# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

## **FORM 20-F**

#### ANNUAL REPORT

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

For the fiscal year ended December 31, 2003

Commission file number 000-30342

## JACADA LTD.

(Exact name of Registrant as specified in its charter)

#### Israel

(Jurisdiction of incorporation or organization)

11 Galgalei Haplada St. P.O. Box 12175 Herzliya 46722, Israel (Address of principal executive offices)

Securities registered or to be registered pursuant to Section 12(b) of the Act: NONE

Securities registered or to be registered pursuant to Section 12(g) of the Act: Ordinary shares, par value NIS 0.01 per share Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: NONE

Indicate the number of outstanding shares of each of the registrant's classes of capital or common stock as of the close of the period covered by the Annual Report:

#### 19,033,778 Ordinary Shares, par value NIS 0.01 per share

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. $\boxtimes$ Yes $\square$ No

Indicate by check mark which financial statement item the registrant has elected to follow. □ Item 17 ☒ Item 18

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#### FORWARD LOOKING STATEMENTS

This Annual Report contains forward-looking statements. These statements include all statements that are not statements of historical fact regarding the intent, belief, or current expectations of the Company, its directors or its officers with respect to, among other things: (i) the Company's financing plans; (ii) trends affecting the Company's financial condition or results of operations; and (iii) the Company's growth strategy and operating strategy (including the development of its products and services). The words "may," "could," "would," "will," "believe," "anticipate," "estimate," "expect," "intend," "plan" and similar expressions or variations thereof are intended to identify forward-looking statements. Prospective investors are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, and that actual results may differ materially from those in the forward-looking statements as a result of various factors. The information contained in this Annual Report, particularly under the heading "Risk Factors," identifies important factors that could cause such differences.

We have prepared our consolidated financial statements in U.S. dollars and in accordance with U.S. generally accepted accounting principles (GAAP). All references in this Annual Report to "dollars" or "\$" are to U.S. dollars and all references to "NIS" are to New Israeli Shekels.

Amounts and percentages appearing in this Annual Report may not total due to rounding.

#### Item 1: IDENTITY OF DIRECTORS, SENIOR MANAGEMENT, AND ADVISERS

Not applicable.

#### Item 2: OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

#### **Item 3: KEY INFORMATION**

#### A. Selected Financial Data

The following table sets forth selected financial data from our consolidated statements of operations and balance sheets for the periods indicated. The selected consolidated statement of operations data for the years ended December 31, 2003, 2002 and 2001 and the selected consolidated balance sheet data as of December 31, 2003 and 2002 have been derived from our audited consolidated financial statements and the notes thereto included elsewhere in this Annual Report. These financial statements have been prepared in accordance with GAAP. The consolidated statements of operations data for the years ended December 31, 2000 and 1999, and the selected consolidated balance sheet data as of December 31, 2001, 2000 and 1999 are derived from audited consolidated financial statements that are not included herein. The following selected financial data are qualified by reference to and should be read in conjunction with the sections entitled "Item 5: Operating and Financial Review and Prospects" and "Item 11: Quantitative and Qualitative Disclosures about Market Risk" and our consolidated financial statements and the notes thereto included elsewhere in the Annual Report.

Year ended December 31,

		2003		2002		2001		2000	1	999
	(In thousands, except per share and share					re data)				
Consolidated Statement of Operations Data:				(		•				
Revenues:										
Software licenses	\$	8,354	\$	9,783	\$	10,930	\$	15,506	\$	8,831
Services		4,704		4,518		8,986		6,070		3,362
Maintenance		7,504		7,235		5,630		3,540		2,406
Total revenues		20,562		21,536		25,546		25,116		14,599
Cost of revenues:										
Software licenses		534		248		520		725		639
Services		2,384		3,115		4,859		3,636		1,619
Maintenance		1,110		1,247		1,705		1,574		1,121
	_	4.020	_		_	<b>7</b> 004	_			2.250
Total cost of revenues		4,028		4,610		7,084		5,935		3,379
Gross profit		16,534		16,926		18,462		19,181		11,220
Operating expenses:										
Research and development, net		5,620		6,191		6,446		4,979		3,267
Sales and marketing		9,386		9,450		14,619		12,873		6,529
General and administrative		4,714		4,602		5,679		3,624		1,960
Non-recurring charges		_		501		2,846		_		
	_	10.720	_	20.744	_	20.500		21 476	_	11 756
Total operating expenses	_	19,720	_	20,744		29,590		21,476		11,756
Operating loss		(3,186)		(3,818)		(11,128)		(2,295)		(536)
Financial income, net		1,038		909		2,337		3,072		530
Net income (loss)	\$	(2,148)	\$	(2,909)	\$	(8,791)	\$	777	\$	(6)
Basic net earnings (loss) per share	\$	(0.11)	\$	(0.16)	\$	(0.48)	\$	0.04	\$	(0.00)
Weighted average number of shares used in computing basic net earnings (loss) per share	10	0,011,435	18	3,710,105	18	3,465,127	15	3,141,223	6.5	72,476
Diluted net earnings (loss) per share	\$	(0.11)	\$	(0.16)	\$	(0.48)		0.04	\$	(0.00)
Weighted average number of shares used in computing diluted net earnings (loss) per	_									
share	19	0,011,435	18	3,710,105	18	3,465,127	19	9,503,971	6,5	72,476
					December 31,			31,		
				2003		2002	2001	2000		1999
Consolidated Balance Sheet I	Datas					( <b>i</b> :	n thousai	nds)		
Cash and cash equivalents	Data:			\$ 9,845	<b>¢</b> 1	15,319	\$ 5,98	2 \$ 9,360	, (	\$ 5,141
Cash and investments				41,793						
						11,382	41,64			55,716
Working capital				12,164		34,448	39,62			53,315
Total assets				53,387	5	54,018	56,45	9 64,797		62,435
Long-term debt, net of current portion						<del></del>				186
Shareholders' equity				44,504	2	16,464	48,58	8 56,646	,	54,854
Dividends per share				_		_		_		_

## **Exchange Rates**

Not applicable.

## **B.** Capitalization and Indebtedness

Not applicable.

## C. Reasons for the Offer and Use of Proceeds

Not applicable.

#### D. Risk Factors

Readers are cautioned that an investment in Jacada is subject to a number of risks. Readers should consider carefully all information set forth herein and in particular the following risks in connection with an investment in Jacada:

#### **Risks Related to Our Business**

Because our products are complex and generally involve significant capital expenditures by customers, we may invest significant time and expense in trying to make a sale to a potential customer that ultimately chooses not to purchase our products. We develop, market and support software that enables businesses to Web-enable, modernize and integrate their existing host-centric software applications to better serve the needs of their users, customers and partners. We also provide related professional services, including training, consulting, support and maintenance. Our products and services provide our end users with comprehensive eBusiness enabling solutions. We have to devote substantial resources to educating prospective customers about our products' benefits. The complexity of our products may add time to the process of educating prospective customers. Many prospective customers have made significant investments in internally-developed or customized integration and modernization solutions and would incur significant costs in switching to third-party products such as ours. Even if our products are effective, our target customers may not choose them for technical, cost, support or other reasons.

Competition in the market in which we compete is intense. If we are unable to compete effectively, the demand for, or the prices of, our products may be reduced. The market in which we compete is extremely competitive and subject to rapid change. We compete with companies that utilize varying approaches to enable host-centric software applications to be utilized over the Internet. These companies include Attachmate Corporation, IBM, Seagull Software Ltd., TIBCO Software, Inc., ClientSoft, Inc., WRQ, Inc. and webMethods, Inc. We expect additional competition from other established and emerging companies. Furthermore, our competitors may combine with each other and other companies may enter our markets by acquiring or entering into strategic relationships with our competitors.

