, a quantitative assessment is then required, including an analysis of future cash flow projections as well as a determination of an appropriate discount rate to calculate present values. Cash flow projections are based on management-approved estimates, which involve the input of numerous Company professionals from finance, operations and program management. Key factors used in estimating future cash flows include assessments of labor and other direct costs on existing contracts, estimates of overhead costs and other indirect costs, and assessments of new business prospects and projected win rates. Our most recent assessment indicates that no reporting units are currently at risk of impairment as the fair value of each reporting unit is significantly in excess of the carrying value. However, significant changes in the estimates and assumptions used in purchase accounting and goodwill impairment testing could have a material effect on the consolidated financial statements.

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk refers to the risk that a change in the level of one or more market prices, interest rates, indices, volatilities, correlations or other market factors such as liquidity, will result in losses for a certain financial instrument or group of financial instruments. We are currently exposed to credit risk on credit extended to customers and interest risk on outstanding debt. We do not currently use any derivative financial instruments. We actively monitor these risks through a variety of controlled procedures involving senior management.

Based on the controls in place and the credit worthiness of the customer base, we believe the credit risk associated with the extension of credit to our customers will not have a material adverse effect on our consolidated financial position, results of operations, or cash flows.

We have no outstanding debt with variable interest rates as of June 30, 2019, and are therefore not currently exposed to interest rate risk.

FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Financial Statements

Report of Independent Registered Public Accounting Firm	31
Management's Annual Report on Internal Control over Financial Reporting	33
Financial Statements	
Consolidated Statements of Income, Years Ended June 30, 2019, 2018, and 2017	34
Consolidated Balance Sheets, June 30, 2019 and 2018	35
Consolidated Statements of Changes in Stockholders' Equity, Years Ended June 30, 2019, 2018, and 2017	36
Consolidated Statements of Cash Flows, Years Ended June 30, 2019, 2018, and 2017	37
Notes to Consolidated Financial Statements	38

Financial Statement Schedules

There are no schedules included because they are not applicable or the required information is shown in the consolidated financial statements or notes thereto.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Jack Henry & Associates, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Jack Henry & Associates, Inc. and its subsidiaries (the “Company”) as of June 30, 2019 and 2018, and the related consolidated statements of income, changes in stockholders’ equity and cash flows for each of the three years in the period ended June 30, 2019, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company’s internal control over financial reporting as of June 30, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of June 30, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended June 30, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of June 30, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for revenue from contracts with customers as of July 1, 2018.

Basis for Opinions

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

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

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

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

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

Critical Audit Matters

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

Revenue Recognition - estimating variable consideration and identification of and accounting for performance obligations

As discussed in Note 1 to the consolidated financial statements, the Company recorded revenue of \$1.553 billion for the year ended June 30, 2019. The Company enters into contracts with its customers, which frequently contain multiple performance obligations and variable contract consideration. The amount of revenue recognized is based on the consideration the Company expects to receive in exchange for transferring goods and services to the customer. The Company's contracts with its customers frequently contain some component of variable consideration. Management estimates variable consideration in its contract primarily using the expected value method, based on both historical and current information. Where appropriate, the Company may constrain the estimated variable consideration included in the transaction price in the event of a high degree of uncertainty as to the final consideration amount. At contract inception, management assesses the solutions and services promised in its contracts with customers and identifies a performance obligation for each promise to transfer to the customer a solution or service (or bundle of solutions or services) that is distinct - that is, if the solution or service is separately identifiable from other items in the arrangement and if the customer can benefit from the solution or service on its own or together with other resources that are readily available. The Company recognizes revenue when or as it satisfies each performance obligation by transferring control of a solution or service to the customer. Significant judgment in revenue recognition for these customer contracts include, where relevant, (i) the estimation of variable consideration, principally, the varying volume of transactional activity over long-term contracts, and (ii) the identification of and accounting for all performance obligations.

The principal considerations for our determination that performing procedures relating to revenue recognition - specifically the estimation of variable consideration and identification of and accounting for performance obligations - is a critical audit matter are there was significant judgment by management to estimate the variable consideration, principally, the varying volume of transactional activity and the identification of and accounting for all performance obligations in a contract. This in turn resulted in significant audit effort, a high degree of auditor judgment and subjectivity, in performing our audit procedures and in evaluating the audit evidence obtained.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the revenue recognition process, including the estimation of variable consideration and identification of and accounting for each performance obligation. The procedures also included, among others, evaluating and testing management's process for determining the variable consideration and testing the reasonableness of management's estimation of variable consideration. Testing the estimation of variable consideration included evaluating the terms and conditions of the long-term contracts and the related significant assumptions used in the estimate of the variable consideration, principally, the varying volume of transactional activity. The procedures for testing the performance obligations and variable consideration included evaluation of the terms and conditions for a sample of contracts.

/s/ PricewaterhouseCoopers LLP

Kansas City, Missouri

August 26, 2019

We have served as the Company's auditor since 2015.

MANAGEMENT'S ANNUAL REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Jack Henry & Associates, Inc. is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). The 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 the Company's consolidated financial statements for external reporting purposes in accordance with U.S. GAAP.

The Company's internal control over financial reporting includes policies and procedures pertaining to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of assets of the Company; provide reasonable assurance transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with U.S. GAAP, and receipts and expenditures of the Company are being made only in accordance with authorizations of management and the directors of the Company; and 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 Company's consolidated financial statements. All internal controls, no matter how well designed, have inherent limitations. Therefore, even where internal control over financial reporting is determined to be effective, it can provide only reasonable assurance. Projections of any evaluation of effectiveness to future periods are subject to the risk controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate.

As of June 30, 2019, management conducted an assessment of the effectiveness of the Company's internal control over financial reporting based on the framework established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, management has concluded the Company's internal control over financial reporting as of June 30, 2019 was effective.

The Company's internal control over financial reporting as of June 30, 2019 has been audited by the Company's independent registered public accounting firm, as stated in their report appearing in this Item 8.

JACK HENRY & ASSOCIATES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
(In Thousands, Except Per Share Data)

	Year Ended June 30,		
	2019	2018	2017
REVENUE	\$ 1,552,691	\$ 1,470,797	\$ 1,388,290
EXPENSES			
Cost of Revenue	923,030	853,138	805,855
Research and Development	96,378	90,340	84,753
Selling, General, and Administrative	185,998	171,710	159,235
Gain on Disposal of Businesses	—	(1,894)	(3,270)
Total Expenses	<u>1,205,406</u>	<u>1,113,294</u>	<u>1,046,573</u>
OPERATING INCOME	347,285	357,503	341,717
INTEREST INCOME (EXPENSE)			
Interest Income	876	575	248
Interest Expense	(926)	(1,920)	(996)
Total Interest Income (Expense)	<u>(50)</u>	<u>(1,345)</u>	<u>(748)</u>
INCOME BEFORE INCOME TAXES	347,235	356,158	340,969
PROVISION/ (BENEFIT) FOR INCOME TAXES	75,350	(8,876)	111,408
NET INCOME	<u>\$ 271,885</u>	<u>\$ 365,034</u>	<u>\$ 229,561</u>
Basic earnings per share	\$ 3.52	\$ 4.73	\$ 2.95
Basic weighted average shares outstanding	77,160	77,252	77,856
Diluted earnings per share	\$ 3.52	\$ 4.70	\$ 2.93
Diluted weighted average shares outstanding	77,347	77,585	78,255

See notes to consolidated financial statements.

JACK HENRY & ASSOCIATES, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(In Thousands, Except Share and Per Share Data)

	<u>June 30,</u> <u>2019</u>	<u>June 30,</u> <u>2018</u>
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 93,628	\$ 31,440
Receivables, net	310,080	297,271
Income tax receivable	17,817	21,671
Prepaid expenses and other	106,466	96,069
Deferred costs	35,102	22,991
Assets held for sale	6,355	1,300
Total current assets	569,448	470,742
PROPERTY AND EQUIPMENT, net	272,474	285,550
OTHER ASSETS:		
Non-current deferred costs	90,084	74,865
Computer software, net of amortization	318,969	288,172
Other non-current assets	134,743	110,299
Customer relationships, net of amortization	100,653	115,034
Other intangible assets, net of amortization	31,514	38,467
Goodwill	666,944	649,929
Total other assets	1,342,907	1,276,766
Total assets	\$ 2,184,829	\$ 2,033,058
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Accounts payable	\$ 9,850	\$ 30,360
Accrued expenses	120,360	88,764
Deferred revenues	339,752	328,931
Total current liabilities	469,962	448,055
LONG-TERM LIABILITIES:		
Non-current deferred revenues	54,554	40,984
Deferred income tax liability	217,010	208,303
Other long-term liabilities	14,290	12,872
Total long-term liabilities	285,854	262,159
Total liabilities	755,816	710,214
STOCKHOLDERS' EQUITY		
Preferred stock - \$1 par value; 500,000 shares authorized, none issued	—	—
Common stock - \$0.01 par value; 250,000,000 shares authorized; 103,496,026 shares issued at June 30, 2019; 103,278,562 shares issued at June 30, 2018	1,035	1,033
Additional paid-in capital	472,029	464,138
Retained earnings	2,066,073	1,912,933
Less treasury stock at cost 26,507,903 shares at June 30, 2019; 26,107,903 shares at June 30, 2018	(1,110,124)	(1,055,260)
Total stockholders' equity	1,429,013	1,322,844
Total liabilities and equity	\$ 2,184,829	\$ 2,033,058

See notes to consolidated financial statements.

JACK HENRY & ASSOCIATES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(In Thousands, Except Share and Per Share Data)

	Year Ended June 30,		
	2019	2018	2017
PREFERRED SHARES:	—	—	—
COMMON SHARES:			
Shares, beginning of year	103,278,562	103,083,299	102,903,971
Shares issued for equity-based payment arrangements	141,071	118,865	98,781
Shares issued for Employee Stock Purchase Plan	76,393	76,398	80,547
Shares, end of year	<u>103,496,026</u>	<u>103,278,562</u>	<u>103,083,299</u>
COMMON STOCK - PAR VALUE \$0.01 PER SHARE:			
Balance, beginning of year	\$ 1,033	\$ 1,031	\$ 1,029
Shares issued for equity-based payment arrangements	1	1	1
Shares issued for Employee Stock Purchase Plan	1	1	1
Balance, end of year	<u>\$ 1,035</u>	<u>\$ 1,033</u>	<u>\$ 1,031</u>
ADDITIONAL PAID-IN CAPITAL:			
Balance, beginning of year	\$ 464,138	\$ 452,016	\$ 440,123
Shares issued for equity-based payment arrangements	235	174	(1)
Tax withholding related to share based compensation	(13,972)	(7,332)	(5,479)
Shares issued for Employee Stock Purchase Plan	9,039	7,522	6,244
Stock-based compensation expense	12,589	11,758	11,129
Balance, end of year	<u>\$ 472,029</u>	<u>\$ 464,138</u>	<u>\$ 452,016</u>
RETAINED EARNINGS:			
Balance, beginning of year	\$ 1,912,933	\$ 1,652,920	\$ 1,431,192
Cumulative effect of ASC 606 adoption*	—	—	83,874
Net income*	271,885	365,034	229,561
Dividends	(118,745)	(105,021)	(91,707)
Balance, end of year	<u>\$ 2,066,073</u>	<u>\$ 1,912,933</u>	<u>\$ 1,652,920</u>
TREASURY STOCK:			
Balance, beginning of year	\$ (1,055,260)	\$ (1,006,274)	\$ (876,134)
Purchase of treasury shares	(54,864)	(48,986)	(130,140)
Balance, end of year	<u>\$ (1,110,124)</u>	<u>\$ (1,055,260)</u>	<u>\$ (1,006,274)</u>
TOTAL STOCKHOLDERS' EQUITY	<u>\$ 1,429,013</u>	<u>\$ 1,322,844</u>	<u>\$ 1,099,693</u>
Dividends declared per share	\$ 1.54	\$ 1.36	\$ 1.18

See notes to consolidated financial statements.

