

NICE Ltd.  
Form 20-F  
April 05, 2019

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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 12(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 December 31, 2018

OR

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

OR

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

Commission file number 0-27466

NICE LTD.

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(Exact name of Registrant as specified in its charter)

N/A

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(Translation of Registrant's name into English)

Israel

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(Jurisdiction of incorporation or organization)

13 Zarchin Street, P.O. Box 690, Ra'anana 4310602, Israel

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(Address of principal executive offices)

Tali Mirsky, +972-9-7753151, tali.mirsky@nice.com,  
13 Zarchin Street, P.O. Box 690, Ra'anana 4310602, Israel

(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

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

<u>Title of Each Class</u>	<u>Name of Each Exchange On Which Registered</u>
<u>American Depositary Shares, each representing one Ordinary Share, par value one New Israeli Shekel per share</u>	<u>NASDAQ Global Select Market</u>

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

None

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(Title of Class)

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

None

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(Title of Class)

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: 61,769,554 Ordinary Shares, par value NIS 1.00 per share (which excludes 12,597,896 treasury 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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes No

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

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.

The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

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 by the International Accounting Standards Board

Other

If "Other" has been checked in response to the previous question indicate by check mark which financial statement item the registrant has elected to follow:

Item 17    Item 18

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

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PRELIMINARY NOTE

This annual report contains historical information and forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 with respect to NICE’s business, financial condition and results of operations. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “project,” “should,” “strategy,” “and “target” and similar expressions, as they relate to NICE or its management, are intended to identify forward-looking statements. Such statements reflect the current beliefs, expectations and assumptions of NICE with respect to future events and are subject to risks and uncertainties. The forward-looking statements relate to, among other things: operating results; anticipated cash flows; gross margins; adequacy of resources to fund operations; our ability to maintain our average selling prices despite the aggressive marketing and pricing strategies of our competitors; our ability to maintain and develop profitable relationships with our key distribution channels; the financial strength of our key distribution channels; and the market’s acceptance of our technologies, products and solutions.

In connection with the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995, we are identifying important factors that, individually or in the aggregate, could cause actual results and outcomes to differ materially from those contained in any forward-looking statements made by us; any such statement is qualified by reference to the following cautionary statements. Many factors could cause the actual results, performance or achievements of NICE to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements, including, among others, changes in general economic and business conditions, competition with existing or new competitors, success and growth of cloud Software-as-a-Service business, dependency on third-party cloud computing platform providers, hosting facilities and service partners, difficulties in making additional acquisitions or effectively integrating acquired operations, rapidly changing technology, cyber security attacks or other security breaches, changes in currency exchange rates and interest rates, privacy concerns and legislation, products, technologies and personnel, whether we are successful in executing our growth strategy, the effects of the recent comprehensive tax reform in the United States and various other factors, both referenced and not referenced in this annual report. These risks are more fully described under Item 3, “Key Information – Risk Factors” of this annual report. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated, expected, intended, planned or projected. All forward-looking statements are made only as of the date hereof. NICE does not intend or assume any obligation to update these forward-looking statements. Investors should bear this in mind as they consider forward-looking statements and whether to invest or remain invested in NICE’s securities.

In this annual report, all references to “NICE,” “we,” “us,” “our” or the “Company” are to NICE Ltd., a company organized under the laws of the State of Israel, and its wholly owned subsidiaries. For a list of our significant subsidiaries, please refer to page 54 of this annual report.

In this annual report, unless otherwise specified or unless the context otherwise requires, all references to “\$” or “dollars” are to U.S. Dollars, all references to “EUR” are to Euros, all references to “GBP” are to British Pounds, all references to “CHF” are to Swiss Francs, all references to “NIS” are to New Israeli Shekels and all references to “INR” are to Indian Rupee. Except as otherwise indicated, the financial statements of and information regarding NICE are presented in U.S. dollars.

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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

The following selected consolidated balance sheet data as of December 31, 2017 and 2018 and the selected consolidated statements of income data for the years ended December 31, 2016, 2017 and 2018 have been derived from our audited Consolidated Financial Statements included in this annual report. These financial statements have been prepared in accordance with United States generally accepted accounting principles, or U.S. GAAP, and audited by Kost, Forer, Gabbay & Kasierer, a member of EY Global. The selected consolidated statements of income data for the years ended December 31, 2014 and 2015 and the selected consolidated balance sheet data as of December 31, 2014, 2015 and 2016 have been derived from other Consolidated Financial Statements not included in this annual report and have also been prepared in accordance with U.S. GAAP and audited by Kost, Forer, Gabbay & Kasierer, a member of EY Global. The selected consolidated financial data set forth below should be read in conjunction with and are qualified by reference to Item 5, "Operating and Financial Review and Prospects", the Consolidated Financial Statements and notes thereto and other financial information included elsewhere in this annual report.

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Year Ended December 31,  
2014 2015 2016 2017 2018  
(U.S. dollars in thousands, except per share data)

OPERATING DATA:

Revenues					
Products	\$289,560	\$317,900	\$306,252	\$318,946	\$263,805
Services	543,548	573,033	623,783	652,040	719,531
Cloud	38,887	35,934	85,507	361,166	461,183
Total revenues	871,995	926,867	1,015,542	1,332,152	1,444,519
Cost of revenues					
Products	63,919	66,363	53,032	51,065	31,065
Services	226,499	222,783	250,022	225,020	229,671
Cloud	13,093	14,436	34,679	192,588	236,079
Total cost of revenues	303,511	303,582	337,733	468,673	496,815
Gross profit	568,484	623,285	677,809	863,479	947,704
Operating expenses:					
Research and development, net	123,141	128,485	141,528	181,107	183,830
Selling and marketing	231,097	225,817	268,349	361,328	370,659
General and administrative	83,360	90,349	116,569	129,071	153,323
Amortization of acquired intangible assets	19,157	12,528	17,187	41,902	42,276
Restructuring expenses	5,435	-	-	-	-
Total operating expenses	462,190	457,179	543,633	713,408	750,088
Operating income	106,294	166,106	134,176	150,071	197,616
Financial and other income (expense), net	3,765	5,304	10,305	(20,411 )	(10,901 )
Income before taxes on income	110,059	171,410	144,481	129,660	186,715
Taxes on income (tax benefits)	9,909	30,832	21,412	(13,631 )	27,377
Net income from continuing operations	100,150	140,578	123,069	143,291	159,338
Discontinued operations:					
Gain on disposal and income (loss) from discontinued operations	4,965	152,459	(8,235 )	-	-
Taxes on income (tax benefits)	2,040	34,206	(2,086 )	-	-
Net income from discontinued operations	2,925	118,253	(6,149 )	-	-
Net income	103,075	258,831	116,920	143,291	159,338
<u>Basic earnings per share from continuing operations</u>	\$1.69	\$2.36	\$2.06	\$2.37	\$2.60
<u>Basic earnings per share from discontinued operations</u>	\$0.05	\$1.99	\$(0.10 )	\$-	\$-
<u>Basic earnings per share</u>	\$1.74	\$4.35	\$1.96	\$2.37	\$2.60
Weighted average number of shares used in computing basic earnings per share (in thousands)	59,362	59,552	59,667	60,444	61,387
<u>Diluted earnings per share from continuing operations</u>	\$1.64	\$2.29	\$2.02	\$2.31	\$2.52
<u>Diluted earnings per share from discontinued operations</u>	\$0.05	\$1.93	\$(0.10 )	\$-	\$-
<u>Diluted earnings per share</u>	\$1.69	\$4.22	\$1.92	\$2.31	\$2.52
Weighted average number of shares used in computing diluted earnings per share (in thousands)	60,895	61,281	61,035	62,119	63,309



	At December 31,				
	2014	2015	2016	2017	2018
	(U.S. dollars in thousands)				
<b>BALANCE SHEET DATA*:</b>					
Working capital**	\$ 107,090	\$ 256,089	\$ 13,713	\$ 132,154	\$ 201,217
Total assets	1,632,952	1,849,613	2,631,876	2,845,086	3,207,366
Shareholders' equity	1,213,456	1,415,149	1,511,332	1,749,561	2,016,613

\*Including assets and liabilities that are accounted for as discontinued operations.

\*\*Including deferred revenues and advances from customers that are classified as long-term liabilities.

## Risk Factors

Our business faces significant risks. You should carefully consider all of the information set forth in this annual report and in our other filings with the Securities and Exchange Commission (“the SEC”), including the following risk factors which we face, and which are faced by our industry. The risks and uncertainties described below are not the only ones facing us. Other events, circumstances or factors that we do not currently anticipate or that we currently do not deem to be material risks may also affect our business, results of operations and financial condition. Our business, financial condition and results of operations could be materially and adversely affected by any of these risks.

### Risks Relating to our Business, Competition and Markets

Conditions and changes in the local and global economic environments may adversely affect our business and financial results.

Adverse economic conditions in markets or regions in which we operate can harm our business. Our results of operations can be affected by adverse changes in local and global economic conditions, slowdowns, recessions and economic instability. To the extent that our business suffers as a result of such unfavorable economic and market conditions, our operating results may be materially adversely affected. In particular, enterprises may reduce spending in connection with their contact centers, financial institutions may reduce spending in relation to trading floors and operational risk management (as IT-related capital expenditures are typically lower priority in times of economic slowdowns), and our customers may prioritize other expenditures over our solutions. In addition, enterprises' ordering and payment patterns are influenced by market conditions and could cause fluctuations in our quarterly results. If any of the above occurs, and our customers or partners significantly reduce their spending or significantly delay or fail to make payments to us, our business, results of operations, and financial condition would be materially adversely affected.

Disruption to the global economy could also result in a number of follow-on effects in addition to a slow-down in our business, including a possible (i) negative impact on our liquidity, financial condition and share price, which may impact our ability to raise capital in the market, obtain financing and secure other sources of funding in the future on terms favorable to us, and (ii) decreases in the value of our assets that are deemed to be other than temporary, which may result in impairment losses.

We face risks relating to our global operations.

We sell our products and solutions throughout the world and intend to continue to increase our penetration of international markets. Our future results could be materially adversely affected by a variety of factors relating to international transactions, including:

governmental controls and regulations, including import or export license requirements, trade protection measures and changes in tariffs;

compliance with applicable international and local laws, regulations and practices, including those related to trade compliance, anticorruption, data privacy and protection, tax, labor, employee benefits, customs, currency restrictions and other requirements;

fluctuations in currency exchange rates;

longer payment cycles in certain countries in our geographic areas of operations;

potential adverse tax consequences, including the complexities of foreign value added tax systems;

political instability, terrorism or the threat of terrorism and general security concerns;

political unrest, armed conflicts or natural disasters around the world;

reduced or limited protection for intellectual property rights in some countries; and

general difficulties in managing our global operations.

On June 23, 2016, the United Kingdom (the “U.K.”) held a referendum in which voters approved an exit from the European Union (the “E.U.”), commonly referred to as “Brexit”, and on March 29, 2017 the U.K. delivered to the E.U. the official separation notice in accordance with Article 50 of the Lisbon Treaty. With negotiations continuing and the U.K. presently scheduled to leave the E.U. in the spring of 2019, we are accelerating plans for an event in which the U.K. and E.U. do not reach an agreement regarding their relationship prior to Brexit. Although it is still unknown what the exact terms of separation will be and what the interactions between the U.K. and E.U. countries will be going forward, it is likely that there will be greater restrictions on imports and exports between the U.K. and E.U. countries and increased regulatory complexities. In addition, as a result of such separation, traditional financial centers may shift to different locations within the E.U., in which we have little or no presence. These changes may impact our business in the U.K. and E.U. and therefore may adversely affect our operations and financial results.

The U.S. administration is renegotiating certain existing international trade agreements, adopting a new trade policy, and implementing changes in trade policies and governmental regulations. All of these could result in the increase of our costs and decrease of our margins. We do not know at this time what additional changes, if any, the U.S. administration will make, and what the impact on us of any of those changes may be. However, any such changes may have a significant impact on our business and operation, which may adversely affect our financial results.

Changes in the political or economic environments, business spending, and the availability and cost of capital in the countries in which we operate, especially in Israel and the U.S., including the impact of such changes on foreign currency rates and interest rates, and the impact of economic conditions on underlying demand for our products and services, could have a material adverse effect on our financial condition, results of operations and cash flow.

As a result of our global presence, especially in emerging markets, we face increasing challenges that could adversely impact our results of operations, reputation and business.

In light of our global presence, especially in emerging markets such as those in Asia, Eastern Europe and Latin America, we face a number of challenges in certain jurisdictions that provide reduced legal protection, including poor protection of intellectual property, inadequate protection against crime (including bribery, corruption and fraud) and breaches of local laws or regulations, as well as challenges relating to competition from companies that already have a local presence in the market, difficulties in recruiting sufficient personnel with appropriate skills and experience, unstable governments and economies, and governmental actions that may affect the flow of goods and currency.

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. Although we implement policies and procedures designed to ensure compliance with these laws, we cannot guarantee that none of our employees, contractors and agents, as well as those companies to which we outsource certain of our business operations, will not take actions in violation of our policies or applicable law. Any such violation could have an adverse effect on our business and reputation and may expose us to criminal or civil enforcement actions, including penalties and fines.

Furthermore, the increased presence of our global operations in lower-cost locations, including outsourcing of certain operations to service providers in such lower-cost locations (such as India), could impact the control over our operations, as well as create dependency on such external service providers. Such mode of operation may impact our business and adversely affect our results of operation.

The markets in which we operate are highly competitive and we may be unable to compete successfully.

The markets for our products, solutions and related services are, in general, highly competitive. Our competitors include a number of large, established developers and distributors. Some of our principal competitors or potential competitors may have advantages over us, including greater resources, a broader portfolio of products, applications and services, larger patent and intellectual property portfolios and access to larger customer bases, all of which would enable them to better adapt to new or emerging technologies or customer requirements or devote more resources to the marketing and sale of their products and services. Additionally, continued price reductions by some of our competitors, particularly at times of economic difficulty, may result in our loss of sales or require that we reduce our prices in order to compete, which would adversely affect our revenues, gross margins and results of operations.

Additional competition from new potential entrants to our markets may lead to the widespread availability and standardization of some of the products and services, which could result in the commoditization of our products and services, reduce the demand for our products and services and drive us to lower our prices.

In recent years, some of our competitors have increased their presence in our markets through internal development, partnerships and acquisitions. Infrastructure vendors, including suppliers of telecommunication infrastructure equipment and services, have decided or may decide in the future to enter our market space and compete with us by offering comprehensive solutions. Moreover, major enterprise software vendors, such as those from the traditional enterprise business intelligence and business analytics sector or Customer Relationship Management (“CRM”), have entered or may decide to enter our market space and compete with us, either by internal development of comprehensive solutions or through acquisition of any of our existing competitors. If we are not able to compete effectively with these market entrants or other competitors, we may lose market share and our business, financial condition or results of operations could be adversely affected.

In light of the intense competition in our markets, successful development, positioning and sales execution of our products is a critical factor in our ability to successfully compete and maintain growth. Therefore, we must continue

making significant expenditures on research and development, marketing and sales to compete effectively. In addition, our software solutions may compete with software developed internally by potential clients, as well as software and other solutions offered by competitors. We cannot ensure that the market awareness or demand for our new products or applications will grow as rapidly as we expect, or that the introduction of new products or technological developments by others will not adversely impact the demand for our products.

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Successful marketing of our products and services to our customers and partners will be critical to our ability to maintain growth. We cannot assure you that our products or existing partnerships will permit us to compete successfully. The market for some of our solutions is highly fragmented and includes a broad range of product offerings, features and capabilities. Consolidation through mergers and acquisitions, or alliances formed, among our competitors in this market, who may have greater resources than we have, could substantially influence our competitive position.

As we expand into new markets, we are faced with new competition, which may be able to more quickly develop or adapt to new or emerging technologies, better respond to changes in customer requirements or preferences, or devote greater resources to the development, promotion, and sale of their products. Additionally, prices of most of our solutions have decreased throughout the market in recent years, primarily due to competitive pressures, and may continue to decrease. Further, in relation to our cloud offering, we may be affected by the pricing of certain infrastructure services, such as in the area of Platform as a Service and network connectivity, which would in turn affect the rates we offer to customers. This could have a negative effect on our gross profit and results of operations.

Our Cloud Software-as-a-Service business model may not be successful or profitable.

Our cloud-based business has grown significantly as a result of our November 2016 acquisition of inContact Inc. (“inContact”) and our internal development efforts, and therefore we are more dependent now on the success and profitability of this area of our business. If we are not able to compete effectively, generate significant revenues or maintain the profitability of our cloud offerings, or if we do not successfully execute our cloud strategy or anticipate the cloud needs of our customers, our reputation as a cloud services provider could be harmed and our revenues and profitability could decline.

In addition, the increasing prevalence of cloud and SaaS delivery models offered by us and our competitors may unfavorably impact pricing in both our on-premise enterprise software business and our cloud business, as well as overall demand for our on-premise software product and service offerings, which could reduce our revenues and profitability. With our move to cloud-based solutions, we cannot guarantee that revenues generated from our cloud offerings will compensate for a loss of business in our on-premise enterprise software business.

Further, cloud computing may make it easier for new competitors to enter our markets due to the lower up-front technology costs and easier implementation and for existing market participants to compete with us on a greater scale. Such increased competition is likely to heighten the pressure to decrease pricing, which could have a negative effect on our revenues, profitability and results of operations.

The business model of our cloud offerings differs from the business model for the sale of products and services. Our cloud offerings are generally purchased by customers on a subscription basis and revenues from these offerings are generally recognized ratably over the term of the subscriptions. Therefore, the shift to SaaS-based sales could result in a delay in revenue recognition and materially adversely affect our results of operations and our rate of growth and profitability.

Moreover, the deferred revenue that results from sales of some of our cloud offerings may prevent any deterioration in sales activity associated with our cloud offerings from becoming immediately observable in our consolidated statement of operations. This is in contrast to revenues associated with our software licenses arrangements, in which new software license revenues are generally recognized in full at the time of delivery of the related software licenses. Our subscription model also makes it difficult for us to rapidly increase our revenue through additional sales in any period, as revenue from new customers must be recognized over the applicable subscription period.

We are dependent on third-party cloud computing platform providers, hosting facilities and service partners that may be difficult to replace.

We rely on computer hardware leased and software licensed from, as well as cloud computing platforms provided by, third parties in order to offer our services, including Platform as a Service provided by strategic partners, such as Amazon. These hardware, software and cloud computing platforms may not continue to provide competitive features and functionality, or may not be available at reasonable prices, on commercially reasonable terms or at all. Any loss of the right to use any of these hardware, software or cloud computing platforms could significantly impact our business, increase our expenses and otherwise result in delays in providing our services until equivalent technology is either developed by us, or, if available, is identified, obtained through purchase or license and integrated into our services. As we grow our business, we will continue to depend on both existing and new strategic relationships with such vendors. Our inability to establish and foster these relationships could adversely affect the development of our business, our growth and our results of operations.