In addition, many companies choose to deploy their own information technology personnel or utilize system integrators to write new code or rewrite existing applications in an effort to develop their own eBusiness enabling solutions. As a result, prospective clients may decide against purchasing and implementing externally-developed solutions such as ours.

Many of our current and potential competitors have significantly greater financial, technical and marketing resources, greater name recognition and larger customer bases than we do. Our competitors may be able to develop products comparable or superior to ours; adapt more quickly than we do to new technologies, evolving industry trends or customer requirements; or devote greater resources than we do to the development, promotion and sale of products. Accordingly, we may not be able to compete effectively in our markets, competition may intensify and future competition may harm our business.

Our software license revenues result from a relatively small number of sales. In addition, our sales cycle is lengthy. These factors may cause our revenues to fluctuate materially from period to period. This would likely cause our stock price to decline. Our sales typically involve significant capital investment decisions by prospective customers, as well as a significant amount of time to educate them as to the benefits of our products. As a result, before purchasing our products, companies spend a substantial amount of time performing internal reviews and obtaining approvals. It may take six months or more from the time we first contact a prospective customer before receiving an initial order. This sales cycle may lengthen in the future.

Because of these and other factors, our quarterly revenues may fluctuate materially. This would likely cause our stock price to decline. Further, period-to-period comparisons of our revenues will not necessarily be meaningful. As a result, you should not rely upon them as an indication of future performance.

Fiscal year 2000 was our only profitable year, and we may not again achieve profitability. We have incurred net losses in each fiscal year since our inception except for fiscal 2000. To achieve and maintain profitability, we will need to increase revenues and contain expenses. We cannot assure you that our revenues will grow or that we will achieve or maintain profitability in the future. Our ability to increase revenues and maintain profitability will be affected by the other risks and uncertainties described in this section and in the sections entitled "Item 5: Operating and Financial Review and Prospects" and "Item 11: Quantitative and Qualitative Disclosures about Market Risk."

The market price of our shares is volatile and you may not be able to resell your shares at or above the price you paid, or at all. The risks described in this Section, combined with a generally sluggish worldwide economy and recently increased geopolitical instability may adversely affect our revenues and share price. If our share price decreases to below \$1.00 per share and remains there for 30 consecutive trading days, Nasdaq could initiate procedures to delist our shares from the Nasdaq National Market and onto either the Nasdaq Small Cap Market or the OTC Bulletin Board.

We must expand our sales and marketing efforts in order to increase market awareness of our products and to generate increased revenues. Expansion of our sales and marketing efforts is essential to increase market awareness of our products and to generate increased revenues. There can be no guarantee that we can successfully expand our sales and marketing efforts. Furthermore, in addition to increasing our direct sales and marketing efforts, we believe that our future success is dependent upon the expansion of our indirect distribution channels, consisting of our relationships with independent software vendors, software distributors and system integrators. We currently have relationships with only a limited number of these parties. However, we have derived, and we anticipate that we will continue to derive, a significant portion of our revenues from these relationships.

Our future growth will be limited if:

- we fail to work effectively with our indirect distribution partners;
- we fail to increase the number of indirect distribution partners with which we have relationships;
- the business of one or more of our indirect distribution partners fails; or
- there is a decrease in the willingness or ability of our indirect distribution partners to devote sufficient resources and efforts to marketing and supporting our products.

If any of these circumstances occurs, we will have to devote substantially more resources to the sales, marketing, distribution, implementation and support of our products than we otherwise would, and our own efforts may not be as effective as those of our indirect distribution channels.

Our revenues could be adversely affected if we fail to retain consultants and sales implementation personnel. We rely on our staff of professional consultants and other technical service personnel to implement our solutions after purchases by our customers. Unless we are able to retain consultants and sales implementation personnel or hire and train qualified consultants and sales implementation personnel to replace those who leave us, it will be difficult for us to increase or possibly even maintain our present level of sales due to constraints on our capacity to implement sales.

Rapid changes and developments in our market could cause our products to become obsolete or require us to redesign our products. The eBusiness enabling software market is characterized by rapid technological change, frequent new product introductions and emerging industry standards. We also expect that the rapid evolution of Internet-based applications and standards, as well as general technology trends such as changes in or introductions of operating systems, will require us to adapt our products to remain competitive. Our existing products could become obsolete and unmarketable if we are unable to adapt quickly to new technologies or standards. To be successful, we will need to develop and introduce, in a timely manner and on a cost-effective basis, new products and product enhancements that respond to technological changes, evolving industry standards and other market changes and developments. Although we plan to continue to spend substantial amounts for research and development in the future, we cannot assure you that we will develop new products and product enhancements successfully or that our products will achieve broad market acceptance. Our failure to respond in a timely and cost-effective manner to new and evolving technologies and other market changes and developments would likely adversely impact our business.

Competitive pressures in our current market will result in continuing reductions in the average selling price of our software products. The average selling price of our current software products (other than our recently introduced Jacada Fusion

products) has declined over the past four years due to changes in our competitive environment, resulting in increased pricing pressures and companies stretching out commitments and postponing purchases. We cannot assure you that this trend will not continue. Reductions in average sales prices of existing software products can cause a reduction in our software license revenues if the reductions are not offset by other revenue from new products or other revenue streams. Even if we are able to offset reductions in our average selling prices of existing software products by increasing the volume of our sales, the reductions may negatively affect our gross margins and operating results.

Our future growth will be adversely affected and our future operating results may be adversely affected if we fail to develop and introduce new products that address new markets and that achieve market acceptance. In order to achieve sales growth we will need to develop and introduce new products for new markets. In the second quarter of 2004, we announced the introduction of Jacada Fusion, our new family of products that is designed to integrate different applications residing on host, Windows and Web-based platforms, and allow non-invasive access to those applications through a single user interface. If we are unable to develop other new products successfully or if the markets we decide to enter fail to develop, our prospects for growth will suffer. In addition, our ability to develop and introduce new products requires us to invest significant resources in research and development and in the sales and marketing of a new product. If we fail to develop and market new products in new markets successfully, we may not be able to recover our research and development expenditures or our sales and marketing expenditures, which would adversely impact our operating results. Furthermore, the successful introduction of new products will require us to maintain an effective sales and marketing strategy regarding our current products in order to maintain a stable revenue stream from them. A failure to do so could adversely impact our operating results.

A component of our new product, Jacada Fusion, is dependent on intellectual property owned by a third party. We are party to an agreement with a company that owns certain technology that we have incorporated into our new product, Jacada Fusion. After December 2004, this agreement may be terminated by us or by the owner of the technology without cause upon 90 days notice. Any termination of this agreement would materially affect our ability to market and license our Jacada Fusion product.

We rely on our key personnel, whose knowledge of our business and technical expertise would be extremely difficult to replace. Our future success depends, to a significant degree, on the continued services of our CEO, Gideon Hollander, as well as other key management, sales and technical personnel. The loss of services of any of our key management for any reason could have a material adverse effect on our business, financial condition and results of operations. We are also dependent on our ability to attract, retain and motivate highly skilled personnel. In the markets in which we recruit, competition for qualified personnel is intense. As a result, our ability to recruit and retain qualified candidates may be limited.