*Retained earnings as of June 30, 2018 and 2017 and net income for the fiscal years ended June 30, 2018 and 2017 have been adjusted as a result of the adoption of ASC 606. Refer to Note 1 for the impact to previously presented Consolidated Balance Sheets and Consolidated Statements of Income. Other components of stockholders' equity were not impacted.

JACK HENRY & ASSOCIATES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In Thousands)

	<u>2019</u>	<u>Year Ended June 30, 2018</u>	<u>2017</u>
CASH FLOWS FROM OPERATING ACTIVITIES:			
Net Income	\$ 271,885	\$ 365,034	\$ 229,561
Adjustments to reconcile net income from operations to net cash from operating activities:			
Depreciation	47,378	47,975	49,677
Amortization	113,255	104,011	90,109
Change in deferred income taxes	7,604	(74,884)	21,187
Expense for stock-based compensation	12,589	11,758	11,129
(Gain)/loss on disposal of assets and businesses	161	(954)	4,771
Changes in operating assets and liabilities:			
Change in receivables	(11,777)	21,489	(33,096)
Change in prepaid expenses, deferred costs and other	(62,165)	(82,663)	(24,992)
Change in accounts payable	(7,526)	6,922	(7,812)
Change in accrued expenses	31,889	7,091	(11,966)
Change in income taxes	4,179	5,108	(6,444)
Change in deferred revenues	23,656	1,255	35,198
Net cash from operating activities	431,128	412,142	357,322
CASH FLOWS FROM INVESTING ACTIVITIES:			
Payment for acquisitions, net of cash acquired	(19,981)	(137,562)	—
Capital expenditures	(53,598)	(40,135)	(41,947)
Proceeds from the sale of businesses	—	350	5,632
Proceeds from the sale of assets	127	306	968
Customer contracts acquired	(20)	—	—
Purchased software	(6,049)	(13,138)	(16,608)
Computer software developed	(111,114)	(96,647)	(89,631)
Purchase of investments	—	(5,000)	—
Net cash from investing activities	(190,635)	(291,826)	(141,586)
CASH FLOWS FROM FINANCING ACTIVITIES:			
Borrowings on credit facilities	35,000	125,000	80,000
Repayments on credit facilities	(35,000)	(175,000)	(30,200)
Purchase of treasury stock	(54,864)	(48,986)	(130,140)
Dividends paid	(118,745)	(105,021)	(91,707)
Proceeds from issuance of common stock upon exercise of stock options	237	176	1
Tax withholding payments related to share based compensation	(13,973)	(7,333)	(5,480)
Proceeds from sale of common stock	9,040	7,523	6,245
Net cash from financing activities	(178,305)	(203,641)	(171,281)
NET CHANGE IN CASH AND CASH EQUIVALENTS	\$ 62,188	\$ (83,325)	\$ 44,455
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	\$ 31,440	\$ 114,765	\$ 70,310
CASH AND CASH EQUIVALENTS, END OF PERIOD	\$ 93,628	\$ 31,440	\$ 114,765

See notes to consolidated financial statements.

JACK HENRY & ASSOCIATES, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In Thousands, Except Per Share Amounts)

NOTE 1. NATURE OF OPERATIONS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

DESCRIPTION OF THE COMPANY

Jack Henry & Associates, Inc. and subsidiaries (“JHA” or the “Company”) is a provider of integrated computer systems and services that has developed and acquired a number of banking and credit union software systems. The Company’s revenues are predominately earned by marketing those systems to financial institutions nationwide together with computer equipment (hardware), by providing the conversion and implementation services for financial institutions to utilize JHA systems, and by providing other related services. JHA also provides continuing support and services to customers using in-house or outsourced systems.

CONSOLIDATION

The consolidated financial statements include the accounts of JHA and all of its subsidiaries, which are wholly-owned, and all intercompany accounts and transactions have been eliminated.

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 reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

PRIOR PERIOD RECLASSIFICATION

The prior year periods have been recast to reflect the Company’s retrospective adoption of Accounting Standards Update (“ASU”) 2014-09, *Revenue from Contracts with Customers*, and related amendments, collectively referred to as Accounting Standards Codification (“ASC”) 606.

We also recorded a prior period re-classification of \$1,300 to a new assets held for sale caption as of June 30, 2018. These assets were previously recorded under Property and Equipment, net.

PRIOR PERIOD MISCLASSIFICATION

In connection with the preparation of the Company’s 2019 annual financial statements, the Company identified an immaterial prior period misclassification which overstated accounts payable by \$4,150, overstated deferred costs by \$4,078, and overstated prepaid expenses and other by \$72. The Company has corrected for this misclassification in the accompanying Consolidated Balance Sheet by revising the fiscal 2018 balances.

REVENUE RECOGNITION

The Company generates “Services and Support” revenue through software licensing and related services, outsourcing core & complementary software solutions, professional services, and hardware sales. The Company generates “Processing” revenue through processing of remittance transactions, card transactions and monthly fees, and digital transactions.

Significant Judgments in Application of the Guidance

Identification of Performance Obligations

The Company enters into contracts with customers that may include multiple types of goods and services. At contract inception, the Company assesses the solutions and services promised in its contracts with customers and identifies a performance obligation for each promise to transfer to the customer a solution or service (or bundle of solutions or services) that is distinct - that is, if the solution or service is separately identifiable from other items in the arrangement and if the customer can benefit from the solution or service on its own or together with other resources that are readily available. Significant judgment is used in the identification and accounting for all performance obligations. The Company recognizes revenue when or as it satisfies each performance obligation by transferring control of a solution or service to the customer.

Determination of Transaction Price

The amount of revenue recognized is based on the consideration the Company expects to receive in exchange for transferring goods and services to the customer. The Company’s contracts with its customers frequently contain some component of variable consideration. The Company estimates variable consideration in its contracts primarily using the expected value method, based on both historical and current information. Where appropriate, the Company may constrain the estimated variable consideration included in the transaction price in the event of a high degree of uncertainty as to the final consideration amount. Significant judgment is used in the estimate of variable consideration of customer contracts that are long-term and include uncertain transactional volumes.

Taxes collected from customers and remitted to governmental authorities are not included in revenue. The Company includes

reimbursements from customers for expenses incurred in providing services (such as for postage, travel and telecommunications costs) in revenue, while the related costs are included in cost of revenue.

Technology or service components from third parties are frequently included in or combined with the Company's applications or service offerings. Whether the Company recognizes revenue based on the gross amount billed to the customer or the net amount retained involves judgment in determining whether the Company controls the good or service before it is transferred to the customer. This assessment is made at the performance obligation level.

Allocation of Transaction Price

The transaction price, once determined, is allocated between the various performance obligations in the contract based upon their relative standalone selling prices. The standalone selling prices are determined based on the prices at which the Company separately sells each good or service. For items that are not sold separately, the Company estimates the standalone selling prices using all information that is reasonably available, including reference to historical pricing data.

The following describes the nature of the Company's primary types of revenue:

Processing

Processing revenue is generated from transaction-based fees for electronic deposit and payment services, electronic funds transfers and debit and credit card processing. The Company's arrangements for these services typically require the Company to "stand-ready" to provide specific services on a when and if needed basis by processing an unspecified number of transactions over the contractual term. The fees for these services may be fixed or variable (based upon performing an unspecified quantity of services), and pricing may include tiered pricing structures. Amounts of revenue allocated to these services are recognized as those services are performed. Customers are typically billed monthly for transactions processed during the month. The Company evaluates tiered pricing to determine if a material right exists. If, after that evaluation, it determines a material right does exist, it assigns value to the material right based upon standalone selling price after estimation of breakage associated with the material right.

Outsourcing and Cloud

Outsourcing and cloud revenue is generated from data and item processing services and hosting fees. The Company's arrangements for these services typically require the Company to "stand-ready" to provide specific services on a when and if needed basis. The fees for these services may be fixed or variable (based upon performing an unspecified quantity of services), and pricing may include tiered pricing structures. Amounts of revenue allocated to these services are recognized as those services are performed. Data and item processing services are typically billed monthly. The Company evaluates tiered pricing to determine if a material right exists. If, after that evaluation, it determines a material right does exist, it assigns value to the material right based upon standalone selling price.

Product Delivery and Services

Product delivery and services revenue is generated primarily from software licensing and related professional services and hardware delivery. Software licenses, along with any professional services from which they are not considered distinct, are recognized as they are delivered to the customer. Hardware revenue is recognized upon delivery. Professional services that are distinct are recognized as the services are performed. Deconversion fees are also included within product delivery and services, and are considered a contract modification. Therefore, the Company recognizes these fees over the remaining modified contract term.

In-House Support

In-house support revenue is generated from software maintenance for ongoing client support and software usage, which includes a license and ongoing client support. The Company's arrangements for these services typically require the Company to "stand-ready" to provide specific services on a when and if needed basis. The fees for these services may be fixed or variable (based upon performing an unspecified quantity of services). Software maintenance fees are typically billed to the customer annually in advance and recognized ratably over the maintenance term. Software usage is typically billed annually in advance, with the license delivered and recognized at the outset, and the maintenance fee recognized ratably over the maintenance term. Accordingly, the Company utilizes the practical expedient which allows entities to disregard the effects of a financing component when the contract period is one year or less.

Disaggregation of Revenue

The tables below present the Company's revenue disaggregated by type of revenue. Refer to Note 13, Reportable Segment Information, for disaggregated revenue by type and reportable segment. The majority of the Company's revenue is earned domestically, with revenue from customers outside the United States comprising less than 1% of total revenue.

	Year Ended June 30,		
	2019	2018	2017
Processing	\$ 594,202	\$ 550,058	\$ 506,555
Outsourcing & Cloud	405,359	361,922	327,738
Product Delivery & Services	231,982	251,743	256,794
In-House Support	321,148	307,074	297,203
Services & Support	958,489	920,739	\$ 881,735
Total Revenue	\$ 1,552,691	\$ 1,470,797	\$ 1,388,290

Contract Balances

The following table provides information about contract assets and contract liabilities from contracts with customers.

	June 30, 2019	June 30, 2018
Receivables, net	\$ 310,080	\$ 297,271
Contract Assets- Current	21,446	14,063
Contract Assets- Non-current	50,640	35,630
Contract Liabilities (Deferred Revenue)- Current	339,752	328,931
Contract Liabilities (Deferred Revenue)- Non-current	54,554	40,984

Contract assets primarily result from revenue being recognized when or as control of a solution or service is transferred to the customer, but where invoicing is delayed until the completion of other performance obligations or payment terms differ from the provisioning of services. The current portion of contract assets is reported within prepaid expenses and other in the consolidated balance sheet, and the non-current portion is included in other non-current assets. Contract liabilities (deferred revenue) primarily relate to consideration received from customers in advance of delivery of the related goods and services to the customer. Contract balances are reported in a net contract asset or liability position on a contract-by-contract basis at the end of each reporting period.

