

AMDOCS LTD
Form 20-F
December 10, 2018
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

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

For the fiscal year ended September 30, 2018

OR

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

For the transition period from _____ to _____.

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report

Commission File Number: 1-14840

AMDOCS LIMITED

(Exact name of Registrant as specified in its charter)

Island of Guernsey

(Jurisdiction of incorporation or organization)

Hirzel House, Smith Street,

St. Peter Port, Guernsey, GY1 2NG

Amdocs, Inc.

1390 Timberlake Manor Parkway, Chesterfield, Missouri 63017

(Address of principal executive offices)

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(Name, Telephone, Email and/or Facsimile number and Address of Company Contact Person)

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

Title of Each Class	Name of Exchange on Which Registered
Ordinary Shares, par value £0.01	Nasdaq Global Select Market

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

Ordinary Shares, par value £0.01
(Title of class)

140,176,828(1)
(Number of shares)

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

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Emerging growth company

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

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as issued

Other

by the International Accounting Standards Board

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

- (1) Net of 135,718,905 shares held in treasury. Does not include 6,525,033 ordinary shares reserved for issuance upon exercise of stock options and vesting of restricted stock units granted under our stock option plan or by companies we have acquired.

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Unless the context otherwise requires, all references in this Annual Report on Form 20-F to Amdocs, we, our, us or the Company refer to Amdocs Limited and its consolidated subsidiaries and their respective predecessors, and references to our software products, refer to current and subsequent versions. Our consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States, or U.S. GAAP, and are expressed in U.S. dollars. References to dollars or \$ are to U.S. dollars. Our fiscal year ends on September 30 of each calendar year. References to any specific fiscal year refer to the year ended September 30 of the calendar year specified. For example, we refer to the fiscal year ending September 30, 2018 as fiscal 2018.

We own, have rights to or use trademarks or trade names in conjunction with the sale of our products and services, including Amdocs , CES and The New World of Customer Experience , among others.

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Forward Looking Statements

This Annual Report on Form 20-F contains forward-looking statements (within the meaning of the U.S. federal securities laws) that involve substantial risks and uncertainties. You can identify these forward-looking statements by words such as expect, anticipate, believe, seek, estimate, project, forecast, continue, potential, should, intend and may, and other words that convey uncertainty of future events or outcome. Statements that we make in this Annual Report that are not statements of historical fact also may be forward-looking statements. Forward-looking statements are not guarantees of future performance, and involve risks, uncertainties and assumptions that may cause our actual results to differ materially from the expectations that we describe in our forward-looking statements. There may be events in the future that we are not accurately able to predict, or over which we have no control. You should not place undue reliance on forward-looking statements. Although we may elect to update forward-looking statements in the future, we disclaim any obligation to do so, even if our assumptions and projections change, except where applicable law may otherwise require us to do so. Readers should not rely on those forward-looking statements as representing our views as of any date subsequent to the date of the filing of this Annual Report on Form 20-F.

Important factors that may affect these projections or expectations include, but are not limited to: changes in the overall economy; changes in competition in markets in which we operate; changes in the demand for our products and services; the loss of a significant customer; consolidation within the industries in which our customers operate; our ability to derive revenues in the future from our current research and development efforts; changes in the telecommunications regulatory environment; changes in technology that impact both the markets we serve and the types of products and services we offer; financial difficulties of our customers; losses of key personnel; difficulties in completing or integrating acquisitions; litigation and regulatory proceedings; and acts of war or terrorism. For a discussion of these and other important factors, please read the information set forth below under the caption Risk Factors.

Table of Contents**PART I****ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION**Selected Financial Data**

Our historical consolidated financial statements are prepared in accordance with U.S. GAAP and presented in U.S. dollars. The selected historical consolidated financial information set forth below has been derived from our historical consolidated financial statements for the years presented. Historical information as of and for the five years ended September 30, 2018 is derived from our consolidated financial statements, which have been audited by Ernst & Young LLP, our independent registered public accounting firm. You should read the information presented below in conjunction with those statements.

The information presented below is qualified by the more detailed historical consolidated financial statements, the notes thereto and the discussion under **Operating and Financial Review and Prospects** included elsewhere in this Annual Report.

	2018	2017	2016	2015	2014
	(in thousands, except share data)				
Statement of Operations Data:					
Revenue	\$ 3,974,837	\$ 3,867,155	\$ 3,718,229	\$ 3,643,538	\$ 3,563,637
Operating income	428,307	517,333	483,141	515,948	495,648
Net income	354,396	436,826	409,331	446,163	422,122
Basic earnings per share	2.49	2.99	2.74	2.89	2.65
Diluted earnings per share	2.47	2.96	2.71	2.85	2.62
Dividends declared per share(1)	0.970	0.855	0.755	0.665	0.595

	2018	2017	2016	2015	2014
	(in thousands)				
Balance Sheet Data:					
Cash, cash equivalents and short-term interest-bearing investments	\$ 519,216	\$ 979,608	\$ 1,095,723	\$ 1,354,012	\$ 1,424,465
Total assets	5,347,815	5,279,380	5,331,355	5,324,652	5,185,277
Long-term obligations					
Convertible senior notes(2)				571	603
Equity	3,492,042	3,574,070	3,453,561	3,406,842	3,395,836

- (1) In the fourth quarter of fiscal 2012, we instituted a discretionary quarterly cash dividend program in the amount of \$0.13 per share, with the first payment in the first quarter of fiscal 2013. In January 2014, January 2015, February 2016, January 2017 and January 2018, our shareholders approved increases in the rate of the quarterly cash dividend to \$0.155 per share, \$0.17 per share, \$0.195 per share, \$0.22 per share and \$0.25, respectively. In November 2018, our Board of Directors approved, subject to shareholder approval at the January 2019 annual general meeting of shareholders, an increase in the rate of the quarterly cash dividend to \$0.285 per share, with the first payment anticipated to be paid in April 2019.

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- (2) On September 6, 2016 (the Redemption Date), we redeemed all of our outstanding convertible notes due 2024 at a redemption price of 100% of the principal amount of the notes, plus accrued and unpaid interest up to, but excluding, the Redemption Date.

	Ordinary Shares		Additional Paid-In Capital (in thousands)	Treasury Stock
	Shares	Amount		
Statement of Changes in Shareholders Equity Data:				
Balance as of September 30, 2015	151,150	\$ 4,331	\$ 3,182,573	\$ (3,611,105)
Employee stock options exercised	2,694	39	89,728	
Repurchase of shares(1)	(7,236)			(413,423)
Tax benefit from equity-based awards			7,788	
Issuance of restricted stock, net of forfeitures	526	7		
Equity-based compensation expense related to employees			42,700	
Balance as of September 30, 2016	147,134	\$ 4,377	\$ 3,322,789	\$ (4,024,527)
Employee stock options exercised	2,220	28	87,948	
Repurchase of shares(1)	(5,519)			(340,597)
Tax benefit from equity-based awards			3,611	
Issuance of restricted stock, net of forfeitures	556	5		
Equity-based compensation expense related to employees			44,539	
Balance as of September 30, 2017	144,391	\$ 4,410	\$ 3,458,887	\$ (4,365,124)
Employee stock options exercised	1,800	24	81,262	
Repurchase of shares(1)	(6,337)			(419,228)
Tax benefit from equity-based awards				
Issuance of restricted stock, net of forfeitures	323	2		
Equity-based compensation expense related to employees			47,476	
Balance as of September 30, 2018	140,177	\$ 4,436	\$ 3,587,625	\$ (4,784,352)

- (1) From time to time, our Board of Directors can adopt share repurchase plans authorizing the repurchase of our outstanding ordinary shares. In February 2016, our Board of Directors adopted a share repurchase plan authorizing repurchase of up to \$750.0 million of our outstanding ordinary shares. In November 2017, our Board of Directors adopted another share repurchase plan authorizing the repurchase of up to an additional \$800.0 million of our outstanding ordinary shares. The authorizations have no expiration date and permit us to purchase our ordinary shares in open market or privately negotiated transactions at times and prices that we consider appropriate. In fiscal year 2016, we repurchased 7.2 million ordinary shares at an average price of \$57.12 per share (excluding broker and transaction fees). In fiscal year 2017, we repurchased 5.5 million ordinary shares at an average price of \$61.70 per share (excluding broker and transaction fees). In fiscal year 2018, we repurchased 6.3 million ordinary shares at an average price of \$66.14 per share (excluding broker and transaction fees). In April 2018, we completed the repurchase of the remaining authorized amount under the February 2016

plan and began executing repurchases under the November 2017 plan. As of September 30, 2018, we had remaining authority to repurchase up to \$637.1 million of our outstanding ordinary shares under the November 2017 plan.

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Risk Factors

We are exposed to general global economic and market conditions, particularly those impacting the communications industry.

We provide software and services primarily to service providers in the communications industry, and our business is therefore highly dependent upon conditions in that industry. Developments in the communications industry, such as the impact of global economic conditions, industry consolidation, emergence of new competitors, commoditization of voice, video and data services and changes in the regulatory environment, at times have had, and could continue to have, a material adverse effect on our existing or potential customers. These conditions have reduced, and may continue to reduce, the high growth rates that the communications industry had previously experienced and caused the market value, financial results and prospects and capital spending levels of many communications companies to decline or degrade. Industry consolidation involving our customers, which has been significant in recent years, may place us at risk of losing business to the incumbent provider to one of the parties to the consolidation or to new competitors. During previous economic downturns, the communications industry experienced significant financial pressures that caused many in the industry to cut expenses and limit investment in capital intensive projects and, in some cases, led to restructurings and bankruptcies. Continuing uncertainty as to the pace of economic recovery following such economic downturns may have adverse consequences for our customers and our business.