If our security measures or those of our third-party hosting facility providers, cloud computing platform providers, or third-party service partners are breached, and unauthorized access is obtained to customers' data, our data or our IT systems, our services may be perceived as not being secure, customers may stop using our services, and we may incur significant legal and financial exposure and liabilities.

Our services involve the storage and transmission of customers' and their end users' proprietary and other sensitive information, including financial information and other personally identifiable information. Security breaches could expose us to a risk of loss of this information, litigation and possible liability. While we have security measures in place, we may from time to time be subject to breaches due to third-party action, including intentional misconduct by computer hackers, employee error, malfeasance or otherwise and result in someone obtaining unauthorized access to our IT systems, our customers' data or our data, including our intellectual property and other confidential business information.

In addition, some of our customers use our products to compile and analyze highly sensitive or confidential information. We may encounter such information or data when we perform service or maintenance functions for our customers. While we have internal policies and procedures for employees in connection with performing these functions, the perception or fact that any of our employees has improperly handled sensitive information of a customer or a customer's end user could negatively affect our business.

Cyber security attacks are becoming increasingly sophisticated and, in many cases, may not be identified until a security breach occurs. If we fail to recognize and deal with such security attacks and threats and if we fail to update our products and solutions and prevent such threatened attacks in real time to protect our customers' or other parties' sensitive information, whether retained in our systems or by our customers using our products and services, our business and reputation will be harmed. The costs of recognizing and addressing security attacks and threats, and updating our products and solutions, may be significant.

Third parties may attempt to breach our security measures or inappropriately take advantage of our solutions, including our SaaS and hosting services, through computer viruses, electronic break-ins and other disruptions. Additionally, third parties may attempt to fraudulently induce employees or customers into disclosing sensitive information such as user names, passwords or other information to gain access to our customers' data, our data or our systems. Furthermore, our customers may authorize third party technology providers to access their customer data, and some of our customers may not have adequate security measures in place to protect their data that is stored on our services. Because we do not control our customers or third-party technology providers, or the processing of such data by third-party technology providers, we cannot ensure the integrity or security of such transmissions or processing. Malicious third parties may also conduct attacks designed to temporarily deny customers access to our services. Any security breach could result in a loss of confidence in the security of our services, damage our reputation, negatively impact our future sales, disrupt our business and lead to legal liability.

While we maintain insurance coverage to protect us against a broad range of risks, including in relation to security breaches and cyber security attacks, we could still be subject to risks of losses that might be beyond the limits, or outside the scope, of coverage of our insurance and that may limit or prevent indemnification under our insurance policies. This potential insufficiency of insurance coverage could result in an adverse effect on our business, financial position, profit, and cash flows.

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Defects or disruptions in our cloud-based services could impact demand for our services and subject us to substantial liability.

Cloud-based services may have errors or defects that could result in unanticipated downtime for our subscribers and harm to our reputation and our business. From time to time we have found defects in, and experienced disruptions to, our services, and new defects or disruptions may occur in the future. In addition, our customers may use our services in unanticipated ways that may cause a disruption in services for other customers attempting to access their data. As our customers use our services for important aspects of their business, any errors, defects, disruptions in service or other performance problems could harm our reputation and may damage our customers' businesses. As a result, customers could elect to not renew our services or delay or withhold payment to us. We could also lose future sales or customers may make warranty or other claims against us, which may harm our business and adversely affect our results.

We currently serve our customers from third-party data center hosting facilities and cloud computing platform providers. While we have security measures in place, they may be breached because of third-party action, including intentional misconduct by computer hackers, employee error, malfeasance or otherwise and result in someone obtaining unauthorized access to our or our third-party vendors' systems and infrastructure. This could result in interruptions in our services, which may cause us to issue credits or pay penalties, cause customers to terminate their subscriptions and adversely affect our attrition rates and our ability to attract new customers, all of which would reduce our revenues. Also, we may not be entitled to indemnification or to recuperate any such loss or damage from third party service providers, which may result in us bearing alone the burden of any such liability or losses.

Facilities at which customer data is stored or through which we render our services may be vulnerable to damage or interruption from earthquakes, floods, fires, power loss, telecommunications failures and similar events. These facilities may also be subject to break-ins, sabotage, intentional acts of vandalism and similar misconduct, as well as legal or administrative actions or requirements that may limit or delay operation at the facilities. Despite precautions taken at these facilities, the occurrence of such damage or interruption, a decision to close the facilities without adequate notice or other unanticipated problems at these facilities, could result in lengthy interruptions in our services. Even with disaster recovery and business continuity arrangements in place, our services could be interrupted.

We are also dependent on our computer databases, billing systems and accounting computer programs, network and computer hardware that houses these systems to effectively operate our business and market our services. Our clients may become dissatisfied by any system failures that interrupt our ability to provide our service to them. Substantial or repeated system failures would significantly reduce the attractiveness of our services. Therefore, significant disruption or failure in the operation of these systems could adversely affect our business and results of operations.



Privacy concerns and legislation, evolving regulation of cloud computing, cross-border data transfer restrictions and other regulations may limit the use and adoption of our services and adversely affect our business.

Governments are adopting new laws and regulations addressing data privacy and the collection, processing, storage and use of personal information. In some cases, foreign data privacy laws and regulations, such as the European Union's General Data Protection Directive ("GDPR"), and the country-specific laws and regulations that implement that directive, also govern the processing of personal information. These and other requirements could reduce demand for our services or restrict our ability to store and process data or, in some cases, impact our ability to offer some of our solutions and services in certain locations or our customers' ability to deploy our solutions globally.

In addition, regulatory issues relating to the Internet, in general, could affect our ability to provide our services. In the United States, legislation has been adopted that regulates certain aspects of the Internet, including online content, user privacy, taxation, liability for third-party activities and jurisdiction.

Furthermore, our customers expect us to meet voluntary certification or other standards established by third parties. If we are unable to maintain these certifications or meet these standards, it could adversely affect our ability to provide our solutions to certain customers and could harm our business. Even the perception that the privacy of personal information is not satisfactorily protected or does not meet regulatory requirements could inhibit sales of our products or services and could limit adoption of our cloud-based solutions.

Industry-specific regulation and other requirements and standards are evolving and unfavorable industry-specific laws, regulations, interpretive positions or standards could harm our business.

Our customers and potential customers conduct business in a variety of industries, including financial services and telecommunications. Regulators in certain industries have adopted and may in the future adopt regulations or interpretive positions regarding the use of cloud computing and other outsourced services. The costs of compliance with, and other burdens imposed by, industry-specific laws, regulations and interpretive positions may limit our customers' use and adoption of our services and reduce overall demand for our services. Compliance with these regulations may also require us to devote greater resources to support certain customers, which may increase costs and lengthen sales cycles. For example, some financial services regulators have imposed guidelines for use of cloud computing services that mandate specific controls or require financial services enterprises to obtain regulatory approval prior to outsourcing certain functions. If we are unable to comply with these guidelines or controls, or if our customers are unable to obtain regulatory approval to use our services where required, our business may be harmed. If in the future we are unable to achieve or maintain industry specific certifications or other requirements or standards relevant to our customers, it may harm our business and adversely affect our results.

In some cases, industry-specific laws, regulations or interpretive positions may also apply directly to us as a service provider. Any failure or perceived failure by us to comply with such requirements could have an adverse impact on our business.

We may not be able to successfully execute our growth strategy.

Our strategy is to continue investing in, enhancing and securing our business and operations and growing our business, both organically and through acquisitions. Investments in, among other things, new markets, products, solutions, and technologies, research and development, infrastructure and systems, geographic expansion, and additional qualified and experienced personnel, are critical to achieving our growth strategy. Growth of our revenue depends on the success of all these factors, including our ability to capture market share, attract new clients, develop our strategic partnerships, introduce our solutions and services to new global markets, strengthen and improve our solutions through significant investments in research and developments and successfully consummate and integrate acquisitions. However, such investments and efforts may not be successful, and, even if successful, may negatively impact our short-term profitability. Furthermore, in the event of an acquisition, our profits may be reduced over the

short-term with the objective of achieving long-term expansion or growth, which may involve risks. Additionally, the terms of the credit agreement (the “Credit Agreement”) that we entered into in connection with our senior secured credit facility (the “Credit Facility”) contains restrictions that could restrict our ability to make strategic acquisitions or investments.

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Our success depends on our ability to execute our growth strategy effectively and efficiently. If we are unable to execute our growth strategy successfully and properly manage our investments and expenditures, our results of operations and stock price may be materially adversely affected. In addition, as a result of the execution of our growth strategy, our short-term profitability may be negatively impacted, including as a result of an acquisition.

We cannot guarantee that we will be able to sustain our growth in future years. The increasing proportion of advanced software applications in our overall sales mix might not compensate for the slowing growth rates of our recording solutions and other more mature products. In addition, our new solutions might not achieve wide market acceptance, and therefore might fail to support revenue growth. The failure to implement our growth strategy successfully could affect our ability to sustain growth and could materially adversely affect our results of operations.

Our business could be materially adversely affected as a result of the risks associated with acquisitions and investments. In particular, we may not succeed in making additional acquisitions or be effective in integrating such acquisitions.

As part of our growth strategy, we have made a significant number of acquisitions (see Item 5, “Operating and Financial Review and Prospects—Recent Acquisitions” in this annual report for a description of certain of these acquisitions). We expect to continue to make acquisitions and investments in the future as part of our growth strategy. We frequently evaluate the tactical or strategic opportunity available related to complementary businesses, products or technologies. There can be no assurance that we will be successful in making additional acquisitions. Even if we are successful in making additional acquisitions, integrating an acquired company’s business into our operations or investing in new technologies may (1) result in unforeseen operating difficulties and large expenditures and (2) absorb significant management attention that would otherwise be available for the ongoing development of our business, both of which may result in the loss of key customers or personnel and expose us to unanticipated liabilities.

Other risks commonly encountered with acquisitions include the effect of acquisitions on our financial and strategic position, the inability to integrate successfully or commercialize acquired technologies and achieve expected synergies or economies of scale on a timely basis and the potential impairment of acquired assets. Further, we may not be able to retain the key employees that may be necessary to operate the businesses we acquire and we may not be able to attract, in a timely manner, new skilled employees and management to replace them.

In recent years, several of our competitors have also completed acquisitions of companies in our markets or in complementary markets. As a result, it may be more difficult for us to identify suitable acquisitions or investment targets or to consummate acquisitions or investments once identified on acceptable terms or at all. If we are not able to execute on our acquisition strategy, we may not be able to achieve our growth strategy, may lose market share, or may lose our leadership position in one or more of our markets.

We often compete with others to acquire companies, and such competition may result in decreased availability of, or an increase in price for, suitable acquisition candidates. We also may not be able to consummate acquisitions or investments that we have identified as crucial to the implementation of our strategy for other commercial or economic reasons. Further, we may not be able to obtain the necessary regulatory approvals, including those of competition authorities and foreign investment authorities, in countries where we seek to consummate acquisitions or make investments. For those and other reasons, we may ultimately fail to consummate an acquisition, even if we announce the intended acquisition. Also, even if we do consummate acquisitions, we may do so on less favorable terms and/or may be subject to certain conditions or commitments imposed by such authorities and agencies that may impact post-acquisition integration or have an adverse effect on our business.

We may require significant financing to complete an acquisition or investment, whether through bank loans, raising of debt or otherwise. In connection with our November 2016 acquisition of inContact, we incurred additional indebtedness pursuant to the Credit Facility and, through our wholly owned subsidiary Nice Systems, Inc. (“Nice Systems”), through the issuance of exchangeable senior notes (the “Notes”). In the future, we cannot assure you that such financing options will be available to us on reasonable terms, or at all. If we are not able to obtain the necessary financing, we may not be able to consummate a substantial acquisition or investment and execute our growth strategy. In addition, if we consummate one or more significant acquisitions in which the consideration consists, in whole or in part, of our ordinary shares or American Depositary Shares (“ADSs”) representing our ordinary shares, our shareholders may suffer immediate dilution of their interests in us or the value of their interests in us. Our shareholders may also suffer substantial dilution if we issue ADSs upon the conversion of the Notes.

Future acquisitions or investments may also require us to incur contingent liabilities, amortization expenses related to intangible assets and impairment of goodwill, any of which could have a material adverse effect on our operating results and financial condition. In addition, we may knowingly enter into an acquisition that will have a dilutive impact on our earnings per share.

We depend on a small number of significant customers.

While no single customer accounted for more than five percent of our aggregate revenues in 2018, we do have a small number of significant customers in each sector of our business, each of which could be material to a particular area of our business.

There can be no assurance that we will be able to retain these key customers or that such customers will not cancel purchase orders, reschedule, or decrease their level of purchases. Loss, cancellation or deferral of business to such customers could have a material adverse effect on our business and operating results.

We depend on the stability of the financial services sector.

The financial services sector is our main industry vertical. If there is deterioration or a crisis in the economic and financial stability of financial institutions, as well as any change in rules and regulations that apply to this sector (such as deregulation in the area of compliance), customers in this sector, including our top tier customers, could fail to make payments to us, reduce spending or delay or postpone orders. This could have a material adverse effect on our sales to this sector and our results of operations.

If we are unable to develop or maintain our relationships with existing and new distributors and strategic partners, our business and financial results could be materially adversely affected.

We have agreements in place with many distributors, dealers and resellers to market and sell our products and services in addition to our direct sales force across all geographies in which we operate. In certain regions, such as Asia and Eastern Europe, we predominantly work through such partners. Our financial results could be materially adversely affected if our contracts with distribution channel partners or our other partners were terminated, if our relationship

with our distribution channel partners or our other partners were to deteriorate, or if the financial condition of our distribution channel partners or our other partners were to weaken.

We believe that developing partnerships and strategic alliances, including through the implementation of our partnership programs, is an important factor in the successful marketing of our products and execution of our growth strategy. In some markets we have only recently started to develop a number of partnerships and strategic alliances. We may not be able to develop such partnerships or strategic alliances on terms that are favorable to us, if at all. Failure to develop such arrangements that are satisfactory to us may limit our ability to successfully market and sell products and may have a material adverse effect on our business and results of operations.

We leverage strategic relationships with third parties such as system integrators and technology and telephony providers. We also license technology from certain third parties. Certain of these license agreements permit either party to terminate all or a portion of the agreement without cause at any time.

As our market opportunities change and as we grow our business, our dependency on particular distribution channels and strategic partners may increase or we may need to create new strategic partnerships and alliances to address changing market needs. We may not be successful in maintaining, creating or expanding these channels and partnerships, which may negatively impact the development of our business, our growth, gross margins and results of operations. We may also develop dependency on certain strategic partners and vendors, and should we have to find alternatives in the market, our development efforts and business may be negatively impacted.

In addition, the execution of our growth strategy also depends on our ability to create new alliances and enter into strategic partnerships with certain market players and maintain those relationships. Even if we are able to enter into such alliances, it may be under terms that are not favorable to us, or we may not be able to realize the benefits that are anticipated through such alliances. If we are not successful at these efforts, we may lose sales opportunities, customers and market share, which may have a material adverse effect on our business and results of operations.

The markets in which we operate are characterized by rapid technological changes and frequent new products and service introductions.

We operate in several markets, each characterized by rapidly changing technology, new product introductions and evolving industry standards. The introduction of products embodying new technology and the emergence of new industry standards might exert price pressures on our existing products or render them obsolete. Our markets are also characterized by consistent demand for state of the art technology and products. Existing and potential competitors might introduce new and enhanced products that could adversely affect the competitive position of our products. Our markets are dominated by a group of highly competitive vendors that are introducing dynamic competitive offerings around evolving industry standards.

We believe that our ability to anticipate changes in technology and industry standards and to successfully develop and introduce new, enhanced and differentiated products, on a timely basis, in each of the markets in which we operate, is a critical factor in our ability to grow our business. As a result, we expect to continue to make significant expenditures on research and development, particularly with respect to new software applications, which are continuously required in all our business areas. Moreover, in the event that we do not anticipate changes in technology or industry practices or fail to timely address market needs or not be able to provide the products that are in demand, we may lose market share and our results of operations may be materially adversely affected.

The growth of new communication channels could require substantial modification and customization of our current cross-channel products, as well as the introduction of new multi-channel products. Also, new products and technologies are being used by our customers to communicate with their customers, e.g., use of chatbots, conversational bots and other digital engagement channels. Such introduction of new products and technologies may change the usage patterns of our products and applications by our customers, which may result in some of our products and applications becoming obsolete. We may not be able to timely and effectively address such market trends and needs.

Further, customer adoption of these new technologies may be slower than we anticipate. We cannot assure you that the market or demand for our products and solutions will be sustained or grow as rapidly as we expect (if at all), that we will successfully develop new products or introduce new applications for existing products, that such new products and applications will achieve market acceptance, or that the introduction of new products or technological developments by others will not render our products obsolete. In addition, our products must readily integrate with major third-party telephone, security, front-office and back-office systems. Any changes to these third-party systems could require us to redesign our products, and any such redesign might not be possible on a timely basis or achieve market acceptance. Our inability to develop products that are competitive in technology and price and responsive to customer needs could have a material adverse effect on our business, financial condition and results of operations.

Therefore, some of the factors that could have a material adverse effect on our business, financial condition and results of operations include industry-specific factors; our ability to continuously develop, introduce, deliver and support commercially viable products, solutions and technologies; the market's rate of acceptance of the product solutions and technologies we offer; our ability to keep pace with market and technology changes; and our ability to compete successfully.

We depend on certain infrastructure vendors' installation base for a portion of our new and recurring sales.

We sell some of our products, either directly or through our other distribution channels, to customers who use infrastructure of our distributors or of other vendors or operate in their environment. To the extent that certain infrastructure vendors do not allow or support the integration of our products with their infrastructure or products or use other means to prevent us from selling our products to such customers, we may experience a reduction in sales to these customers, which is broader than such infrastructure vendors' direct business with us. This could impact our ability to attract new customers that use such infrastructure products or continue rendering maintenance services and other services and generate recurring sales to existing customers. As a result, we could lose customers and market share, which could have a material adverse effect on our business, financial condition, or results of operation.

Some of our enhanced services are dependent on leased network connectivity lines, and a significant disruption or change in these services could adversely affect our business.

A significant portion of our cloud software solutions are provided to customers through a dedicated network of equipment we own that is connected through leased network connectivity lines based on Internet protocol with capacity dedicated to us. We also move a portion of our voice long distance service over this dedicated network.

We lease network connectivity lines and space at co-location facilities for our equipment from third-party suppliers. These co-location facilities represent the backbone of our dedicated network. If any of these suppliers is unable or unwilling to provide or, if we desire, expand their current levels of service to us, the services we offer to customers may be adversely affected. We may not be able to obtain substitute services from other providers at reasonable or comparable prices or in a timely fashion. Any resulting disruptions in the services we offer that are provided over our dedicated network would likely result in customer dissatisfaction and adversely affect our operations. Furthermore, pricing increases by any of the suppliers we rely on for our dedicated network could adversely affect our results of operations if we are unable to pass through pricing increases.





We rely on third party network service providers to originate and terminate public switched telephone network calls, and thus significant failures in these networks could harm our operations.