The Company analyzes contract language to identify if a significant financing component does exist, and would adjust the transaction price for any material effects of the time value of money if the timing of payments provides either party to the contract with a significant benefit of financing the transaction.

During the fiscal years ended June 30, 2019, 2018, and 2017, the Company recognized revenue of \$265,946, \$269,593, and \$264,517, respectively, that was included in the corresponding deferred revenue balance at the beginning of the periods.

Revenue recognized that related to performance obligations satisfied (or partially satisfied) in prior periods were immaterial for each period presented. These adjustments are primarily the result of transaction price adjustments and re-allocations due to changes in estimates of variable consideration.

Transaction Price Allocated to Remaining Performance Obligations

As of June 30, 2019, estimated revenue expected to be recognized in the future related to performance obligations that are unsatisfied (or partially unsatisfied) at the end of the reporting period totaled \$3,640,955. The Company expects to recognize approximately 30% over the next 12 months and 18% in 13-24 months, and the balance thereafter.

Contract Costs

The Company incurs incremental costs to obtain a contract as well as costs to fulfill contracts with customers that are expected to be recovered. These costs consist primarily of sales commissions, which are incurred only if a contract is obtained, and customer conversion or implementation-related costs. Capitalized costs are amortized based on the transfer of goods or services to which the asset relates, in line with the percentage of revenue recognized for each performance obligation to which the costs are allocated.

Capitalized costs totaled \$231,273 and \$176,954 at June 30, 2019 and 2018, respectively.

For the fiscal years ended June 30, 2019, 2018, and, 2017 amortization of deferred contract costs totaled \$110,894, \$94,337, and \$88,064, respectively. There were no impairment losses in relation to capitalized costs for the periods presented.

COMPUTER SOFTWARE DEVELOPMENT

The Company capitalizes new product development costs incurred for software to be sold from the point at which technological feasibility has been established through the point at which the product is ready for general availability. Software development costs that are capitalized are evaluated on a product-by-product basis annually and are assigned an estimated economic life based on the type of product, market characteristics, and maturity of the market for that particular product. These costs are amortized based on current and estimated future revenue from the product or on a straight-line basis, whichever yields greater amortization expense. All of this amortization expense is included within components of operating income, primarily cost of revenue.

The Company capitalizes development costs for internal use software beginning at the start of application development. Amortization begins on the date the software is placed in service and the amortization period is based on estimated useful life.

CASH EQUIVALENTS

The Company considers all highly liquid investments with maturities of three months or less at the time of acquisition to be cash equivalents.

ACCOUNTS RECEIVABLE

Receivables are recorded at the time of billing. A reasonable estimate of the realizability of customer receivables is made through the establishment of an allowance for doubtful accounts, which is estimated based on a combination of write-off history, aging analysis, and any specifically known collection issues.

PROPERTY AND EQUIPMENT AND INTANGIBLE ASSETS

Property and equipment is stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets.

Intangible assets consist of goodwill, customer relationships, computer software, and trade names acquired in business acquisitions in addition to internally developed computer software. The amounts are amortized, with the exception of those with an indefinite life (goodwill), over an estimated economic benefit period, generally three to twenty years.

The Company reviews its long-lived assets and identifiable intangible assets with finite lives for impairment whenever events or changes in circumstances have indicated that the carrying amount of its assets might not be recoverable. The Company evaluates goodwill for impairment of value on an annual basis as of January 1 and between annual tests if events or changes in circumstances indicate that the asset might be impaired.

PURCHASE OF INVESTMENT

In the third quarter of fiscal 2018, the Company made an investment totaling \$5,000 for the purchase of preferred stock of Automated Bookkeeping, Inc (“Autobooks”), representing a non-controlling share of the voting equity of Autobooks as of that date. This investment was recorded at cost and is included within other non-current assets on the Company’s balance sheet. The fair value of this investment has not been estimated, as estimation is not practicable. There have been no events or changes in circumstances that would indicate an impairment and no price changes resulting from observing a similar or identical investment. An impairment and/or an observable price change would be an adjustment to recorded cost. Fair value will not be estimated unless there are identified events or changes in circumstances that may have a significant adverse effect on the fair value of the investment.

COMPREHENSIVE INCOME

Comprehensive income for each of the fiscal years ending June 30, 2019, 2018, and 2017 equals the Company’s net income.

REPORTABLE SEGMENT INFORMATION

In accordance with U.S. GAAP, the Company’s operations are classified as four reportable segments: Core, Payments, Complementary, and Corporate and Other (see Note 13). Substantially all the Company’s revenues are derived from operations and assets located within the United States of America.

COMMON STOCK

The Board of Directors has authorized the Company to repurchase shares of its common stock. Under this authorization, the Company may finance its share repurchases with available cash reserves or short-term borrowings on its existing credit facilities. The share repurchase program does not include specific price targets or timetables and may be suspended at any time. At June 30, 2019, there were 26,508 shares in treasury stock and the Company had the remaining authority to repurchase up to 3,483 additional shares. The total cost of treasury shares at June 30, 2019 is \$1,110,124. During fiscal 2019, the Company repurchased 400 treasury shares for \$54,864. At June 30, 2018, there were 26,108 shares in treasury stock and the Company had authority to repurchase up to 3,883 additional shares.

EARNINGS PER SHARE

Per share information is based on the weighted average number of common shares outstanding during the year. Stock options and restricted stock have been included in the calculation of income per diluted share to the extent they are dilutive. The difference between basic and diluted weighted average shares outstanding is the dilutive effect of outstanding stock options and restricted stock (see Note 10).

INCOME TAXES

Deferred tax liabilities and assets are recognized for the tax effects of differences between the financial statement and tax bases of assets and liabilities. A valuation allowance would be established to reduce deferred tax assets if it is more likely than not that a deferred tax asset will not be realized.

The Company recognizes the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based upon the technical merits of the position. The tax benefit recognized in the financial statements from such a position is measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. Also, interest and penalties expense are recognized on the full amount of deferred benefits for uncertain tax positions. The Company's policy is to include interest and penalties related to unrecognized tax benefits in income tax expense.

RECENT ACCOUNTING PRONOUNCEMENTS

Recently Adopted Accounting Guidance

The Financial Accounting Standards Board ("FASB") issued ASU No. 2014-09, *Revenue from Contracts with Customers*, in May 2014. This standard (and related amendments collectively referred to as "ASC 606") is part of an effort to create a common revenue standard for U.S. GAAP and International Financial Reporting Standards ("IFRS"). The new standard has superseded much of the authoritative literature for revenue recognition. The new model enacts a five-step process for achieving the core principle, which 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. The standard was effective for the Company on July 1, 2018. Entities are allowed to transition to the new standard by either recasting prior periods (full retrospective) or recognizing the cumulative effect as of the beginning of the period of adoption (modified retrospective).

The Company adopted the new standard using the full retrospective transition approach, using certain practical expedients. The Company has not disclosed the amount of transaction price allocated to remaining performance obligations for reporting periods presented before the date of initial application. Also, the Company did not separately consider the effects of contract modifications that occurred before the beginning of the earliest reporting period presented, but reflects the aggregate effect of all modifications that occurred before the beginning of the earliest period presented. As a result, all fiscal 2018 and fiscal 2017 financial information has been adjusted for the effects of applying ASC 606. The details of the significant changes are disclosed below:

Software Revenue Recognition

The Company previously recognized software license and related services within the scope of ASC Topic 985-605, which required the establishment of vendor-specific objective evidence ("VSOE") of fair value in order to separately recognize revenue for each software-related good or service. Due to the inability to establish VSOE, the Company had previously deferred all revenue on software-related goods and services on a master contract until all the goods and services had been delivered. Under ASC 606, VSOE is no longer required for separation of otherwise distinct performance obligations within a revenue arrangement. This change has resulted in earlier recognition of revenue for the Company's software-related goods and services, leading to a decrease in deferred revenue balances within its adjusted consolidated balance sheets.

Impacts on Financial Statements

The following tables summarize the impacts of ASC 606 adoption on the Company's Consolidated Financial Statements:

Consolidated Balance Sheet as of June 30, 2018:

	As Previously Reported (Adjusted)*	Adjustments	As Adjusted
ASSETS			
CURRENT ASSETS:			
Cash and cash equivalents	\$ 31,440	\$ —	\$ 31,440
Receivables, net	291,630	5,641	297,271
Income tax receivable	21,671	—	21,671
Prepaid expenses and other*	84,738	11,331	96,069
Deferred costs*	34,907	(11,916)	22,991
Assets held for sale*	1,300	—	1,300
Total current assets	465,686	5,056	470,742
PROPERTY AND EQUIPMENT, net*	285,550	—	285,550
OTHER ASSETS:			
Non-current deferred costs	95,540	(20,675)	74,865
Computer software, net of amortization	288,172	—	288,172
Other non-current assets	107,775	2,524	110,299
Customer relationships, net of amortization	115,034	—	115,034
Other intangible assets, net of amortization	38,467	—	38,467
Goodwill	649,929	—	649,929
Total other assets	1,294,917	(18,151)	1,276,766
Total assets	\$ 2,046,153	\$ (13,095)	\$ 2,033,058
LIABILITIES AND STOCKHOLDERS' EQUITY			
CURRENT LIABILITIES:			
Accounts payable*	\$ 30,360	\$ —	\$ 30,360
Accrued expenses	97,848	(9,084)	88,764
Deferred revenues	355,538	(26,607)	328,931
Total current liabilities	483,746	(35,691)	448,055
LONG-TERM LIABILITIES:			
Non-current deferred revenues	93,094	(52,110)	40,984
Non-current deferred income tax liability	189,613	18,690	208,303
Other long-term liabilities	12,872	—	12,872
Total long-term liabilities	295,579	(33,420)	262,159
Total liabilities	779,325	(69,111)	710,214
STOCKHOLDERS' EQUITY			
Preferred stock - \$1 par value; 500,000 shares authorized, none issued	—	—	—
Common stock - \$0.01 par value; 250,000,000 shares authorized; 103,278,562 shares issued at June 30, 2018	1,033	—	1,033
Additional paid-in capital	464,138	—	464,138
Retained earnings	1,856,917	56,016	1,912,933
Less treasury stock at cost 26,107,903 shares at June 30, 2018	(1,055,260)	—	(1,055,260)
Total stockholders' equity	1,266,828	56,016	1,322,844
Total liabilities and equity	\$ 2,046,153	\$ (13,095)	\$ 2,033,058

*Adjusted for reclassifications and corrections not related to ASC 606 adoption. See comments under "Prior Period Reclassification" and "Prior Period Misclassification" headings in this Note 1 to the Consolidated Financial Statements.