Downturns in the business climate for communications companies have in the past resulted in slower customer buying decisions and price pressures that adversely affected our ability to generate revenue. Adverse market conditions may have a negative impact on our business by decreasing our new customer engagements and the size of initial spending commitments under those engagements, as well as decreasing the level of demand and expenditures by existing customers. In addition, a slowdown in buying decisions may extend our sales cycle period and may limit our ability to forecast our flow of new contracts. If such adverse business conditions arise in the future, our business may be harmed.

If we fail to adapt to changing market conditions and cannot compete successfully with existing or new competitors, our business could be harmed.

We may be unable to compete successfully with existing or new competitors. Our failure to adapt to changing market conditions and to compete successfully with established or new competitors could have a material adverse effect on our results of operations and financial condition. We face intense competition for the software products and services that we sell, including competition for managed services we provide to customers under long-term service agreements. These managed services include management of data center operations and IT infrastructure, application management and ongoing support, systems modernization and consolidation and management of end-to-end business processes for billing and customer care operations.

The market for communications information systems is highly competitive and fragmented, and we expect competition to continue to increase. We compete with independent software and service providers and with the in-house IT and network departments of communications companies. Our main competitors include firms that provide IT services (including consulting, systems integration and managed services), software vendors that sell products for particular aspects of a total information system, software vendors that specialize in systems for particular communications services (such as Internet, wireline and wireless services, cable, satellite and service bureaus) and network equipment providers that offer software systems in combination with the sale of network equipment. We also compete with companies that provide digital commerce software and solutions.

We believe that our ability to compete with other vendors as well as with in-house IT and network departments of communications companies, depends on a number of factors, including:

the development by others of software products and services that are competitive with our products and services,

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the price at which others offer competitive software and services,

the ability of competitors to deliver projects at a level of quality that rivals our own,

the responsiveness of our competitors to customer needs, and

the ability of our competitors to hire, retain and motivate key personnel.

A number of our competitors have long operating histories, large customer bases, substantial financial, technical, sales, marketing and other resources, and strong name recognition. Current and potential competitors have established, and may establish in the future, cooperative relationships among themselves or with third parties to increase their abilities to address the needs of our existing or prospective customers. In addition, our competitors have acquired, and may continue to acquire in the future, companies that may enhance their market offerings. Accordingly, new competitors or alliances among competitors may emerge and rapidly acquire significant market share. As a result, our competitors may be able to adapt more quickly than us to new or emerging technologies and changes in customer requirements, and may be able to devote greater resources to the promotion and sale of their products. We cannot assure you that we will be able to compete successfully with existing or new competitors. If we fail to adapt to changing market conditions and to compete successfully with established or new competitors, our results of operations and financial condition may be adversely affected.

If we do not continually enhance our products and service offerings, introduce new products and features and adopt and monetize new technologies and methodologies in the marketplace we may have difficulty retaining existing customers and attracting new customers.

We believe that our future success will depend, to a significant extent, upon our ability to enhance our existing products and services, to introduce new products, services and features to meet the requirements of our customers, and to adopt to and leverage new technologies and methodologies such as cloud, microservices-based architecture, DevOps, automation, and artificial intelligence, in a rapidly developing and evolving market. We devote significant resources to refining and expanding our base software modules and to developing our products, services and development methodologies and tools. In some instances, we rely on cooperative relationships with third parties to assist us in delivering certain products and services to our customers. Our present or future products, services and technology may not satisfy the evolving needs of the communications industry or of other industries that we serve. If we are unable to anticipate or respond adequately to such needs, due to resource, technological or other constraints, our business and results of operations could be harmed.

Our future success will depend on our ability to develop and maintain long-term relationships with our customers and to meet their expectations in providing products and performing services.

We believe that our future success will depend to a significant extent on our ability to develop and maintain long-term relationships with successful network operators and service providers with the financial and other resources required to invest in significant ongoing development of our products and services. If we are unable to develop new customer relationships, our business will be harmed. In addition, our business and results of operations depend in part on our ability to provide high quality services to customers that have already implemented our products. If we are unable to meet customers' expectations in providing products or performing services, our business and results of operations could be harmed.

If our security measures for our software, hardware, services or cloud offerings are compromised and as a result, our data, our customers' data or our IT systems are accessed improperly, made unavailable, or improperly modified, our products and services may be perceived as vulnerable, which may materially affect our business and result in potential legal liability.

Our products and services, including our cloud offerings, store, retrieve, and manage our customers' information and data, as well as our own data. We have a reputation for secure and reliable product offerings and related services and we have invested a great deal of time and resources in protecting the integrity and security of

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our products, services and the internal and external data that we manage. Despite our efforts to implement network security measures, we cannot guarantee that our systems are fully protected from vulnerabilities related to IT-related viruses, worms and other malicious software programs, attacks, break-ins and similar disruptions from unauthorized tampering by computer hackers and others. Such cybersecurity incident could include an attempt to gain unauthorized access to digital systems for purposes of misappropriating assets or sensitive information, corrupting data, or causing operational disruption. Phishing and other types of attempts to obtain unauthorized information or access are often sophisticated and difficult to detect or defeat. In addition, security measures in our products and services may be penetrated or bypassed by computer hackers and others who may gain unauthorized access to our or our customers' or partners' software, hardware, cloud offerings, networks, data or systems. These actors may use a wide variety of methods, which may include developing and deploying malicious software to attack our products and services and gain access to our networks and datacenters, using social engineering techniques, or acting in a coordinated manner to launch distributed denial of service or other coordinated attacks. This is also true for third party data, products or services incorporated into our own. Data may also be accessed or modified improperly as a result of customer, partner or employee error or malfeasance and third parties may attempt to fraudulently induce customers, partners, employees or suppliers into disclosing sensitive information such as user names, passwords or other information in order to gain access to our data or IT systems or our customers' or partners' data or IT systems. Any of the foregoing occurrences could create system disruptions and cause shutdowns or denials of service or compromise data, including personal or confidential information, of us, our partners or our customers.

If a cyber-attack or other security incident (for example phishing, advanced persistent threats, or social engineering) were to result in unauthorized access to, or deletion of, and/or modification and/or exfiltration of our customers' data, other external data or our own data or our IT systems or if the services we provide to our customers were disrupted, customers could lose confidence in the security and reliability of our products and services, including our cloud offerings, and perceive them not to be secure. This in turn could lead to fewer customers using our products and services and result in reduced revenue and earnings. The costs we would incur to address and fix these security incidents would increase our expenses. These risks will increase as we continue to grow our cloud and network offerings and store and process increasingly large amounts of data, including personal information and our customers' confidential information and data and other external data, and host or manage parts of our customers' businesses in cloud-based IT environments. In addition, we have acquired certain companies, products, services and technologies over the years and have partnered with other companies for certain of our other offerings. While we make significant efforts to address any IT security issues with respect to our acquired companies and partners, we may still inherit such risks when we integrate these companies, products, services and technologies or work with our partners.

Any of the events described above could cause our customers to make claims against us for damages allegedly resulting from a security breach or service disruption, which could adversely affect our business, results of operation and financial condition.

We are subject to laws, directives, and regulations relating to the collection, use, retention, disclosure, security and transfer of personal data. These laws, directives, and regulations, and their interpretation and enforcement continue to evolve and may be inconsistent from jurisdiction to jurisdiction. For example, the General Data Protection Regulation (GDPR), which regulates the use of personally identifiable information, went into effect in the European Union (EU) on May 25, 2018, applies globally to all of our activities conducted from an establishment in the EU, to related products and services that we offer to EU customers and to non-EU customers which offer services in the EU. The GDPR also affects our role as product developers, as we are required to adopt privacy by design principles in order to address our customers' need to apply privacy adequate solutions when handling their subscribers' data. Complying with the GDPR and similar emerging and changing privacy and data protection requirements may cause us to incur substantial costs or require us to change our business practices. Noncompliance with our legal obligations relating to privacy and data protection could result in penalties, fines, legal proceedings by governmental entities or others, loss

of reputation, legal claims by individuals and customers and significant legal and financial exposure and could affect our ability to retain and

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attract customers. In addition, Guernsey has introduced legislation similar in form to the GDPR, the Data Protection (Bailiwick of Guernsey) Law, 2017 (as amended) which will apply globally in a similar fashion as the GDPR to our activities conducted from and within Guernsey.

We may not receive significant revenues from our current research and development efforts for several years, if at all.

Developing software and digital products is expensive and the investment in the development of these products often involves a long return on investment cycle. An important element of our corporate strategy is to continue to make significant investments in research and development and related products and service opportunities both through internal investments and the acquisition of intellectual property including from companies that we have acquired. Accelerated products and service introductions and short software and hardware life cycles require high levels of expenditures for research and development that could adversely affect our operating results if not offset by revenue increases. We believe that we must continue to dedicate a significant amount of resources to our research and development efforts to maintain our competitive position. However, we cannot guarantee that we will receive significant revenues from these investments for several years, if at all.