We expect to be subject to increasing risks of international operations. We currently market and sell our products and services primarily in North America, from which we received approximately 80% of our total revenues for the year ended December 31, 2003. However, we have increased and plan to continue to increase our operations, particularly in Europe. This expansion will require significant management attention and financial resources. Further, we currently have limited experience in marketing and distributing our products in regions other than North America. Our inability to increase our worldwide operations successfully could adversely impact our business. In addition, exchange rate fluctuations between the dollar and foreign currencies may adversely affect us. Prior to 2003, we did not use currency exchange forward contracts and options to hedge the risks associated with fluctuations in foreign exchange rates. Although we did utilize currency exchange forward contracts to hedge the revenues from most of our Eurodenominated transactions in 2003, some of our foreign currency-denominated revenues are still not hedged. Accordingly, we are still exposed to the risk that our revenues will decrease in the event that those foreign currencies strengthen against the dollar. In addition, as most of our sales are currently made in dollars, an increase in the value of the dollar could make our products less competitive in non-U.S. markets, thereby causing a reduction in our sales. See "-Exchange rate fluctuations between the dollar and the NIS may negatively affect our earnings" for a discussion of risks associated with fluctuations in the dollar-NIS exchange rate.

Our products may contain unknown defects that could harm our reputation, result in product liability or decrease market acceptance of our products. Our products may contain errors or defects, particularly when first introduced or when new versions or enhancements are released. Although we have not experienced any material software defects to date, defects could cause our customers to experience system failures. Our customers depend on our software for their critical systems and business functions. Any errors or defects could:

- damage our reputation;
- increase our product development costs;
- divert our product development resources;
- expose us to monetary damages;
- cause us to lose future sales; or
- delay or diminish market acceptance of our products.

Although we conduct extensive testing, we may not discover software defects that affect our products or enhancements until after they are sold. Furthermore, we are unable to test our products in each of the applications in which they are designed to work.

Certain of our products contain technology that we acquired from third parties. Because we did not develop the technology ourselves, there may be errors in the technology of which we are not aware. In addition, our products are integrated with our customers' networks and software applications. The sale and support of our products may expose us to the risk of product liability or warranty claims based on damage to these networks or applications caused by the technology we developed or the technology developed by a third party and acquired by us. In addition, the failure of our products to perform to customer expectations could give rise to warranty or other claims. Any of these claims, even if not meritorious, could result in costly litigation or divert management's attention and resources. We may not have sufficient funds or insurance coverage to satisfy any or all liability that may be imposed upon us with respect to these claims.

Our technology may be subject to infringement claims or may be infringed upon. Our success and ability to compete are substantially dependent upon our internally developed technology. Most of our intellectual property, other than our trademarks, consists of proprietary or confidential information that is not subject to patent or similar protection. Despite our efforts to protect our intellectual property rights, unauthorized third parties may attempt to copy or otherwise obtain and use the technology protected by those rights. Any infringement of our intellectual property could have a material adverse effect on our business, financial condition and results of operations. Furthermore, policing unauthorized use of our products is difficult and costly, particularly in countries where the laws may not protect our proprietary rights as fully as in the United States.

Although we do not believe that our products infringe upon any patent, trademark or other intellectual property rights of others, we cannot be certain that one or more persons will not make a claim of infringement against us. Any claims, with or without merit, could:

- be expensive and time-consuming to defend;
- · cause product shipment and installation delays;
- divert management's attention and resources; or
- require us to enter into royalty or licensing agreements, which may not be available on acceptable terms, or may not be available at all.

A successful claim of product infringement against us or our failure or inability to license the infringed or similar technology could have a material adverse effect on our business, financial condition and results of operations.

#### Risks Related to Our Location in Israel

Israeli courts might not enforce judgments rendered outside of Israel. We are incorporated under the laws of the State of Israel and we maintain significant operations in Israel. Certain of our officers and directors and our Israeli accountants and counsel reside outside of the United States. Therefore, you might not be able to enforce any

judgment obtained in the United States against us or any of such persons. Additionally, you might not be able to bring civil actions under United States securities laws if you file a lawsuit in Israel. We have been advised by our Israeli counsel that, subject to certain limitations, Israeli courts may enforce a final executory judgment of a United States court for liquidated amounts in civil matters after a hearing in Israel, provided that certain conditions are met. If a foreign judgment is enforced by an Israeli court, it will be payable in Israeli currency.

Conditions in and around Israel could adversely affect our operations. Because our research and development facilities are located in Israel, we are directly influenced by the political, economic and military conditions affecting Israel. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its Arab neighbors. Any major hostilities involving Israel or the interruption or curtailment of trade between Israel and its present trading partners could materially adversely affect our operations. Despite the negotiations towards peace between Israel and certain of its Arab neighbors, the future of these peace efforts is uncertain. Since October 2000, there has been a significant increase in violence primarily in the West Bank and the Gaza Strip and negotiations between Israel and the Palestinian representatives have ceased for periods of time. There can be no assurance that ongoing or revived hostilities or other factors related to Israel, will not have a material adverse effect on us or on our business or adversely affect our share price.

Some of our officers and employees in Israel are obligated to perform 36 days or more of military reserve duty annually and in some cases may be called upon to serve upon short notice. The absence of these employees for significant periods may cause us to experience operating difficulties. Additionally, a number of countries continue to restrict or ban business with Israel or Israeli companies, which may limit our ability to make sales in those countries.

Exchange rate fluctuations between the dollar and the NIS may negatively affect our earnings. A substantial majority of our revenues and a substantial portion of our expenses are denominated in U.S. dollars. However, a significant portion of the expenses associated with our Israeli operations, including personnel and facilities-related expenses, are incurred in New Israeli Shekels (NIS). Consequently, inflation in Israel will have the effect of increasing the U.S. dollar cost of our operations in Israel, unless it is offset on a timely basis by a devaluation of the NIS relative to the U.S. dollar. We cannot predict any future trends in the rate of inflation in Israel or the rate of valuation of the NIS against the U.S. dollar. Although we have begun in 2004 to hedge partially against risks associated with fluctuations in the dollar-NIS exchange rate, if the dollar cost of our operations in Israel increases, our U.S. dollar-measured results of operations will still be adversely affected.

Any failure to obtain the tax benefits from the State of Israel that we anticipate receiving could adversely affect our plans and prospects. Pursuant to the Law for the Encouragement of Capital Investments, 1959, the Israeli government has granted "Approved Enterprise" status to our existing capital investment programs. Consequently, we are eligible for certain tax benefits for the first several years in which we generate

taxable income. However, we have not yet begun to generate taxable income for purposes of this law. Once we begin to generate taxable income, our financial results could suffer if our tax benefits are significantly reduced.

In order to receive tax benefits, we must comply with a number of conditions and criteria. If we fail to comply in whole or in part with these conditions and criteria, the tax benefits that we receive could be partially or fully canceled and we could be forced to refund the amount of the benefits we received, adjusted for inflation and interest. Although we believe that we have operated and will continue to operate in compliance with the required conditions, we cannot assure you that this will continue.

We cannot assure you that these tax benefits will be continued in the future at their current levels or at all. The termination or reduction of tax benefits could have a material adverse effect on our business, financial condition and results of operations. In addition, in the event that we increase our activities outside the State of Israel, these activities generally will not be eligible for inclusion in Israeli tax benefit programs. Accordingly, our effective corporate tax rate could increase significantly in the future.