For our business in the unified communications market, we leverage the infrastructure of third-party network service providers to provide telephone numbers, public switched telephone network call termination and origination services, and local number portability for our customers rather than deploying our own network throughout the United States. If any of these network service providers ceases operations or otherwise terminate the services that we depend on, the delay in switching our technology to another network service provider, if available, could have an adverse effect on our business, financial condition or operating results.

Interruptions or delays in our services through error, security breaches, cyber-attacks or the occurrence of unforeseeable events, could harm our ability to deliver our services, which could harm our relationships with customers and subject us to liability.

We provide some of our services through computer hardware that we own and that is currently located in third-party web hosting co-location facilities maintained and operated in various locations globally. Our hosting providers do not guarantee that our customers' access to our solutions will be uninterrupted, error-free or secure. Our operations depend on our providers' ability to protect their and our systems in their facilities against damage or interruption from natural disasters, power or network connectivity failures, criminal acts, including cyber-attacks, and similar events. Our back-up computer hardware and systems may not have sufficient capacity to recover all data and services in the event of an outage occurring simultaneously at all facilities. In the event that our hosting facility arrangements were terminated, or there was a lapse of service or accidental or willful damage to such facilities, we could experience lengthy interruptions in our service as well as delays and/or additional expense in arranging new facilities and services. Any or all of these events could cause our customers to lose access to the services they are purchasing from us. In addition, the failure by our third-party hosting facilities to meet our capacity requirements could result in interruptions in our service or impede our ability to scale our operations.

Design and mechanical errors, spikes in usage volume and failure to follow system protocols and procedures and cyber-attacks could cause our systems to fail, resulting in interruptions in our customers' service to their customers. Any interruptions or delays in our services, whether as a result of third-party error, our own error, natural disasters, security breaches or cyber-attacks, and whether accidental or willful, could harm our relationships with customers and our reputation. This in turn could cause a reduction in our revenue, subject us to liability, and cause us to issue credits or pay penalties or cause customers to fail to continue service, any of which could adversely affect our business, financial condition and results of operations. In the event of damage or interruption, our insurance policies may not adequately compensate us for any losses that we may incur.

We provide certain service level commitments to our customers, which could cause us to provide credits for future services if the stated service levels are not met for a given period and could adversely impact our revenue.

Our customer agreements for cloud offerings provide service level commitments. If we are unable to meet the stated service level commitments or suffer extended periods of unavailability for our service, we may be contractually obligated to provide these customers with credits for future services. Our revenue could be adversely impacted if we suffer unscheduled downtime that exceeds the allowed downtimes under our agreements with our customers. Any such extended service outages could harm our reputation, revenue and operating results.

## General Risks Relating to Our Offerings and Operations

We depend on the success of our recording solutions.

We are dependent on the success of our recording solutions to maintain profitability and sustain growth. Our recording solutions currently generate, and in recent years have generated, a significant portion of our revenues, and we will continue to be dependent on the sales of our recording solutions and recurring revenues, such as maintenance services, in the next several years. However, there can be no assurance that the recording market will not decline significantly or that revenues generated from our recording solutions will not be significantly impacted. Also, certain switch manufacturers offer various types of recording solutions, which could result in a significant decline in sales of our recording solutions and in sales of related applications, or a significant decrease in the profit margin on such solutions, any of which could have a material adverse effect on our business, financial condition or results of operations.

The trend of enterprise customers moving from voice to other means of communication with the enterprise (such as self-service, e-mail, instant messaging, social media and chat), may result in a reduction in the demand for our voice recording platform and applications. If such trend continues, and to the extent not mandated under applicable regulations, our customers may cease to record voice and switch to recording other means of communication. In addition, changes in regulations could reduce the need for recording, which would reduce the demand for our recording and platform. Any of the above may have a material adverse effect on our business, financial condition or results of operations.

The sale of advanced software applications and a multi-product offering requires significant resources and may also delay our recognition of revenues.

The sale of advanced software applications and multi-product offering is complex, and requires, among other things, customization and implementation, and is subject to a prolonged sale process. Therefore, the sale of advanced software applications and multi-product offering may impact the time we recognize the revenue from such orders. These factors could result in a delay in revenue recognition and materially adversely affect our results of operations.

A significant portion of our business relies on software applications. We cannot guarantee that our customers' adoption of advance software applications will meet our expectation and planning. As a result, certain applications may not reach the critical mass in sales and revenues necessary to offset the high cost of developing and maintaining such advanced applications, which could negatively affect our results of operation.

Our quarterly results may be volatile at times, which could cause us to miss our forecasts.

We generally provide forecasts as to expected future revenues in the coming fiscal quarters and fiscal year. Our revenue and operating results can vary and have varied in the past, sometimes substantially, from one quarter to another. These forecasts are based on management estimation and expectations, our then-existing backlog and an analysis of assumptions and assessments that may not materialize or end up being inaccurate. We may not meet our expectations or those of industry analysts in a particular future quarter. Our quarterly operating results may be subject to significant fluctuations due to the following factors: the timing and size of customer orders, delays in issuance or shifting of customer orders (as often happens when customers postpone their buying decisions to the end of the budgetary year), variations in distribution channels, mix of products and services, new product introductions, competitive pressures and general economic conditions. It is difficult to predict the exact mix of products and services for any period, as well as within the product category between interaction-related platforms and related applications and transactional related platforms and applications. Changes in the mix of products and services across our different business lines may significantly impact our revenues. Further, the period of time from order to delivery of our platforms and applications is short, and therefore our backlog for such products is currently, and is expected to continue to be, small and substantially unrelated to the level of sales in subsequent periods.



In addition, we derive a substantial portion of our sales through indirect channels, making it more difficult for us to predict revenues because we depend partially on estimates of future sales provided by third parties. Changes in our arrangements with our network of channel partners or in the products they offer, such as the introduction of new support programs for our customers, which combines support from our channel partners with back-end support from us, could affect the timing and volume of orders. Furthermore, our expense levels are based, in part, on our expectations as to future revenues. If our revenue levels are below expectations, our operating results are likely to be adversely affected, as most of our expenses are not variable in the short term.

Fluctuations in our results of operations may result from, among other things, our ability to retain and increase sales to existing customers, attract new customers and satisfy our customers' requirements, the timing and success of new product introductions and enhancements or product initiation by our competitors, the purchasing and budgeting cycles of our customers and general economic, industry and market conditions. Additionally, as a high percentage of our expenses, particularly employee compensation and other overhead costs, are relatively fixed, a variation in the level of sales, especially at or near the end of any quarter, may have a material adverse impact on our quarterly operating results.

While seasonality and other factors mentioned above are common in the software and technology industry, this pattern should not be considered a reliable indicator of our future revenue or financial performance. Many other factors, including general economic conditions, may also have an impact on our business and financial results.

We depend on our ability to recruit and retain key personnel.

In order to compete, we must recruit and retain executives and other key employees. Hiring and retaining qualified executives and other key employees is critical to our business, and competition for highly qualified and experienced managers in our industry is intense. There is no guarantee that additional key management members will not leave the Company, or if they do, that we will be able to identify and hire qualified replacements, or that the transition of new personnel will not cause disruption in our business.

In addition, due to our growth, or as a result of regular recruitment, we will be required to hire and integrate new employees. Recruiting and retaining qualified engineers and computer programmers to perform research and development and to commercialize our products, as well as qualified personnel to market and sell those products, are critical to our success. As of December 31, 2018, approximately 27% of our employees were devoted to research and product development and approximately 21% were devoted to marketing and sales. There can be no assurance that we will be able to successfully recruit and integrate new employees.

There is intense competition to recruit highly skilled employees in the technology industry. We have suffered from attrition in our workforce in previous years and we believe that such attrition will continue in the future. We may not be able to offer current and potential employees a compensation package that is satisfactory in order to keep them within our employment.

In certain locations in which we have development centers, the rate of attrition is high and could have a negative impact on our ability to retain our employees in such centers, timely develop our products and service our customers. In addition, the migration of development and other activities and functions to low-cost countries (such as India) may result in disruption to our business due to differing levels of employee knowledge, expertise and organizational and leadership skills, greater employee attrition and increased cost of retaining our most highly-skilled employees.

An inability to attract and retain highly qualified employees may have an adverse effect on our ability to develop new products and enhancements for existing products and to successfully market such products, all of which would likely have a material adverse effect on our results of operations and financial position. Our success also depends, to a significant extent, upon the continued service of a number of key management, sales, marketing and development employees, the loss of any of whom could materially adversely affect our business, financial condition and results of operations.

We rely on software from third parties. If we lose the right to use that software, we would have to spend additional capital to redesign our existing software to adhere to new third-party providers or develop new software.

We integrate and utilize various third-party software products as components of our products and solutions to enhance their functionality. Our business could be disrupted if functional versions of these software products were either no longer available to us or no longer made available to us on commercially reasonable terms. Also, in the event that any of these third-party vendors is unable to meet our requirements in a timely manner or that our relationship with any such vendor is terminated, we may experience disruption in our business until an alternative source of supply can be obtained. Any disruption, or any other interruption in a vendor's ability to provide components to us, could result in delays in making product deliveries or inability to deliver, which could have a material adverse effect on our business, financial condition and results of operations.

In addition, some of our third-party vendors use proprietary technology and software code that could require significant redesign of our products in the case of a change in vendor. If we lost the right to use such third-party software, we would be required to spend additional capital to either redesign our software to function with alternate third-party software or develop these components ourselves. As a result, we might be forced to limit the features available in our current or future products and solutions offerings and the commercial release of our products and solutions could be delayed.

Incorrect or improper use of our products and solutions or failure to properly provide professional services and maintenance services could result in negative publicity and legal liability.

Our products and solutions are complex and are deployed in a wide variety of network environments. The proper use of our software requires training and, if our software products are not used correctly or as intended, there may be inaccurate results. Our products may also be intentionally misused or abused by clients who use our products. The incorrect or improper use of our products and solutions or our failure to properly provide professional services and maintenance services, including installation, training, project management, product customizations and consulting to our clients may result in losses suffered by our clients, which could result in negative publicity and product liability or other legal claims against us.

Undetected errors or malfunctions in our products or services could directly impair our financial results and we could face potential product liability claims.

Our software products and services are highly complex. Despite extensive testing by us and by our clients, our products and services may include errors, failures, bugs or other weaknesses. Such errors, failures, bugs or other weaknesses in our products and services could result in product returns, loss of or delay in market acceptance of our products and services, loss of competitive position, or claims by clients or others, which would seriously harm our revenues, financial condition and results of operations. Correcting and repairing such errors, failures or bugs could also require significant expenditures of our capital and other resources and could cause interruptions, delays or cessation of our product licensing.

In addition, the identification of errors in our software applications and services or the detection of bugs by our clients may damage our reputation in the market as well as our relationships with existing clients, which may result in our inability to attract or retain clients.

Further, as our products are used by our customers for important aspects of their business, such as compliance recording and operational risk management functions that are often critical to our clients and must adhere to certain rules and regulations, any errors or defects in, or other performance problems with, our products and services could hurt our reputation and may damage our customers' business. If that occurs, we could lose future sales, our existing customers could elect not to renew, and we could potentially be subject to product liability claims. In particular, some of our customers, including financial institutions, may suffer significant damages as a result of a failure of our solutions to perform their functions. Although we attempt to limit any potential exposure through quality assurance programs, insurance and contractual terms, we cannot assure you that we will be able to eliminate or successfully limit our liability for any failure of our solutions. Any product liability insurance we carry may not be sufficient to cover our losses resulting from any such product liability claims. The successful assertion of one or more large product liability claims against us could have a material adverse effect on our results of operations and financial condition.

#### Risks Relating to Our Financial Condition

Our debt could adversely affect our financial condition and impact our business needs and plans.

In connection with our November 2016 acquisition of inContact, we incurred indebtedness pursuant to the Credit Facility available to us under the Credit Agreement and through the issuance of the Notes. The debt incurred could have adverse consequences to our financial condition and business. For example, it could:

- increase our vulnerability to general adverse economic and industry conditions;
- make it more difficult for us to satisfy our other financial obligations;
- make it more difficult for us to make strategic acquisitions;
- require us to dedicate a substantial portion of our cash flow from operations to payments on our debt, thereby limiting the availability of our cash flow to fund working capital, capital expenditures and other general corporate purposes;
- expose us to interest rate fluctuations since the interest on the Credit Agreement is imposed at variable rates;
- make it more difficult for us to satisfy our obligations to our lenders, resulting in possible defaults on and acceleration of such debt;
- limit to some extent our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate;
- place us at a competitive disadvantage compared to our competitors that have less debt and comparable resources;
- limit to some extent our ability to borrow additional funds as needed;
- restrict our ability to prepay the Notes or to pay cash upon exchanges of the Notes; and
- limit to some extent our ability to pay dividends, redeem stock or make other distributions.

Our ability to make payments on and to refinance our debt, to fund planned capital expenditures and to maintain sufficient working capital will depend on our ability to continue to generate cash in the future. This is subject to

general economic, financial, competitive, business, regulatory and other factors that may be beyond our control. We cannot assure you that our business will continue to generate sufficient cash flow from operations or that future borrowings will be available to us under the Credit Agreement or from other sources in an amount sufficient to enable us to service our debt, or to fund our other liquidity needs or execute on our strategic plans. If our cash flow and capital resources are insufficient to allow us to make scheduled payments on our debt, we may need to reduce or delay capital expenditures, sell assets, seek additional capital or restructure or refinance all or a portion of our debt on or before the maturity thereof, any of which could have a material adverse effect on our business, financial condition or results of operations. We cannot assure you that we will be able to refinance any of our debt on commercially reasonable terms or at all, or that the terms of that debt will allow any of the above alternative measures or that these measures would satisfy our scheduled debt service obligations. If we are unable to generate sufficient cash flow to repay or refinance our debt on favorable terms, it could significantly adversely affect our financial condition and the value of our outstanding debt. Our ability to restructure or refinance our debt will depend on the condition of the capital markets and our financial condition. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. A failure to comply with the covenants and other provisions of our outstanding debt could result in events of default under such instruments, which could permit acceleration of our Notes and borrowings under our Credit Agreement. Any required prepayment or exchange of our Notes or Credit Facility as a result of an event of default or fundamental change triggering such right would lower our current cash on hand such that we would not have those funds available for use in our business, which could adversely affect our operating results.

We are subject to a number of restrictive covenants under the Credit Agreement, which restrict our business and financing activities.

The Credit Agreement imposes, and the terms of any future debt may impose, operating and other restrictions on us. Such restrictions limit or prohibit, among other things, our and our subsidiaries' ability to incur or guarantee additional debt, pay dividends, repurchase or retire our equity interests or subordinated debt, transfer or sell our assets, make certain payments or investments and capital expenditures, create liens, engage in certain transactions with our affiliates and merge or consolidate with other companies.

The restrictions under the Credit Agreement may, in certain circumstances, prevent us from taking actions that management believes would be in the best interests of our business, and may make it difficult for us to successfully execute our business strategy or effectively compete with companies that do not have similar restrictions. In the event of any event of default under the Credit Agreement, the lenders under the Credit Agreement could elect to terminate their commitments or cease making further loans and accelerate the outstanding loans, and, in any such case, we could ultimately be forced into bankruptcy or liquidation. Because the indenture governing the Notes and the Credit Agreement has customary cross-default provisions, if our obligations under the Credit Agreement are accelerated we may be unable to repay or refinance the amounts due under the Credit Agreement or the Notes.

The accounting method for convertible debt securities that may be settled in cash, such as the Notes, may have a material effect on our reported financial results.

Under Accounting Standards Codification 470-20, Debt with Conversion and Other Options, an entity must separately account for the liability and equity components of convertible or exchangeable debt instruments (such as the Notes) that may be settled entirely or partially in cash upon exchange in a manner that reflects our economic interest cost. The effect of ASC 470-20 on the accounting for the Notes is that the equity component is required to be included in the additional paid-in capital section of shareholders' equity on our consolidated balance sheet, and the value of the equity component would be treated as original issue discount for purposes of accounting for the debt component of the Notes. As a result, we will be required to record a greater amount of non-cash interest expense in current periods presented as a result of the amortization of the discounted carrying value of the Notes to their principal amount over the term of the Notes. We will report lower net income (or greater net loss) in our financial results because ASC 470-20 requires interest to include both the current period's amortization of the debt discount and the instrument's coupon interest, which could adversely affect our reported or future financial results.



In addition, convertible or exchangeable debt instruments (such as the Notes) that may be settled entirely or partly in cash are not required to be included in our diluted share count if we have the ability and intent to settle exchanges in cash. If we elect to settle the Notes in ADSs, according to the treasury stock method, the transaction is accounted for in the diluted share count, as if the number of ADSs that would be necessary to settle the Notes are deemed issued. We cannot be sure that we will be able to continue to demonstrate the ability or intent to settle exchanges in cash or that the accounting standards in the future will continue to permit the use of the treasury stock method. If we are unable to use the treasury stock method in accounting for the ADSs deliverable upon exchange of the Notes, our diluted earnings per share would be adversely affected.

The conditional exchange feature of the Notes, if triggered, may adversely affect our financial condition and operating results.

The Notes will mature on January 15, 2024, unless earlier prepaid, redeemed or exchanged. In the event certain conditions are met during set periods, the conditional exchange feature of the Notes will be triggered, meaning that holders of Notes will be entitled at their option to exchange the Notes at any time during such specified periods. If one or more holders elect to exchange their Notes, we may elect to settle all or a portion of our exchange obligation through the payment of cash, which could adversely affect our liquidity. In addition, even if holders do not elect to exchange their Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital and adversely affect covenants under the Credit Agreement.

We face foreign exchange currency risks.

Exchange rate fluctuations affect our operations. We experience risks from fluctuations in the value of the NIS, EUR, GBP, INR and other currencies compared to the U.S. dollar, the functional currency in our financial statements. A significant portion of the expenses associated with our Israeli and Indian operations, including personnel and facilities related expenses, are incurred in NIS and INR, respectively, whereas most of our business and revenues are generated in dollars, and to a certain extent, in GBP, EUR and other currencies. If the value of the dollar decreases against these foreign currencies, our earnings may be negatively affected. As a result, we may experience an increase in the costs of our operations, as expressed in dollars, which could adversely affect our earnings.

We monitor foreign currency exposure and may use various instruments to preserve the value of sales transactions, expenses and commitments, however this cannot assure our full protection against risks of currency fluctuations that could affect our financial results. As part of our efforts to mitigate these risks, we use foreign currency hedging mechanisms, which may be ineffective in protecting us against adverse currency fluctuations and can also limit opportunities to profit from exchange rate fluctuations that would otherwise be favorable. For information on the market risks relating to foreign exchange, please see Item 11, "Quantitative and Qualitative Disclosures about Market Risk" in this annual report.

Additional tax liabilities could materially adversely affect our results of operations and financial condition.