Our business is dependent on a limited number of significant customers, and the loss of any one of our significant customers, or a significant decrease in business from any such customer, could harm our results of operations.

Our business is dependent on a limited number of significant customers, of which AT&T has historically been our largest. AT&T accounted for 27% and 33% of our revenue in fiscal years 2018 and 2017, respectively. We cannot assure you that our revenues from AT&T will remain the same or grow in future years. Aggregate revenue derived from the multiple business arrangements we have with the ten largest of our significant customers accounted for approximately 66% of our revenue in fiscal year 2018 and 71% in fiscal year 2017. The loss of any significant customer, including as a result of industry consolidation involving our customers, a significant decrease in business from any such customer or a reduction in customer revenue due to adverse changes in the terms of our contractual arrangements, market conditions, customer circumstances (such as financial condition and market position) or other factors could harm our results of operations and financial condition. Revenue from individual customers may fluctuate from time to time based on the commencement, scope and completion of projects or other engagements, the timing and magnitude of which may be affected by market or other conditions.

Although we have received a substantial portion of our revenue from recurring business with established customers, many of our major customers do not have any obligation to purchase additional products or services from us and generally have already acquired fully paid licenses for their installed systems. Therefore, our customers may not continue to purchase new systems, system enhancements or services in amounts similar to previous years or may delay implementation or significantly reduce the scope of committed projects, each of which could reduce our revenue and profits.

We seek to acquire companies or technologies and cannot assure you that these acquisitions will enhance our products and services or strengthen our competitive position, and they may adversely affect our results of operations.

It is a part of our business strategy to pursue acquisitions and other initiatives in order to offer new products or services or otherwise enhance our market position or strategic strengths. Consistent with this strategy, in recent years we have completed numerous acquisitions and we are actively evaluating potential acquisition opportunities, some of which could be significant, stand alone or in the aggregate. In the future, we intend to continue to pursue acquisitions of other companies, products, services and technologies that we believe will advance our business strategy. However,

we may not be able to identify suitable future acquisition candidates, consummate acquisitions on favorable terms or complete otherwise favorable acquisitions because of antitrust, regulatory or other concerns.

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We cannot assure you that the acquisitions we have completed, or any future acquisitions that we may make, will enhance our products and services or strengthen our competitive position. Due to the multiple risks and difficulties associated with any acquisition, there can be no assurance that we will be successful in achieving our expected strategic, operating, and financial goals for any such acquisition.

We may not be successful in the integration of our acquisitions.

We cannot assure you that we have identified, or will be able to identify, all material adverse issues related to the integration of our acquisitions, such as significant defects in the internal control policies of companies that we have acquired. In addition, our acquisitions could lead to difficulties in integrating acquired personnel and operations and in retaining and motivating key personnel from these businesses. In some instances, we may need to depend on the seller of an acquired business to provide us with certain transition services in order to meet the needs of our customers. Any failure to recognize significant defects in the internal control policies of acquired companies or properly integrate and retain personnel, and any interruptions of transition services, may require a significant amount of time and resources to address. Acquisitions may disrupt our ongoing operations, divert management from day-to-day responsibilities, increase our expenses and harm our results of operations or financial condition.

The skilled and highly qualified workforce that we need to develop, implement and modify our solutions may be difficult to hire, train and retain, and we could face increased costs to attract and retain our skilled workforce.

Our business operations depend in large part on our ability to attract, train, motivate and retain highly skilled information technology professionals, software programmers and communications engineers on a worldwide basis. In addition, our competitive success will depend on our ability to attract and retain other outstanding, highly qualified employees, consultants and other professionals. Because our software products are highly complex and are generally used by our customers to perform critical business functions, we depend heavily on skilled technology professionals. Skilled technology professionals are often in high demand and short supply. If we are unable to hire or retain qualified technology professionals to develop, implement and modify our solutions, we may be unable to meet the needs of our customers. In addition, serving several new customers or implementing several new large-scale projects in a short period of time may require us to attract and train additional IT professionals at a rapid rate.

We may face difficulties identifying and hiring qualified personnel and in particular, we may face difficulties in our ability to attract and retain employees with technical and project management skills, including those from developing countries. Although we are heavily investing in training our new employees, we may not be able to train them rapidly enough to meet the increasing demands on our business, particularly in light of high attrition rates in some regions where we have operations. Our inability to hire, train and retain the appropriate personnel could increase our costs of retaining a skilled workforce and make it difficult for us to manage our operations, meet our commitments and compete for new customer contracts. In particular, wage costs in lower-cost markets where we have historically added personnel, such as India, are increasing and we may need to increase the levels of our employee compensation more rapidly than in the past to remain competitive.

As a result of our entry into new domains, we now compete for high quality employees in those domains' limited and competitive talent market. In addition, cost containment measures effected in recent years, such as the relocation of projects to lower-costs countries, may lead to greater employee attrition and increase the cost of retaining our most skilled employees. The transition of projects to new locations may also lead to business disruptions due to differing levels of employee knowledge and organizational and leadership skills. Although we have never experienced an organized labor dispute, strike or work stoppage, any such occurrence, including in connection with unionization efforts, could disrupt our business and operations and harm our financial condition.

In addition, a national union and a group of our employees had attempted in the past to secure the approval of the minimum number of employees needed for union certification with respect to our employees in Israel.

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While these efforts have not resulted in either group being recognized as a representative union, we cannot be certain there will be no such efforts in the future. In the event an organization is recognized as a representative union for our employees in Israel, we would be required to enter into negotiations to implement a collective bargaining agreement. We are unable to predict whether, and to what extent, efforts to unionize our employees in Israel or elsewhere would have an adverse effect on our business, operations or financial condition.

Our continued growth and success will also depend upon the continued active participation of a relatively small group of senior management personnel, and requires us to hire, retain and develop our leadership bench. If we are unable to attract and retain talented, highly qualified senior management and other key executives, as well as provide for the succession of senior management, our growth and results of operations may be adversely impacted.

Our quarterly operating results may fluctuate, and a decline in revenue in any quarter could result in lower profitability for that quarter and fluctuations in the market price of our ordinary shares.

At times, we have experienced fluctuations in our quarterly operating results and anticipate that such movements may continue to occur. Fluctuations may result from many factors, including:

the size, timing and pace of progress of significant customer projects and license and service fees,

delays in or cancellations of significant projects and activities by customers,

changes in operating expenses,

increased competition,

changes in our strategy,

personnel changes,

foreign currency exchange rate fluctuations,

penetration of new markets, regions, customers and domains, and

general economic and political conditions.

Generally, our revenue relating to software licenses that require significant customization, modification, implementation and integration is recognized as work is performed, using the percentage of completion method of accounting. Given our reliance on a limited number of significant customers, our quarterly results may be significantly affected by the size and timing of customer projects and our progress in completing such projects.

We believe that the placement of customer orders may be concentrated in specific quarterly periods due to the time requirements and budgetary constraints of our customers. Although we recognize a significant portion of our revenue as projects are performed, progress may vary significantly from project to project, and we believe that variations in quarterly revenue are sometimes attributable to the timing of initial order placements. Due to the relatively fixed nature of certain of our costs, a decline of revenue in any quarter could result in lower profitability for that quarter. In addition, fluctuations in our quarterly operating results could cause significant fluctuations in the market price of our ordinary shares.

Our revenue, earnings and profitability are affected by the length of our sales cycle, and a longer sales cycle could adversely affect our results of operations and financial condition.

Our business is directly affected by the length of our sales cycle. Information systems for communications companies are relatively complex and their purchase generally involves a significant commitment of capital, with attendant delays frequently associated with large capital expenditures and procurement procedures within an organization. The purchase of these types of products and services typically also requires coordination and

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agreement across many departments within a potential customer's organization. Delays associated with such timing factors could have a material adverse effect on our results of operations and financial condition. In periods of economic slowdown in the communications industry, our typical sales cycle lengthens, which means that the average time between our initial contact with a prospective customer and the signing of a sales contract increases. The lengthening of our sales cycle could reduce growth in our revenue. In addition, the lengthening of our sales cycle contributes to increased selling expenses, thereby reducing our profitability.

We may be required to increase or decrease the scope of our operations in response to changes in the demand for our products and services, and if we fail to successfully plan and manage changes in the size of our operations, our business will suffer.

In the past, we have both grown and contracted our operations, in some cases rapidly, in order to profitably offer our products and services in a continuously changing market. If we are unable to manage these changes and plan and manage any future changes in the size and scope of our operations, our business will suffer.

Restructurings and cost reduction measures that we have implemented, from time to time, have reduced the size of our operations and workforce. Reductions in personnel can result in significant severance, administrative and legal expenses and may also adversely affect or delay various sales, marketing and product development programs and activities. These cost reduction measures have included, and may in the future include, employee separation costs and consolidating and/or relocating certain of our operations to different geographic locations.

Acquisitions, organic growth and absorption of significant numbers of customers' employees in connection with managed services projects have, from time to time, increased our headcount. During periods of expansion, we may need to serve several new customers or implement several new large-scale projects in short periods of time. This may require us to attract and train additional IT professionals at a rapid rate, as well as quickly expand our facilities, which we may have difficulties doing successfully.

Volatility and turmoil in the world's capital markets may adversely affect our investment portfolio and other financial assets.