Consolidated Statements of Income for the fiscal years ended June 30, 2018 and June 30, 2017:

	Year Ended June 30, 2018			Year Ended June 30, 2017		
	As Previously Reported	Adjustments	As Adjusted	As Previously Reported	Adjustments	As Adjusted
REVENUE	\$ 1,536,603	\$ (65,806)	\$ 1,470,797	\$ 1,431,117	\$ (42,827)	\$ 1,388,290
EXPENSES						
Cost of Revenue	873,642	(20,504)	853,138	819,034	(13,179)	805,855
Research and Development	90,340	—	90,340	84,753	—	84,753
Selling, General, and Administrative	182,146	(10,436)	171,710	162,898	(3,663)	159,235
Gain on Disposal of a Business	(1,894)	—	(1,894)	(3,270)	—	(3,270)
Total Expenses	1,144,234	(30,940)	1,113,294	1,063,415	(16,842)	1,046,573
OPERATING INCOME	392,369	(34,866)	357,503	367,702	(25,985)	341,717
INTEREST INCOME (EXPENSE)						
Interest Income	575	—	575	248	—	248
Interest Expense	(1,920)	—	(1,920)	(996)	—	(996)
Total Interest Income (Expense)	(1,345)	—	(1,345)	(748)	—	(748)
INCOME BEFORE INCOME TAXES	391,024	(34,866)	356,158	366,954	(25,985)	340,969
PROVISION/ (BENEFIT) FOR INCOME TAXES	14,364	(23,240)	(8,876)	121,161	(9,753)	111,408
NET INCOME	\$ 376,660	\$ (11,626)	\$ 365,034	\$ 245,793	\$ (16,232)	\$ 229,561
Basic earnings per share	\$ 4.88		\$ 4.73	\$ 3.16		\$ 2.95
Basic weighted average shares outstanding	77,252		77,252	77,856		77,856
Diluted earnings per share	\$ 4.85		\$ 4.70	\$ 3.14		\$ 2.93
Diluted weighted average shares outstanding	77,585		77,585	78,255		78,255

Consolidated Statement of Cash Flows for the fiscal years ended June 30, 2018 and June 30, 2017:

	Year Ended June 30, 2018			Year Ended June 30, 2017		
	As Previously Reported*	Adjustments	As Adjusted	As Previously Reported	Adjustments	As Adjusted
CASH FLOWS FROM OPERATING ACTIVITIES:						
Net Income	\$ 376,660	\$ (11,626)	\$ 365,034	\$ 245,793	\$ (16,232)	\$ 229,561
Adjustments to reconcile net income from operations to net cash from operating activities:						
Depreciation	47,975	—	47,975	49,677	—	49,677
Amortization	104,011	—	104,011	90,109	—	90,109
Change in deferred income taxes	(51,644)	(23,240)	(74,884)	30,940	(9,753)	21,187
Expense for stock-based compensation	11,758	—	11,758	11,129	—	11,129
(Gain)/loss on disposal of assets and businesses	(954)	—	(954)	4,771	—	4,771
Changes in operating assets and liabilities:						
Change in receivables	(9,219)	30,708	21,489	(22,499)	(10,597)	(33,096)
Change in prepaid expenses, deferred costs and other*	(24,304)	(58,359)	(82,663)	(25,088)	96	(24,992)
Change in accounts payable*	6,922	—	6,922	(7,812)	—	(7,812)
Change in accrued expenses	9,091	(2,000)	7,091	(4,454)	(7,512)	(11,966)
Change in income taxes	5,108	—	5,108	(6,444)	—	(6,444)
Change in deferred revenues	(63,262)	64,517	1,255	(8,800)	43,998	35,198
Net cash from operating activities	412,142	—	412,142	357,322	—	357,322
CASH FLOWS FROM INVESTING ACTIVITIES:						
Payment for acquisitions, net of cash acquired	(137,562)	—	(137,562)	—	—	—
Capital expenditures	(40,135)	—	(40,135)	(41,947)	—	(41,947)
Proceeds from the sale of businesses	350	—	350	5,632	—	5,632
Proceeds from the sale of assets	306	—	306	968	—	968
Purchased software	(13,138)	—	(13,138)	(16,608)	—	(16,608)
Computer software developed	(96,647)	—	(96,647)	(89,631)	—	(89,631)
Purchase of investments	(5,000)	—	(5,000)	—	—	—
Net cash from investing activities	(291,826)	—	(291,826)	(141,586)	—	(141,586)
CASH FLOWS FROM FINANCING ACTIVITIES:						
Borrowings on credit facilities	125,000	—	125,000	80,000	—	80,000
Repayments on credit facilities	(175,000)	—	(175,000)	(30,200)	—	(30,200)
Purchase of treasury stock	(48,986)	—	(48,986)	(130,140)	—	(130,140)
Dividends paid	(105,021)	—	(105,021)	(91,707)	—	(91,707)
Proceeds from issuance of common stock upon exercise of stock options	176	—	176	1	—	1
Tax withholding payments related to share based compensation	(7,333)	—	(7,333)	(5,480)	—	(5,480)
Proceeds from sale of common stock	7,523	—	7,523	6,245	—	6,245
Net cash from financing activities	(203,641)	—	(203,641)	(171,281)	—	(171,281)
NET CHANGE IN CASH AND CASH EQUIVALENTS	\$ (83,325)	\$ —	\$ (83,325)	\$ 44,455	\$ —	\$ 44,455
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	\$ 114,765	\$ —	\$ 114,765	\$ 70,310	\$ —	\$ 70,310
CASH AND CASH EQUIVALENTS, END OF PERIOD	\$ 31,440	\$ —	\$ 31,440	\$ 114,765	\$ —	\$ 114,765

*Adjusted for reclassifications and corrections not related to ASC 606 adoption. See comments under "Prior Period Reclassification" and "Prior Period Misclassification" headings in this Note 1 to the Consolidated Financial Statements.

ASU 2016-15 issued by the FASB in August 2016 clarifies cash flow classification of eight specific cash flow issues and was effective for the Company's annual reporting period beginning July 1, 2018. The adoption of this standard did not have any impact on its financial statements.

Not Yet Adopted

The FASB issued ASU No. 2016-02, Leases, in February 2016. This ASU aims to increase transparency and comparability among organizations by recognizing lease assets and liabilities on the balance sheet and requiring disclosure of key information regarding leasing arrangements to enable users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. Specifically, the standard requires operating lease commitments to be recorded on the balance sheet as operating lease liabilities and right-of-use assets, and the cost of those operating leases to be amortized on a straight-line basis. ASU No. 2016-02 will be effective for JHA's annual reporting period beginning July 1, 2019. The Company established a cross-functional team to implement this standard and evaluated arrangements that would be subject to the standard, implemented software to meet the reporting and disclosure requirements of the standard, and assessed the impact of the standard on its processes and internal controls. The Company will adopt the new standard using the optional transition method in ASU 2018-11. Under this method, the Company will not adjust its comparative period financial statements for the effects of the new standard or make the new, expanded required disclosures for periods prior to the effective date. The Company will recognize a cumulative-effect adjustment, as necessary, to the opening balance of retained earnings for fiscal 2020 in connection with the adoption of the standard.

The Company will take advantage of the transition package of practical expedients permitted within the new standard, which among other things, allows it to carryforward the historical lease classification. In addition, the Company will make an accounting policy election that will keep leases with an initial term of twelve months or less off of the balance sheet. The Company also elected the practical expedient not to separate the non-lease components of a contract from the lease component to which they relate.

Upon adoption of the standard, the Company will record right-of-use assets of approximately \$70,000 to \$73,000 and lease obligations of approximately \$73,000 to \$75,000 on the Company's balance sheet as of July 1, 2019. Adoption of the standard is not expected to significantly impact the Company's net income and is not expected to have a material impact on the Company's compliance with the financial covenants under its credit facility.

In August of 2018, the FASB issued ASU No. 2018-15, Intangibles, Goodwill and Other - Internal-Use Software (Subtopic 350-40), which broadens the scope of Subtopic 350-40 to include costs incurred to implement a hosting arrangement that is a service contract. The costs are capitalized or expensed depending on the nature of the costs and the project stage during which they are incurred, consistent with costs for internal-use software. The amendments in this update can be applied either retrospectively or prospectively to all implementation costs incurred after the date of adoption. The ASU will be effective for the Company on July 1, 2020, with early adoption permitted. The Company is currently evaluating the impact that the guidance will have on its financial statements.

NOTE 2. FAIR VALUE OF FINANCIAL INSTRUMENTS

For cash equivalents, amounts receivable or payable and short-term borrowings, fair values approximate carrying value, based on the short-term nature of the assets and liabilities.

The Company's estimates of the fair value for financial assets and financial liabilities are based on the framework established in the fair value accounting guidance. The framework is based on the inputs used in valuation, gives the highest priority to quoted prices in active markets, and requires that observable inputs be used in the valuations when available. The three levels of the hierarchy are as follows:

Level 1: inputs to the valuation are quoted prices in an active market for identical assets

Level 2: inputs to the valuation include quoted prices for similar assets in active markets that are observable either directly or indirectly

Level 3: valuation is based on significant inputs that are unobservable in the market and the Company's own estimates of assumptions that it believes market participants would use in pricing the asset

Fair value of financial assets, included in cash and cash equivalents, and financial liabilities is as follows:

Recurring Fair Value Measurements	Estimated Fair Value Measurements			Total Fair Value
	Level 1	Level 2	Level 3	
June 30, 2019				
Financial Assets:				
Money market funds	\$ 81,945	\$ —	\$ —	\$ 81,945
June 30, 2018				
Financial Assets:				
Money market funds	\$ 14,918	\$ —	\$ —	\$ 14,918
Non-Recurring Fair Value Measurements				
June 30, 2019				
Long-lived assets held for sale	\$ —	\$ 1,300	\$ —	\$ 1,300
June 30, 2018				
Long-lived assets held for sale ^(a)	\$ —	\$ 1,300	\$ —	\$ 1,300

^(a) In accordance with ASC Subtopic 360-10, long-lived assets held for sale with a carrying value of \$4,575 were written down to their fair value of \$1,300, resulting in an impairment totaling \$3,275, which was included in earnings for the fiscal year ended June 30, 2017. The Company has entered into an agreement to sell these assets. That sale is expected to be completed during the second quarter of fiscal 2020.

NOTE 3. PROPERTY AND EQUIPMENT

The classification of property and equipment, together with their estimated useful lives is as follows:

	June 30,		Estimated Useful Life
	2019	2018	
Land ⁽¹⁾	\$ 23,243	\$ 24,845	
Land improvements ⁽¹⁾	25,209	25,383	5 - 20 years
Buildings ⁽¹⁾	147,220	143,918	20 - 30 years
Leasehold improvements	48,478	48,060	5 - 30 years ⁽²⁾
Equipment and furniture	365,101	328,864	3 - 10 years
Aircraft and equipment	39,293	38,761	4 - 10 years
Construction in progress	12,411	39,872	
	660,955	649,703	
Less accumulated depreciation	388,481	364,153	
Property and equipment, net	\$ 272,474	\$ 285,550	

⁽¹⁾ Excludes assets held for sale

⁽²⁾ Lesser of lease term or estimated useful life

The change in property and equipment in accrued liabilities was \$14,315 and \$15,674 for the fiscal years ended June 30, 2019 and 2018, respectively. These amounts were excluded from capital expenditures on the statements of cash flows.

No impairments of property and equipment were recorded in fiscal 2019 or 2018.

During the third quarter of fiscal 2019, the Company received an unsolicited offer to purchase its Houston, TX, facility. At June 30, 2019, the facility included assets with a carrying value of approximately \$5,055. Although management has not committed to the sale, a sale of the facility during fiscal 2020 is likely and the Company expects to record a gain on the sale upon closing, since the offer represents full appraisal value for the facility. Therefore, the assets are considered held for sale at June 30, 2019. Also held for sale at June 30, 2019, was the Company's Elizabethtown, KY facility. During the third quarter of fiscal 2018, the Company reached a definitive agreement to sell the property for \$1,300 pending an expected closing date during the second quarter of fiscal 2020. An impairment loss was recorded on this facility during fiscal 2017 as disclosed in Note 2 to the Company's consolidated financial statements. Total assets held for sale by the Company at June 30, 2019 and 2018 were \$6,355 and \$1,300, respectively, and were included in assets held for sale on the Company's consolidated balance sheet for each year. Those balances are not included on the above table.