As a global corporation, we are subject to income and other taxes in Israel, the United States and various foreign jurisdictions. Our domestic and international tax liabilities are subject to the allocation of revenues and expenses in different jurisdictions and the timing of recognizing revenues and expenses. Additionally, the amount of income taxes paid or accrued is subject to our interpretation of applicable laws in the jurisdictions in which we do business. From time to time, we are subject to income and other tax audits in various jurisdictions, the timing of which is unpredictable. While we believe we comply with applicable tax laws, there can be no assurance that a governing tax authority will not have a different interpretation of the law and assess us with additional taxes. If we are assessed additional taxes, it could have a material adverse effect on our results of operations and financial condition.



In recent years we have seen changes in tax laws resulting in an increase in effective tax rates, especially increased liabilities of corporations and limitations on the ability to benefit from strategic tax planning, with these laws particularly focused on international corporations. Such legislative changes in one or more jurisdictions in which we operate may have implications on our tax liability and have a material adverse effect on our results of operations and financial condition.

The Organization for Economic Cooperation and Development (“OECD”) introduced the base erosion and profit shifting (“BEPS”) project in 2013, which set out a plan to address international taxation principles in a globalized, digitized business world (the “BEPS Plan”). In November 2015, the G20 adopted the OECD’s published guidance on domestic legislation and administrative changes to address the BEPS Plan’s action points. During 2018, as part of the BEPS Plan, more than 80 countries have been implementing the Multilateral Convention to Implement Tax Treaty Related Measures to Prevent BEPS (“MLI”). The MLI significantly changes the bilateral tax treaties signed by any country that chose to sign the MLI. As a result of participant countries adopting the international tax policies set out under the BEPS Plan, changes have been and continue to be made to numerous international tax principles, as well as national tax incentives, which could adversely affect our provision for income taxes. Countries have only recently begun to translate the BEPS recommendations into specific national tax laws, and it remains difficult to predict the magnitude of the effect of such new rules on our financial results.

The comprehensive tax reform in the United States could adversely affect our results of operations and financial condition.

On December 22, 2017, the United States enacted the Tax Cuts and Jobs Act (the “U.S. Tax Reform”), a comprehensive tax legislation that includes significant changes to the taxation of business entities. These changes include, among others, (i) a permanent reduction to the corporate federal income tax rate, (ii) a partial limitation on the deductibility of business interest expense, (iii) a shift of the U.S. taxation of multinational corporations from a tax on worldwide income to a territorial system (along with certain rules designed to prevent erosion of the U.S. income tax base), (iv) immediate deductions for certain new investments instead of deductions for depreciation expense over time, (v) modifying or repealing certain business deductions and credits, and (vi) providing a permanent deduction to corporations generating revenues from non-US markets. See Note 12c to the Consolidated Financial Statements included elsewhere in this annual report. It is possible that the final impact may differ from our current assessment of our business and effective income tax rate, and our profitability may be adversely affected, due to, among other things, possible changes in the interpretations and assumptions made by us as a result of additional information or additional guidance that will be issued by the U.S. Department of Treasury, the IRS or other standard-setting bodies. In addition, there is still uncertainty regarding to what extent certain states will conform to the newly enacted federal tax law.

We might recognize a loss with respect to our financial investments.

We invest most of our cash through a variety of financial investments. If the obligor of any of our financial investments defaults or undergoes reorganization in bankruptcy, we may lose a portion of such investment and our assets and income may decrease. In addition, a downturn in the credit markets or the downgrading of the credit rating of our investments could result in a reduction in the market value of our holdings and reduce the liquidity of our investments, which could require us to recognize a loss at the time of liquidation and would adversely affect our assets and income.

If we fail to maintain effective internal controls over financial reporting, it could have a material adverse effect on our business, operating results, and the price of our ordinary shares and ADSs.

Effective internal controls are necessary for us to provide reliable financial reports and prepare consolidated financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles and U.S. securities laws, as well as to effectively prevent material fraud. Because of inherent limitations, even effective internal control over financial reporting may not prevent or detect every misstatement. In addition, if we fail to maintain the adequacy of our internal controls, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal control over financial reporting. Furthermore, as we grow our business or acquire businesses, our internal controls may become more complex and we may require significantly more resources to ensure they remain effective. In addition, we may identify material weaknesses or significant deficiencies in our internal control over financial reporting. Failure to maintain effective internal control over financial reporting could result in investigation or sanctions by regulatory authorities and could have a material adverse effect on our business and operating results, investor confidence in our reported financial information, and the market price of our ordinary shares and ADSs.

Current and future accounting pronouncements and other financial reporting standards and principles might have a significant impact on our financial position and negatively impact our financial results.

We prepare our Consolidated Financial Statements in accordance with U.S. GAAP. These principles are subject to interpretation by the SEC and various bodies formed to interpret and create appropriate accounting principles. A change in these principles can have a significant effect on our reported results and may even retroactively affect previously reported transactions. Additionally, the adoption of new or revised accounting principles may require that we make significant changes to our systems, processes and controls. Changes resulting from these new standards may result in materially different financial results and may require that we change how we process, analyze and report financial information and that we change financial reporting controls.

We regularly monitor our compliance with applicable financial reporting standards and review new pronouncements and drafts thereof that are relevant to us. As a result of new standards, changes to existing standards and changes in their interpretation, we might be required to change our accounting policies.

This could lead to risks associated with our ability to react in a timely manner to new accounting pronouncements and financial reporting standards and unpredictable changes in interpretation of standards. Any one or more of these events could have an adverse effect on our business, financial position, and profit.

#### Risks Relating to Intellectual Property, Data Protection and Regulatory Environment

We may face risks relating to inadequate intellectual property protection and liability resulting from infringement by our products or solutions of third-party proprietary rights.

Our success is dependent, to a significant extent, upon our proprietary technology. We currently hold 298 U.S. patents and 41 patents issued in additional countries covering substantially the same technology as the U.S. patents. We have 79 patent applications pending in the United States and other countries. We rely on a combination of patent, trade secret, copyright and trademark law, together with non-disclosure and non-competition agreements, as well as third party licenses to establish and protect the technology used in our systems. However, we cannot assure you that such measures will be adequate to protect our proprietary technology, that competitors will not develop products with features based upon, or otherwise similar to our systems, that third party licenses will be available to us or that we will prevail in any proceeding instituted by us in order to enjoin competitors from selling similar products. In most of the areas in which we operate, third parties also have patents which could be found applicable to our technology and products. Such third parties may include competitors, as well as large companies, which invest millions of dollars in their patent portfolios, regardless of their actual field of business. Although we believe that our products and solutions

do not infringe upon the proprietary rights of third parties, we cannot assure you that one or more third parties will not make a claim or that we will be successful in defending such claim.

We generally distribute our software products under software license agreements that restrict the use of our products by terms and conditions prohibiting unauthorized reproduction or transfer of the software products. However, effective copyrights and other intellectual property rights protection may be inadequate or unavailable to us in every country in which our software products are available, and the laws of some foreign countries may not be as protective of intellectual property rights as those in Israel and the United States. Consequently, we may be unable to prevent our proprietary technology from being exploited abroad, which could affect our ability to expand to international markets or require costly efforts to protect our technology. Policing the unauthorized use of our products, trademarks and other proprietary rights is expensive, difficult and, in some cases, impossible. Litigation may be necessary in the future to enforce or defend our intellectual property rights, to protect our trade secrets or to determine the validity and scope of the proprietary rights of others. Such litigation could result in substantial costs and diversion of management resources, either of which could harm our business. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property.

From time to time third parties allege or claim patent infringements. In defending ourselves against any such claims or actions we could be subject to substantial costs and diversion of management resources.

In addition, to the extent we are not successful in defending such claims, we may be subject to injunctions with respect to the use or sale of certain of our products or to liabilities for damages and may be required to obtain licenses which may not be available on reasonable terms. Any of these may have a material adverse impact on our business or financial condition.

We face risks relating to our use of certain “open source” software tools.

Certain of our software products contain a limited amount of open source code and we may use more open source code in the future. In addition, certain third-party software that we embed in our products contains open source code. Open source code is code that is covered by a license agreement that permits the user to liberally use, copy, modify and distribute the software without cost, provided that users and modifiers abide by certain licensing requirements. The original developers of the open source code provide no warranties on such code.

As a result of our use of open source software, we could be subject to suits by parties claiming ownership of what we believe to be open source code and we may incur expenses in defending claims that we did not abide by the open source code license. In addition, third party licensors do not provide intellectual property protection with respect to the open source components of their products, and therefore we may not be indemnified by such third-party licensors in the event that we or our customers are held liable in respect of the open source software contained in such third-party software. If we are not successful in defending against any such claims that may arise, we may be subject to injunctions and/or monetary damages or be required to remove the open source code from our products. Such events could disrupt our operations and the sales of our products, which would negatively impact our revenues and cash flow.

Moreover, under certain conditions, the use of open source code to create derivative code may obligate us to make the resulting derivative code available to others at no cost. The circumstances under which our use of open source code would compel us to offer derivative code at no cost are subject to varying interpretations. If we are required to publicly disclose the source code for such derivative products or to license our derivative products that use an open source license, our previously proprietary software products may be available to others without charge. If this happens, our customers and our competitors may have access to our products without cost to them, which could harm our business.

We monitor our use of such open source code to avoid subjecting our products to conditions we do not intend. The use of such open source code, however, may ultimately subject some of our products to unintended conditions so that we are required to take remedial action that may divert resources away from our development efforts.

Changes in the legal and regulatory environment could materially and adversely affect our business, results of operations and financial condition.

Our business, results of operations and financial condition could be materially and adversely affected if laws, regulations or standards relating to our business and products, us or our employees (including labor laws and regulations) are changed or new ones are implemented. Such implemented laws and regulations include requirements in the United States, Europe and other territories in relation to data privacy and protection, anti-bribery and anti-corruption, foreign investment, import and export, labor, tax and environmental and social issues. It is expected that the current U.S. administration will promulgate new or amended or abolish regulations that may impact our customers' business or our operations, such as the Dodd –Frank Act or consumer protection laws, which may reduce the demand for our products and services and may adversely affect our results of operations.

From time to time, we may also operate pursuant to specific authorizations of, and commitments towards, U.S., Israeli, E.U. or other governmental authorities and agencies. While we make every effort to comply with such requirements, we cannot assure you that we will be fully successful in our efforts, and that our business will not be harmed. Failure to comply with such laws, regulations, authorizations and commitments could result in fines, damages, civil liability and criminal sanctions against us, our officers and our employees, prohibitions on the conduct of our business and damage to our reputation.

We believe there is a global trend toward adoption and enforcement of data privacy, information security and cyber related legislation and procedures. For example, on April 14, 2016, the European Parliament formally adopted the GDPR, which formally went into effect on May 25, 2018. The GDPR provides that companies must comply with certain standards regarding the protection of the personal data of their customers or risk significant financial penalties. Regulations or interpretive positions may be enforced specifically with respect to the use of SaaS, hosting and cloud-based services, as well as other outsourced services. Adoption of such legislation and regulations may require that we invest in the modification of our solutions to comply with such legislation and regulations, cause a reduction in the use of our solutions and services or subject ourselves or our customers to liability resulting from a breach of such regulations. If we are unable to comply with these specific requirements or guidelines, or privacy and information security legislation in general, it could materially adversely affect our business and results of operations.

Failure to comply with privacy legislation or procedures may cause us to incur civil liability to government agencies, customers, shareholders and individuals whose privacy may have been compromised.

In addition, our revenues would be adversely affected if we fail to adapt our products and services to changes in rules and regulations applicable to the business of certain clients, such as rules and regulations regarding securities trading, broker sales compliance and anti-money laundering, which could have an impact on their need for our products and services. There are growing compliance and regulatory initiatives and changes for corporations and public organizations around the world that are driven by events and concerns such as accounting scandals, security threats and economic conditions.

While we attempt to prepare in advance for these new initiatives and standards, we cannot assure you that we will be successful in our efforts, that such changes will not negatively affect the demand for our products and services, or that our competitors will not be more successful or prepared than us. Alternatively, a reduction in the implementation of compliance and regulatory requirements in the industries in which we operate could result in a decrease in demand, which could materially and adversely affect our business and results of operations.

In certain industries in which we operate, there may be regulations or guidelines for use of SaaS, hosting and cloud-based services that mandate specific controls or require enterprises to obtain certain approvals prior to outsourcing certain functions. In addition, we may be limited in our ability to transfer or outsource business to certain jurisdictions and may be limited in our ability to undertake development activity in certain jurisdictions, which may impede on our efficiency and adversely affect our business results of operations.

#### Risks Relating to our Presence in Israel

We are subject to the political, economic and security conditions in Israel.

Political, economic and military conditions in Israel directly affect our operations. Since the establishment of the State of Israel, a number of armed conflicts have taken place, varying in degree and intensity. There can be no assurance that such attacks or hostilities, to the extent that they continue in the future, will not have an impact on our premises or major infrastructure and transport facilities in the country, which may have a material adverse effect on our ability to conduct business.

Additionally, several countries restrict doing business with Israel and Israeli companies, and additional companies may restrict doing business with Israel and Israeli companies or boycott Israel as a result of an increase in hostilities or due to disagreement with Israel's policies and agenda. This may also seriously harm our operating results, financial condition and the ability to expand our business.

Some of our officers and employees are obligated to perform annual military reserve duty, and in the event of a military conflict, these persons could be called to active duty at any time, for extended periods of time and on very short notice. The absence of a number of our officers and employees for significant periods could disrupt our operations and impact our business. We cannot assess the full impact of these obligations on our workforce or business if conditions should change.

It may be difficult to enforce a U.S. judgment against us and our officers and directors in Israel or the United States, or to serve process on our officers and directors.

Service of process upon us, our Israeli subsidiaries, directors and officers, and Israeli advisors, if any, named in this annual report, may be difficult to obtain within the United States. Additionally, it may be difficult to enforce civil liabilities under U.S. federal securities law in original actions instituted in Israel. Israeli courts may refuse to hear a claim based on a violation of U.S. securities laws because Israel is not the most appropriate forum to bring such a claim. In addition, even if an Israeli court agrees to hear a claim, it may determine that Israeli law and not U.S. law is applicable to the claim. If U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact, which can be a time-consuming and costly process. Certain matters of procedure will also be governed by Israeli law. There is little binding case law in Israel addressing these matters.

We currently benefit from local government programs as well as international programs and local tax benefits that may be discontinued or reduced.

We derive and expect to continue to derive significant benefits from various programs including Israeli tax benefits relating to our "Preferred Technology Enterprise" programs and certain grants from the National Association for Technology and Innovation (formerly known as the Office of the Chief Scientist of the Ministry of Economy) of the



State of Israel (the “NATI”) for research and development.

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To be eligible for tax benefits as a Preferred Technology Enterprise, we must continue to meet certain conditions. While we believe that we have met and continue to meet the conditions that entitle us to previously obtained Israeli tax benefits, there can be no assurance that the Israeli Tax Authorities will agree.

To be eligible for NATI-related grants and benefits, we must continue to meet certain conditions, including conducting the research, development, manufacturing of products developed with such NATI grants in Israel, and providing the NATI with an undertaking that the know-how to be funded, and any derivatives thereof, is wholly owned by us, upon its creation. In addition, we are prohibited from transferring to third parties the know-how developed with these grants without the prior approval of a governmental committee and, possibly, paying a fee. See Item 4, “Information on the Company—Research and Development” in this annual report, for additional information about NATI programs.

If grants, programs and benefits available to us or the laws, rules and regulations under which they were granted are eliminated or their scope is further reduced, or if we fail to meet the conditions of existing grants, programs or benefits and are required to refund grants or tax benefits already received (together with interest and certain inflation adjustments) or fail to meet the criteria for future Preferred Technology Enterprises, our business, financial condition and results of operations could be materially adversely affected.

Provisions of Israeli law may delay, prevent or otherwise impede a merger with, or an acquisition of, our company, which could prevent a change of control, even when the terms of such a transaction are favorable to us and our shareholders.

Israeli corporate law regulates mergers, requires tender offers for acquisitions of shares above specified thresholds, requires special approvals for transactions involving directors, officers or significant shareholders and regulates other matters that may be relevant to these types of transactions.

Furthermore, Israeli tax considerations may make potential transactions unappealing to us or to our shareholders whose country of residence does not have a tax treaty with Israel exempting such shareholders from Israeli tax. These and other similar provisions could delay, prevent or impede an acquisition of us or our merger with another company, even if such an acquisition or merger would be beneficial to us or to our shareholders.

See Item 10, “Additional Information—Mergers and Acquisitions” in this annual report, for additional discussion regarding anti-takeover effects of Israeli law.

#### Risks Relating to our Securities

The market price of each of our ADSs, ordinary shares and the Notes is volatile and may decline.

Numerous factors, some of which are beyond our control, may cause the market price of our ADSs, ordinary shares and the Notes to fluctuate significantly. These factors include, among other things:

- Quarterly variations in our operating results;
- Changes in expectations as to our future financial performance, including financial estimates by securities;
- Perceptions of our company held by analysts and investors;
- Additions or departures of key personnel;

- Announcements related to dividends;
- Development of or disputes concerning our intellectual property rights;
- Announcements of technological innovations;
- Customer orders or new products by us or our competitors;
- Acquisitions or investments by us or by our competitors and partners;
- The exchangeability of the Notes for ADSs;
- Hedging or arbitrage trading activity involving ADSs by holders of the Notes;

Modification of hedge positions by counterparties to the hedge transactions we entered into simultaneously with the issuance of the Notes, including the possible entry into or unwinding of derivative transactions with respect to the ADSs or the purchase or sale of the ADSs or other NICE securities in secondary market transactions;

- Currency exchange rate fluctuations;
- Earnings releases by us, our partners or our competitors;
- General financial, economic and market conditions;
- Political changes and unrest in regions, natural catastrophes;

Market conditions in the industry and the general state of the securities markets, with particular emphasis on the technology and Israeli sectors of the securities markets; and

- General stock market volatility.

Our ADSs and ordinary shares are traded on different markets and this may result in price variations.

Our ADSs have been listed on The NASDAQ Stock Market since 1996 and our ordinary shares have been traded on the Tel Aviv Stock Exchange, or the “TASE”, since 1991. Trading in our securities on these markets takes place in different currencies (our ADSs are traded in U.S. dollars and our ordinary shares are traded in New Israeli Shekels), and at different times (resulting from different time zones, different trading days and different public holidays in the United States and Israel). As a result, the trading prices of our securities on these two markets may differ due to these factors. In addition, any decrease in the price of our securities on one of these markets could cause a decrease in the trading price of our securities on the other market.

Substantial future sales or the perception of sales of our ADSs or ordinary shares, or the exchange of a substantial amount of Notes, or perception thereof, could cause the price of our ADSs or ordinary shares to decline.

Sales of substantial amounts of our ADSs or ordinary shares in the public market, or the perception that these sales could occur, could adversely affect the price of our ADSs and ordinary shares and could impair our ability to raise capital through the sale of additional shares. Such sales may also make it more difficult for us to sell equity or equity-related securities in the future at a time and at a desirable price.

Additionally, future exchanges of the Notes for ADSs, or the perception that these exchanges may occur, could reduce the market price of the ordinary shares or ADSs. This could also impair NICE’s abilities to raise additional capital

through the sale of its securities.