Our cash, cash equivalents and short-term interest-bearing investments totaled \$519 million, as of September 30, 2018. Our short-term investments consist primarily of bank deposits, corporate bonds, money market funds, U.S. government treasuries, and U.S. agency securities. Although we believe that we generally adhere to conservative investment guidelines, adverse market conditions have resulted in immaterial impairments of the carrying value of certain of our investment assets in recent fiscal years, and future adverse market conditions may lead to additional impairments. Realized or unrealized losses in our investments or in our other financial assets may adversely affect our financial condition, including by reducing the capital available for our business and requiring us to seek additional capital, which may not be available on favorable terms.

Declines in the financial condition of banks or other global financial institutions may adversely affect our normal financial operations.

We may be exposed to the credit risk of customers that have been adversely affected by adverse business conditions.

We typically sell our software and related services as part of long-term projects and arrangements. During the life of a project or arrangement, a customer's budgeting constraints or other financial difficulties can impact the scope of such project or arrangement as well as the customer's requirements and ability to make payments or comply with other obligations with respect to such project or arrangement. In addition, adverse general business conditions may degrade

the creditworthiness of our customers over time, and we can be adversely affected by bankruptcies or other business failures.

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Our international presence exposes us to risks associated with varied and changing political, cultural, legal and economic conditions worldwide.

We are affected by risks associated with conducting business internationally. We maintain development facilities in Brazil, Canada, Cyprus, India, Ireland, Israel, Mexico, the Philippines, the United Kingdom and the United States, and have operations in North America, Europe, Israel, Latin America, Africa and the Asia-Pacific region. Although a substantial majority of our revenue is derived from customers in North America, we obtain significant revenue from customers in Europe, the Asia-Pacific region and Latin America. Our strategy is to continue to broaden our North American and European customer bases and to continue to expand into international markets, including emerging markets, such as those in Latin America, Russia and other members of the Commonwealth of Independent States, India and Southeast Asia. Conducting business internationally exposes us to certain risks inherent in doing business in numerous markets, including:

lack of acceptance of non-localized products or services and other related services,

difficulties in complying with varied legal and regulatory requirements across jurisdictions, including those applicable to employees and the terms of employment,

difficulties in staffing and managing foreign operations,

longer payment cycles,

difficulties in collecting accounts receivable, converting local currencies or withholding taxes,

capital restrictions that limit the repatriation of earnings,

trade barriers,

challenges in complying with complex foreign and U.S. laws and regulations, including communication, trade sanctions, export controls, and privacy regulations,

political instability and threats of terrorism,

currency exchange rate fluctuations,

hyper inflation,

foreign ownership restrictions,

regulations on the transfer of funds to and from foreign countries,

the lack of well-established or reliable legal systems in some countries,

variations in effective income tax rates and tax policies among countries where we conduct business; and

the timing and manner of the United Kingdom exiting the European Union, as and when it occurs.

One or more of these factors could have a material adverse effect on our operations, which could harm our results of operations and financial condition.

In addition, the ability of foreign nationals to work in the United States, Europe and other regions in which we have customers depends on their and our ability to obtain the necessary visas and work permits for our personnel who need to travel internationally. If we are unable to obtain such visas or work permits, or if their issuance is delayed or if their length is shortened, this may impact our ability to provide services to our customers in a timely and cost-effective manner. Immigration and work permit laws and regulations in the countries in which we have customers are subject to legislative and administrative changes as well as changes in the application of standards and enforcement.

As we continue to develop our business internationally, including in emerging markets, we face increasing challenges that could adversely impact our results of operations, reputation and business.

As we continue our efforts to expand our business internationally, including in emerging markets such as those in Latin America, Africa, Russia and other members of the Commonwealth of Independent States, India

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and Southeast Asia, we face a number of challenges. These challenges include those related to more volatile economic conditions, competition from companies that are already present in the market, the need to identify correctly and leverage appropriate opportunities for sales and marketing, poor protection of intellectual property, inadequate protection against crime (including counterfeiting, corruption and fraud), lack of due process, inadvertent breaches of local laws or regulations and difficulties in recruiting sufficient personnel with appropriate skills and experience. In addition, local business practices in jurisdictions in which we operate, and particularly in emerging markets, may be inconsistent with international regulatory requirements, such as anti-corruption and anti-bribery laws and regulations (including the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act) to which we are subject. It is possible that some of our employees, subcontractors, agents or partners may violate such legal and regulatory requirements, which may expose us to criminal or civil enforcement actions, including penalties and suspension or disqualification from U.S. federal procurement contracting. If we fail to comply with such legal and regulatory requirements, our business and reputation may be harmed.

Our international operations expose us to risks associated with fluctuations in foreign currency exchange rates that could adversely affect our business.

Although we have operations throughout the world, approximately 70% to 80% of our revenue and approximately 50% to 60% of our operating costs are denominated in, or linked to, the U.S. dollar. Accordingly, we consider the U.S. dollar to be our functional currency. As we conduct business internationally, fluctuations in exchange rates between the dollar and the currencies not denominated in, or linked to, the U.S. dollar in which revenues are earned or costs are incurred may have a material adverse effect on our results of operations and financial condition. From time to time, we may experience increases in the costs of our operations outside the United States, as expressed in dollars, as well as decreases in revenue not denominated in, or linked to, the U.S. dollar, each of which could have a material adverse effect on our results of operations and financial condition.

For example, during the height of the financial crisis in fiscal 2008, we recognized higher than usual foreign exchange losses under interest and other expense, net, mainly due to the significant revaluation of assets and liabilities denominated in other currencies attributable to the rapid and significant foreign exchange rate changes associated with the global economic turbulence. Although our foreign exchange losses have been less significant since then as a result of enhanced hedging strategies, we believe that foreign exchange rates may continue to present challenges in future periods should significant increases in volatility in foreign exchange markets occur.

Our policy is to hedge significant net exposures in the major foreign currencies in which we operate, and we generally hedge our net currency exposure with respect to expected revenue and operating costs and certain balance sheet items. We do not hedge all of our currency exposure, including for currencies for which the cost of hedging is prohibitively expensive. We cannot assure you that we will be able to effectively limit all of our exposure to currency exchange rate fluctuations.

The imposition of exchange or price controls, devaluation policies, restrictions on withdrawal of foreign exchange, other restrictions on the conversion of foreign currencies or foreign government initiatives to manage local economic conditions, including changes to or cessation of any such initiatives, could also have a material adverse effect on our business, results of operations and financial condition.

Political and economic conditions in the Middle East and other countries may adversely affect our business.

Of the development centers we maintain worldwide, two of our largest development centers are located in Israel and India. In Israel, the centers are located in several different sites, and approximately 20% of our software and information technology, sales and marketing workforce is located in Israel. As a result, we are directly influenced by

the political, economic and military conditions affecting Israel and its neighboring regions. Any major hostilities involving Israel could have a material adverse effect on our business. We maintain contingency plans to provide ongoing services to our customers in the event that escalated political or military

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conditions disrupt our normal operations. These plans include the transfer of some development operations within Israel to several of our other sites both within and outside of Israel. Implementation of these plans could disrupt our operations and cause us to incur significant additional expenditures, which could adversely affect our business and results of operations.

Conflicts in North Africa and the Middle East, including in Egypt and Syria which border Israel, have resulted in continued political uncertainty and violence in the region. Relations between Israel and Iran continue to be seriously strained, especially with regard to Iran's nuclear program. In addition, efforts to improve Israel's relationship with the Palestinian Authority have failed to result in a permanent solution, and there have been numerous periods of hostility in recent years. Further deterioration of relations with the Palestinian Authority or other countries in the Middle East might require increased military reserve service by some of our workforce, which may have a material adverse effect on our business.

In recent years, we have expanded our operations internationally, particularly in India, Southeast Asia and Latin America. Conducting business in these and other countries involves unique challenges, including political instability, threats of terrorism, the transparency, consistency and effectiveness of business regulation, business corruption, the protection of intellectual property, and the availability of sufficient qualified local personnel. Any of these or other challenges associated with operating in these countries may adversely affect our business or operations. We have development and other facilities at multiple locations in India, and approximately 40% of our software and information technology, sales and marketing workforce is located in India. Terrorist activity in India and Pakistan has contributed to tensions between those countries and our operations in India may be adversely affected by future political and other events in the region.

If we are unable to protect our proprietary technology from misappropriation, our business may be harmed.

Any misappropriation of our technology or the development of competitive technology could seriously harm our business. Our software and software systems are largely comprised of software and systems we have developed or acquired and that we regard as proprietary. We rely upon a combination of trademarks, patents, contractual rights, trade secret law, copyrights, non-disclosure agreements and other methods to protect our proprietary rights. We enter into non-disclosure and confidentiality agreements with our customers, workforce and marketing representatives and with certain contractors with access to sensitive information, and we also limit our customer access to the source codes of our software and our software systems. We have undertaken, and will continue to undertake, appropriate actions to protect our technology. The ability to develop and use our software and software systems requires knowledge and professional experience that we believe is unique to us and would be very difficult for others to independently obtain. However, our competitors may independently develop technologies that are substantially equivalent or superior to ours.

The steps we have taken to protect our proprietary rights may be inadequate. If so, we might not be able to prevent others from using what we regard as our technology to compete with us. Existing trade secret, copyright and trademark laws offer only limited protection. In addition, the laws of some foreign countries do not protect our proprietary technology or allow enforcement of confidentiality covenants to the same extent as the laws of the United States.