NOTE 4. OTHER ASSETS

Goodwill

The carrying amount of goodwill for the fiscal years ended June 30, 2019 and 2018, by reportable segments, is as follows:

	June 30,	
	2019	2018
Core		
Beginning balance	\$ 195,956	\$ 195,956
Goodwill, acquired during the year	4,000	—
Goodwill, adjustments related to dispositions	—	—
Ending balance	<u>\$ 199,956</u>	<u>\$ 195,956</u>
Payments		
Beginning balance	\$ 325,204	\$ 234,106
Goodwill, acquired during the year	122	91,098
Goodwill, adjustments related to dispositions	—	—
Ending balance	<u>\$ 325,326</u>	<u>\$ 325,204</u>
Complementary		
Beginning balance	\$ 128,769	\$ 122,403
Goodwill, acquired during the year	12,893	6,499
Goodwill, adjustments related to dispositions	—	(133)
Ending balance	<u>\$ 141,662</u>	<u>\$ 128,769</u>

Goodwill acquired during fiscal 2019 totaled \$17,015, with \$12,893 of that resulting from the purchase of BOLTS Technologies, Inc., \$3,999 resulting from the purchase of Agiletics, Inc., and the remainder resulting from a measurement period adjustment on the Ensenta valuation. The goodwill arising from these acquisitions consists largely of the growth potential, synergies and economies of scale expected from combining the operations of the Company with those of BOLTS Technologies and Agiletics, together with the value of their assembled workforces. No goodwill was assigned to the Company's Corporate and Other reportable segment.

Goodwill acquired during fiscal 2018 totaled \$97,597, with \$91,098 of that resulting from the purchase of Ensenta Corporation, included in the Payments segment. The remaining \$6,499 of goodwill acquired during fiscal 2018 resulted from the purchase of Vanguard Software Group, which was added to the Company's Complementary segment. The goodwill arising from these acquisitions consists largely of the growth potential, synergies and economies of scale expected from combining the operations of the Company with those of Ensenta and Vanguard, together with the value of their assembled workforces. No goodwill was assigned to the Company's Corporate and Other reportable segment.

The Goodwill reduction during fiscal 2018 was a result of the Company's sale of jhaDirect product line in the first quarter. Goodwill allocated to the carrying amount of the net assets sold was calculated based on the relative fair values of the business disposed and the portion of the reporting unit that was retained.

Other Intangible Assets

Information regarding other identifiable intangible assets is as follows:

	June 30, 2019		
	Gross Carrying Amount	Accumulated Amortization	Net
Customer relationships	\$ 305,512	\$ (204,859)	\$ 100,653
Computer software	\$ 759,671	\$ (440,702)	\$ 318,969
Other intangible assets:	\$ 93,471	\$ (61,957)	\$ 31,514

	June 30, 2018		
	Gross Carrying Amount	Accumulated Amortization	Net
Customer relationships	\$ 302,727	\$ (187,693)	\$ 115,034
Computer software	\$ 653,407	\$ (365,235)	\$ 288,172
Other intangible assets:	\$ 88,017	\$ (49,550)	\$ 38,467

Customer relationships have useful lives ranging from 5 to 20 years.

Computer software includes cost of software to be sold, leased, or marketed of \$135,743 and costs of internal-use software of \$183,226 at June 30, 2019. At June 30, 2018, costs of software to be sold, leased, or marketed totaled \$125,223, and costs of internal-use software totaled \$162,949.

Computer software includes the unamortized cost of commercial software products developed or acquired by the Company, which are capitalized and amortized over useful lives generally ranging from 5 to 15 years. Amortization expense for computer software totaled \$82,605, \$72,859, and \$60,880 for the fiscal years ended June 30, 2019, 2018, and 2017, respectively. There were no material impairments in any of the fiscal years presented.

The Company's other intangible assets have useful lives ranging from 3 to 20 years.

Amortization expense for all intangible assets was \$113,255, \$104,011, and \$90,109 for the fiscal years ended June 30, 2019, 2018, and 2017, respectively. The estimated aggregate future amortization expense for each of the next five years for all intangible assets remaining as of June 30, 2019, is as follows:

Years Ending June 30,	Computer Software	Customer Relationships	Other Intangible Assets	Total
2020	\$ 77,020	\$ 14,665	\$ 9,186	\$ 100,871
2021	58,153	12,409	6,345	76,907
2022	42,981	11,260	3,437	57,678
2023	27,454	8,808	1,963	38,225
2024	10,975	7,547	1,315	19,837

NOTE 5. DEBT

The Company had no outstanding long-term or short-term debt at June 30, 2019 or June 30, 2018.

Revolving credit facility

The revolving credit facility provides for borrowings of up to \$300,000, which may be increased by the Company at any time until maturity to \$600,000. The credit facility bears interest at a variable rate equal to (a) a rate based on LIBOR or (b) an alternate base rate (the highest of (i) the Prime Rate for such day, (ii) the sum of the Federal Funds Effective Rate for such day plus 0.50% and (iii) the Eurocurrency Rate for a one-month Interest Period on such day for dollars plus 1.0%), plus an applicable percentage in each case determined by the Company's leverage ratio. The credit facility is guaranteed by certain subsidiaries of the Company. The credit facility is subject to various financial covenants that require the Company to maintain certain financial ratios as defined in the agreement. As of June 30, 2019, the Company was in compliance with all such covenants. The revolving loan terminates February 20, 2020 and at June 30, 2019 there was no outstanding balance. Prior to termination, the Company plans to renew the current credit facility or replace it with a similar credit facility.

Other lines of credit

The Company renewed an unsecured bank credit line on May 1, 2019 which provides for funding of up to \$5,000 and bears interest at the prime rate less 1.0%. The credit line was renewed through April 30, 2021. At June 30, 2019, no amount was outstanding.

Interest

The Company paid interest of \$691, \$1,747, and \$767 during the fiscal years ended June 30, 2019, 2018, and 2017, respectively.

NOTE 6. COMMITMENTS AND CONTINGENCIES

Property and Equipment

The Company had an estimated \$2,673 and \$2,076 of commitments at June 30, 2019 and 2018, respectively, to purchase property and equipment.

Leases

The Company leases certain property under operating leases which expire over the next 11 years, but certain of the leases contain options to extend the lease term. All lease payments are based on the lapse of time but include, in some cases, payments for operating expenses and property taxes. There are no purchase options on real estate leases at this time. Certain leases on real estate are subject to annual escalations for increases in operating expenses and property taxes.

As of June 30, 2019, net future minimum lease payments are as follows:

Years Ending June 30,	Lease Payments
2020	\$ 15,559
2021	13,539
2022	11,860
2023	10,169
2024	8,835
Thereafter	11,671
Total	<u>\$ 71,633</u>

Rent expense was \$15,196, \$10,835, and \$10,195 in fiscal 2019, 2018, and 2017, respectively.

NOTE 7. INCOME TAXES

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

	Year Ended June 30,		
	2019	2018	2017
Current:			
Federal	\$ 54,800	\$ 56,060	\$ 80,752
State	12,946	9,948	9,469
Deferred:			
Federal	4,177	(80,509)	17,017
State	3,427	5,625	4,170
	<u>\$ 75,350</u>	<u>\$ (8,876)</u>	<u>\$ 111,408</u>

The tax effects of temporary differences related to deferred taxes shown on the balance sheets were:

	June 30,	
	2019	2018
Deferred tax assets:		
Contract and service revenues	\$ 13,450	\$ —
Expense reserves (bad debts, insurance, franchise tax and vacation)	14,325	11,164
Net operating loss and tax credit carryforwards	2,713	2,759
Other, net	851	2,711
Total gross deferred tax assets	<u>31,339</u>	<u>16,634</u>
Valuation allowance	(415)	(515)
Net deferred tax assets	<u>30,924</u>	<u>16,119</u>
Deferred tax liabilities:		
Accelerated tax depreciation	(31,846)	(32,026)
Accelerated tax amortization	(154,633)	(141,274)
Contract and service revenues	—	(5,067)
Contract and service costs	(61,455)	(46,055)
Total gross deferred liabilities	<u>(247,934)</u>	<u>(224,422)</u>
Net deferred tax liability	<u>\$ (217,010)</u>	<u>\$ (208,303)</u>

The following analysis reconciles the statutory federal income tax rate to the effective income tax rates reflected above:

	Year Ended June 30,		
	2019	2018	2017
Computed "expected" tax expense	21.0%	28.1%	35.0%
Increase (reduction) in taxes resulting from:			
State income taxes, net of federal income tax benefits	3.7%	2.9%	2.6%
Research and development credit	(2.5)%	(2.0)%	(2.1)%
Domestic production activities deduction	—%	(1.4)%	(2.3)%
TCJA deferred tax rate re-measurement	—%	(30.0)%	—%
Tax effects of share-based payments	(1.4)%	(0.8)%	(0.8)%
Other (net)	0.9%	0.7%	0.3%
	<u>21.7%</u>	<u>(2.5)%</u>	<u>32.7%</u>

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 ("TCJA") was enacted into law. The TCJA included numerous provisions that impacted the Company, including reducing the U.S. federal tax rate, eliminating the Domestic Production Activities Deduction, and providing expanded asset expensing. The TCJA reduced the U.S. federal statutory corporate income tax rate from 35% to 21%, effective January 1, 2018. For fiscal 2018, a blended U.S. federal statutory tax rate of approximately 28% applied to the Company.

As of June 30, 2019, the Company has \$4,542 of gross federal net operating loss (“NOL”) carryforwards pertaining to the acquisition of Goldleaf Financial Solutions, Inc. and Bolts Technologies, Inc., which are expected to be utilized after the application of IRC Section 382. Separately, as of June 30, 2019, the Company has state NOL carryforwards with a tax-effected value of \$651. The federal and state losses have varying expiration dates, ranging from fiscal 2019 to 2037. Based on state tax rules which restrict utilization of these losses, the Company believes it is more likely than not that \$415 of these losses will expire unutilized. Accordingly, a valuation allowance of \$415 and \$515 has been recorded against the state net operating losses as of June 30, 2019 and 2018, respectively.

The Company paid income taxes, net of refunds, of \$62,005, \$60,382, and \$96,074 in fiscal 2019, 2018, and 2017, respectively.

At June 30, 2019, the Company had \$10,495 of gross unrecognized tax benefits, \$9,892 of which, if recognized, would affect its effective tax rate. At June 30, 2018, the Company had \$10,227 of unrecognized tax benefits, \$9,366 of which, if recognized, would affect its effective tax rate. The Company had accrued interest and penalties of \$1,514 and \$1,279 related to uncertain tax positions at June 30, 2019 and 2018, respectively. The income tax provision included interest expense and penalties (or benefits) on unrecognized tax benefits of \$128, \$165, and \$(105) in the fiscal years ended June 30, 2019, 2018, and 2017, respectively.