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The market prices of the ordinary shares and the ADSs, which may fluctuate significantly, will directly affect the market price for the Notes.

We expect that the market price of the ordinary shares and the ADSs will affect the market price of the Notes. This may result in greater volatility in the market price of the Notes than would be expected for non-exchangeable notes. The market price of the ordinary shares and the ADSs will likely fluctuate in response to a number of factors, many of which are beyond our control. Holders who receive ADSs upon exchange of the Notes will therefore be subject to the risk of volatility and depressed prices of ADSs. In addition, we expect that the market price of the Notes will be influenced by yield and interest rates in the capital markets, our creditworthiness and the occurrence of certain events affecting us that do not require an adjustment to the exchange rate. Fluctuations in yield rates in particular may give rise to arbitrage opportunities based upon changes in the relative values of the Notes and ADSs. Any such arbitrage could, in turn, affect the market prices of ADSs and the Notes.

Holder of our ADSs do not have any rights as shareholders of our company.

Holder of our ADSs are not treated as shareholders of our company unless they withdraw the ordinary shares underlying the ADSs from the depositary, which holds the ordinary shares underlying the ADSs. Holders of ADSs therefore do not have any rights as shareholders of our company, other than the rights that they have pursuant to the deposit agreement with the depositary.

We have not registered, and do not currently intend to register, the Notes, the ADSs into which the Notes are exchanged or exchangeable or the ordinary shares represented thereby. There are restrictions on Noteholders' ability to transfer or resell the Notes, ADSs and the underlying ordinary shares.

The Notes, the ADSs deliverable upon exchange of the Notes and the ordinary shares represented thereby were offered and sold pursuant to an exemption from registration under the Securities Act and applicable state securities laws, and we have not registered, and do not currently intend to register, the Notes, the ADSs or such ordinary shares. Therefore, Noteholders may transfer or resell the Notes only in a transaction registered under or exempt from the registration requirements of the Securities Act and applicable state securities laws and may be required to bear the risk of their investment for an indefinite period of time.

The fundamental change and make-whole fundamental change provisions of the Notes may delay or prevent an otherwise beneficial attempt to acquire our company.

The fundamental change prepayment rights of the Noteholders under the Notes, which would allow Noteholders to require that we prepay all or a portion of their Note upon the occurrence of a fundamental change, and the provisions under the Notes requiring an increase to the exchange rate for exchanges in connection with a make-whole fundamental change, in certain circumstances may delay or prevent an acquisition of NICE that would otherwise be beneficial to our shareholders.

Item 4. History and Development of the Company.

Our History

NICE was founded on September 28, 1996, as Neptune Intelligent Computer Engineering Ltd., with the vision to digitize unstructured data previously captured using analog means. Such digitization enabled to vastly improve the capture, distribution, storage and security of such data. On October 14, 1991, the Company was renamed NICE-Systems Ltd., expanding its mission to the Customer Service market, to become a leading global provider of Workforce Optimization software applications, as well as adding solutions for the Public Safety sector. As computing power evolved, it became feasible to perform analytics on the unstructured data. NICE launched Interaction Analytics products allowing to understand and act on the captured data. In 2007 NICE acquired Actimize, a leader in Financial Crime and Compliance analytics solutions, and added real-time transaction data analytics as well as solutions to prevent financial fraud.

On June 6, 2016, we were renamed NICE Ltd., which is our legal and commercial name. Today NICE is an enterprise software leader in both the Customer Engagement and Financial Fraud and Compliance markets. Our solutions help organizations create exceptional Customer Experiences, improve Public Safety and prevent Financial Crime, based on cloud platforms that combine Digital and Omnichannel capabilities, advanced Analytics, smart Automation and Artificial Intelligence.

NICE is a company limited by shares organized under the laws of the State of Israel. Our Israeli offices are located at 13 Zarchin Street, P.O. Box 690, Ra'anana 4310602, Israel (Tel. +972-9-775-3151). Our subsidiary, NICE Systems, Inc. has been appointed as our Agent for Service in the United States, and is located at 221 River Street, Hoboken, New Jersey 07030.

Principal Capital Expenditures

In the last three fiscal years, our principal capital expenditures were the acquisition of other businesses, repurchases of our ADRs and distributions of dividends. For information regarding our acquisitions and ordinary share repurchases, please see Item 5, "Operating and Financial Review and Prospects—Recent Acquisitions," and "Liquidity and Capital Resources," in this annual report. For additional information regarding our ordinary share repurchases, please also see Item 16E, "Purchases of Equity Securities by the Issuer and Affiliated Purchasers," in this annual report.

For a breakdown of total revenues by products and services and by geographic markets for each of the last three years, please see Item 5, "Operating and Financial Review and Prospects – Results of Operation," in this annual report.

About NICE

NICE is a global enterprise software leader providing solutions that are based on advanced analytics, artificial intelligence (sometimes referred to as "AI" in this annual report) and automation. We serve two main markets, Customer Engagement and Financial Crime and Compliance. NICE's integrated solutions are based on advanced cloud platforms designed to provide a complete and unified portfolio for improving customer experience as well as preventing financial crime.

NICE's core mission is empowering organizations to provide exceptional customer experiences and protect their reputation by preventing financial crime. Our software is used by customer service organizations of enterprises of all sizes and verticals, and by compliance and fraud-prevention groups in leading financial institutions.

With an integrated cloud platform and advanced analytics solutions, we help organizations understand customers' behaviour, create smarter personal customer connections, engage their employees, optimize their workforce and improve their processes. Additionally, we help them predict needs and identify risks to create excellent and

personalized customer experience, prevent fraud and ensure compliance. These capabilities are enhanced through the utilization of advanced automation and artificial intelligence capabilities. Our most advanced solutions constantly improve by applying machine learning to cross-industry and cross-organizational data and by offering collective insights.

NICE is at the forefront of two industry transformations; the adoption of cloud platforms by enterprises and the shift by financial institutions to integrated risk management solutions for end-to-end financial crime prevention.

In both cases, our ability to deeply integrate analytics and automation and apply it across multiple data sources and workflows enables organizations to achieve greater effectiveness and efficiency.

We rely on several key assets to drive our growth:

Our market-leading open customer experience cloud platform with an integrated suite application for omnichannel routing, workforce optimization and analytics, as well as our open Financial Crime and Compliance cloud platform. Both platforms embed analytics, automation and artificial intelligence, and are protected by a broad array of patents.

Our ability to provide solutions that cover all market segments, from small to mid-sized business to large scale Fortune 100 enterprises.

Our extensive portfolio of applications as well as a large partner ecosystem allow NICE's customers to benefit from a wide range of both cloud and on-premises solutions.

Our broad array of proprietary technologies and algorithms in the domains of automation, analytics, machine learning, speech-to-text, natural language processing, personality-based routing and others.

Our market leadership, which makes us a well-recognized brand and creates top-of-mind awareness for our solutions in our areas of operation.

Our loyal customer base: Today, more than 25,000 organizations in over 150 countries, including 85 of the Fortune 100 companies, use NICE solutions.

Our ability to quickly drive mainstream adoption for innovative solutions and new technologies and trends, which we introduce to the market through our direct sales force and distribution network.

Our skilled employees and domain expertise in our core markets allows us to bring our customers the right solutions to address key business challenges and build strong customer partnerships.

Our access to data for improving our algorithms through machine learning and artificial intelligence, which relies on a combination of our expansive customer base, cloud deployments and domain expertise.

Our services, customer support and operations, which enable our customers to quickly enjoy the benefits of our solutions, with multiple deployment models in the cloud or on-premises throughout the world and support for full value realization and customer success.

We have established a leadership position in many of our areas of operation by offering comprehensive and innovative enterprise-grade platforms, solutions and technologies. Our customers, across multiple sizes and verticals, including banking, telecommunications, healthcare, insurance, retail, travel, gaming, public safety, state and local government, are benefiting from the tangible and practical business value that our solutions provide.



## Business Overview

NICE is an industry leader operating in two main markets: Customer Engagement and Financial Crime and Compliance. NICE's long-term strategy is to further strengthen its leadership position in these two market segments and further enhance its position in adjacent markets. During 2018, NICE continued to execute its long-term strategy through both organic activity and acquisitions, enhancing our position as a leader in both markets.

### Customer Engagement

Organizations are challenged to differentiate through high quality customer experiences that are personalized and responsive to consumers' ever-changing expectations across all touch points, and to differentiate themselves through efficient and effective interactions. In addition, they must find ways to generate business insights, better understand customer intent and create smarter customer connections. They need to accomplish these objectives while containing operational costs and adhering to regulations. NICE's comprehensive portfolio of solutions and customer experience platform, CXone™, helps organizations address these challenges.

NICE is a global leader in the Customer Engagement market. We serve contact centers, back office operations and retail branches, across multiple industries. Our platform and solutions serve thousands of organizations worldwide, providing a powerful combination of omnichannel routing in the cloud with workforce optimization (including recording and workforce management), analytics, automation and artificial intelligence capabilities. Our platform and solutions both in the cloud as well as on-premises, empower businesses to deliver consistent and personalized experience across the customer journey while optimizing business performance and ensuring compliance.

Our unified, enterprise-grade open cloud platform CXone™ supports contact centers of all sizes and geographic locations – from small single sites, to distributed remote agents, to global enterprises. The platform is open and extensible, with over 300 Application Program Interfaces (APIs) and over 120 development partners participating in our DEVone partnership program.

Our smart omnichannel routing capabilities empower organizations to connect their customer journeys across any channel to the right employee, provide a superior experience in the customer's preferred voice or digital channel, offer Interactive Voice Response (IVR) for self-service, and make it easier for organizations to add future agent-assisted or self-service channels.

Our advanced analytics solutions help organizations understand their customers, their employees and their processes, as well as match employees to customers based on their personality profile, to improve customer experience. Our solutions analyze both structured and unstructured data, coming from all touchpoints of the customer journey and data systems, allowing organizations to deliver the consistent and personalized experience that customers today expect, as well as improving operational efficiency, ensuring regulatory compliance and increasing revenues. Our adaptive persona-based and analytics-driven approach for agent engagement and improvement allows organization to drive employee productivity and motivation. Our workforce optimizations solutions enable organizations to ensure that their employees are engaged, properly trained and in a position to provide the highest quality of service.

Our automation and artificial intelligence solutions streamline service delivery by smartly finding processes that can be automated, and then triggering both attended and unattended automated real-time assistance, depending on the skills required. Our automation solutions are easy to deploy and free employees from the manual execution of repetitive tasks by deploying software robots to handle such tasks. This leads to reduced handle time, lower costs, improved response times and happier customers and employees.

## Financial Crime and Compliance

Financial institutions are regularly challenged with prevention of fraud and money laundering, and compliance adherence. They have a common need for risk management solutions that will help them stay ahead of the evolving landscape of threats and efficiently adapt to changes in business and regulatory requirements.

Furthermore, many organizations that are not traditional financial institutions, including alternative payment platforms, cryptocurrency exchanges, gaming, fintech, etc. find themselves under similar threats and under increasing regulatory scrutiny and need to quickly adjust and ensure they adhere with those requirements.

NICE is a global leader in advanced analytics-based applications for fighting financial crime and ensuring compliance. NICE provides organizations with proven capabilities for real-time and cross-channel fraud prevention, anti-money laundering, brokerage compliance and enterprise-wide case management. With this set of solutions, financial institutions can tighten risk controls, lower operational and information technology costs, enhance investigation efficiency and improve customer experience.

NICE serves the financial crime and compliance needs of hundreds of organizations, including many of the world's top financial institutions, regulatory authorities and emerging fintech companies. Our solutions monitor millions of financial transactions daily, enabling organizations to mitigate the risk of financial crime, improve compliance and reduce operational costs.

Our open platform serves as an end-to-end financial crime and compliance solution. This allows our customers to use a unified platform instead of integrating multiple solutions, whether home-grown or from third party vendors. The NICE platform handles the entire process, including detection, investigation, remediation and reporting. Such integrated open platform allows our customers to improve detection, lower costs, keep tight control over their process and automate regulatory reporting.

In 2018 we introduced X-Sight, the market's first cloud-based Financial Crime Risk Management Platform-as-a-Service, that will enable financial services organizations (FSO) to transition to the cloud. Our Autonomous Financial Crime capabilities, that incorporate artificial intelligence and advanced automation into our platform, allow organizations to further increase detection, reduce noise and automate many previously manual routine tasks. In addition, our ActOne offering introduces analytics and automation to financial crime investigation processes.

Our Actimize Watch solution allows us to better protect financial institutions from criminal threats by leveraging the cloud and machine learning technologies. Organizations that subscribe to the cloud delivered service benefit from our data scientists tuning their analytics and creating new machine learning models that can be seamlessly deployed in their production environment. Actimize Watch customers further benefit from the collective intelligence of Actimize and peer organizations, as new threats that are detected are shared with all other customers of the service. As such, Actimize Watch serves as an inoculation, protecting all organizations from an attack perpetrated against a specific organization.

Mid-size financial institutions are finding themselves under increased pressure to adopt compliance best practices. Our Essentials platform is a cloud-based financial crime and compliance solution that enables smaller organizations to enjoy the capabilities previously only afforded to large organizations.

We plan to continue to expand our addressable market by providing cloud solutions to smaller institutions and by expanding to non-traditional financial institutions. We also expand our value to our customers by leveraging artificial intelligence, the cloud and robotic automation which facilitate both better protection and significant cost reductions.



## Industry and Technology Trends

Following are the key trends that are driving demand for our solutions:

Organizations prefer using open software platforms as the foundation for their applications. Open platforms provide unified and fully-integrated solutions that are all based on a shared framework of service, allowing for fast innovation, easy deployment, flexible functionality and an enhanced ecosystem of solution providers. Third party solutions can be easily added to extend the functionality of the platform to match a customer's or industry specific needs.

Cloud solutions are expanding and moving upmarket to enterprise companies. Cloud solutions have been popular mostly for small and mid-size organizations, allowing them to achieve flexible and cost-effective deployment models for their enterprise software. These include SaaS, Contact Center as a Service ("CCaaS"), Infrastructure as a Service, Platform as a Service, and other cloud-based solutions. By using cloud solutions, customers can scale their operation quickly and easily while paying only for the resources they use. We are now seeing larger, more complex corporate deployments in large to very large organizations, in part because cloud providers have improved their capabilities and are now able to meet such organization's requirements around security, scale, and other items.

Consumers' demand for a holistic omnichannel experience that is effortless and consistent across all touchpoints has become a standard requirement. While consumers move constantly between devices and channels, their expectation is for consistent experiences across all communication channels and a seamless transformation from one channel to another. They easily and often traverse these channels, depending on their task, location, time-of-day or even progress within a certain process. The number of channels is continuously growing, but the consumers keep viewing them all as one. Organizations are expected to quickly adapt to the large variety of channels as well to view them seamlessly in the same way their consumers do and offer a reliable and consistent experience across all touch points.

Organizations will rely more on analytics and AI to further improve customer experience as well as the general performance of the Contact Center. Organizations are increasingly adopting a customer-centric strategy to get better understanding of customer behaviors and gain insight into the omnichannel customer journey. Organizations are increasing the use of artificial intelligence empowered tools to achieve focused decisioning and real-time action solutions – being proactive and predictive. Front and back office functions seek to employ analytics to better optimize their operations. These tools include, among others, cognitive engagement solutions, like interactive communications, predictive analytics and machine learning.

Organizations are looking for ways to engage their employees in personalized and adaptive ways to improve workforce productivity and satisfaction. Contact Center employees are heterogenic with different needs and requirements. These employees, especially those that belong to the "millennial" generation, expect organizations to hear their voice and engage them individually. Successfully engaging and motivating these employees in a personalized manner reduces attrition levels, hiring and on boarding efforts and improves the experience level of the team, resulting in an improved experience for end-customers.

Organizations look at Big Data technologies to analyze a wealth of information, derive new business insights and act in real time. Structured and unstructured data, from millions of omnichannel interactions and transactions, as well as customer feedback, open up an opportunity to gain deep insight and human understanding, uncovering customer and employee intentions and behavioral patterns. Organizations keep looking for ways to elevate their usage of Big Data and advance from glimpses of interactions and transactions to a meaningful understanding of behaviors, and to identify a customer's underlying concerns. Furthermore, they strive to ensure compliance in real time, which is then translated into action and into providing the best solution and an accurate response.

Automation and machine learning are increasingly used to enhance customer experience and efficiency. Smart and self-learning machines allow for the automated enhancement of real-time guidance and analytics-based insights (including speech and text analytics), behavior analytics and technique focused on profiling, trending and pattern detection. As a result, organizations increasingly use these technologies to provide faster and more efficient customer service.

Chat and conversational bots are being deployed to contain and deflect calls and interactions into self-service. Organizations are looking for new and advanced digital means to improve customer satisfaction and reduce cost. Further development of intelligent bots will improve operational processes, ensure compliance with rules and regulations, increase flexibility in customer interactions with the contact center, as well as decrease error rate and wait time while providing a personalized experience. This technology will increase self-service channels containment and allow the human workforce to focus on more complex added value services.

There is a growing awareness among companies, consumers and regulators of the value of personal information, and an increased concern with how this data is being collected and stored. Organizations are required to gain and maintain trust with their customers, and governments are increasingly regulating the ways to gather and manage users' information. GDPR and CCPA (California Consumer Privacy Act) seem to be part of the global trend seeking to hold companies accountable for how they address privacy and data.

Preventing financial crime and ensuring stringent compliance and evolving regulatory environments. Financial services regulators are calling for a fundamental change in the underlying culture of the entities that they regulate, in order to send a strong message that protecting an institution, its customers and its assets, is of primary importance. The need to ensure compliance with requirements for advanced technological solutions can be seen across customer interactions and financial services markets. Financial services organizations are increasingly being asked to document and prove to their regulators that the controls that are in place are working and effective. This is evidenced by substantial fines that have recently been levied against such institutions. Furthermore, the regulatory requirements are constantly evolving, requiring financial institutions to respond with solutions that are up to date with the latest modifications.

An unpredictable threat landscape environment. The growing number of data breaches and cyber security incidents puts increasing amounts of personally identifiable information and sensitive data at risk of exposure. This information can be used to open accounts that can be used for laundering money, terrorist financing, account fraud, market manipulation, social engineering, and more. Such potential risks threaten an organization's reputation, as well as create large financial exposures due to both losses as well as fines. In addition, the large volumes of data, having to do with both internal and external threats, place an enormous operational burden on organizations dealing with threats. Having the ability to aggregate, analyze, compare, and decision those incidents and cases increasingly points to the need for a robust and comprehensive way in which cases are handled by large financial services organizations.

An increasing need to control cost of compliance. The regulatory pressures and increasing threat landscape have driven a sharp increase in the number of risk and compliance personnel, which in turn have dramatically increased the cost of compliance. Organizations are turning to technology to allow them to control these costs without compromising their compliance adherence and while continuing to lower their exposure to financial crime.

An integrated risk management platform is becoming more prevalent. The ever-expanding risk landscape and sophistication of financial criminals, as well as the need to keep costs in check, creates a growing need for a single view of financial crime-related risk, thereby allowing organizations to aggregate and analyze the different detection signals coming from throughout the financial services organization. Financial institutions are seeking a single platform that aggregates all such information from across the organization, with the capabilities to analyze it, act on it and present it in a single dashboard to both operations and executives.