If we have to resort to legal proceedings to enforce our intellectual property rights, the proceedings could be burdensome, protracted and expensive and could involve a high degree of risk.

Claims by others that we infringe their proprietary technology and trade secrets could harm our business and subject us to potentially burdensome litigation.

Our software and software systems are the results of long and complex development processes, and although our technology is not significantly dependent on patents or licenses from third parties, certain aspects of our products make use of software components that we license from third parties, including our employees and contractors. As a developer of complex software systems, third parties may claim that portions of our systems violate their intellectual property rights.

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Software developers, including us, have been and are becoming increasingly subject to infringement claims as the number of products and competitors providing software and services to the communications industry increases and overlaps occur. In addition, patent infringement claims are increasingly being asserted by patent holding companies, which do not use the technology subject to their patents, and whose sole business is to enforce patents against companies, such as us, for monetary gain. Any claim of infringement by a third party could cause us to incur substantial costs defending against the claim and could distract our management from our business. Furthermore, a party making such a claim, if successful, could secure a judgment that requires us to pay substantial damages. A judgment could also include an injunction or other court order that could prevent us from selling our products or offering our services, or prevent a customer from continuing to use our products. For example, in November 2018, we paid a \$50 million settlement payment in connection with a lawsuit against certain of our subsidiaries alleging breach of contract and trade secret misappropriation. See [Legal Proceedings](#) for further details. We also support service providers and media companies with respect to digital content services, which could subject us to claims related to such services. Our entry into the digital content services market has also subjected us to possible claims of infringement of the ownership rights to media content, for example, as well as to direct legal claims from retail consumers arising from the delivery of such services.

If anyone asserts a claim against us relating to proprietary technology or information, we might seek to license their intellectual property. We might not, however, be able to obtain a license on commercially reasonable terms or on any terms. In addition, any efforts to develop non-infringing technology could be unsuccessful. Our failure to obtain the necessary licenses or other rights or to develop non-infringing technology could prevent us from selling our products and could therefore seriously harm our business.

Product defects, software errors, or service failures could adversely affect our business.

Design defects or software errors may cause delays in product introductions and project implementations and damage customer satisfaction, and may have a material adverse effect on our business, results of operations and financial condition. Our software products are highly complex and may, from time to time, contain design defects or software errors that may be difficult to detect and correct.

Because our products are generally used by our customers to perform critical business functions, design defects, software errors, misuse of our products, incorrect data from external sources, failures to comply with our service obligations or other potential problems within or outside of our control may arise during implementation or from the use of our products and services, and may result in financial or other damages to our customers, for which we may be held responsible. Although we have license and service agreements with our customers that contain provisions designed to limit our exposure to potential claims and liabilities arising from customer problems, these provisions may not effectively protect us against such claims in all cases and in all jurisdictions. In addition, as a result of business and other considerations, we may undertake to compensate our customers for damages caused to them arising from the use of our products and services, even if our liability is limited by a license or other agreement. Claims and liabilities arising from customer problems could also damage our reputation, adversely affecting our business, results of operations and financial condition and the ability to obtain [Errors and Omissions](#) insurance.

Our use of open source software could adversely affect our ability to sell our services and subject us to possible litigation.

We use open source software in providing our solutions, and we may use additional open source software in the future. Such open source software is generally licensed by its authors or other third parties under open source licenses. Under such licenses, if we engage in certain defined manners of use, we may be subject to certain conditions, including requirements that we offer our solutions that incorporate the open source software for no cost; that we make

available source code for modifications or derivative works we create based upon, incorporating or using the open source software; and/or that we license such modifications or derivative works under the terms of the particular open source license. In addition, if a third-party software provider has

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incorporated open source software into software that we license from such provider in a manner that triggers one or more of the above requirements, we could be required to disclose any of our source code that incorporates or is a modification of such licensed software. If an author or other third party that distributes such open source software were to allege that we had not complied with the conditions of one or more of these licenses, we could be required to incur significant legal expenses defending such allegations and could be subject to significant damages, enjoined from the sale of our solutions that contained the open source software, and required to comply with the foregoing conditions, which could disrupt the distribution and sale of some of our solutions. In addition, generally open source software licenses do not contain any warranties and may not have available support from the authors or third parties from whom we license it from. If such open source software contains prior defects, security vulnerabilities or infringes any third party right or we are unable to obtain or provide necessary support, we could be exposed to legal claims and significant legal expenses without the ability to seek contribution from the authors or third parties from whom we license open source software.

System disruptions and failures may result in customer dissatisfaction, customer loss or both, which could materially and adversely affect our reputation and business.

Our systems are an integral part of our customers' business operations. The continued and uninterrupted performance of these systems for our customers is critical to our success. Customers may become dissatisfied by any system failure that interrupts our ability to provide services to them.

Our ability to serve our customers depends on our ability to protect our systems and infrastructure against damage from fire, power loss, water damage, telecommunications and technology failure, cyber-attacks, earthquake, severe weather conditions, terrorist attacks, vandalism and other similar unexpected adverse events. We also depend on various cloud providers and co-location datacenter providers which provide us environments, tools and applications on which we provide our products. Although we maintain insurance that we believe is appropriate for our business and industry, such coverage may not be sufficient to compensate for any significant losses that may occur as a result of any of these events. In addition, we have experienced systems outages and service interruptions in the past, none of which has had a material adverse effect on us. However, a prolonged system-wide outage or frequent outages for our infrastructure or our cloud providers' infrastructure could cause harm to our customers and to our reputation and reduce the attractiveness of our services significantly, which could result in decreased demand for our products and services and could cause our customers to make claims against us for damages allegedly resulting from an outage or interruption. Any damage or failure that interrupts or delays our operations could result in material harm to our business and expose us to material liabilities.

Changes in the tax legislation policies and regulations imposed by the jurisdictions in which we operate, the termination or reduction of certain government programs and tax benefits, or challenges by tax authorities of our tax positions could adversely affect our overall effective tax rate.

There can be no assurance that our effective tax rate of 15.9% for the year ended September 30, 2018 will not change over time as a result of changes in corporate income tax rates or other changes in the tax laws of Guernsey, the jurisdiction in which our holding company is organized, or of the various countries in which we operate. Any changes in tax laws could have an adverse impact on our financial results.

For example, there is growing pressure in many jurisdictions and from multinational organizations such as the Organization for Economic Cooperation and Development (OECD) and the EU to amend existing international taxation rules in order to align the tax regimes with current global business practices. Specifically, in October 2015, the OECD published its final package of measures for reform of the international tax rules as a product of its Base Erosion and Profit Shifting (BEPS) initiative, which was endorsed by the G20 finance ministers. Many of the

initiatives in the BEPS package required and resulted in specific amendments to the domestic tax legislation of various jurisdictions and to existing tax treaties. We continuously monitor these developments. Although many of the BEPS measures have already been implemented or are currently being implemented globally (including, in certain cases, through adoption of the OECD's multilateral convention to effect changes to tax treaties which entered into force on July 1, 2018 and through the European Union's Anti

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Tax Avoidance Directives), it is still difficult in some cases to assess to what extent these changes would impact our tax liabilities in the jurisdictions in which we conduct our business or to what extent they may impact the way in which we conduct our business or our effective tax rate due to the unpredictability and interdependency of these potential changes. In the wake of the BEPS project, it is generally expected that tax authorities in various jurisdictions in which we operate might increase their audit activity and might seek to challenge some of the tax positions we have adopted. It is difficult to assess if and to what extent such challenges, if raised, might impact our effective tax rate.

In addition, following the screening by the EU Code of Conduct Group on Business Taxation (COCG) of third country jurisdictions to assess their compliance for tax purposes, Guernsey was found to be a co-operative jurisdiction. However, the COCG has requested that Guernsey, along with a number of other jurisdictions, take further steps to ensure that its tax system does not facilitate offshore structures which attract profits without real economic activity. Guernsey has issued a commitment to the EU to address these concerns by implementing legal substance requirements by the end of 2018 and is currently working with COCG in this regard. Draft substance legislation was published on 8 November 2018 and it is expected to apply to the Company.

Further, the recently enacted U.S. Tax Cuts and Jobs Act of 2017 (the Tax Act) significantly changed how corporations are taxed in the United States. The application of the Tax Act is subject to certain uncertainties. The Tax Act includes certain provisions that may increase our overall tax liabilities. Certain provisions of the Tax Act apply to us from fiscal year 2018, while other provisions of the Tax Act will start to apply to us from our fiscal year 2019. We are implementing certain steps to optimize our global tax structure, but there can be no assurance that our global tax liabilities would not increase as a result of the Tax Act. In addition, due to the uncertainty involved in applying certain provisions of the Tax Act to our group, we made reasonable estimates for the future effects on our financial statements for our fiscal year 2019. The U.S. Treasury Department, the Internal Revenue Service and other standards-setting bodies may issue guidance on how the provisions of the Tax Act will be applied that is different from our interpretation. The Tax Act requires complex computations not previously required or produced, and significant judgments and assumptions in the interpretation of the law were made in producing our provisional estimates. As we continue our analyses, and interpret any additional guidance, we may adjust the provisional amounts we have recorded, and those adjustments may materially impact our provision for income taxes in the period in which the adjustments are made.