A reconciliation of the unrecognized tax benefits for the fiscal years ended June 30, 2019 and 2018 follows:

	Unrecognized Tax Benefits
Balance at July 1, 2017	\$ 5,449
Additions for current year tax positions	2,157
Reductions for current year tax positions	—
Additions for prior year tax positions	3,130
Reductions for prior year tax positions	(55)
Additions related to business combinations	510
Settlements	(161)
Reductions related to expirations of statute of limitations	(803)
Balance at June 30, 2018	10,227
Additions for current year tax positions	1,135
Reductions for current year tax positions	(40)
Additions for prior year tax positions	562
Reductions for prior year tax positions	(531)
Additions related to business combinations	43
Settlements	(25)
Reductions related to expirations of statute of limitations	(876)
Balance at June 30, 2019	\$ 10,495

The U.S. federal and state income tax returns for fiscal 2016 and all subsequent years remain subject to examination as of June 30, 2019 under statute of limitations rules. The Company anticipates that potential changes due to lapsing statutes of limitations and examination closures could reduce the unrecognized tax benefits balance by \$3,000 - \$4,000 within twelve months of June 30, 2019.

NOTE 8. INDUSTRY AND SUPPLIER CONCENTRATIONS

The Company sells its products to banks, credit unions, and financial institutions throughout the United States and generally does not require collateral. All billings to customers are due 30 days from date of billing. Reserves (which are insignificant at June 30, 2019 and 2018) are maintained for potential credit losses. Customer-related risks are moderated through the inclusion of credit mitigation clauses in the Company’s contracts and through the monitoring of timely payments.

In addition, some of the Company’s key solutions are dependent on technology manufactured by IBM Corporation and Microsoft. Termination of the Company’s relationship with either IBM or Microsoft could have a negative impact on the operations of the Company.

NOTE 9. STOCK-BASED COMPENSATION

The Company's pre-tax operating income for the fiscal years ended June 30, 2019, 2018, and 2017 includes \$12,589, \$11,758, and \$11,129 of equity-based compensation costs, respectively, of which \$10,828, \$10,256, and \$9,861 relates to the restricted stock plans, respectively. Costs are recorded net of estimated forfeitures. The income tax benefits from stock option exercises and restricted stock vests totaled \$6,191, \$3,274, and \$2,638 for the fiscal years ended June 30, 2019, 2018, and 2017, respectively.

2015 Equity Incentive Plan and 2005 Non-Qualified Stock Option Plan

On November 10, 2015, the Company adopted the 2015 Equity Incentive Plan ("2015 EIP") for its employees and non-employee directors. The plan allows for grants of stock options, stock appreciation rights, restricted stock shares or units, and performance shares or units. The maximum number of shares authorized for issuance under the plan is 3,000. For stock options, terms and vesting periods of the options were determined by the Compensation Committee of the Board of Directors when granted. The option period must expire not more than ten years from the options grant date. The options granted under this plan are exercisable beginning three years after grant at an exercise price equal to 100% of the fair market value of the stock at the grant date. The options terminate upon surrender of the option, ninety days after termination of employment, upon the expiration of one year following notification of a deceased optionee, or 10 years after grant.

The Company previously issued options to outside directors under the 2005 Non-Qualified Stock Option Plan ("2005 NSOP"). No additional stock options may be issued under this plan.

The 2005 NSOP was adopted by the Company on September 23, 2005, for its outside directors. Generally, options were exercisable beginning 6 months after grant at an exercise price equal to the fair market value of the stock at the grant date. For individuals who have served less than four continuous years, 25% of all options will vest after one year of service, 50% shall vest after two years, and 75% shall vest after three years of service on the Board. The options terminate upon surrender of the option, upon the expiration of one year following notification of a deceased optionee, or 10 years after grant. 700 shares of common stock were reserved for issuance under this plan with a maximum of 100 for each director.

A summary of option plan activity under the plans is as follows:

	Number of Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value
Outstanding July 1, 2016	50	\$ 22.14	
Granted	32	87.27	
Forfeited	—	—	
Exercised	(10)	28.52	
Outstanding July 1, 2017	72	50.04	
Granted	—	—	
Forfeited	—	—	
Exercised	(20)	17.45	
Outstanding July 1, 2018	52	62.65	
Granted	—	—	
Forfeited	—	—	
Exercised	(20)	23.65	
Outstanding June 30, 2019	32	\$ 87.27	\$ 1,478
Vested and Expected to Vest June 30, 2019	32	\$ 87.27	\$ 1,478
Exercisable June 30, 2019	—	\$ —	\$ —

There were no options granted in fiscal 2019, no options granted during fiscal 2018, and 32 options granted during fiscal 2017. The weighted-average fair value at the grant date of options granted during fiscal 2017 was \$15.78.

The Company utilized a Black-Scholes option pricing model to estimate fair value of the stock option grants at the grant date. All 32 options granted during fiscal 2017 were granted on July 1, 2016. Assumptions such as expected life, volatility, risk-free interest rate, and dividend yield impact the fair value estimate. These assumptions are subjective and generally require significant analysis and judgment to develop. The risk-free interest rate used in the Company's estimate was determined from external data, while volatility, expected life, and dividend yield assumptions were derived from its historical experience with share-based payment arrangements. The appropriate weight to place on historical experience is a matter of judgment, based on relevant facts and circumstances. The assumptions used in estimating fair value and resulting compensation expenses at the grant dates are as follows:

Expected Life (years)	6.50 years
Volatility	19.60 %
Risk-free interest rate	1.24 %
Dividend yield	1.28 %

At June 30, 2019, there was no compensation cost yet to be recognized related to outstanding options.

The total intrinsic value of options exercised was \$2,289, \$2,165, and \$747 for the fiscal years ended June 30, 2019, 2018, and 2017, respectively.

Restricted Stock Plan and 2015 Equity Incentive Plan

The Restricted Stock Plan was adopted by the Company on November 1, 2005, for its employees. The plan expired on November 1, 2015. Up to 3,000 shares of common stock were available for issuance under the plan. The 2015 EIP was adopted by the Company on November 10, 2015 for its employees. Up to 3,000 shares of common stock are available for issuance under the 2015 Equity Incentive Plan. Upon issuance, shares of restricted stock are subject to forfeiture and to restrictions which limit the sale or transfer of the shares during the restriction period. The restrictions are lifted over periods ranging from 3 years to 5 years from grant date.

The following table summarizes non-vested share awards activity:

Share awards	Shares	Weighted Average Grant Date Fair Value
Outstanding July 1, 2016	58	\$ 44.95
Granted	17	87.27
Vested	(38)	37.00
Forfeited	(1)	65.52
Outstanding July 1, 2017	36	73.66
Granted	—	—
Vested	(12)	58.61
Forfeited	(1)	64.60
Outstanding July 1, 2018	23	81.33
Granted	—	—
Vested	(17)	79.41
Forfeited	—	—
Outstanding June 30, 2019	6	\$ 87.27

The non-vested share awards granted prior to July 1, 2016 do not participate in dividends during the restriction period. As a result, the weighted-average fair value of the non-vested share awards was based on the fair market value of the Company's equity shares on the grant date, less the present value of the expected future dividends to be declared during the restriction period, consistent with the methodology for calculating compensation expense on such awards. The non-vested share awards granted during the fiscal year ended June 30, 2017 do participate in dividends during the restriction period. The weighted-average fair value of such participating awards was based on the fair market value on the grant date.

At June 30, 2019, there was no compensation expense yet to be recognized related to non-vested restricted stock share awards.

An amendment to the Restricted Stock Plan was adopted by the Company on August 20, 2010. Unit awards were made to employees remaining in continuous employment throughout the performance period and vary based on the Company's percentile ranking in Total Shareholder Return ("TSR") over the performance period compared to a peer group of companies. TSR is defined as the change in the stock price through the performance period plus dividends per share paid during the performance period, all divided by the stock price at the beginning of the performance period. It is the intention of the Company to settle the unit awards in shares of the Company's stock. Certain Restricted Stock Unit awards are not tied to performance goals, and for such awards, vesting occurs over a period of 1 to 3 years.

The following table summarizes non-vested unit awards as of June 30, 2019, as well as activity for the fiscal year then ended:

Unit awards	Shares	Weighted Average Grant Date Fair Value	Aggregate Intrinsic Value
Outstanding July 1, 2016	429	\$ 58.06	
Granted	130	77.75	
Vested	(136)	50.12	
Forfeited	(37)	54.30	
Outstanding July 1, 2017	386	67.84	
Granted	125	98.41	
Vested	(156)	57.00	
Forfeited	(4)	81.83	
Outstanding July 1, 2018	351	83.37	
Granted	80	169.53	
Vested	(129)	82.06	
Forfeited	(4)	92.32	
Outstanding June 30, 2019	298	\$107.00	\$39,867

The Company utilized a Monte Carlo pricing model customized to the specific provisions of the Company's plan design to value unit awards subject to performance targets on the grant dates. The weighted average assumptions used in this model to estimate fair value at the grant dates are as follows:

	Year Ended June 30,		
	<u>2019</u>	<u>2018</u>	<u>2017</u>
Volatility	15.3%	15.6%	16.0%
Risk free interest rate	2.89%	1.55%	0.93%
Dividend yield	0.9%	1.2%	1.3%
Stock Beta	0.669	0.687	0.684

For the fiscal year ended June 30, 2019, 39 unit awards were granted and measured using the above assumptions. The remaining 41 unit awards granted are not subject to performance targets, and therefore the estimated fair value at measurement date is valued in the same manner as restricted stock award grants.

At June 30, 2019, there was \$13,444 of compensation expense that has yet to be recognized related to non-vested restricted stock unit awards, which will be recognized over a weighted-average period of 1.04 years.

The fair value of restricted shares and units at vest date totaled \$34,645, \$17,951, and \$15,085 for the fiscal years ended June 30, 2019, 2018, and 2017, respectively.

NOTE 10. EARNINGS PER SHARE

The following table reflects the reconciliation between basic and diluted earnings per share.

	Year Ended June 30,		
	<u>2019</u>	<u>2018</u>	<u>2017</u>
Net Income	\$ 271,885	\$ 365,034	\$ 229,561
Common share information:			
Weighted average shares outstanding for basic earnings per share	77,160	77,252	77,856
Dilutive effect of stock options and restricted stock	187	333	399
Weighted average shares outstanding for diluted earnings per share	77,347	77,585	78,255
Basic earnings per share	\$ 3.52	\$ 4.73	\$ 2.95
Diluted earnings per share	\$ 3.52	\$ 4.70	\$ 2.93

Per share information is based on the weighted average number of common shares outstanding for each of the fiscal years. Stock options and restricted stock have been included in the calculation of earnings per share to the extent they are dilutive. The two-class method for computing EPS has not been applied because no outstanding awards contain non-forfeitable rights to participate in dividends. There were no anti-dilutive stock options and restricted stock excluded for fiscal 2019, 41 shares excluded for fiscal 2018, and 32 shares excluded for fiscal 2017.

NOTE 11. EMPLOYEE BENEFIT PLANS

The Company established an employee stock purchase plan in 2006. The plan allows the majority of employees the opportunity to directly purchase shares of the Company at 85% of the closing price of the Company's stock on or around the fifteenth day of each month. During the fiscal years ended June 30, 2019, 2018 and 2017, employees purchased 76, 76, and 81 shares under this plan at average prices of \$118.32, \$98.46, and \$77.52, respectively. As of June 30, 2019, approximately 1,304 shares remained available for future issuance under the plan. The plan does not meet the criteria as a non-compensatory plan. As a result, the Company records the total dollar value of the stock discount given to employees under the plan as expense.