The government grants we have received for research and development expenditures restrict our ability to manufacture products and transfer technologies outside of Israel and require us to satisfy specified conditions. From time to time we have received royalty-bearing grants from the Office of the Chief Scientist of the Ministry of Industry and Trade of the Government of Israel. The terms of these grants prohibit us from manufacturing products or transferring technologies developed using these grants outside of Israel without special approvals. Even if we receive approval to manufacture these products outside of Israel, we may be required to pay increased royalties, up to 300% of the grant amount plus interest, depending on the manufacturing volume that is performed outside of Israel. The technology developed with these grants may not be transferred to third parties, including in the context of an acquisition of our company, without the prior approval of a governmental committee under the Research and Development Law, and may not be transferred to non-residents of Israel. These restrictions may impair our ability to outsource manufacturing or engage in similar arrangements for those products or technologies. In addition, if we fail to comply with any of the conditions imposed by the Office of the Chief Scientist, we may be required to refund any grants previously received, together with interest and penalties.

In 2002, the Research and Development Law was amended to, among other things, enable companies applying for grants from the Office of the Chief Scientist to seek prior approval for conducting manufacturing activities outside of Israel without being subject to increased royalties. However, this amendment will not apply to any of our existing grants. In addition, the amendment provides that one of the factors to be taken into consideration by the Office of the Chief Scientist in deciding whether to approve a grant application is the percentage of the manufacturing of the relevant product that will be conducted outside of Israel. Accordingly, should we seek additional grants from the Office of the Chief Scientist and seek prior approval for manufacturing products outside of Israel, we may not receive such grant or may receive a grant in an amount that is less than the amount we sought.

Certain provisions of our articles of association and of Israeli law could delay, hinder or prevent a change in our control. Our articles of association contain provisions which could make it more difficult for a third party to acquire control of us, even if that change would be beneficial to our shareholders. For example, our articles of association provide that our board of directors is divided into three classes, each serving three-year terms. In addition, certain provisions of the Israeli Companies Law, which we refer to as the Companies Law, could also delay or otherwise make more difficult a change in control. The provisions of the Companies Law relating to mergers and acquisitions are discussed in greater detail in "Item 10.B: Memorandum and Articles of Association."

Our stock is traded on more than one stock exchange and this may result in price variations. Our stock is traded on the Nasdaq National Market and on the Tel Aviv Stock Exchange. Our stock is traded on these markets in different currencies (US dollars on Nasdaq and New Israeli Shekels on the Tel Aviv Stock Exchange) and at different opening times (notably, different time zones and public holidays; in addition, the Tel Aviv Stock Exchange is closed on Fridays and open on Sundays, while Nasdaq is open on Fridays and closed on Sundays). This means that our stock is often traded at a price differential on these two markets resulting, among other factors, from the different trading times and the differences in exchange rates.

#### **Item 4: INFORMATION ON THE COMPANY**

#### A. History and Development of the Company

Our legal and commercial name is Jacada Ltd. We were incorporated under the laws of the State of Israel in December 1990 as a limited liability company. On August 9, 1999 we changed our name from Client/Server Technology Ltd. to Jacada Ltd. Our commercial name is Jacada.

Our registered office in Israel is 11 Galgalei Haplada Street, Herzliya 46722 Israel and our telephone number is 972-9-952-5900. Our agent in the United States is Robert C. Aldworth, whose address is 400 Perimeter Center Terrace, Suite 100, Atlanta, Georgia 30346. Our address on the Internet is <a href="http://www.jacada.com">http://www.jacada.com</a>. The information on our website is not incorporated into this Annual Report. We operate under the Companies Law.

Since October 1999, our Ordinary Shares have been quoted on the Nasdaq National Market under the symbol "JCDA." In addition, our Ordinary Shares have been quoted on the Tel Aviv Stock Exchange under the same symbol or its Hebrew equivalent since June 18, 2001. We develop, market and support software that enables businesses to Web-enable, modernize and integrate their existing host-centric software applications to better serve the needs of their users, customers and partners. We also provide related professional services, including training, consulting, support and maintenance. Our products and services provide our end users with comprehensive eBusiness enabling solutions.

Typical users of our products and services are medium to large businesses with sophisticated technology requirements. Some of the companies that have implemented or are implementing our solutions include AIG, Bank of America, Caterpillar, Delta Air Lines, U.S. Department of Interior, The Federal Reserve Bank, Liberty Mutual Insurance, Lockheed Martin, Manpower, Porsche Cars North America, Prudential Life Insurance Company, Raytheon, The Hartford and Saab Cars.

See Items 5 and 18 for a description of our capital expenditures for the past three fiscal years. We have made no divestitures during the same time period. In addition, we are not currently engaged in a capital divestiture and our current capital expenditures are for computers, software and peripheral equipment. These capital expenditures are financed with our internal cash resources.

We are not aware of any public takeover offers by third parties in respect of our shares, and we have made no public takeover offers in respect of other companies' shares during fiscal years 2002 and 2003.

#### **B.** Business Overview

#### **Industry Overview**

The Internet has fundamentally changed the way companies think about their business strategies. It has created opportunities for companies to make their applications and data accessible to their employees, customers, suppliers and other third parties quickly and cost effectively. The strategic importance of eBusiness is driving the demand for solutions that can provide the necessary infrastructure to extend existing applications and data to browser-enabled desktops and to the Internet.

A significant number of the applications that are critical to companies in operating their businesses, including applications for customer account information, sales and inventory management, customer order information and manufacturing enterprise resource planning, are currently held in host-centric environments such as those based on mainframes and mini-computers. Applications for host-centric systems are typically complex and proprietary and tailored to the needs of a specific company. These applications were originally designed to be accessible only by a fixed network of users, principally employees. Furthermore, these applications have complicated text-based user interfaces, which lack the flexibility and intuitiveness of today's graphical user interfaces. Companies continue to rely heavily on and invest a significant amount of resources in host-centric applications and data.

Companies are increasingly seeking to circumvent the limitations of their existing host-centric systems by utilizing the broad distribution potential of browser-enabled desktops and the Internet to grant employees, customers, suppliers and corporate partners easy access to applications and data. Additionally, as newer applications are implemented, such as Customer Relationship Management software (CRM), there is an increasing need to integrate existing host-centric applications with these new systems easily.

Web-enabling or integrating existing host-centric applications may be accomplished by either completely rewriting the existing applications or by using technologies like ours to leverage those applications that exist today. Rewriting an application involves significant time and expense, as well as uncertain scheduling, budgeting and results. It may also render the skills and knowledge of a company's information technology staff obsolete. Companies' large investments in existing host-centric applications have created the need for a solution that enables application reuse without the costs, risks and time required to rewrite the application.

An effective solution to extend and integrate existing applications should:

- be able to be implemented rapidly;
- enable the deployment of a comprehensive solution that does not require extensive custom programming;
- provide a flexible architecture that allows for the efficient incorporation of evolving technologies; and
- be able to operate on multiple platforms and support a variety of applications.

#### **Our Solutions**

We develop, market and support software that enables businesses to Web-enable, modernize, and integrate their existing host-centric applications to better serve the needs of their users, customers and partners. Our solutions provide the following benefits:

- Leverage Existing Information Technology Resources. Our solutions permit companies to access their existing host-centric
  applications through browser-enabled desktops or over the Internet, and can integrate these existing applications with newer
  software implementations such as CRM solutions from companies such as Siebel Systems, Inc. and PeopleSoft, Inc. This
  eliminates the need to replace existing applications through time-consuming and expensive custom programming.
  Additionally, our solutions allow programmers trained in various languages to program in their native software languages
  and to deliver applications that are Web-enabled.
- *Allow Rapid Implementation*. We design our solutions to be implemented rapidly and to require minimal customization, which results in faster implementation than internally developed solutions.
- *Provide a Complete eBusiness Enabling Solution*. Our comprehensive solutions allow companies to conduct eBusiness to the same extent as available by direct connection with the host computer, without purchasing any other products.