The market price of our ordinary shares has and may continue to fluctuate widely.

The market price of our ordinary shares has from time to time fluctuated widely and may continue to do so. Many factors could cause the market price of our ordinary shares to rise and fall, including:

market conditions in the industry and the economy as a whole,

variations in our quarterly operating results,

changes in our backlog levels,

announcements of technological innovations by us or our competitors,

announcements by any of our key customers,

introductions of new products and services or new pricing policies by us or our competitors,

trends in the communications, media or software industries, including industry consolidation,

acquisitions or strategic alliances by us or others in our industry,

changes in estimates of our performance or recommendations by financial analysts,

changes in our shareholder base, and

political developments in the Middle East or other areas of the world.

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In addition, the stock market frequently experiences significant price and volume fluctuations. In the past, market fluctuations have, from time to time, particularly affected the market prices of the securities of many high technology companies. These broad market fluctuations could adversely affect the market price of our ordinary shares.

It may be difficult for our shareholders to enforce any judgment obtained in the United States against us or our affiliates.

We are incorporated under the laws of the Island of Guernsey and a majority of our directors and executive officers are not citizens or residents of the United States. A significant portion of our assets and the assets of those persons are located outside the United States. As a result, it may not be possible for investors to effect service of process upon us within the United States or upon such persons outside their jurisdiction of residence. Also, we have been advised that there is doubt as to the enforceability in Guernsey of judgments of the United States courts of civil liabilities predicated solely upon the laws of the United States, including the federal securities laws.

ITEM 4. INFORMATION ON THE COMPANY

History, Development and Organizational Structure of Amdocs

Amdocs Limited was organized as a company with limited liability under the laws of the Island of Guernsey in 1988. Since 1995, Amdocs Limited has been a holding company for the various subsidiaries that conduct our business on a worldwide basis. Our global business is providing software and services solutions to leading communications and media companies in North America, Europe and the rest of the world. Our registered office is Hirzel House, Smith Street, St. Peter Port, Guernsey, GY1 2NG, and the telephone number at that location is +44-1481-728444.

The executive offices of our principal subsidiary in the United States are located at 1390 Timberlake Manor Parkway, Chesterfield, Missouri 63017, and the telephone number at that location is +1-314-212-8328.

Our subsidiaries are organized under and subject to the laws of several countries. Our principal operating subsidiaries are in Canada, Cyprus, India, Ireland, Israel, Switzerland, the United Kingdom and the United States. Please see Exhibit 8 to this Annual Report on Form 20-F for a listing of our significant subsidiaries.

As part of our strategy, we have pursued and may continue to pursue acquisitions and other initiatives in order to offer new products or services or otherwise enhance our market position or strategic strengths. In recent years, we have completed numerous acquisitions, which, among other things, have expanded our business into digital commerce solutions and other digital offerings, software design and development and the media and entertainment domain. In January 2016, we acquired cVidya Networks, Inc., a vendor of revenue assurance and fraud management solutions, which adds to our capabilities in the area of revenue guard and fraud management. Additionally, in September 2016, we acquired Vindicia, Inc., a software-as-a-service subscription management and payment solution provider, BriteBill Group Limited, a provider of personalized digital interactive billing services and Pontis, Inc., a provider of contextual digital engagement solutions, enabling us to expand our digital offerings. In July 2017, we acquired Kenzan Media, LLC, a software engineering services company that provides customized, end-to-end solutions focusing on digital transformation, and platform-as-a-service and cloud native application development using DevOps and microservices. In November 2017, we acquired projekt202, a leader in experience-driven software design and development. In February 2018, we acquired Vubiquity, a leading provider of premium digital content services and technology solutions, in order to further expand our capabilities in the world of media and entertainment which is increasingly converging with our traditional domain of communications. Also in February 2018, we acquired UXP Systems, a leader in user lifecycle management, to enhance our capabilities around digital identity, user entitlements, personalization, and privacy, including consent management.

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As the result of our organic growth and acquisitions, our workforce has increased over the last three years from an approximate average workforce of 22,751 in fiscal 2016 to 24,381 in fiscal 2018. In the past, our workforce has fluctuated with changes in business conditions.

Our principal capital expenditures for fiscal 2018 have been for computer equipment in our operating facilities and development centers, for which we spent approximately \$118 million and the development of our new campus in Israel for which we spent approximately \$96 million. In 2017 and 2016, our principal capital expenditures have been for computer equipment in our operating facilities and development centers, for which we spent approximately \$114 million and \$111 million, respectively.

Business Overview

Amdocs is a leading provider of software and services for more than 350 communications, Pay TV, entertainment and media industry and other service providers in developed countries and emerging markets. Our customers include some of the largest telecommunications companies in the world (including America Movil, AT&T, Bell Canada, Singtel, Sprint, Telefonica, Telstra, T-Mobile and Vodafone), as well as cable and satellite providers (including Altice USA, Charter, Comcast, J:COM, Rogers Communications and Sky), small to mid-sized communications businesses and mobile virtual network enablers/mobile virtual network operators and directory publishers and other providers of media and other services. Amdocs also has technology and distribution ties to more than 600 content creators to bring premium content to over 1,000 video distributors worldwide, including Verizon, Turner and Warner Bros.

Our software and services, which we develop, implement and manage, are designed to meet the business imperatives of our customers. These business imperatives include the need to grow revenue and deliver a superior user experience; entertain end users and leverage the digital ecosystem; enable the enterprise and connected society; evolve to a service-driven network, and drive agility and operational excellence. Our offerings are based on a product and services mix, using technologies and methodologies such as cloud, microservices, DevOps, open source, bimodal operations and increasing amounts of automation through standard information technology (IT) tools, REST APIs and artificial intelligence. As a result, our offerings enable service providers to efficiently and cost-effectively introduce new products and services, process orders, monetize data and content, support new business models and generally enhance their understanding of their customers. Our technology, design-led thinking approach and expertise help service providers to further transform into digital service providers, enhance their entertainment offerings, and serve their customers across all channels.

We are able to offer customers superior products and services on a worldwide basis, in large part because of our highly qualified and trained technical, engineering, sales, marketing, consulting, and management personnel. We combine deep industry knowledge and experience, advanced methodologies, industry best practices and pre-configured tools to help deliver consistent results and minimize our customers' risks. We invest significantly in the ongoing training of our personnel in key areas such as industry knowledge, software technologies and management capabilities. Based in significant part on the skills and knowledge of our workforce, we believe that we have developed a reputation for reliably delivering quality solutions.

We believe the demand for our solutions is driven by our clients continued transformation into digital service providers to provide wireless access services, content and applications (apps) on any device through digital and non-digital channels. It is also driven by the trend towards integrated service offerings which we believe is leading to increased merger and acquisition activity among our customers who then require systems consolidation, which we provide, to ensure a consistent customer experience at all touchpoints. Our solutions enable service providers to help their consumer and enterprise and business-to-business (B2B) customers navigate the increasing number of devices, services, partner services and plans available in today's digital world and the need of service providers to cope with the

rapidly growing demand for content and data that these devices and services create, as well as to compete with over-the-top (OTT)-focused players. Regardless of whether service providers are bringing their first offerings to market, scaling for growth, consolidating systems or

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transforming the way they do business, we believe that they seek to differentiate themselves by delivering a customer experience that is simple, personal, contextual and valuable at every point of engagement and across all channels.

In addition to the business value we provide to our customers, we also aim to create value for society: we believe we are a leading provider of sustainable products and services. For example, our network functions virtualization and orchestration solutions are designed to help service providers shift away from costly, space and energy-consuming hardware components, by delivering software-driven capabilities, while our mobile financial services solutions designed to help the unbanked and underbanked to manage their finances, transfer money, shop, buy and pay bills using just their phone. We also take consumer privacy and security seriously and have made it a priority to address the impact of our products and services on both, in order to meet consumer expectations, as well as regulatory demands.

Our business is conducted on a global basis. We maintain development and support facilities worldwide, including Brazil, Canada, Cyprus, India, Ireland, Israel, Mexico, the Philippines, the United Kingdom and the United States and have operations in North America, Europe, Israel, Latin America, Africa and the Asia-Pacific region.

Industry Background

We believe service providers will maintain a strong focus on growing new revenue streams, cost reduction and driving more efficient operations, and that the trends of ongoing digital transformation, network virtualization, and consolidation within the industry will continue. This is due to service providers seeking to become full-service integrated carriers, providing their customers with a rich portfolio of offerings including core communications; media, advertising and entertainment; enterprise enablement; Internet of Things (IoT) and digital lifestyle services. The smartphone and associated communications and entertainment apps, other connected devices such as tablets, e-readers, wearables, and improvements in IoT technology continue to drive unprecedented growth in the demand for multi-modal customer engagement capabilities and data. In response to the demand for digital experiences, service providers are continuing to focus on providing digital services, as well as enriching their offerings with integrated partner services. Service providers are also preparing for the introduction of 5G, investing in their networks, and virtualizing them, to meet the demand for increased bandwidth, faster pace of innovation for new digital services, as well as to improve their business and operational agility and optimize and monetize their investments in such services.