The Company has a defined contribution plan for its employees: the 401(k) Retirement Savings Plan (the "Plan"). The Plan is subject to the Employee Retirement Income Security Act of 1975 ("ERISA") as amended. Under the Plan, the Company matches 100% of full time employee contributions up to 5% of eligible compensation. Prior to January 1, 2019, the Company match was subject to a maximum of \$5 per year. On January 1, 2019, the maximum limit was removed. In order to receive matching contributions, employees must be 18 years of age and be employed for at least six months. The Company has the option of making a discretionary contribution; however, none has been made for any of the three most recent fiscal years. The total matching contributions for the Plan were \$21,003, \$18,821, and \$17,550 for fiscal 2019, 2018 and 2017, respectively.

NOTE 12. BUSINESS ACQUISITIONS

BOLTS Technologies, Inc

On October 5, 2018, the Company acquired all of the equity interest of BOLTS Technologies, Inc. for \$15,046 paid in cash. The acquisition was funded by cash generated from operations. BOLTS Technologies is the developer of boltsOPEN, a digital account opening solution.

Management has completed a purchase price allocation and its assessment of the fair value of acquired assets and liabilities assumed. The recognized amounts of identifiable assets acquired and liabilities assumed, based on their fair values as of October 5, 2018 are set forth below:

Current assets	\$	1,384
Identifiable intangible assets		2,274
Total other liabilities assumed		(1,505)
Total identifiable net assets		<u>2,153</u>
Goodwill		12,893
Net assets acquired	<u>\$</u>	<u>15,046</u>

The amounts shown above include measurement period adjustments made during fiscal 2019 related to income taxes.

The goodwill of \$12,893 arising from this acquisition consists largely of the growth potential, synergies and economies of scale expected from combining the operations of the Company with those of BOLTS, together with the value of BOLTS' assembled workforce. The goodwill from this acquisition has been allocated to the Company's Complementary segment and is not deductible for income tax purposes.

Identifiable intangible assets from this acquisition consist of customer relationships of \$567, computer software of \$1,409, and other intangible assets of \$298. The weighted average amortization period for acquired customer relationships, computer software, and other intangible assets is 15 years, 10 years, and 10 years, respectively.

Current assets were inclusive of cash acquired of \$1,365. The fair value of current assets acquired included accounts receivable of \$14, none of which were expected to be uncollectible.

Costs incurred related to the acquisition of BOLTS in fiscal 2019 totaled \$23 for legal, valuation, and other fees, and were expensed as incurred within selling, general, and administrative expense.

For the fiscal year ended June 30, 2019, the Company's consolidated statements of income included revenue of \$126 and after-tax net loss of \$895 resulting from BOLTS' operations.

The accompanying consolidated statements of income for the fiscal years ended June 30, 2019 and 2018 do not include any revenues and expenses related to this acquisition prior to the acquisition date. The impact of this acquisition was considered immaterial to both the current and prior periods of the Company's consolidated financial statements and, accordingly, pro forma financial information has not been provided.

Agiletics, Inc.

On October 1, 2018, the Company acquired all of the equity interest of Agiletics, Inc. for \$7,649 paid in cash. The acquisition was funded by cash generated from operations. Agiletics is a provider of escrow, investment, and liquidity management solutions for banks serving commercial customers.

Management has completed a purchase price allocation and its assessment of the fair value of acquired assets and liabilities assumed. The recognized amounts of identifiable assets acquired and liabilities assumed, based on their fair values as of October 1, 2018 are set forth below:

Current assets	\$	2,170
Identifiable intangible assets		3,090
Non-current deferred income tax liability		(872)
Total other liabilities assumed		(738)
Total identifiable net assets		<u>3,650</u>
Goodwill		3,999
Net assets acquired	\$	<u><u>7,649</u></u>

The amounts shown above include measurement period adjustments made during fiscal 2019 related to income taxes.

The goodwill of \$3,999 arising from this acquisition consists largely of the growth potential, synergies and economies of scale expected from combining the operations of the Company with those of Agiletics. The goodwill from this acquisition has been allocated to the Company's Core segment and is not deductible for income tax purposes.

Identifiable intangible assets from this acquisition consist of customer relationships of \$2,198, computer software of \$701, and other intangible assets of \$191. The weighted average amortization period for acquired customer relationships, computer software, and other intangible assets is 15 years, 10 years, and 10 years, respectively.

Current assets were inclusive of cash acquired of \$1,349. The fair value of current assets acquired included accounts receivable of \$302, none of which were expected to be uncollectible.

Costs incurred related to the acquisition of Agiletics in fiscal 2019 totaled \$36 for legal, valuation, and other fees, and were expensed as incurred within selling, general, and administrative expense.

For the fiscal year ended June 30, 2019, the Company's consolidated statements of income included revenue of \$926 and after-tax net loss of \$192 resulting from Agiletics' operations.

The accompanying consolidated statements of income for the fiscal years ended June 30, 2019 and 2018 do not include any revenues and expenses related to this acquisition prior to the acquisition date. The impact of this acquisition was considered immaterial to both the current and prior periods of the Company's consolidated financial statements and, accordingly, pro forma financial information has not been provided.

Ensenta Corporation

On December 21, 2017, the Company acquired all of the equity interest of EST Holdings, Inc. and its wholly-owned subsidiary, EST Interco, Inc., for \$134,381 paid in cash. EST Holdings, Inc. and EST Interco, Inc. jointly own all of the outstanding equity of Ensenta Corporation ("Ensenta"), a California-based provider of real-time, cloud-based solutions for mobile and online payments and deposits. This acquisition was partially funded by a draw on the Company's revolving credit facility, with the remaining amount funded by existing operating cash. The addition of Ensenta Corporation to the JHA Payment Solutions Group expands the Company's ability to conduct real-time transactions with third-party platforms, extending its presence in the credit union market through shared branching technology.

Management has completed a purchase price allocation of Ensenta and its assessment of the fair value of acquired assets and liabilities assumed. The recognized amounts of identifiable assets acquired and liabilities assumed, based upon their fair values as of December 21, 2017 are set forth below:

Current assets	\$	14,125
Long-term assets		586
Identifiable intangible assets		58,806
Non-current deferred income tax liability		(21,859)
Total other liabilities assumed		(8,496)
Total identifiable net assets		<u>43,162</u>
Goodwill		91,219
Net assets acquired	\$	<u><u>134,381</u></u>

The amounts shown above include measurement period adjustments made during the third and fourth quarters of fiscal 2018, and the

second quarter of fiscal 2019, related to income tax adjustments and a fair value assessment.

The goodwill of \$91,219 arising from this acquisition consists largely of the growth potential, synergies and economies of scale expected from combining the operations of the Company with those of Ensenta, together with the value of Ensenta's assembled workforce. The goodwill from this acquisition has been allocated to the Company's Payments segment and is not expected to be deductible for income tax purposes.

Identifiable intangible assets from this acquisition consist of customer relationships of \$37,800, computer software of \$16,505, and other intangible assets of \$4,501. The weighted average amortization period for acquired customer relationships, computer software, and other intangible assets is 15 years, 10 years, and 10 years, respectively.

Current assets were inclusive of cash acquired of \$7,274. The fair value of current assets acquired included accounts receivable of \$4,668, none of which were expected to be uncollectible.

Costs incurred related to the acquisition of Ensenta in fiscal 2018 totaled \$339 for legal, valuation, and other fees, and were expensed as incurred within selling, general, and administrative expense.

For the fiscal year ended June 30, 2019, the Company's consolidated statements of income included revenue of \$35,688 and after-tax net income of \$11,163. For the fiscal year ended June 30, 2018, Ensenta contributed revenue of \$15,776 and after-tax net income of \$8,197. The after-tax net income for the fiscal year ended June 30, 2018 included a large tax benefit recorded as a result of the TCJA. Excluding that benefit, the Company's after tax net income resulting from Ensenta's operations totaled \$536.

The accompanying consolidated statements of income for the fiscal year ended June 30, 2019 do not include any revenues and expenses related to this acquisition prior to the acquisition date. The following unaudited pro forma consolidated financial information is presented as if this acquisition had occurred at the beginning of the prior period presented. In addition, this unaudited pro forma financial information is provided for illustrative purposes only and should not be relied upon as necessarily being indicative of the historical results that would have been obtained if the acquisition had actually occurred during this period, or the results that may be obtained in the future as a result of the acquisition.

	Year Ended		
	June 30,		
	<u>2019</u>	<u>2018</u>	<u>2017</u>
	Actuals	Proforma	Proforma
Revenue	\$ 1,552,691	\$ 1,483,915	\$ 1,411,873
Net Income	271,885	366,544	231,696
Basic Earnings Per Share	\$ 3.52	\$ 4.74	\$ 2.98
Diluted Earnings Per Share	\$ 3.52	\$ 4.72	\$ 2.96

Vanguard Software Group

On August 31, 2017, the Company acquired all of the equity interest of Vanguard Software Group, a Florida-based company specializing in the underwriting, spreading, and online decisioning of commercial loans, for \$10,744 paid in cash. This acquisition was funded using existing operating cash. The addition of Vanguard Software Group to the Company's ProfitStars® Lending Solutions Group expands functionality offered to clients, allowing for near-real-time communication with JHA's core processing and ancillary solutions, and also enhances cross-sell opportunities.

Management has completed a purchase price allocation of Vanguard Software Group and its assessment of the fair value of acquired assets and liabilities assumed. The recognized amounts of identifiable assets acquired and liabilities assumed, based upon their fair values as of August 31, 2017 are set forth below:

Current assets	\$ 1,153
Long-term assets	9
Identifiable intangible assets	4,200
Total liabilities assumed	(1,117)
Total identifiable net assets	4,245
Goodwill	6,499
Net assets acquired	\$ 10,744

The goodwill of \$6,499 arising from this acquisition consists largely of the growth potential, synergies and economies of scale expected from combining the operations of the Company with those of Vanguard Software Group, together with the value of Vanguard Software Group's assembled workforce. The goodwill from this acquisition has been allocated to the Company's Complementary segment and is expected to be deductible for income tax purposes.

Identifiable intangible assets from this acquisition consist of customer relationships of \$2,234, computer software of \$1,426, and other

intangible assets of \$540. The weighted average amortization periods for acquired customer relationships, computer software, and other intangible assets are 15 years, 10 years, and 10 years, respectively.

Current assets were inclusive of cash acquired of \$289. The fair value of current assets acquired included accounts receivable of \$847, none of which were expected to be uncollectible.

Costs incurred related to the acquisition of Vanguard Software Group were immaterial for the periods presented.

For the fiscal year ended June 30, 2019, the Company's consolidated statements of income included revenue of \$3,120 and after-tax net loss of \$243. For the fiscal year ended June 30, 2018, Vanguard contributed revenue of \$1,486 and after-tax net loss of \$870.

The accompanying consolidated statements of income for the fiscal year ended June 30, 2019 do not include any revenues and expenses related to this acquisition prior to the acquisition date. The impact of this acquisition was considered immaterial to both the current and prior periods of the Company's consolidated financial statements and, accordingly, pro forma financial information has not been provided.

NOTE 13. REPORTABLE SEGMENT INFORMATION

The Company is a leading provider of technology solutions and payment processing services primarily for financial services organizations.

Beginning in the first quarter of fiscal 2018, JHA changed its reportable segment structure from two customer-centric segments, Bank and Credit Union, to four product-centric segments. The change was made based on the view of its Chief Executive Officer, who is also the Chief Operating Decision Maker, that the Company could be more effectively managed using a product-centric approach and was driven by the first budgetary process under his administration.