Our solutions have been or are being implemented by hundreds of companies worldwide. Our customers receive the following advantages:

- Flexibility to Adapt to Evolving Business Needs. We design our solutions to work effectively even as companies modify existing and add new applications in response to their evolving business needs. As companies program changes into their applications, our solutions automate the changes in the graphical user interface.
- Reliability and Scalability. Our solutions are designed to provide the reliability required for applications that are critical to the operation of businesses, and are easily scalable to accommodate additional users in response to evolving business needs.
- *Programming Language Independence*. Our solutions protect customers from changes in interface development trends by generating multiple interface language standards from the same interface design.
- Platform Independence. Our Java-based solution provides customers with the flexibility to run our products on any Java-enabled platform, including IBM zSeries S/390, iSeries AS/400, Sun Solaris, HP UX, IBM AIX, Microsoft Windows NT and Microsoft Windows 2000.

#### **Products and Technology**

Our products and services provide our customers with a comprehensive eBusiness enabling solution. Our products include:

Jacada ® Interface Server. Jacada Interface Server generates graphical user interfaces for mainframe and midrange software applications without requiring any change to the host applications. By generating Java or HTML graphical interfaces, Jacada Interface Server enables our customers to extend their host-centric applications and data to the Internet and their intranets without rewriting these applications. In addition, Jacada Interface Server provides the modern graphical features users expect from today's applications. Jacada Interface Server also allows customers to enhance their applications to add functionality, integrate with other data sources and link to other Internet applications.

Jacada Interface Server also provides an ability to modernize the architecture of some host-centric applications. Developed in cooperation with IBM, the Jacada Interface Server's DDS Bridge and Jacada Studio contain innovative technology which enables new or existing applications written in COBOL or RPG to leverage the Jacada presentation technology to deliver graphical "thin client" user screens, replacing the text-based, "green screen" architecture found in legacy applications. Any software developer can utilize the Jacada Interface Server without any special knowledge of any other programming language. This allows customers to leverage their existing software skills and resources to build modern applications.

*Jacada* ® *Integrator*. Jacada Integrator is a software solution for integrating core host-centric business systems, including the data and processes in those systems, with multiple packaged applications, frameworks and client environments.

Jacada has established sales and marketing relationships with Siebel Systems, PeopleSoft, Computer Associates, Oracle, BEA Systems and SeeBeyond, Inc. to utilize Jacada Integrator where a real-time, non-intrusive solution is required to integrate a host-centric application with its CRM or EAI solutions. Our customers get the benefits of on-line, real-time integration with back-office applications without rewriting any of their existing systems.

#### Some of Jacada Integrator's key features include:

- Automated tools for capturing screens and navigation, minimizing the amount of code to be written;
- Support for a wide range of client front-ends, including Java, Windows APIs (such as ActiveX) and C-language libraries;
- Special adapters and validation with Siebel eBusiness Solutions (CRM);
- Special adapter and validation with SeeBeyond (EAI);
- Special adapter for IBM MQSeries;
- Support for XML;
- Support for Application Servers, including WebSphere and WebLogic; and
- Support for a wide range of back-end host-centric systems, including IBM mainframes (S/390 or zSeries) presenting 3270 screens, IBM AS/400s or iSeries presenting a 5250 interface, and a variety of UNIX, VMS and other systems presenting a Telnet (VT100/220) interface.

Jacada Interface Server and Jacada Integrator are based on our following core technology components:

• Jacada KnowledgeBase. The Jacada KnowledgeBase is a set of sophisticated algorithms for analyzing and interpreting host-centric applications and converting patterns on those text-based applications into graphical user interface components. During the conversion process, the Automated Conversion Environment automatically matches all the patterns identified on the screen with pattern definitions in the KnowledgeBase. The KnowledgeBase then generates a new graphical user interface based on these pattern definitions.

- Jacada Automated Conversion Environment (ACE). In combination with the Jacada KnowledgeBase, ACE forms the powerful core of a solution that can quickly and easily generate graphical user interfaces for mainframe and mid-range software applications. This allows companies to extend their host-centric applications to the Internet through user interfaces that are graphical in nature and intuitive, as opposed to user interfaces that are comprised solely of text. Graphical user interfaces may be created using Java, HTML or ActiveX/Visual Basic. ACE allows users to customize the graphical user interface by changing colors, fonts, sizes and layout, as well as by adding or deleting functions or graphics.
- MapMaker. Jacada Integrator includes our MapMaker graphical integration environment that enables the development of complex application integration solutions in an easy to use and understand modeling environment. It employs a rapid, component-based approach to legacy integration that requires no changes to the existing systems, saving time and eliminating complexity. MapMaker creates a map of the host application that consists of the application screens, the navigational information required to traverse through a sequence of screens, and the tags and fields included on each host application screen. This information is stored in Java class files produced within MapMaker that are implemented as Java services. Jacada Integrator also provides a means for packaging MapMaker services as Enterprise JavaBeans.

Jacada ® Host Transaction Connector. Jacada Host Transaction Connector, introduced in April 2003, transforms CICS (Customer Information Systems) and IMS (Information Management Systems) transactions into services that can be deployed natively in a J2EE (Java 2 Enterprise Edition) environment as a JCA (Java Control Architecture) resource adapter or as an EJB (Enterprise JavaBean), or as Web services and .NET components. Jacada Host Transaction Connector provides direct access to CICS and IMS transactions without relying on the 3270 data stream or any other screen-based protocols. Jacada Integrator Host Transaction Connector is an efficient, easy-to-use and flexible solution for integrating applications and data on mainframes with new composite applications.

The ability to rapidly and cost effectively transform CICS and IMS transactions into reusable components provides organizations with tremendous value in leveraging the core business functionality of the mainframe and integrating these valuable applications into today's e-business efforts.

Jacada ® Terminal Emulator. Jacada Terminal Emulator is a full featured, Java-based, thin client terminal emulator that provides companies with a low cost, thin client alternative to traditional fat client emulation software. Jacada Terminal Emulator eliminates the need to install emulation software on each user's desktop by automatically deploying such software from a Web server, which lowers the total cost of ownership for terminal access to host systems.

#### **New Product**

Most computer applications developed in the 1990s were developed for Windows-based or Client/Server platforms. Accordingly, many companies require the ability to deliver Web services from Windows and Client/Server applications and not just from host-centric applications. More recently, many companies developed and utilize applications that were developed for Web-based platforms. In these instances, company employees often must access and interface with multiple applications residing on a variety of platforms in order to accomplish even simple business processes.

We have developed a new product family, Jacada Fusion, that is designed to integrate different applications residing on host, Windows and Web-based platforms. Jacada Fusion products are designed to provide a complete solution that enables non-invasive access to software applications residing on host, Windows and Web-based platforms, meaning that applications can be utilized and data entered and retrieved without the need to rewrite code or reinsert data. Jacada Fusion is enabled by our new Jacada WinFuse product, which we developed utilizing our core application technology and which enables Windows and Client/Server applications to be more easily integrated with portals or other applications. In addition, Jacada Fusion incorporates some of our other existing technologies as well as third party technology.