OTT-focused players and device manufacturers continue to penetrate the communications market and are also competing for customer attention in the entertainment market, while traditional content creators are looking to stream their content direct-to-consumer (D2C). Additionally, social networks such as Facebook and Twitter, alongside OTT-focused players such as Skype, Snapchat and WhatsApp, have become widely-accepted alternatives to traditional voice communications and are also providing video streaming services. To meet the challenges from new competitors, service providers are developing cooperative partnerships with OTT-focused players to improve the customer experience as well as vertically integrating with content creators. Pay TV providers are moving toward more OTT and on-demand video services in their need to respond to customers' on-demand experience expectations. As the business-to-consumer (B2C) domain is crowded with disruptors and heightened competition from OTT players, service providers are also looking to strengthen their standing with enterprise customers, explore new opportunities in the wholesale market and provide IoT services to new vertical market segments, such as the home, health and automotive industries.

To capture new revenue streams, service providers are expanding within existing and non-traditional business models and deploying new network technologies. We believe service providers will place an emphasis on network virtualization and on modernization and transformation projects for their networks and operational and business support systems as they look for innovative ways to improve service agility and operations.

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We believe these factors create significant opportunities for vendors of information technology software products and providers of managed services and end-to-end systems integration, such as Amdocs.

Business Strategy

Our goal is to provide software and services solutions and support to communications and media companies of all sizes as they strive to deliver digital engagements and remain competitive. We seek to accomplish our goal by pursuing the strategies described below.

Focus on the Communications, Entertainment and Media Industry. We focus our resources and efforts primarily on providing customer experience solutions to service providers in the communications, entertainment and media industry. We consider our longstanding and continuing focus on this industry a competitive advantage. This strategy has enabled us to develop the specialized industry know-how and capability necessary to deliver the technologically advanced, large-scale, specifications-intensive customer experience solutions required by the leading wireless, wireline, broadband, cable and satellite companies as well as provide targeted point solutions for service providers of all sizes. These strengths have enabled us to diversify our customer base and expand our offering domains and may continue to provide us with opportunities to expand within other vertical segment markets.

Target Industry Leaders. We intend to continue to direct our marketing efforts primarily toward communications and media industry leaders and contenders. By targeting such leading service providers, which require the most sophisticated and relevant solutions, we believe that we are better able to remain at the forefront of developments in the industry. We believe that the development of this customer base has helped position us as a market leader.

Continued Expansion into New Geographies and Emerging Markets. We seek to grow our customer base by expanding into new markets inside the regions we currently serve and serving the needs of service providers operating in emerging markets. While we have a strong presence overall in developed markets such as Europe, there are countries in which we believe we can further expand our presence. In fiscal 2018, for example, we succeeded in growing our activities in the Italian market. We are also expanding our presence in other geographies such as South Korea. In emerging markets, prepaid subscriber growth remains high and average revenue per user remains relatively low in comparison to more developed markets. In order to increase subscriber revenue, service providers are focusing on customer experience and on increasing capacity, particularly for data and content offerings, as key competitive differentiators. Our existing and prospective customers in these markets vary dramatically, with some service providers serving subscriber bases already numbering in the hundreds of millions and others introducing communications services to communities for the first time. We believe this shift in focus to customer experience and on increasing bandwidth and providing content helps to create the wide spectrum of emerging market service providers that require offerings ranging from relatively low-cost systems with pre-packaged services that can be implemented rapidly, to more robust services, to complete customer experience solutions.

Provide Customers with a Broad, Open, Deep Set of Modular Integrated Products. With amdocsONE, we seek to provide our customers with an open, broad, yet integrated, set of modular products to help them

deliver a customer experience that is simple, personal and valuable at every point of service. We provide solutions across the business support systems (BSS), operational support systems (OSS) and network domains and multiple lines of business, including wireline, wireless, broadband, cable, satellite services and digital services. Integration of our systems is achieved through a central catalog leveraged by the BSS, OSS and network management layer, as well as with an open, API-first and microservices-based approach in our product portfolio to enable third-party integration. We believe that our ability to provide a broad, open, deep and integrated modular set of products helps position us as a strategic partner for our customers as they continue to transform into digital service providers and provides us with multiple avenues for strengthening and expanding our ongoing customer relationships.

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Expand Our Managed Services Capabilities. We seek to assume responsibility for the operation, development and management of our customers' Amdocs systems, as well as systems developed by in-house IT departments or by other vendors. Our mandate can extend across the service provider's entire IT and network environment and encompass key business process operational needs. Our customers receive predictable service levels based on agreed-upon key performance indicators, as well as improved efficiencies and long-term savings over the day-to-day costs of operating and maintaining these systems, as well as an improved end-user experience, so they can focus on their own internal strengths and strategy to grow their business, leaving system concerns to us. Managed services also benefit us, as they can be a source of predictable revenue and long-term relationships.

Develop and Maintain Long-Term Customer Relationships. We seek to develop and maintain long-term, mutually beneficial relationships with our customers, and have organized our internal operations to better anticipate and respond to our customers' needs. We believe these relationships can lead to additional product and services sales, as well as ongoing, long-term support, system enhancement, modernization and maintenance and managed services agreements. We believe that such relationships are facilitated in many cases by the mission-critical, strategic nature of Amdocs systems and by the added value we provide through our specialized skills and knowledge. We believe that the longevity of our customer relationships and the recurring revenue that such relationships produce provide a competitive advantage for us.

amdocsONE

In the second quarter of fiscal 2018, we relaunched our business offerings, including the Amdocs customer experience solutions (CES) portfolio and Amdocs Optima, as amdocsONE. amdocsONE is designed to meet the challenges facing our customers as they transform into digital service providers within the framework of a hybrid IT environment, which requires them to rapidly introduce new cloud-native applications while still operating legacy systems. It enables modular expansion as a service provider evolves, ensuring low-cost and reduced-risk implementations, while its microservices-based architecture enables the rapid deployment of complex applications as suites of independently deployable services that can be frequently upgraded via DevOps. With amdocsONE's modular structure, our customers have the flexibility to choose business offerings that address their specific needs and improve their time to market.

As part of amdocsONE, we offer a comprehensive line of services designed to address every stage of a service provider's lifecycle, from planning, delivery and implementation to ongoing support. Our services include managed services, testing (which we refer to as quality engineering), data and intelligence services, cloud enablement, digital business operations, autonomous network service assurance and advisory services. Using artificial intelligence and predictive analytics, as well as automation and machine learning, our managed services enable faster time to market for new services as well as the cost-effective management of existing offerings. Managed services provide multi-year, flexible and tailored managed services across all verticals, managing IT, business processes and applications services, including application development and maintenance, operations, IT and infrastructure hosting, cloud services and legacy modernization. Our professional services are designed to assist customers in the selection, implementation, operation, management, modernization and maintenance of their IT, network and content systems. As a lead systems integrator, we assume end-to-end responsibility to monitor, manage and deploy the overall development and integration activities of Amdocs and third-party vendors throughout the transformation lifecycle and business as usual state.

Meeting our Customers' Business Imperatives

amdocsONE consists of a combination of software and services that address service providers' business and operational needs. Our software and services solutions support the full span of the customer relationship.

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The key service provider business imperatives addressed by amdocsONE are:

Consumer experience and monetization: Our modular solutions are designed to address service providers need to differentiate in a hyper-competitive consumer market, as disruptors continuously emerge, and consumer expectations are ever-changing. We support service providers in their goal to deliver a contextual and personalized engagement across all touchpoints of the omni-channel user journey. Our solutions are designed to enable a frictionless digital user relationship, boost new upsell opportunities and through proactive and contextual care further improve consumer loyalty and stickiness. Our 5G-ready, cloud-enabled monetization offerings help to quickly grow and modify the number of digital services offered, enabling service providers to launch new types of multi-play, multi-partner offers, with the necessary payment methods needed to capture new revenues. Our intelligence engine captures and processes every user interaction via an integrated and actionable 360-degree user profile and enables the feedback loop for service providers to boost the recommendation engine in an effort to expand share of the consumer wallet.

Media and digital services: Our solutions are designed to enable service providers to build rich, premium content offerings for their customers, accessing large libraries of premium licensed content, securely processed and distributed across any channel, device type or geography. Through content aggregation, localization and compliance management, metadata creation, encoding, distribution, asset management and delivery, our solutions help service providers and premium content owners monetize content through a variety of commercial models. Our solutions provide support for multi-platform viewing, which includes secure distribution across a diverse network of content providers to distributors worldwide, as well as monitoring and reporting. We also help our customers expand services in the hyper-connected world with solutions for consumer IoT, eSIM and digital lifestyle offerings.

Enterprise and connected society: These offerings allow service providers to leverage their B2B customer relationships and experience across the B2B customer journey. At the sales phase, our lead-to-order solution facilitates, secures and helps transform opportunity into an order. Once the customer order is placed, our zero-touch ordering and fulfillment solutions eliminate manual handling and order fallouts. When the order relates to connectivity, our solutions boost the time to activation whether for traditional connectivity such as fiber, mobile such as eSIM, or new generation connectivity such as SD-WAN. Our NFV/SDN offering includes a large partner ecosystem of virtual network functions (VNFs) and provides upsell opportunities with services such as security, web filtering or vCPE. Our full business enablement suite for enterprise customers also includes functions such as white-label billing, settlement or partner management as well as a large portfolio of competencies to support migration to cloud native, microservices-based environments.