Process automation and machine learning are increasingly used to automate financial investigation tasks where it may not be necessary to have human involvement. This frees up investigators from low value, high volume manual tasks so that they may better focus on more important and strategic tasks. This leads to better resource utilization, increased accuracy and productivity, and improved return on investment.

Financial services providers are increasingly considering introducing Blockchain based solutions. Blockchain can provide high levels of security and transparency to financial transactions, as well as decrease costs through its decentralized structure. This decentralization can also help decrease financial risks, as each transaction is stored with a highly difficult to hack cryptographic mechanism. It can also support secure and transparent data sharing between financial organizations and the creation of consortiums.

## Strategy

### Strengthening our market leadership

We intend to solidify and increase our market-leading position by continuing to offer and expand our comprehensive portfolio of solutions and by leveraging several major industry trends:

The shift to the cloud – we provide a cloud platform offering for both Customer Engagement as well as for Financial Crime and Compliance. This allows us to provide a broader set of functionalities with the strength of our integrated offering.

Expanding our market share in the mid-market - our cloud platforms as well as our expanded partner network and our marketing and sales organizations allow us to reach and to serve smaller organizations in a more cost-effective way than in the past, significantly enhancing our market opportunity

Adoption of artificial intelligence and automation – NICE expertise and technology in the domains of Machine Learning, Artificial Intelligence and Automation as well as our unique access to data to train these algorithms via our cloud offering, allows us to provide market leading solutions in these domains.

Expanding our geographic footprint in selected locations where we can further grow and establish our presence.

Our brand, global reach, financial resources, extensive domain expertise and ability to deliver solutions for large organizations, as well as small and mid-sized companies, will also contribute to increasing our market-leading position.

In 2018 we continued expanding our cloud offering through our NICE inContact CXone™, cloud customer experience platform. CXone™ provides a broad suite of integrated applications to power the contact center, including omnichannel routing, analytics, workforce optimization, automation and Artificial Intelligence – all on an open cloud foundation.

We also expanded our Autonomous Financial Crime Management offering, allowing financial services organizations to merge innovative technologies to seamlessly connect data, apply machine learning, advanced analytics and automation to turn raw data into intelligence. As part of this approach, we launched ActOne, a solution that allows the investigation and resolving of alerts with limited human intervention. This enables financial services companies to lower costs, reduce risks and increase efficiency. We also recently launched X-Sight, the industry's first cloud Platform as a Service (PaaS) for financial crime and compliance. These offerings enable us to increase value to our existing customers, as well as expand NICE's reach and open-up new opportunities, considerably increasing our addressable market size.

We plan to continue to develop our open cloud platforms, for both the Customer Engagement and Financial Crime markets, to enable unified integrated solutions that offer fast innovation and easy implementation. We also plan to continue to develop DEVone, our partners and developers' ecosystem, and our advanced applications marketplace, CXexchange. These allow our customers to expand the functionality of CXone™ to cover even more business needs.

We intend to drive additional growth by continuing to develop our direct relationships with customers, nurturing our partner ecosystem, and creating growth in each of our business areas. Additionally, we intend to lead in new product categories, as we introduce novel solutions and enter additional market segments.

Our products and technologies can provide value in markets that are adjacent to our existing markets, such as back office operations, alternative payment service providers, fintech, gaming and others. We plan to expand our market reach into such adjacencies, by adapting our products and leveraging technology as well as our customer relationships and brand to expand our addressable market.

Continuing to deliver more comprehensive solutions to our existing customers

One of our main assets is our growing customer base. We believe there are many opportunities to up-sell and cross-sell within our existing customer base. This includes increasing our customers' exposure to the full breadth of our portfolio that we continue to enhance to provide our customers with new benefits by expanding the offering they already use, adding new products and migrating our customers to the cloud when ready to do so.

Continuing organic innovation and development, while also pursuing acquisitions

We intend to continue investing in innovation and development and continue to augment our organic growth with additional acquisitions that will broaden our product and technology portfolio, expand our presence in selected verticals, adjacent markets and geographic areas, broaden our customer base, and increase our distribution channels.

Maximizing the synergetic potential across some of our businesses

At NICE we value and promote a synergetic approach, fostering a corporate culture based on delivering high-quality products and services.

We will continue leveraging the fact that many of our solutions are based on the same methodology of capturing and analyzing massive amounts of structured and unstructured data, providing real-time insight and driving process automation. Maximizing these synergies and cooperation between our business areas is a key pillar of our corporate strategy.

We have already introduced several joint offerings across our business segments and combined go-to-market efforts. We will continue leveraging our extensive complementary domain expertise, technological know-how, capabilities and development, in order to grow our business through additional cross-sell and up-sell opportunities.

Providing innovative, real-time analytics and machine learning and cross-channel solutions with significant impact for our customers' businesses

Our solutions address the growing, unmet need to more accurately analyze and extract meaningful information from structured and unstructured data in real time, and to do so across multiple channels, in a wide variety of businesses and operational environments. We enable our customers to embed both real-time and offline analytics into their business processes, positively impacting these processes as they occur, which in turn has a positive impact on their businesses.

We plan to continue enhancing our capabilities in operationalizing Big Data with analytics, behavior prediction, decisioning and guidance. We also plan to continue enabling organizations to address the full lifecycle of interactions, transactions and events (i.e., before, during, and after they occur).

Offering a flexible delivery model

Our strategy is to offer our solutions in alignment with both on-premises and cloud-based enterprise software delivery models, adjusting our solutions to our clients' changing needs.

In the cloud-based model we are providing our customers faster access to innovation, and more flexibility, as well as a lower total cost of ownership (TCO). Given the growing demand for these models, we are expanding our portfolio and penetrating the mid-market segment, as well as enabling our existing customers to broaden their use of our products.

We also continue to offer our solution through an on-premises model. In this model customers purchase a license to use our software indefinitely, while also purchasing related professional services and annual software maintenance. We also offer some of our solutions under a term license, according to which customers purchase a license to use our software for a fixed period. Growth in maintenance revenues (which is primarily a result of high maintenance contract renewal rates and the increase in cloud sales) is driving an increase in our recurring revenue.

We intend to continue offering our solutions in a variety of delivery models, which enables us to be flexible in effectively addressing our customers' needs. This, in turn, will enable us to focus on growth and improving profitability.

We will continue looking for ways to increase the proportion of recurring revenue (both from recurring maintenance and cloud sales) to our overall revenue mix to provide increasingly predictable revenue streams.

Increase our footprint in selected geographical regions

Part of our strategy is to expand our business in selected regions where we can further grow and establish our presence by exploiting opportunities in less penetrated, growing markets. We intend to do this by leveraging our existing offering, partner ecosystem, in both the Contact Center business as well as the Financial Crime and Compliance business.





## Customer Engagement Business Strategy

Our strategy is to extend our market leading position in the customer engagement space, while continuing to expand beyond the contact center to the different customer experience channels and touch points with multiple delivery models. We intend to achieve this by providing solutions that focus on:

- Offering a unified, open, cloud platform that combines omnichannel routing for voice and digital channels, IVR, self-service, customer journey analytics, adaptive WFO and automation: NICE inContact CXone™, a global leading cloud customer experience platform.

Offering solutions to all customer touchpoints, as well as solutions that benefit back office operations, retail branches, and self-service channels with the ability to easily connect future channels.

Offering our customers the possibility to extend our solutions through innovative third party solutions that they can self-select using our platform's CXexchange application marketplace as part of our DEVone dedicated partner ecosystem.

Leading cloud transformation across the entire Customer Engagement portfolio for all segments and regions to enhance flexibility, agility and lower TCO.

Providing a comprehensive suite of customer service essentials, from predictive omnichannel routing and WFO to advanced analytics -based applications.

Transforming the workforce through Adaptive Workforce Optimization (Adaptive WFO), by providing tools that understand the individual employee's wants and needs, and empower and enhance the employee experience and engagement, in order to drive motivation and reduce attrition.

Infusing analytics into each and every element of our customer engagement offerings.

Leveraging artificial intelligence and advanced process automation technologies to automate customer engagement and to dramatically reduce routine employee activities, while using our advanced analytics to identify processes suitable for automation.

Applying advanced interaction analytics to better understand the customer personality and use Predictive Behavioral Routing to connect customers with contact center employees based on their personality styles.

Analyzing individual customer journeys and operationalizing the insights extracted to create business value in real-time for customer experience stakeholders.

Capturing customer feedback across all touch points, driving specific insights and taking action to address the needs of Customer Experience Officers and other stakeholders in the marketing department in order to improve customer loyalty and satisfaction.

Extending Workforce Management functionality to proactively identify and solve staffing gaps, manage agent communication and adjust schedules.

## Financial Crime and Compliance Business Strategy

We plan to continue extending our market leading position and our addressable market, while supporting the move of financial institutions to the cloud. We also plan to leverage our capabilities to facilitate both better protection and significant cost reductions. We intend to achieve this by focusing on:

- Delivering integrated financial crime and compliance solutions that help financial services organizations to identify issues faster and earlier.

- Providing X-Sight, a new platform for Financial Crime and Compliance solutions with data and analytics agility, driving forward the Autonomous Financial Crime Management vision and our ability to cross sell solutions, leveraging Big Data, machine learning, advanced automation and other technologies to help customers reduce the cost of operations while increasing their adherence and capturing more crime.

- Leveraging our cloud-based platform Essentials to expand our market reach to mid-size banks and financial institutions.

- Continuing to cross-sell and up-sell into our existing customer base around the world.

- Continuing to focus on tier 1 and tier 2 clients by providing them with solutions to meet their needs via cloud and on-premises models.

- Introducing cloud-based solutions to monitor procurement, payments, and travel and expense data within organizations

- Partnering with world-class consultancy and other firms to identify additional significant opportunities.

- Increasingly selling holistic solutions, combining Financial Crime and Compliance offerings with Customer Engagement offerings.

- Offering our solutions to verticals outside of the traditional financial services, such as gaming, energy, insurance, healthcare, industry regulators, government agencies, and alternative payments providers.

## Our Solutions

### I. Customer Engagement

#### Our Platform and Solutions' Core Capabilities

Omnichannel Routing and IVR enables organizations to run their contact center in the cloud, and route customer interactions in a hyper personalized manner to ensure agents positively and productively interact with customers on any channel. Organizations gain business flexibility by quickly deploying agents anytime, anywhere, including remote/home-based agents and implementing changes to customer routing and IVR in hours, not months.

Omnichannel, Real-time Interaction Analytics enables organizations to uncover the valuable data and insights hidden in customer interactions. It uses advanced technology powered by Nexidia Analytics, for analyzing speech, text, call flow, feedback, customer sentiment and employee desktop activity, in order to understand the root cause of service issues, connect the customers with the best employees to handle the interaction, and to drive business results.



Predictive Behavioral Routing (PBR) creates smart, personalized interactions, by pairing customers with agents best suited to handle their personality style. This innovative approach to connecting customers with service givers is based on identifying the customer's personality type using advanced analytics and AI, communication preferences, and behavioral characteristics. The customers are then paired in real-time with the best available agent matched to their personality type. The result is more productive and positive call outcomes, leading to better business results and better customer experiences.

Omnichannel Recording and Interaction Management enables organizations to capture structured and unstructured customer interaction and transaction data from multiple channels, including: phone calls, chats, emails, videos, customer feedback, web sessions, social media postings, and walk-in centers. In addition, our recording solutions allow organizations to manage their compliance when it comes to regulations such as PCI, GDPR, stored interactions archival durations and others.

Employee Engagement enables organizations to improve an agent's individual productivity, by identifying performance gaps, delivering on targeted coaching and training, and effectively forecasting workloads and scheduling staff in an adaptive and automated manner enabling greater flexibility. It fosters performance-driven operations and culture, leverages the power of advanced analytics, and embeds the voice of the customer into daily operations to engage employees.

Customer Journey Solutions enable organizations to analyze the entire customer journey across various touchpoints, transactions and events. These analytics driven solutions allow organizations to have a comprehensive view of their customer intents and actions throughout their journey. They also leverage Big Data infrastructure and predictive analytics models to identify and sequence individual customer interactions across time and touch points, including calls, text, IVR, web, self-service and others. With this analysis, organizations can understand the context of each contact, uncover patterns, predict needs and personalize interactions in real time.

Advanced and Robotic Process Automation provides organizations with a real-time decisioning engine that supports business decisions. The engine drives the finding of processes that can be automated and draws on business rules and predictive models to automate mundane manual tasks through process insights derived from analytics that are applied while interactions are taking place, for attended and unattended automation environments. Attended automation includes NEVA, NICE employee's virtual assistant, overlooking their desktop activities and prompting guidance in the context of the live customer interaction or the process the employee is working on. These solutions enable organizations to make the right decision during individual interactions and across a mass number of interactions, which in turn drives future next-best-action guidance through process automation. Our Desktop Analytics and Automation Finder offerings allow organizations to better understand agent desktop activities, as well as identify new process efficiencies in an automated way, using advanced machine learning and AI algorithms.

Open Cloud Platform, CXone™, powers rapid innovation with an extensible enterprise-grade platform that scales securely, deploys quickly, and serves customers of all sizes globally. We guarantee industry-best availability and offer easy customization through RESTful APIs and our developer program, plus CXexchange marketplace for pre-built integrations from ecosystem partners. The combination of the above capabilities enables organizations to improve customer experience and achieve business and operational goals. Solutions are available individually or as an integrated whole.

Addressing Business and Operational Needs

## 1. Omnichannel Routing

Solutions and Capabilities	Description
Automatic Contact Distributor and Interactive Voice Response	Ensures customer requests are routed to qualified agents or resolved with self-service through a skills-based omnichannel routing engine that provides a universal queue for real-time interaction management, and a consolidated interface with a seamlessly integrated IVR for routing strategies across all supported channels.
Personal Connection	Provides inside sales an easier way to attain quota by connecting with more prospects every day and customer service the ability to reduce inbound calls through personalized, low cost, and proactive outbound notifications.
Customer Interaction Channels	Enables contact centers to service customers via any channel, with extensive routing options, consolidated reporting and a state-of-the-art agent interface. Channels include inbound and outbound voice, callback, voicemail, email, chat, text/SMS, Social Media and work items. Other channels, such as video, are implemented using work items.

## 2. Open Cloud Platform

Solutions and Capabilities	Description
CRM Integrations	Delivers pre-built CRM integrations, such as Salesforce.com, and empowers agents to personalize omnichannel customer service. Provides seamless, bidirectional CRM integrations with the contact center that increase agent efficiency and independence by delivering a real-time 360-degree view of the customer.
UCaaS Integrations	Delivers pre-built or partner-provided integration with Unified Communication tools that enables seamless collaboration between contact center agents and experts in their organization. This easy to deploy integration provides a single solution for formal and informal contact center agents.
Network and Voice Connectivity Solutions	Includes Voice as a Service network connectivity suite that delivers flexible and reliable telephony services built specifically for the contact center. Offering a full range of telephony options, with guaranteed voice quality. Through proactive diagnostic tools and extensive telephony expertise we guarantee voice quality based on mean opinion score (MOS).
APIs	Empowers organizations to customize and integrate their contact center with other business critical solutions to create the optimal customer service environment.

## 3. Compliance and Risk

Solutions and Capabilities	Description
Compliance Omnichannel Recording	Proactively captures and retains all customer interactions across multiple touch points to help ensure compliance with government regulations, such as the Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank Act”), Security Exchange Commission Rule 17a-4, the Health Insurance Portability and Accountability Act, the Sarbanes–Oxley Act, the Payment Card Industry Data Security Standard, the Financial Services Authority and Medicare Improvements

for Patients and Providers Act, the General Data Protection Regulation (GDPR) as well as with internal policies. Compliance Recording is also an invaluable tool to resolve disputes, perform investigations and verify sales, as well as provide redundancy and disaster recovery capabilities to meet business continuity requirements.

Compliance Center	Powering organizations to manage all interactions compliance activities in one place in a smart and automated way. Compliance center enables detecting breaches, defining policies and carrying out audits relating to regulations such as PCI DSS, HIPAA, SEC, MIFID II, and GDPR. Compliance center includes compliance dashboards that provide an aggregated view on regulatory topics and a self-service policy management hub to see, manage and automate all compliance activities in one repository; it also includes an agent dedicated application to gain compliance insights, trigger real-time notifications to agents on recording assurance, audio loss and offers manual commands for PCI DSS with pause and resume.
Trading Floor Compliance Solutions	Enables organizations to capture, monitor and analyze interactions and transactions in real time, in order to proactively minimize risks, detect potential regulatory breaches, counter fraudulent activities, and improve investigative capabilities. These solutions deliver comprehensive, integrated capabilities to effectively manage the complex, ongoing, high-risk exchange of interactions and transactions between traders, firms and their counterparties.
Communication Surveillance	Monitors trading activity by analyzing conversations from trading turrets, fixed and mobile phones, email, text, instant messaging, chat and social media using speech analytics, machine-learning and natural language processing. It automatically highlights potential risks and enables compliance officers and analysts to see emerging trends so that compliance breaches and fraud can be averted whilst keeping false positives at a minimum. It also enables organizations to meet global regulatory requirements with fully auditable workflows and reporting functionality that fulfill the needs for a robust supervision and investigation process.
Complaint Management	Enables organizations to use analytics to identify interactions at risk and manage the process of handling the complaint.
Compliance and Script Adherence	Monitors agent interactions, searches for any phrase, at any time, and utilizes the phrases in issue resolution and training exercises. Incorporates real-time monitoring and alerting to guide towards required behaviors. Knows which calls are contained in the audio and helps ensure reading for an audit.