Because Jacada Fusion presents users with a single interface through which applications are accessed, it eliminates the need to navigate through and between applications. Therefore it eliminates redundant data entry, cuts keystrokes and streamlines process steps, thereby generating greater efficiency. The access to multiple platforms through one interface also allows companies to respond more quickly to customer demands and changes in the marketplace as new business rules and processes can be adopted through the single user interface without rewriting any code or data.

We introduced Jacada Fusion in the second quarter of 2004 and have begun marketing it to potential customers. We intend to market Jacada Fusion to a broad range of customers and in a manner similar to the marketing of our current products. However, we have identified particular business segments that we believe would particularly benefit from the Jacada Fusion solution.

#### **Professional Services**

Our professional services include training, consulting and support and maintenance services. Support and maintenance services are provided to our customers through agreements under which we provide technical support by telephone, fax, email and the Internet and provide updates, upgrades and fixes to our software products. We require our customers to purchase support and maintenance services for 12 months after the initial purchase of a software license, renewable annually thereafter. In addition, customers can elect optional services such as emergency coverage on a 24 hours per day, seven days per week basis and dedicated technical account managers. We also provide customer training at our Atlanta, Georgia facility and other locations, with coursework related to various aspects of our products.

We provide our customers with training services to assist them in learning how to use our products. We also provide our direct customers with consulting services to assist them with installing and integrating our products into their systems, and with managing and enhancing their utilization of our products on an ongoing basis.

We bill for consulting services either on a fixed fee basis or by the hour plus out-of-pocket expenses, and for training services by the day plus out-of-pocket expenses. The majority of our trainers and consultants are located in the United States. Our distributors and other resellers typically provide training and consulting services directly to their customers, assisted by us as necessary.

#### **Principal Markets**

Our principal markets are North America and Europe. We generate revenues from licensing our software products to customers and providing customers with training, consulting, and support and maintenance services. Software license revenues constituted approximately 40.6%, 45.4% and 42.8% of our total revenues for the years ended December 31, 2003, 2002 and 2001, respectively, while service and maintenance revenues constituted approximately 59.4%, 54.6% and 57.2% of our total revenues, respectively, for the same periods. Software license revenues generated from North American customers constituted approximately 30.6%, 31.4% and 37.3% of our total revenues for the years ended December 31, 2003, 2002 and 2001, respectively, while service and maintenance revenues generated from North American customers constituted approximately 49.4%, 48.3% and 54.5% of our total revenues, respectively, for the same periods. Software license revenues generated from European customers constituted approximately 9.2%, 14.0% and 5.5% of our total revenues for the years ended December 31, 2003, 2002 and 2001, respectively, while service and maintenance revenues generated from European customers constituted approximately 9.6%, 6.3% and 2.7% of our total revenues, respectively, for the same periods. Our gross margins on software license revenues have historically been higher than our gross margins on service and maintenance revenues.

#### Seasonality

Not applicable.

#### Sources and Availability of Raw Materials

Not applicable.

#### Sales and Marketing

We sell our products through our direct sales force in North America, Europe and Latin America, as well as through our indirect distribution channels, consisting of software distributors, independent software vendors and system integrators. We also use

indirect distribution channels in countries where we have no direct sales operations. As of December 31, 2003, we had 47 people in our sales and marketing organization, representing an increase from 44 at December 31, 2002.

Our indirect distribution channels have capabilities that complement and augment our eBusiness solutions and extend our market reach. In particular, independent software vendors often contribute industry-specific and application-specific expertise as well as large scale project management capabilities that enable us to address a broad range of vertical markets. Independent software vendors and system integrators often package or incorporate our products with their products or solutions. This enables us to create combined offerings that address specific needs, particularly for specific vertical markets, and provide more complete and tailored offerings.

Our marketing efforts are focused on developing greater awareness among target customers of our solutions and the benefits they can provide. We market our products and services online and through tradeshows and public relations activities. We have developed a wide range of collateral materials and sales tools that are used by both our direct sales force and indirect distribution channels. These materials include brochures, white papers, case studies, press releases and our Web site.

#### **Customers**

Our customers include both end users to whom we sell our products and services directly and distributors and other intermediaries who either resell our products to end users or incorporate our products into their own product offerings. Typical end users of our products and services are medium to large businesses with sophisticated technology requirements.

Our customers are using our solutions to rapidly deploy eBusiness applications. Some examples of customers' uses of our products include:

- Insurance companies, which use our solutions to modernize their call center applications, Web-enable access to these applications for customers to update account information via the Internet, and integrate their customer information systems with CRM applications.
- Financial institutions, which use our solutions to provide real-time integration between Siebel eBusiness Solutions (CRM) and existing back-office systems, eliminating redundant data entry, providing real-time data access and processing, and enhancing customer service and service levels.
- Automotive companies, which use our solutions to enhance the quality of their services by enabling dealers in their networks to utilize previously centralized sales and inventory management systems to locate and order cars and parts inventory.

- Retailers, which use our solutions to enable existing back-office software applications to be used to receive and process orders from customers and to send orders to suppliers via the Internet.
- Enterprise resource planning software vendors, which use our solutions in concert with their manufacturing applications software to enable their customers to manage the customers' manufacturing and inventory processes via the Internet.

#### **Research and Development**

We believe that strong product development is essential to our strategy of continuing to enhance and expand the capabilities of our products. We have invested significant time and resources in creating a structured process for undertaking all product development. This process involves several functional groups at all levels within our organization and is designed to provide a framework for defining and addressing the activities required to bring product concepts and development projects to market successfully. In addition, we have recruited and intend in the future to recruit key software engineers and developers with experience in Java, .net, communications, expert systems, Windows internals and Internet technologies. Our research and development efforts, which include internal development as well as acquisition of technology components, are primarily focused on enhancing and adding functionality to our existing products and adding new products based on our expectations of future technologies and industry trends.

Our research and development expenses were \$5.6 million for the year ended December 31, 2003, \$6.2 million for the year ended December 31, 2002 and \$6.4 million for the year ended December 31, 2001. As of December 31, 2003, 52 professionals were engaged in research and development activities, representing an increase from 49 professionals at December 31, 2002. See also "Item 8. Financial Information, B. Significant Changes."

#### **Dependence on Patents and Licenses**

We own our core technology for our core products. In addition, we own a significant majority of the software products that we license to customers. We hold one patent on a portion of our technology. For our more established products, we are generally not dependent on any third party license or patent with respect to such technology or products. While we have an additional patent pending with respect to our technology, we believe that the failure to obtain such patent would not diminish our ownership rights in our technology or our software products. A component of our new product, Jacada Fusion, contains technology that we license from a third party, and we are dependent on this third party technology for such component. After December 2004, this license may be terminated by us or by the third party without cause. Any termination of this Agreement would materially affect our ability to market and license our Jacada Fusion Product.

#### Competition

The eBusiness enabling software market is extremely competitive and subject to rapid change. We believe that the competitive factors affecting the market for our products and services include:

- product functionality and features;
- availability of global support;
- existing vendor relationships;
- ease of product implementation;
- quality of customer support services;
- product reputation; and
- financial stability of vendors.

The relative importance of each of these factors depends upon the specific customer environment. Although we believe that our products and services currently compete favorably, we may not be able to maintain our competitive position against current and potential competitors. In addition, many companies choose to deploy their own information technology personnel or utilize system integrators to write new code or rewrite existing applications in an effort to develop eBusiness solutions. As a result, prospective customers may decide against purchasing and implementing externally developed and produced solutions such as ours.