Service-driven networks: These offerings comprise standards-based software solutions to enable service lifecycle management in a hybrid physical and virtual network allowing service providers to automate network operations and simplify the introduction of NFV into existing and next generation networks, including 5G and edge-computing systems. Amdocs NFV powered by ONAP (the Linux Foundation's Open Network Automation Platform) features software and services capabilities to orchestrate multi-vendor virtual network functions (VNFs) over virtual infrastructures and public clouds such as AWS and Azure, automating VNF onboarding to enable the design, testing and launching of new network services in weeks rather than months, and supporting a live view of services and resources. We also provide operational

support systems for fixed line, broadband, wireless and cable TV networks. The offerings facilitate network operational processes, including network planning and rollout across multiple technologies such as fiber, small cell and LTE, essential for 5G readiness, service fulfillment and assurance, inventory management, order orchestration and activation of new services through automation. Our integrated suite of network optimization software and services is designed to help service providers plan, build, launch, manage and optimize their mobile networks. Vendor and technology agnostic, this offering affords service providers the analytics and services

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capabilities needed to maximize network investments, accelerate and automate the roll out and upgrade of network technologies, and optimize network performance and capacity.

Services and agile operations: Our solutions are designed to enable service providers to introduce intelligence and automation into their operations to accelerate innovation, agility and efficiency; optimize data for intelligence-driven analytics; effectively manage multi-dimensional, dynamic hybrid operations; embark on their cloud and IT modernization paths, and prevent revenue loss and reduce cyber security risks. Using open source, third party solutions and Amdocs unique IP, including tools and methodologies around artificial intelligence, predictive analytics and machine learning, these services span both Amdocs products and third-party software and can be rapidly deployed through DevOps capabilities and are focused on delivering clear business value as well as reducing costs.

As part of amdocsONE, we also offer a broad suite of services designed to help address our customers business imperatives. From advisory services through solution development and business operations to managed services and training, the extent of services provided varies from customer to customer. Our services engagements can range in size and scope and include advising customers on business and technical strategy, designing and implementing particular business solutions, managing specific business operations processes, adopting DevOps and orchestrating large-scale transformation projects. In addition, we are generally retained by the customer to provide ongoing services, such as maintenance, enhancement design and development and operational support, or to act as a lead systems integrator for post-production activities that may include interfaces with third-party and legacy systems. For a substantial number of our customers, the implementation and integration of an initial system has been followed by the sale of additional systems and modules. We aim to establish long-term maintenance and support contracts with our customers. These contracts generally involve an expansion in the scope of support delivered and provide us with recurring revenue.

Our key services are:

Advisory Services We identify actionable and pragmatic solutions to business and operational challenges. A team of industry experts design insights based on research, trend analysis, global best practices, innovation and partnerships. This service helps service providers meet their objectives, including digital transformation, IoT, customer experience, NFV, DevOps, NextGen IT, cloud, 5G and enterprise.

Managed Services We seek to transform traditional managed services towards autonomous operations, while continuing to manage legacy systems. This includes rapid deployment of new services through DevOps capabilities, modernization of legacy systems, cloud and infrastructure services, while maintaining ongoing IT operations. Using open source, third party solutions and Amdocs unique IP around artificial intelligence, predictive analytics and machine-to-machine learning, this suite of services spans both Amdocs products and third-party software.

Autonomous Network Service Assurance We combine machine learning and artificial intelligence with operational models, policies and workflows to provide proactive, autonomous network remediation and notifications, reducing operational costs and improving the customer experience. This service integrates BSS, OSS, IT and network information to present service providers a customer-centric view of network events.

Digital Business Operations We offer a suite of services for automating and digitalizing business operations, including order to activation and other business processes. These services combine domain-specific expertise and advanced technologies such as robotic process automation, predictive analytics, machine learning and technology with real-time, end-to-end visibility over any business process regardless of underlying silos. We aim to improve customer experience, decrease handling time, reduce OPEX and shorten time to introduce digital channels and new services.

Quality Engineering Services We offer industry-specific quality assurance services, and a global presence, to help our customers reduce operational costs, enhance innovation and ensure the desired

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end-user experience, leveraging our advanced automation, intelligence and machine learning technologies.

Data & Intelligence Services We offer advanced, insightful data and analytics services, powered by our IP around customer data and our logical data model. From strategy and consulting through optimizing and modernizing data ecosystems, our services deliver self-service business intelligence (BI) reporting, dashboards and efficient data monetization.

In addition, amdocsONE includes our mobile financial services offering, which enables service providers and financial institutions to serve financially underserved customer segments; revenue guard services designed to ensure faster, more accurate detection and resolution of revenue leakage, fraud and cyber fraud; the BriteBill multi-channel bill presentment platform focused on contextual and personalized customer engagements. We also provide advertising and media offerings for media publishers, TV networks, video streaming providers, advertising agencies and service providers.

Technology

Our portfolio architecture allows our applications to work in multiple customer environments.

To help service providers respond more quickly to changes in their markets, we embrace an open and integrated approach to our technology built on the following key principles:

Design led. Adopting design-led principles and methodologies across software applications to ensure improved and optimized customer experiences.

API enabled. Leveraging domain-driven design to expose APIs across key applications and ensure consumption and interaction between applications is easily enabled. It exposes the Amdocs portfolio application programming interfaces to external systems, allowing our applications to integrate with each other and with third-party applications.

Cloud flexibility. Architected to run in public and on-premise cloud environments.

Microservices. Developing highly granular, lightweight distributed software architecture, shipped and delivered using containers and orchestrated using Kubernetes, the industry-leading cluster management for containers.

Scalability. Designed to take full advantage of the capabilities of the underlying platform, allowing progressive system expansion, proportional with increases in business volumes. Using the same software, our applications can support operations for small and very large service providers.

Reliability. System and component architecture supports high availability and redundancy to allow connected and uninterrupted operations at full network utilization and device load.

Modularity. Applications can be installed on an individual standalone basis, interfacing with the customer's existing systems, or as part of an integrated Amdocs system environment. We believe this modularity provides our customers with a highly flexible solution that is able to incrementally expand with the customer's growing needs and capabilities.

Upgradability and Backwards Compatibility. Version interoperability eliminates risky upgrades and allows for a gradual upgrade approach of suite elements.

Virtualization. Business agility improves with virtualization as it allows introduction of new services rapidly. Moreover, virtualization reduces cost by improving resource utilization, and by automating processes.

Open Source Software. Enabling rapid time to market and lower-cost functionality introduction, our software leverages open-source components to encourage standardization and improved quality where possible. Amdocs is playing a central role in the development of The Linux Foundation's ONAP (Open Network Automation Platform), an advanced open source solution for the telecommunication industry.

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Service-Oriented Architecture. SOA enables improved flow of information, rapid function development, easier scaling and simplified introduction of new services.

Sales and Marketing

Our sales and marketing activities are primarily directed at major communications, cable, entertainment and media companies.

As a result of the strategic importance of our amdocsONE solutions to the operations of service providers, a number of constituencies within a customer's organization are typically involved in purchasing decisions, including senior management, information systems personnel and user groups, such as the finance, customer service and marketing departments. We maintain sales offices in six continents.

Our sales activities are supported by marketing efforts and increasing cooperation with strategic partners. We interact with other third parties in our sales activities, including independent sales agents, information systems consultants engaged by customers and system integrators that provide complementary products and services. We also have value-added reseller agreements with leading hardware and software vendors. Our sales and marketing activities also support projects with partner companies, such as Amazon Web Services, Microsoft, Redhat, Dell EMC and VMware, Adobe, Nokia, Juniper, Hewlett Packard Enterprise and IBM.

Customers

Our target market is comprised of service providers in the communications, cable, entertainment and media industry that require customer experience solutions with advanced functionality and technology. The companies in our target segment are typically market leaders. By working with such companies, we help ensure that we remain at the forefront of developments in the industry and that our product offerings continue to address the market's most sophisticated needs. We have a global orientation and customers in over 85 countries.

Our customers include service providers, such as:

20th Century Fox	Proximus
A1 Bulgaria	Reliance Communications
A1 Telekom Austria	Rogers Communications
Airtel	Rostelecom
Altice SFR	Safaricom
Altice USA	Sensis
America Movil	Singtel
Astro	Sky Italia
AT&T	Smart
AT&T Mexico	Sprint
Bell Canada	Sunrise Telecom
Botswana Telecommunications Corporation Limited	Telefónica Argentina
BT	Telefónica Brasil
Cable and Wireless	Telefónica Chile
Cellcom	Telefónica Peru
CenturyLink	Telefónica SA
Claro Brasil	Telia Sweden

Claro Chile
Claro Dominican Republic
Claro Puerto Rico
Comcast
Deutsche Telekom
Dex Media
Dish Network

Telkom South Africa
Telstra
TELUS Communications
Three Ireland (Hutchison) Limited
TIM
TIM Brasil
T-Mobile USA

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EE	True Corporation
Elisa	Turner
EPIX (an MGM company)	UPC Broadband Holding B.V.
FarEasTone	US Cellular
Globe Telecom	UTS
J:COM	Veon
Kazakhtelecom	Verizon
Kcell	Virgin Media
KCOM	Vodafone Germany
KPN	Vodafone Hungary
KT Corporation	Vodafone Idea
Kyivstar	Vodafone Ireland
M1	Vodafone Italy
Magyar Telekom	Vodafone Romania
MTS	Vodafone Spain
NetCom	Vodafone UK
Oi	VodafoneZiggo
Optus	Warner Bros