## 4. Operational Efficiency

Solutions and Capabilities	Description
Contact Center Omnichannel Recording	<p>Provides comprehensive omnichannel interaction recording: voice, video, chat, email, and social media and is integrated with all telephony environments and hybrid networks. It delivers all the advantages of a thorough and robust recording platform over a fully dedicated and operated public or private cloud designed for high availability and redundancy.</p> <p>Supports thousands of concurrent IP streams: capturing, forwarding in real time, recording and archiving in a single platform while ensuring customer safety and minimizing organizational risks, with its encompassing compliance solution, certified for PCI DSS3 and HIPAA.</p>
Performance Management	<p>Maps enterprise business objectives to group and individual goals, and tracks and reports performance. It also automates critical managerial activities, including data analysis, identification of improvement areas, employee coaching, recognition, and performance improvement, allowing front-line managers to become more effective and efficient in developing their teams. Performance Management also includes unique capabilities, such as gamification, to engage and motivate and align employees around common and personalized business goals.</p>
Workforce Management	<p>Forecasts an organization's interactions load, using sophisticated artificial intelligence algorithms, schedules agent shifts across multiple sites with appropriate skills to manage and optimize the level of customer service resources in multi-skilled environments. It measures agent and team performance and provides real-time change management to proactively respond to changing conditions.</p>
Employee Engagement Management	<p>Real-time analysis and management of understaffing and overstaffing which provides adaptive and proactive intra-day scheduling that supports agent needs and preferences while also ensuring that a company's operational goals and KPIs are achieved. The application also allows self-management of schedules through an intuitive mobile application anytime, anywhere and on-the-go, allowing employees to perform sophisticated transactions like shift bidding and shift swaps, setting preferences, reporting absences, and receiving immediate confirmation.</p>
Quality Central	<p>Automates quality assurance processes and selection of calls for evaluation based on performance data. The solution facilitates root-cause evaluation, with easy drill down to interactions missing their Key Performance Indicator targets. Quality improvement is thus managed across voice, email, chat, and social media channels.</p>
Nexidia Interaction Analytics	<p>Analyzes large quantities of customer interactions across multiple channels in near-real time to identify hot topics and root causes quickly, and to produce actionable insights. These insights are then leveraged to improve processes, enhance customer experience, increase sales, reduce attrition, optimize marketing campaigns and reduce operational costs.</p> <p>Analyzes live customer voice interactions in real-time, identifying opportunities to improve the customer experience, increase sales, and ensure compliance – all while the agent is still speaking with the customer.</p>
Back Office Workforce Optimization	<p>Automates manual processes, integrates data from employees' desktops, improves forecast accuracy, enables managers to view and manage resource capacity, and empowers employees to improve their own performance. It also provides tools to ensure regulatory compliance and accuracy, elevating the level of service customers receive across the entire enterprise.</p>
Real-time Authentication (RTA)	<p>Provides end-to-end authentication for contact centers. Based on voice biometrics, it automatically verifies the caller's claimed identity within the first few seconds of a call through natural conversation with an agent. Leveraging its unique Single Voiceprint capability, RTA</p>



uses the same voiceprint across channels, allowing effortless authentication on the IVR or mobile application as well. Combining voice biometrics with additional authentication factors, RTA offers risk-based authentication across multiple channels. It improves the level of security and reduces operational costs.

Desktop Automation Automatically monitors agent activity in real time, enabling organizations to identify process bottlenecks and implement best practices. With this information, the solution navigates agents through complex processes using on-screen guidance and automates routine tasks to shorten handle time and eliminate manual processing errors.

NEVA (NICE Employee Virtual Attendant) Introduced in 2018, NEVA is an avatar interface, addressing attendant processes, and adding the option for the employee to interact with the avatar, using chat or voice. It overlooks an agent's desktop activities and pops up with guidance in the context of the live customer interaction or the process the employee is working on. This solution will automate desktop activities when appropriate, or will trigger an unattended bot to complete a task and free the employee to deal with higher value activities.

Robotic Automation Robotic solution for the automation of routine back office and contact center processes. Operated on virtual machines and monitored centrally, these robots handle unattended end-to-end processes, essentially performing any routine task which the human user would otherwise do manually.

Desktop analytics Identifies productivity gaps and process best practices by monitoring and collecting data about employees' daily activities: for any applications used (including specific pages within the application), web sites visited, computer idle/locked mode, as well as the time the employee spent in each application/state. Applications can be classified as productive/non-productive or non-work related.

Predictive Behavioral Routing (PBR) Leverages AI and machine learning to connect customers with the best agent based on personality-type, communication preferences, and behavioral characteristics. The connections result in sustained improvement in call outcomes for any type of contact center and measurable benefits to an organization's bottom line.

Interactive Voice Response (IVR) Optimization Enables organizations to reduce customer effort by increasing IVR containment rate, reducing IVR repeat calls, agent transfers, drop-offs and deflections and dramatically improving call center efficiency.

## 5. Customer Experience

Solutions and Capabilities	Description
Voice of the Customer	Collects and analyzes comprehensive data from multiple interaction touch points and channels; proactively solicits customer feedback from any touch point, including text message, email, IVR, mobile app, and online forms in scheduled cadences or immediately following an interaction through their channel of choice; and leverages indirect and unsolicited feedback channels. Delivers analytics that allow companies to understand the business practices and behaviors that drive customer loyalty, using metrics including Net Promoter Score® (NPS®), customer satisfaction, Customer Effort Score, or custom metrics. Drives strategic and operational improvements to increase retention and revenue opportunities. Delivers insights across departments with role-specific analytics, reporting, and alerts.
Customer Journey Optimization	Helps organizations optimize their overall customer interactions process across multiple touch points. The solution automatically constructs and visualizes a cross-channel map of the customer journey, providing insights into trends and focus areas for improvement. The Journey Excellence Score measures customer experience at the journey level, predicting successful outcomes and highlighting journey events that cause failure and customer dissatisfaction. It automatically assigns contact reasons to every interaction and reveals customer behavior patterns, helping to predict the customer's next action and to respond accordingly. The solution highlights opportunities for self-service channel containment and offers real-time guidance for an improved customer experience.
Customer Loyalty	Understands the business practices and behaviors that drive customer loyalty by calculating NPS. Simplifies the customer experience, through methods such as quicker caller identification. Attracts new customers by offering an easier path to service than the competition. Statistically determines which business processes and agent behaviors have the greatest impact on customer behavior.
Customer Churn	Analyzes historic defection data to create models for predicting future churn. Understands causes and effects of customer churn and how to design procedures to reduce the defection rate. Prioritizes at-risk customers based on search results combined with customer data. Collects information to refine retention marketing offers that are better tailored to customer types and demographics.

## 6. Sales Optimization

Solutions and Capabilities	Description
Sales Performance Management	Provides the end-to-end ability to create, manage and distribute all aspects of a commissions program. It automates the process of commission, bonus and incentive administration, in support of any type of variable pay system that rewards employees for achieving targets aligned with the business strategy.
Real Time Web Personalization	Uses customer intelligence, predictive models and machine learning to make insightful, real-time personalization decisions during customer interactions over the Web. The solution helps organizations improve customer retention, increase online conversion rates, and deliver better service by taking the next-best-action.
Sales Effectiveness	Helps organizations optimize their campaigns. Locates and quantifies specific events by building the right metrics to align with corporate objectives such as offers made versus up-sell opportunities. Correlates data points such as customer spend and purchase history to build predictive models, prioritizing customers with a propensity to buy and create the next-best offer.

Identifies high-performing agents and bases best practices off their behavior. Establishes thresholds and works with agents, measuring performance against sales driven metrics.

#### 7. Public Safety Police Incident Debriefing and Investigation

Solutions and Capabilities	Description
NICE Inform	Enables public safety agencies and organizations across various industries to capture, consolidate, synchronize and manage multimedia incident information efficiently and effectively. It captures and processes event information from a variety of media: radio and call audio, video, text, Computer-Aided Dispatch (CAD) systems, Geographic Information Systems, and others.
NICE Investigate	Automates and expedites the end-to-end collection, analysis and sharing of all digital case evidence – from Records Management Systems, CAD, interview room and emergency call audio, documents, photos, private and public CCTV, body-worn and in-car video, social media and more – to help facilitate building and clearing more cases faster.

#### 8. Public Safety Emergency Response Optimization

Solutions and Capabilities	Description
NICE Multimedia Recording	Addresses the needs of emergency communications, dispatch and air traffic control operations. The recording platform automatically records, analyzes, stores, quickly retrieves and instantly replays telephony, radio and IP voice calls, operator console screens and SMS Text-to-911. TDM and VoIP recordings can be used to ensure compliance with regulations, provide case or incident evidence, and manage and improve departmental quality and productivity.
NICE Inform	Helps emergency centers to effectively record, manage and derive valuable insights from today's higher volume and variety of communications. It captures multimedia communications and helps manage, synchronize and put incidents into context – saving time, money and resources, while ensuring quality and compliance.

## II. Financial Crime and Compliance

### Our Platform and Solutions' Core Capabilities

Core platform: Financial Crime and Compliance solutions (also known as NICE Actimize solutions) share a single, flexible and scalable core on- premises platform that enables financial services organizations to expand the use of NICE's solutions over time. We recently launched X-Sight, the industry's first cloud PAAS for financial crime and compliance. This eases implementation and lowers total cost of ownership.

Autonomous Financial Crime Management (AFCM): By merging data, analytics and automation technologies, financial services organizations are able to improve detection, improve their operational efficiencies, and reduce costs. Raw data becomes actionable intelligence by applying machine learning, advanced analytics and automation. This innovative process will create a unique environment that more effectively addresses the challenges and pain points that financial services organizations are facing by allowing them to tailor their operations to lower costs and drive greater profitability, all while improving accuracy and throughput. Autonomous Financial Crime Management also allows organizations to configure which decisions to direct to human experts, supporting either semi-autonomous to fully autonomous operations.

Analytical models and flexible tools: The core platform provides dozens of out-of-the-box analytical models with each specific solution, as well as flexible tools that can be used to develop and customize analytical models, data sources, and business processes at both the business and IT levels.

Multi-channel transaction management: The solutions are proven to capture and analyze thousands of financial transactions a second from a variety of sources and channels.

Domain-specific advanced analytics: Comprehensive, domain-specific solutions detect anomalous customer or employee behavior in real time, leveraging industry-proven analytics.

Real-time decisioning and enforcement: A real-time decisioning engine draws on analyzed data to trigger alerts that enable optimal enforcement and resolution. Built-in capabilities for comprehensive workflow and investigation allow effective alert management.

Solutions are available individually or as an integrated whole.

Addressing Business Needs

1. ActOne – Investigations and Case Management

Solutions and Capabilities	Description
ActOne	Enables organizations to better manage and mitigate organizational risk by providing a single view across the business. It serves as a central platform for managing alerts, cases, investigations, and regulatory reporting, across multiple lines of business, channels, products, and regions, turning them into actionable insights.
ActOne Assist	Includes attended robots that are digital assistants that live in the case manager on analysts’ desktops and collaborate with them as needed during the day. These robots can be used on demand – as for copying and pasting or navigating between systems and screens – to help analysts complete their evidence gathering processes and get to a decision point faster and more accurately. It also includes unattended robots which are a digital workforce, working 24/7 without human intervention. These robots can be used to fetch data from legacy systems and update enterprise systems so data is always in the right place when you need it. As no integrations are needed, implementations are faster and cheaper.
Quality Assurance	Helps risk and compliance teams create a truly closed-loop, end-to-end investigation process. With it, compliance and quality teams can collaborate in order to reduce re-opens, work more efficiently and lower risk.
Productivity Studio	Allows organizations to increase speed and efficiency, without compromising on accuracy. Teams are empowered to understand their productivity by seeing gaps and bottlenecks in their workflows, as well as patterns and trends in their activities.
Notifications and Attestations	With Actimize Notifications and Attestations, management and internal audit can gain oversight of their teams, ensuring everyone is aligned; teams can mitigate risk by lowering organizational and personal accountability risk; and finally, teams can improve their efficiency with quick access to all past and present notifications without leaving the case management platform.

2. Anti-Money Laundering

Solutions and Capabilities	Description
Suspicious Activity Monitoring	Leverages transaction analytics to offer end-to-end coverage for detection, scoring, alerting, workflow processing and reporting of suspicious activity to make sure nothing slips through the cracks. It supports the full investigation life cycle and, with NICE’s integrated case management platform, improves staff productivity, helping meet regulatory obligations in a cost-effective manner.
Watch List Filtering	Provides enterprise-wide customer and transaction screening against multiple watch lists, for end-to-end sanctions list coverage. It identifies and manages sanctioned or high-risk individuals and entities, with real-time name recognition capabilities, providing organizations the ability to conduct accurate name matching to prevent non-compliance occurrences.
Customer Due Diligence	Provides integrated risk-based rating and continuous monitoring of accounts throughout the entire customer life-cycle, from initial applicant onboarding to periodic re-screening of existing customers. It is an open, flexible platform that can adapt to unique requirements across business segments, regions, and jurisdictions.

CTR Processing and Automation	Provides seamless automated Currency Transaction Reporting (CTR) processing to ensure compliance with U.S. Bank Secrecy Act standards, and to optimize CTR processes for efficiency and cost-effectiveness. This allows for the reduction in manual intervention and errors. Built-in validation tools and flexible capabilities enhance the quality and timeliness of completed reports while letting organizations adapt to changing regulatory and business needs.
Suspicious Transaction Activity Reporting	Global regulatory reporting forms. Provides operational efficiency needed to handle the increase in form filing requirements, including e-filing where applicable.
ActimizeWatch for SAM	This is a managed analytics service to overcome FSOs' challenges in keeping their Anti-Money Laundering (AML) systems optimized. This service brings data scientists to organizations that may find it restrictive to build out their own data science teams and pair them with AML expertise. Managed analytics provides cost-predictability that continuously optimizes the system where existing tuning practices are costly and therefore infrequent and commonly avoided. This service also provides FSOs the ability to benchmark their AML performance against similar institutions which enables them to self-improve and have more preparedness and confidence in regulatory examinations.
AML Essentials	A cloud-based offering that uses the same power and experience as our enterprise solutions, with coverage that includes Transaction Monitoring, Customer Due Diligence, and Sanctions Screening, offers rapid deployment and reduces overhead to make compliance easier and at a lower total cost of ownership.
Anti-Bribery and Corruption (ABC)	Anti-Bribery and Corruption is a cloud-based solution that provides ongoing monitoring of procurement, payments, and travel & expense data within organizations. Based upon two decades of transactional analytics experience, Actimize ABC analyzes transactions and behavior across the organization and the supply chain, for a real-time, up to date view of their bribery and corruption risk across business, geographic, vendor and customer lines.

## 3. Fraud Prevention

Solutions and Capabilities	Description
ActimizeWatch for Fraud	<p>A cloud-based managed services solution to optimize analytics. ActimizeWatch continuously monitors the transactional data for individual FIs to assess when analytics must be tuned, and leverages insights from a market-wide view to proactively optimize analytics for members of the service. ActimizeWatch uses machine learning analytics to assess cross-market transactional data, identify fraud patterns within individual organizations and across the market. ActimizeWatch proactively optimizes analytics using automation for quick delivery of implementation-ready models and features.</p>
Fraud Essentials	<p>A cloud-based offering that uses the power and experience as our enterprise solutions. The Fraud Essentials solution serves as both a single and cross-channel solution for online banking and mobile banking channels. It can detect fraud perpetrated against enrollments, address or account-based bill payments, and inter-bank transactions such as wire, ACH, etc.</p>
Card Fraud	<p>Enables card issuers, acquirers and processors to detect fraudulent transactions, whether ATM, PIN, signature point-of-sale, or without a physical card. Market leading profile based behavioral analytics takes into account all available transaction, reference and location data to provide holistic coverage of card and account takeover. Solution includes the Actimize Digital &amp; Mobile Wallet Fraud which protects customers from digital account takeover and protects organizations from fraud liability and negative brand reputation. Monitors and protects a full range of wallet activity, including card/account provisioning, card present and not present purchases, person-to-person transfers, bill payments, and account-service events. The Actimize Pre-Paid Card Fraud solution identifies and prevents fraud in the pre-paid sector. From ATM to point-of-sale (POS) and Card-Not-Present (CNP), all transactions can be identified, interdicted on and alerted in real time.</p>
Digital Payments Fraud Solutions	<p>Provides end-to-end protection against third party fraud on any type of payment (like ACH, Wire, P2P, SEPA, TCH/RTP and more) tailored for the specific needs of retail and commercial banks. The Actimize Digital Payments Fraud solutions protect the full lifecycle of the transaction, both at the customer accessing channels – online portal, mobile app, APIs, IVR, contact center – and at the backend, at the payment hub level. Using our unique expert-infused machine learning analytic we calculate a real-time risk score for every transaction and provide customers with a turnkey solution to resolve alerts and investigate fraud cases. Our solutions serve as a central “risk hub” that enables the sharing of internal and third-party data from multiple channels for fraud and cyber detection, operations, and investigations. By accurately and efficiently coordinating customer lifetime value, transaction amounts and service history, the solution optimizes fraud prevention by offering greater insight into cross-channel authentication and facilitates interdiction strategies.</p>
X-Sight Studio	<p>Enables customers to expand their Actimize Fraud solutions with their own models and analytics. The DIY studio also enables our customers to develop a fraud solution for use cases which go beyond the available packaged fraud solutions from Actimize.</p>
Employee Fraud	<p>Offers advanced analytic monitoring capabilities and flexible configuration options to detect fraudulent employee activity and violation of corporate policy across the enterprise, business lines, and channels. Comprehensive investigation tools are supported by multichannel data ingest, multi-country data and policy requirement configurations, secure and auditable user access levels, and automated configurable workflows, enabling banks to efficiently sift through employee audit reports and build cases to support fraudulent employee activity.</p>

Check Fraud	<p>Helps financial institutions minimize deposit fraud losses by providing comprehensive account activity monitoring. The solution analyzes risk across silos of data and lines of business, consolidates suspicious activity notifications into account and customer level alerts, and allows real-time decisioning to safely accelerate fund availability and enhance customer satisfaction.</p>
Authentication-IQ	<p>Manages multiple authentication methods and risk-based decisions by creating a complete customer profile, based on historical authentication activity, account servicing, and transactional behavior which is then used to identify suspicious behavior at log-in or throughout a session, producing real-time actionable risk scores. In addition, the solution manages the process of step up authentication, choosing the appropriate method, producing alerts and enabling real-time interdiction. Finally, it provides alert and case management in a unified context to prioritize investigations and optimize workflow across the enterprise.</p>



## 4. Financial Markets Compliance

Solutions and Capabilities	Description
Institutional Trade Surveillance	Provides scenario management for identifying market manipulation and abuse, fair dealings with customers, and insider trading across asset classes (such as equities, fixed income, swaps and futures). It includes specific tools for desk supervision, control room surveillance, and trade reporting practices, to ensure comprehensive oversight and sales and trading compliance across all channels.
Retail Trade Surveillance	Addresses organization-wide compliance needs across a broad range of retail sales practices relating to Know Your Customer (“KYC”) and Suitability requirements. It enables local and regional branch management to effectively delegate supervision across products and provides automated desk supervision, with electronic access and sign-off on individual trades.
Employee Trade Surveillance	Detects conflicts of interest and rogue trading. It completely automates the submission, review and approval process for employees’ personal trades, including post-trade reconciliation. It analyzes transactions against rules mapped to the organization’s employee trading policies and procedures.
Enterprise Conflicts Management	Offers a unified approach to maintain controls and detect conflicts of interest before they occur on a global, enterprise-wide scale. Enables organizations to effectively manage employee requests for personal trades by evaluating details of the proposed trade in real time and automatically determining if the request should be approved, rejected, or escalated to a supervisor for approval. The solution includes detection models that compare executions with the employee’s trade request history to determine whether the trade was pre-cleared and approved and to reconcile the trade details with the terms and conditions of the approved trade request.
Sales Practices and Suitability	Provides coverage for a broad range of sales practices and issues, helping organizations meet current and future global regulatory requirements and ensure investment recommendations are consistent with each customer’s suitability profiles. It also includes a comprehensive toolset that allows organizations to automate sales practice compliance processes, extend out of the box analytics and visualize overall risks. By automating oversight and supervision, companies can ensure consistency and maintain a consolidated audit trail, lowering regulatory risk while improving productivity and efficiency.
Market Surveillance	Helps financial organizations to meet global regulatory requirements and protects them from reputational damage and financial losses. The solution provides Full Asset Class coverage to address the global regulatory requirements including both exchange traded products and OTC trades. Specialized analytics are designed to process today's HFT (high frequency trading) trading volume and detect different types of risks, including Spoofing, Layering, Fictitious Orders and more. The solution also addresses the complex requirements around Insider Dealing news based, Cross Market/Cross Product and Frontrunning. Our patented correction engine automates the reconstruction process and helps the Compliance Analyst to understand the intent behind a suspicious trade by creating the full life cycle of a trade.
Markets Surveillance Cloud (MSC)	Provides a turnkey solution that effectively detects market manipulation and reduces false positives by enabling organizations to create rules and tailor alert thresholds based on their trading activity.
Holistic Surveillance	Provides a holistic view across both trade and communications data, proactively analyzing all trading interactions, while monitoring the full trade life cycle in conjunction with relevant news events.