We compete with companies that utilize varying approaches to enable host-centric software applications to be utilized over the Internet. These companies include Attachmate Corporation, IBM, Seagull Software Ltd., TIBCO Software Inc., ClientSoft,

Inc., WRQ, Inc. and webMethods, Inc. We expect additional competition from other established and emerging companies. Furthermore, our competitors may combine with each other, or other companies may enter our markets by acquiring or entering into strategic relationships with our competitors.

#### **Material Effects of Government Regulation in Israel**

Pursuant to the Law for the Encouragement of Capital Investments, 1959, the Israeli government has granted "Approved Enterprise" status to our existing capital investment programs. Consequently, we are eligible for certain tax benefits for the first several years in which we generate taxable income. However, we have not yet begun to generate taxable income for purposes of this law. Once we begin to generate taxable income, our financial results could suffer if our tax benefits are significantly reduced.

In order to receive tax benefits, we must comply with a number of conditions and criteria. Although we believe that we have operated and will continue to operate in compliance with the required conditions, we cannot guarantee that this will continue. Once we generate taxable income, if we fail to comply in whole or in part with these conditions and criteria, the tax benefits that we receive could be partially or fully canceled and we could be forced to refund the amount of the benefits we received, adjusted for inflation and interest. We cannot assure you that these tax benefits will be continued in the future at their current levels or at all. The termination or reduction of tax benefits could have a material adverse effect on our business, financial condition and results of operations. In addition, in the event that we increase our activities outside the State of Israel, these activities generally will not be eligible for inclusion in Israeli tax benefit programs. Accordingly, our effective corporate tax rate could increase significantly in the future.

From time to time we have received royalty-bearing grants from the Office of the Chief Scientist of the Ministry of Industry and Trade of the Government of Israel. The terms of these grants prohibit us from manufacturing products or transferring technologies developed using these grants outside of Israel without special approvals. Even if we receive approval to manufacture these products outside of Israel, we may be required to pay increased royalties, up to 300% of the grant amount plus interest, depending on the manufacturing volume that is performed outside of Israel. The technology developed with these grants may not be transferred to third parties, including in the context of an acquisition of our company, without the prior approval of a governmental committee under the Research and Development Law, and may not be transferred to nonresidents of Israel. These restrictions may impair our ability to outsource manufacturing or engage in similar arrangements for those products or technologies. In addition, if we fail to comply with any of the conditions imposed by the Office of the Chief Scientist, we may be required to refund any grants previously received, together with interest and penalties.

In 2002, the Research and Development Law was amended to, among other things, enable companies applying for grants from the Office of the Chief Scientist to seek prior approval for conducting manufacturing activities outside of Israel without

being subject to increased royalties. However, this amendment does not apply to any of our existing grants. In addition, the amendment provides that one of the factors to be taken into consideration by the Office of the Chief Scientist in deciding whether to approve a grant application is the percentage of the manufacturing of the relevant product that will be conducted outside of Israel. Accordingly, should we seek additional grants from the Office of the Chief Scientist and also seek prior approval for manufacturing products outside of Israel, we may not receive such grant or may receive a grant in an amount that is less than the amount we sought.

The Companies Law, which came into effect in February 2000, brought about significant changes to Israel's corporate law. Under this law, there may be uncertainties regarding corporate governance in some areas. In addition, additional uncertainties exist concerning the application of new U.S. corporate governance rules to foreign companies operating and whose shares trade in the U.S. These uncertainties will persist until these laws have been adequately interpreted, and these uncertainties could inhibit takeover attempts or other transactions and inhibit other corporate decisions.

#### C. Organizational structure

Jacada owns 100% of the stock in Jacada, Inc., a corporation organized under the laws of the state of Delaware, and 100% of the stock in Jacada (Europe) Limited, a company organized under the laws of England. Jacada (Europe) Limited owns 100% of the stock of Jacada Deutschland GmbH, a limited liability company organized under the laws of Germany.

### D. Property, Plants and Equipment

As of December 31, 2003, our headquarters and principal administrative, research and development operations were located in approximately 16,000 square feet of leased office space in Herzliya, Israel. The lease expires in March 2007.

In the United States, we lease approximately 18,500 square feet in Atlanta, Georgia, which we utilize for marketing, sales, administration, service and technical support. The lease expires in June 2009, and we have the right to extend the lease for an additional five year term. In addition, we lease approximately 5,100 square feet in Brooklyn Park, Minnesota, which we use for research and development, sales, and technical support. However, in connection with our previously announced decision to consolidate all research and development operations in Israel, we vacated the Minnesota facilities in June 2004 and negotiated an early termination of the lease for those facilities. We also lease office space in Miami, Florida, Bellevue, Washington and Chicago, Illinois, which we utilize for marketing and sales; these leases are not material.

In England, we lease approximately 600 square feet, which we utilize for sales, marketing and services. The lease expires in October 2004. In addition, we lease office space in Germany, Brazil and Mexico, which we utilize for sales, marketing and services. These leases are renewable on an annual basis and are not material.

#### Item 5: OPERATING AND FINANCIAL REVIEW AND PROSPECTS

#### A. Operating Results

We develop, market and support software that enables businesses to utilize their existing host-centric software applications to conduct business over the Internet. We also provide related professional services, including training, consulting, support and maintenance.

We were incorporated in December 1990. In March 1994, we shipped our first product, GUISys. Until that time, our operations consisted primarily of research and development, recruiting personnel and raising capital. Since that time, we have continued to focus on these activities, as well as on building our sales and marketing presence, expanding and enhancing our product offerings, building relationships with third parties, and supporting and maintaining our product deployments in an expanding customer base.

#### Revenues

We and our subsidiaries have adopted American Institute of Certified Public Accountants Statement of Position (SOP) 97-2, "Software Revenue Recognition," as amended. SOP 97-2 generally requires revenue earned on software arrangements involving multiple elements to be allocated to each element based on the relative fair value of the elements. We and our subsidiaries have also adopted SOP 98-9, "Modification of SOP 97-2, Software Revenue Recognition with Respect to Certain Transactions," for all transactions entered into after January 1, 2000. SOP 98-9 requires that revenue be recognized under the "residual method" when Vendor Specific Objective Evidence (VSOE) of fair value exists for all undelivered elements and no VSOE exists for the delivered elements. We derive our revenues from license fees for our products, fees from consulting and training and from maintenance and support. We sell licenses to our customers primarily through our direct sales force and indirectly through resellers. Both our customers and our resellers are considered end users. We are also entitled to revenues from some resellers upon the sublicensing of the software to end users.

Revenue from license fees is recognized when persuasive evidence of an agreement exists, delivery of the product has occurred, no significant obligations with regard to implementation remain, the fee is fixed or determinable, and collectability is probable. We do not grant a right of return to our customers. We consider all arrangements with payment terms extending beyond one year not to be fixed or determinable. If the fee is not fixed or determinable, revenue is recognized as payments become due from the customer provided that all other revenue recognition criteria have been met.

Maintenance and support revenue included in multiple element arrangements is deferred and recognized on a straight-line basis over the term of the maintenance and support agreement.

Transactions that include consulting and training services are evaluated to determine whether those services are essential to the functionality of other elements of the transaction. When services are not considered essential, the revenue allocable to the services is recognized as the services are performed. To date, we have determined that the consulting and training services are not considered essential to the functionality of other elements of the transaction.