The Company's operations are classified into four reportable segments: Core, Payments, Complementary, and Corporate and Other. The Core segment provides core information processing platforms to banks and credit unions, which consist of integrated applications required to process deposit, loan, and general ledger transactions, and maintain centralized customer/member information. The Payments segment provides secure payment processing tools and services, including ATM, debit, and credit card processing services, online and mobile bill pay solutions, and risk management products and services. The Complementary segment provides additional software and services that can be integrated with the Company's core solutions or used independently. The Corporate & Other segment includes revenue and costs from hardware and other products not attributable to the other three segments, as well as operating costs not directly attributable to the other three segments.

The Company evaluates the performance of its segments and allocates resources to them based on various factors, including performance against trend, budget, and forecast. Only revenue and costs of revenue are considered in the evaluation for each segment.

An immaterial adjustment was made to reclassify revenue recognized in fiscal 2018 from the Core to the Corporate and Other Segment. For the fiscal year ended June 30, 2018, the amount reclassified totaled \$2,968.

	Year Ended June 30, 2019				
	Core	Payments	Complementary	Corporate & Other	Total
REVENUE					
Services and Support	\$ 506,007	\$ 52,756	\$ 348,631	\$ 51,095	\$ 958,489
Processing	28,422	495,563	69,584	633	594,202
Total Revenue	534,429	548,319	418,215	51,728	1,552,691
Cost of Revenue	243,989	273,261	175,737	230,043	923,030
Research and Development					96,378
Selling, General, and Administrative					185,998
Gain on Disposal of Businesses					—
Total Expenses					1,205,406
SEGMENT INCOME	\$ 290,440	\$ 275,058	\$ 242,478	\$ (178,315)	
OPERATING INCOME					347,285
INTEREST INCOME (EXPENSE)					(50)
INCOME BEFORE INCOME TAXES					\$ 347,235

**Year Ended
June 30, 2018**

	Core	Payments	Complementary	Corporate & Other	Total
REVENUE					
Services and Support	\$ 482,216	\$ 47,641	\$ 333,812	\$ 57,070	\$ 920,739
Processing	27,605	460,690	61,607	156	550,058
Total Revenue	<u>509,821</u>	<u>508,331</u>	<u>395,419</u>	<u>57,226</u>	<u>1,470,797</u>
Cost of Revenue	232,868	245,269	163,905	211,096	853,138
Research and Development					90,340
Selling, General, and Administrative					171,710
Gain on Disposal of Businesses					(1,894)
Total Expenses					<u>1,113,294</u>
SEGMENT INCOME	<u>\$ 276,953</u>	<u>\$ 263,062</u>	<u>\$ 231,514</u>	<u>\$ (153,870)</u>	
OPERATING INCOME					357,503
INTEREST INCOME (EXPENSE)					(1,345)
INCOME BEFORE INCOME TAXES					<u>\$ 356,158</u>

**Year Ended
June 30, 2017**

	Core	Payments	Complementary	Corporate & Other	Total
REVENUE					
Services and Support	\$ 452,712	\$ 43,477	\$ 322,784	\$ 62,762	\$ 881,735
Processing	24,893	428,511	53,027	124	506,555
Total Revenue	<u>477,605</u>	<u>471,988</u>	<u>375,811</u>	<u>62,886</u>	<u>1,388,290</u>
Cost of Revenue	219,440	222,685	155,084	208,646	805,855
Research and Development					84,753
Selling, General, and Administrative					159,235
Gain on Disposal of Businesses					(3,270)
Total Expenses					<u>1,046,573</u>
SEGMENT INCOME	<u>\$ 258,165</u>	<u>\$ 249,303</u>	<u>\$ 220,727</u>	<u>\$ (145,760)</u>	
OPERATING INCOME					341,717
INTEREST INCOME (EXPENSE)					(748)
INCOME BEFORE INCOME TAXES					<u>\$ 340,969</u>

The Company has not disclosed any additional asset information by segment, as the information is not produced internally and its preparation is impracticable.

NOTE 14: SUBSEQUENT EVENTS

Dividends

On August 23, 2019, the Company's Board of Directors declared a cash dividend of \$0.40 per share on its common stock, payable on September 30, 2019 to shareholders of record on September 9, 2019.

Acquisition

On July 1, 2019, the Company acquired 100% of the equity interest in Geezeo for a net cash outlay of \$37,776. The Company has not yet completed its purchase price allocation for this acquisition. Geezeo is a Boston-based provider of retail and business digital financial management solutions and was a privately-held company.

The acquisition was funded with operating cash. Due to the timing of the acquisition, the Company has not yet completed its purchase accounting procedures with respect to this transaction. Geezeo's historical operating results would not materially affect the Company's consolidated financial statements and, accordingly, pro forma financial information has not been provided.

QUARTERLY FINANCIAL INFORMATION
(unaudited)

For the Year Ended June 30, 2019

	Quarter 1	Quarter 2	Quarter 3	Quarter 4	Total
REVENUE	\$ 392,543	\$ 386,275	\$ 380,364	\$ 393,509	\$ 1,552,691
EXPENSES					
Cost of Revenue	220,112	227,284	235,594	240,040	923,030
Research & Development	24,026	23,990	23,442	24,920	96,378
Selling, General, & Administrative	45,183	46,797	44,887	49,131	185,998
Total Expenses	289,321	298,071	303,923	314,091	1,205,406
OPERATING INCOME	103,222	88,204	76,441	79,418	347,285
INTEREST INCOME (EXPENSE)					
Interest income	291	252	155	178	876
Interest expense	(147)	(148)	(224)	(407)	(926)
Total interest income (expense)	144	104	(69)	(229)	(50)
INCOME BEFORE INCOME TAXES	103,366	88,308	76,372	79,189	347,235
PROVISION/ (BENEFIT) FOR INCOME TAXES	19,815	20,219	17,120	18,196	75,350
NET INCOME	\$ 83,551	\$ 68,089	\$ 59,252	\$ 60,993	\$ 271,885
Basic earnings per share	\$ 1.08	\$ 0.88	\$ 0.77	\$ 0.79	\$ 3.52
Basic weighted average shares outstanding	77,188	77,216	77,177	77,060	77,160
Diluted earnings per share	\$ 1.08	\$ 0.88	\$ 0.77	\$ 0.79	\$ 3.52
Diluted weighted average shares outstanding	77,537	77,409	77,286	77,157	77,347

For the Year Ended June 30, 2018*

	<u>Quarter 1</u>	<u>Quarter 2</u>	<u>Quarter 3</u>	<u>Quarter 4</u>	<u>Total</u>
REVENUE	\$ 361,284	\$ 357,209	\$ 374,048	\$ 378,256	\$ 1,470,797
EXPENSES					
Cost of Revenue	203,915	207,100	218,517	223,606	853,138
Research & Development	20,929	22,414	22,591	24,406	90,340
Selling, General, & Administrative	41,088	43,094	42,234	45,294	171,710
Gain on disposal of businesses	(1,705)	(189)	—	—	(1,894)
Total Expenses	264,227	272,419	283,342	293,306	1,113,294
OPERATING INCOME	97,057	84,790	90,706	84,950	357,503
INTEREST INCOME (EXPENSE)					
Interest income	147	146	130	152	575
Interest expense	(189)	(250)	(734)	(747)	(1,920)
Total interest income (expense)	(42)	(104)	(604)	(595)	(1,345)
INCOME BEFORE INCOME TAXES	97,015	84,686	90,102	84,355	356,158
PROVISION/ (BENEFIT) FOR INCOME TAXES	30,145	(76,557)	21,017	16,519	(8,876)
NET INCOME	\$ 66,870	\$ 161,243	\$ 69,085	\$ 67,836	\$ 365,034
Basic net income per share	\$ 0.87	\$ 2.09	\$ 0.89	\$ 0.88	\$ 4.73
Basic weighted average shares outstanding	77,283	77,218	77,247	77,261	77,252
Diluted net income per share	\$ 0.86	\$ 2.08	\$ 0.89	\$ 0.87	\$ 4.70
Diluted weighted average shares outstanding	77,646	77,565	77,546	77,585	77,585

*As previously disclosed, the Company adopted ASU 2014-09 effective July 1, 2018 using the full retrospective approach. In connection therewith, in its previously filed fiscal 2019 Form 10-Q's, the Company adjusted its comparative fiscal 2018 financial information, including its June 30, 2018 balance sheet, to reflect the retrospective effects of applying ASC 606. In connection with the preparation of the Company's consolidated financial statements for the year ended June 30, 2019, the Company identified a \$23,500 error in the as adjusted June 30, 2018 balance sheet that was disclosed within the previously filed fiscal 2019 Form 10-Q's, which resulted in an overstatement of current deferred revenues and a corresponding understatement of non-current deferred revenues in such unaudited quarterly filings. Management has determined that such misclassification error did not result in the previously filed 2019 Form 10-Q's being materially misstated.

BOARD OF DIRECTORS

JOHN F. "JACK" PRIM

CHAIRMAN OF THE BOARD

Former Chief Executive Officer, Jack Henry & Associates, Inc.
Monett, Missouri

DAVID B. FOSS

PRESIDENT AND CHIEF EXECUTIVE OFFICER

Jack Henry & Associates, Inc.
Monett, Missouri

MATTHEW C. FLANIGAN

VICE CHAIRMAN AND LEAD DIRECTOR, JACK HENRY & ASSOCIATES, INC.

Former Executive Vice President and Chief Financial Officer
Leggett & Platt, Incorporated
Carthage, Missouri

THOMAS H. WILSON, JR.

MANAGING PARTNER

DecisionPoint Advisors, LLC
Charlotte, North Carolina

JACQUELINE R. FIEGEL

CHAIRMAN/CENTRAL OKLAHOMA AREA

Prosperity Bank
Oklahoma City, Oklahoma

THOMAS A. WIMSETT

CHAIRMAN AND MANAGING PARTNER

Wimsett & Company, LLC
Louisville, Kentucky

LAURA G. KELLY

MANAGING DIRECTOR

CoreLogic
Irvine, California

SHRUTI S. MIYASHIRO

PRESIDENT AND CHIEF EXECUTIVE OFFICER

Orange County's Credit Union
Santa Ana, California

WESLEY A. BROWN

PRESIDENT

Bent St. Vrain & Company, LLC
Denver, Colorado

EXECUTIVE OFFICERS

DAVID B. FOSS

President and Chief Executive Officer

KEVIN D. WILLIAMS

Chief Financial Officer and Treasurer

MARK S. FORBIS

Executive Vice President and Chief Technology Officer

CRAIG K. MORGAN

General Counsel and Secretary

GREGORY R. ADELSON

Vice President and General Manager of JHA Payment Solutions

RONALD L. MOSES

Vice President and General Manager of Consumer and Commercial Solutions

RUSSELL L. BERNTHAL

Vice President and President of ProfitStars

STACEY E. ZENGEL

Vice President and President of Jack Henry Banking

STEVEN W. TOMSON

Vice President of Sales and Marketing

TEDDY I. BILKE

Vice President and President of Symitar

ANNUAL MEETING

The annual meeting of shareholders will be held on **Thursday, November 14** at **11 a.m. CT** at Jack Henry's Corporate Headquarters, Monett, Missouri.

FORM 10-K

A copy of the company's Form 10-K is available upon request to the Chief Financial Officer at the corporate headquarters address or from our website at www.jackhenry.com.

TRANSFER AGENT AND REGISTRAR

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P.O. Box 505000
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