Holistic Behavioral Analytics	Enables sell side, buy side, and retail brokerage companies to easily pinpoint individuals whose actions are putting their organization at risk. The solution does this by analyzing a wide range of data and identifying deviations from normal behavior. In addition, Holistic Behavioral Analytics is the natural complement to traditional analytics, allowing you to cover both sides of compliance — known and hidden threats.
Trade Reconstruction	Dramatically simplifies the reconstruction of a trade by normalizing, analyzing, indexing and correlating data across structured and unstructured data sources.

## Strategic Alliances

We sell our solutions and products worldwide, both directly to customers and indirectly through selected partners to better serve our global customers. We partner with companies in a variety of sales channels, including service providers, system integrators, consulting firms, distributors, value-added resellers and complimentary technology vendors. These partners form a vital network for selling and supporting our solutions and products. We have established a business partner program, which provides full support and a broad portfolio of sales tools to help our partners promote the NICE offerings, helping to drive mutual revenue growth and success.

We also have strategic technology partnerships in place to ensure full integration with NICE's offerings, delivering value added capabilities that address a variety of technology environments. Our DEVone program allows third party software providers to integrate with our CXone™ platform and extend its functionality. We currently have over 120 DEVone partners.

The following is a partial list of our main partners, some of which we cooperate with across all of our businesses, while others are only involved in a portion of our initiatives: Accenture, BT, ConvergeOne, Dimension Data, Deloitte, IBM, Infosys, IPC, Motorola, PWC, RingCentral, Salesforce, Servion, Tata Consulting Services and Verizon.

## Professional Service and Support

The NICE Professional Services and Support organization enables our customers to derive sustainable business value from our solutions.

The Professional Service and Support offerings focus on enabling and sustaining business value for our customers. We address all stages of the technology lifecycle, including defining requirements, planning, design, implementation, customization, optimization, proactive maintenance and ongoing support.

## Enabling Value

Solution Delivery optimizes solution delivery and enables our customers to achieve their specific business and organizational goals, on time and on budget. NICE solutions are delivered by certified project managers, technical experts, and application specialists. We follow a proven methodology that includes business discovery to map solutions to business processes.

Business Consulting promotes customer success through Value Realization Services (VRS) targeted to improve business operations, by leveraging and integrating NICE solutions into the customer's daily practices. This global consulting team consists of industry experts who have accumulated a broad portfolio of best practices and honed domain expertise, with extensive experience in implementing vertical market solutions for many industries. Their focus on continuous value realization helps our customers accelerate return on investment, increase revenue and minimize business costs.

Managed Services empowers organizations to meet short term objectives, such as lowering handle time or improving sales rates, along with achieving long term goals such as customer retention. Our team of experienced practitioners work with customers, guiding the process of collecting interactions, prioritizing subjects to study, conducting analysis and most importantly, developing plans that put the results of the analysis into action.

Customer Education Services provide users with the necessary knowledge and skills to operate NICE solutions and to leverage their capabilities to meet customer needs. These services are offered both before and after the deployment of NICE solutions.



## Sustaining Value

Customer Success means working hand-in-hand with our customers to identify areas that can maximize business value and minimize complications, ensuring continued delivery of business benefits.

Cloud Services ensure that solutions hosted in the NICE cloud run optimally, maximizing availability, performance and quality while ensuring the security of customer information. This is done by use of very sophisticated proprietary utilities and automations that perform in a proactive manner allowing the means to avoid impacting customer and business interruption. This includes: NICE Cloud Services Operations, running our Hosting Centers as well as AWS Global Regions; an experienced DevOps team who design and develop the utilities and automations while working with our product development teams to optimize our solutions for the cloud environment, and the 7X24 Cloud Application Support teams that monitor and manage the solutions for our customers, ensuring world class up-time, performance, scalability and security.

Customer Support and Maintenance responds to customer requests for support on a 24/7 basis, using advanced tools and methodologies. NICE offers flexible service level agreements to meet our customers' needs. Our solutions are generally sold with a warranty for repairs of hardware and software defects or malfunctions. Software maintenance includes an enhancement program with (in the majority of cases) an ongoing delivery of "like-for-like" upgrade releases, service packs and hot fixes. NICE also offers a Technical Account Management service or TAM. The TAM is a designated manager responsible for escalation management and overall customer care services.

Proactive Maintenance addresses issues before they can significantly impact our customers' businesses. These offerings include:

Advanced Services – Technical experts perform system-level audits to ensure ongoing compliance with operational specifications as well as specific product customizations tailored to the requirements of the customer.

Application Performance Services – A 24/7 function that proactively monitors NICE-hosted and customer-premises environments with triage, resolution and escalation of system alarms.

Managed Technical Services (Technical and Operation) – NICE offers a suite of managed technical and operation services that enable the customer to fully outsource all necessary responsibilities and functions required in order to manage the NICE solutions. This service includes: dedicated onsite and remote support engineers, system management, system operation, updates and upgrades.

## Manufacturing and Source of Supplies

The vast majority of our solutions is software-based and is deployed by open cloud platform and standard commercial servers.

There is a small portion of our products that have certain hardware elements that are based primarily on standard commercial off-the-shelf components and utilize proprietary in-house developed circuit cards and algorithms, digital processing techniques and software. These products are IT-grade compatible.

We manufacture those of our products that contain hardware elements through subcontractors. Our manufacturers provide us with turnkey manufacturing solutions including order receipt, purchasing, manufacturing, testing, configuration, inventory management and delivery to customers for all of our product lines. NICE is entitled to, and exercises, various control mechanisms and supervision over the entire production process. In addition, the manufacturer of a significant portion of such products, which is a subsidiary of a global electronics manufacturing service provider, is obligated to ensure the readiness of a back-up site in the event that the main production site is unable to operate as required. We believe these outsourcing agreements provide us with a number of cost advantages

due to such manufacturer's large-scale purchasing power and greater supply chain flexibility.

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Some of the components we use have a single approved manufacturer while others have two or more options for purchasing. In addition, we maintain an inventory for some of the components and subassemblies in order to limit the potential for interruption. We also maintain relationships directly with some of the more significant manufacturers of our components. Although certain components and subassemblies we use in our existing products are purchased from a limited number of suppliers, we believe that we can obtain alternative sources of supply in the event that such suppliers are unable to meet our requirements in a timely manner.

We have qualified for and received the ISO-9001:2015 quality management, as well as the ISO 27001:2013 information security management and ISO 14001:2015 environmental management certifications.

#### Research and Development

We believe that the development of new products and the enhancement of existing products are essential to our future success. Therefore, we intend to continue to devote substantial resources to research and new product development, and to continuously improve our systems and design processes in order to reduce the cost of our products. Our research and development efforts have been financed through our internal funds and through some programs sponsored through the government of Israel.

We believe our research and development effort has been an important factor in establishing and maintaining our competitive position

In 2018, we were qualified to participate in six programs funded by the Israeli NATI to develop generic technology relevant to the development of our products. Such programs are approved pursuant to the Law for the Encouragement of Industrial Research and Development, 1984 (the "Research and Development Law"), and the regulations promulgated thereunder. We were eligible to receive grants constituting between 40% and 66% of certain research and development expenses relating to these programs. Some of these programs were approved as programs for companies with large research and development activities and some of these programs are in the form of membership in certain Magnet consortiums. Accordingly, the grants under these programs are not required to be repaid by way of royalties. However, the restrictions of the Research and Development Law described below apply to these programs. In 2016, 2017 and 2018 we received a total of \$1.3 million, \$2.1 million, and \$2.2 million from the NATI programs, respectively

The Research and Development Law generally requires that the product incorporating know-how developed under an NATI-funded program be manufactured in Israel. However, upon the approval of the NATI (or notification in the event set forth below, as the case may be), some of the manufacturing volume may be performed outside of Israel, provided that the grant recipient pays royalties at an increased rate, which may be substantial, and the aggregate repayment amount is increased, which increase might be up to 300% of the grant (depending on the portion of the total manufacturing volume that is performed outside of Israel). Following notification to the NATI (and provided the NATI did not object), up to 10% of the grant recipient's approved Israeli manufacturing volume, measured on an aggregate basis, may be transferred out of Israel, subject to payment of the increased royalties referenced above.

The Research and Development Law also provides that know-how developed under an approved research and development program may not be transferred to third parties without the approval of the NATI. Such approval is not required for the sale or export of any products resulting from such research or development. The NATI, under special circumstances, may approve the transfer of NATI-funded know-how outside Israel, including, in the event of a sale of the know how or sale of the grant recipient, provided that the grant recipient pays to the NATI a portion of the sale price paid in consideration for such NATI-funded know-how or in consideration for the sale of the grant recipient itself, as the case may be, which portion will not exceed six times the amount of the grants received plus interest (or three times the amount of the grant received plus interest, in the event that the recipient of the know-how has committed to retain the R&D activities of the grant recipient in Israel after the transfer).





The Research and Development Law imposes reporting requirements with respect to certain changes in the ownership of a grant recipient. The law requires the grant recipient, its controlling shareholders and non-Israeli interested parties to notify the NATI of any change in control of the recipient, or a change in the holdings of the means of control of the recipient that results in becoming an interested party directly in the recipient. Further, if the interested party is non-Israeli, requires the party to undertake to the NATI to comply with the Research and Development Law. In addition, the rules of the NATI may require prior approval of the NATI or additional information or representations in respect of certain of such events. Furthermore, the Research and Development Law imposes reporting requirements in the event that proceedings commence against the grant recipient, including under certain applicable liquidation, receivership or debtor's relief law or in the event that special officers, such as a receiver or liquidator, are appointed to the grant recipient.

Failure to satisfy the Research and Development Law's requirements may subject us to mandatory repayment of grants received by us (together with interest and penalties), as well as expose us to criminal proceedings. In addition, the Government of Israel may from time to time audit sales of products which it claims incorporates technology funded through NATI programs which may lead to additional royalties being payable on additional products.

The funds available for NATI grants out of the annual budget of the State of Israel were reduced in recent years, and the Israeli authorities have indicated in the past that the government may further reduce or abolish NATI grants in the future. Even if these grants are maintained, we cannot presently predict what would be the amounts of future grants, if any, that we might receive.

We may participate from time to time in the European Community Framework Program for Research, Technological Development and Demonstration, which funds and promotes research. There are no royalty obligations associated with receiving such funding.

#### Intellectual Property

We currently rely on a combination of trade secret, patent, copyright and trademark law, together with non-disclosure and non-compete agreements, to establish and/or protect the technology used in our systems.

We currently hold 298 U.S. patents and 41 patents issued in additional countries covering substantially the same technology as the U.S. patents. We have 79 patent applications pending in the United States and other countries. We believe that the improvement of existing products and the development of new products are important in establishing and maintaining a competitive advantage. We believe that the value of our products is dependent upon our proprietary software and hardware continuing to be "trade secrets" or subject to copyright or patent protection. We generally enter into non-disclosure and non-compete agreements with our employees and subcontractors. However, there can be no assurance that such measures will protect our technology, or that others will not develop a similar technology or use technology in products competitive with those offered by us. In most of the areas in which we operate, third parties also have patents which could be found applicable to our technology and products. Such third parties may include competitors, as well as large companies, which invest millions of dollars in their patent portfolios, regardless of their actual field of business. Although we believe that our products do not infringe upon the proprietary rights of third parties, there can be no assurance that one or more third parties will not make a claim or that we will be successful in defending such claim.

In addition, to the extent we are not successful in defending such claims, we may be subject to injunctions with respect to the use or sale of certain of our products or to liabilities for damages and may be required to obtain licenses which may not be available on reasonable terms.

We own the following trademarks and/or registered trademarks in different countries: Actimize, Actimize logo, NICE Adaptive WFO, NICE WFM, NICE Voice of the Customer, NICE Work Force Management, NICE Incentive Compensation, NICE Real Time Solutions, NICE Trading Recording, NICE Uptivity, NICE Air, NICE Communication Surveillance, Customer Engagement Analytics, Decisive Moment, Fizzback, IEX, inContact, inContact Logo, NICE inContact, Insight from Interactions, Intent. Insight. Impact., Last Message Replay, Mirra, NICE, NICE Analyzer, NICE Engage, NICE Engage Platform, NICE Interaction Management, NICE Sentinel, NICE Inform, NICE Inform Lite, NICE Performance Compliance, NICE Inform Media Player, NICE Inform Verify, NICE Logo, NICE Perform, NICE Incentive Compensation Management, NICE Real Time Solutions, NICE Trading Recording, NICE Proactive Compliance, NICE Seamless, NICE Security Recording, NICE SmartCenter, NICE, NiceLog, Nexidia, Nexidia (!) Logo, Nexidia Interaction Analytics, Nexidia Advanced Interaction Analytics, Nexidia Search Grid, Neural Phonetic Speech Analytics, Own the Decisive Moment, Scenario Replay, Syfact, Syfact Investigator, TotalView, inContact Cloud Center Solutions, Supervisor on-the-go, VAAS, Voice as a Service, Personal Connection, InTouch, Echo, inCloud, CXone, CXone Logo, NICE inContact CXone, NICE Perform Compliance, NICE Performance Management, inContact Automatic Contact Distributor, inContact Personal Connection, inContact Interactive Voice Response and inContact Work Force Management, Mattersight, Mattersight Logo, Mattersight See What Matters and Chemistry of Conversation.

#### Seasonality

The majority of our business operates as an enterprise software model, which is characterized, in part, by uneven business cycles throughout the year and under which a significant portion of customer orders are entered into in the fourth quarter of each calendar year, due primarily to year-end capital purchases by customers and holiday season spending in our cloud subscription models. Such factors have resulted in 2016, 2017 and 2018 first quarter revenue being lower than revenue in the fourth quarter of the preceding calendar year. We believe that this trend will continue in the near future. While seasonal factors such as these are common in the software and technology industry, this pattern should not be considered a reliable indicator of our future revenue or financial performance. Many other factors, including general economic conditions, also have an impact on our business and financial results. See "Risk Factors" under Item 3, "Key Information" of this annual report for a more detailed discussion of factors which may affect our business and financial results.

#### Regulation

##### Data Privacy and Cyber-Related Security Restrictions

We are subject to applicable data privacy and cyber-related security restrictions in countries in which our customers and their end-users are located, including the United States, Israel and the European Union, specifically in relation to our SaaS, hosting and cloud-based services, as well as other outsourced services. For example, on April 14, 2016, the European Parliament formally adopted the GDPR, which became effective on May 25, 2018. In the event we do not comply with such data privacy and cyber-related security restrictions, we may be subject to significant financial penalties.

## Export Restrictions

We are subject to applicable export control regulations in countries from which we export goods and services, including the United States, Israel and the United Kingdom. Such regulations may apply with respect to product components that are developed or manufactured in, or shipped from, the United States, Israel and the United Kingdom, or with respect to certain content contained in our products. There are restrictions that apply to software products that contain encryption functionality. In the event that our products and services are subject to such controls and restrictions, we may be required to obtain an export license or authorization and comply with other applicable requirements pursuant to such regulations.

## European Environmental Regulations

Our European activities require us to comply with Directive 2002/95/EC of the European Parliament on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, and Directive 2011/65/EU of the European Parliament on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (together “RoHS”). RoHS provides, among other things, that producers of electrical and electronic equipment may not place new equipment containing certain materials, in amounts exceeding certain maximum concentration values, on the market in the European Union. We are also required to comply with the European Community Regulation on chemicals and their safe use (EC 1907/2006) that deals with the Registration, Evaluation, Authorization and Restriction of Chemical substances (“REACH”, SVHC-173), which requires producers to manage the risks from chemicals used in their products and to provide safety information on the substances found in their products.

Our products meet the requirements of the RoHS and REACH directives and we are making every effort in order to maintain compliance, without adversely affecting the quality and functionalities of our products. If we fail to maintain compliance, including by reason of failure of our suppliers to comply, we may be restricted from conducting certain business in the European Union, which could adversely affect our results of operations.

Our European activities also require us to comply with Directive 2002/96/EC of the European Parliament on Waste Electrical and Electronic Equipment (“WEEE”). The WEEE directive covers the labeling, recovery and recycling of IT/Telecommunications equipment, electrical and electronic tools, monitoring and control instruments and other types of equipment, devices and items, and we have set up the operational and financial infrastructure required for collection and recycling of WEEE, as stipulated in the WEEE directive, including product labeling, registration and the joining of compliance schemes. We are taking and will continue to take all requisite steps to ensure compliance with this directive. If we fail to maintain compliance, we may be restricted from conducting certain business in the European Union, which could adversely affect our results of operations.

Similar regulations have been, or are being, formulated in other parts of the world. We may be required to comply with other similar programs that are enacted outside Europe in the future.

## Competition

We believe that our solutions have several competitive advantages (as set forth above in “Our Solutions” section in this Item 4 – “Business Overview”) as well as their scale, performance and accuracy, comprehensiveness of solutions and broad functionality.

We are leaders in the Customer Engagement space. We compete against WFO players such as Aspect, Calabrio, Genesys and Verint. In the CCaaS market, which is a part of the Contact Center Infrastructure market that is still mainly held by traditional on-premises players, we compete against Amazon Connect, Avaya, Five9 and Genesys, as well as other niche vendors. We also compete against certain Unified cloud Communications vendors (UCaaS), such as 8x8 and Vonage (who acquired in 2018 New Voice Media, a CCaaS provider), which offer basic CCaaS

capabilities. In addition, we are seeing some CRM companies that provide a subset functionality of our broader offerings.

We are leaders in the Financial Crime and Compliance space. We compete against niche vendors that provide one subset of functionality to protect against a specific risk and against vendors that provide a more comprehensive offering. Such vendors include BAE Systems, FICO, NASDAQ Smarts, Oracle and SAS Institute.

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Organizational Structure

The following is a list of our significant subsidiaries, including the name and country of incorporation or residence. Each of our significant subsidiaries is wholly-owned by us.

Name of Subsidiary	Country of Incorporation or Residence
Nice Systems Australia PTY Ltd.	Australia
NICE Systems Technologies Brasil LTDA	Brazil
NICE Systems Canada Ltd.	Canada
Nice Systems China Ltd.	China
Nice France S.A.R.L.	