Where software arrangements involve multiple elements, revenue is allocated to each element based on VSOE of the relative fair values of each element in the arrangement, in accordance with the "residual method" prescribed by SOP 98-9. Our VSOE used to allocate the sales price to services, support and maintenance is based on the price charged when these elements are sold separately. License revenues are recorded based on the residual method. Under the residual method, revenue is recognized for the delivered elements when (1) there is VSOE of the fair values of all the undelivered elements, and (2) all revenue recognition criteria of SOP 97-2, as amended, are satisfied. Under the residual method, any discount in the arrangement is allocated to the delivered element.

For further discussion of our revenue recognition policy, see below under "Critical Accounting Policies."

#### Cost of Revenues

Cost of software license revenues consists of royalties, including payments to the Office of the Chief Scientist of the State of Israel, amortization of acquired technology, commissions, and costs of duplicating media and documentation. Cost of service and maintenance revenues consists of compensation expense, related overhead and subcontractors costs for personnel engaged in training, consulting, support and maintenance services for our customers.

#### Research and Development Costs

We have incurred substantial research and development costs and have invested heavily in the expansion of our sales and marketing and professional services organizations to build an infrastructure to support our long-term growth strategy. Our fulltime employees have increased from 21 as of January 1, 1995 to 162 as of December 31, 2003.

Costs for the development of new software products and substantial enhancements to existing software products are expensed as incurred until technological feasibility has been established, at which time any additional development costs are capitalized. Based on our product development process, technological feasibility is established upon completion of a working model. Costs incurred between the completion of the working model and the point at which the products are ready for general release have been insignificant. Therefore, all research and development costs have been expensed.

#### **Primary Currency**

A majority of our revenues and that of our subsidiaries is generated in United States dollars. Our management believes that the dollar is the primary currency of the economic environment in which we and our subsidiaries operate. Thus, our functional and reporting currency and the functional and reporting currency of our subsidiaries is the dollar.

Although we derive most of our revenues outside of Israel, a portion of our expenses are incurred in Israel and are affected by economic conditions in the country.

The effects of foreign currency exchange rate for the years ended December 31, 2003, 2002 and 2001 were immaterial.

#### **Recently Issued Accounting Pronouncements**

For a discussion of applicable recently issued accounting pronouncements, see Note 2 to our financial statements included in Item 18 below.

#### **Critical Accounting Policies**

The discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. These estimates are evaluated by us on an ongoing basis. We base our estimates on our historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying amount values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe that application of the following critical accounting policies entails the more significant judgments and estimates used in the preparation of our consolidated financial statements.

Revenues. Our revenue recognition policy is significant because our revenues are a key component of our results of operations. Revenue results are difficult to predict, and any shortfall in revenues or delay in recognizing revenues could cause our operating results to vary significantly from quarter to quarter and could result in future operating losses. In addition, our revenue recognition determines the timing of certain expenses, such as commissions and royalties. We follow very specific and detailed guidelines in

measuring revenues; however, certain judgments affect the application of our revenue policy. Our revenues are principally derived from the licensing of our software and the provision of related services. We recognize revenues in accordance with SOP 97-2 as amended and modified by SOP 98-9. Revenues from software license fees are recognized when persuasive evidence of an arrangement exists, either by written agreement or a purchase order signed by the customer, the software product has been delivered, the license fees are fixed and determinable, and collection of the license fees is considered probable. License fees from software arrangements which involve multiple elements, such as post-contract customer support, consulting and training, are allocated to each element of the arrangement based on the relative fair values of the elements. We determine the fair value of each element in multiple-element arrangements based on VSOE.

In judging the probability of collection of software license fees we continuously monitor collection and payments from our customers and maintain a provision for estimated credit losses based upon our historical experience and any specific customer collection issues that we have identified. In connection with customers with whom we have no previous experience, we may utilize independent resources to evaluate the creditworthiness of those customers. For some customers, typically those with whom we have long-term relationships, we may grant extended payment terms. We perform on-going credit evaluations of our customers and adjust credit limits based upon payment history and the customer's current creditworthiness, as determined by our review of their current credit information. If the financial situation of any of our customers were to deteriorate, resulting in an impairment of their ability to pay the indebtedness they incur with us, additional allowances may be required.

Our software products (other than Fusion) do not require significant customization or modification. Service revenues include post-contract customer support, consulting and training. Post-contract customer support arrangements provide for technical support and the right to unspecified upgrades on an if-and-when-available basis. Revenues from those arrangements are recognized ratably over the term of the arrangement, usually one year. Consulting services and training are recognized either on a time and materials basis as the services are provided or on a fixed fee basis.

Impairment of long-lived assets. We and our subsidiaries' long-lived assets and certain identifiable intangibles are reviewed for impairment in accordance with Statement of Financial Accounting Standard No.144 "Accounting for the Impairment or Disposal of Long-Lived Assets" ("SFAS No.144") whenever events or changes in circumstances indicate that the carrying amount of an asset or group of assets may not be recoverable. Recoverability of an asset or group of assets to be held and used is measured by a comparison of the carrying amount of an asset or group of assets to the future undiscounted cash flows expected to be generated by the assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. We have performed impairment tests on our long-lived assets and as of December 31, 2003, no impairment losses have been identified.

Goodwill. Under Statement of Financial Accounting Standard No.142, "Goodwill and Other Intangible Assets" ("SFAS No, 142") goodwill acquired in a business combination which closes on or after July 1, 2001 is deemed to have indefinite life and will not be amortized. SFAS No.142 requires goodwill to be tested for impairment on adoption and at least annually thereafter or between annual tests in certain circumstances, and written down when impaired, rather than being amortized as previous accounting standards required. Goodwill is tested for impairment by comparing the fair value of the reporting unit with its carrying value. Fair value is determined using market multiples and comparative analysis. Significant estimates used in the methodologies include estimates of market multiples for the reportable unit. We have performed impairment tests and determined that our goodwill of \$4.6 million is not subject to an impairment charge as of our December 31, 2003 fiscal year end.

Our historical operating results for the years ended December 31, 2003, 2002 and 2001 as a percentage of net revenues are as follows:

	Year I	Year Ended December 31,			
	2003	2002	2001		
Revenues:					
Software licenses	40.6%	45.4%	42.8%		
Services	22.9	21.0	35.2		
Maintenance	36.5	33.6	22.0		
Total revenues	100.0%	100.0%	100.0%		
Cost of revenues:					
Software licenses	2.6	1.1	2.0		
Services	11.6	14.5	19.0		
Maintenance	5.4	5.8	6.7		
Total cost of revenues	19.6	21.4	27.7		
Gross profit	80.4	78.6	72.3		
Operating expenses:					
Research and development	27.3	28.7	25.2		
Sales and marketing	45.6	43.9	57.2		
General and administrative	22.9	21.4	22.2		
Restructuring and other non recurring charges	0.0	2.3	11.2		
Total operating expenses	95.9	96.3	115.8		
	(15.5)	(15.5)	(40.5)		
Operating loss	(15.5)	(17.7)	(43.5)		
Financial and other income, net	5.1	4.2	9.1		
Net loss	(10.4)%	(13.5)%	(34.4)%		

#### Years Ended December 31, 2003, 2002 and 2001

#### Revenues and Cost of Revenues

*Revenues*. Revenues were \$20.6 million, \$21.5 million and \$25.5 million for the years ended December 31, 2003, 2002 and 2001, respectively. The 4.2% decrease in total revenues in 2003 as compared to 2002 is primarily due to changes in our competitive

environment that resulted in increased pricing pressures and companies stretching out commitments and postponing purchases. As a result of these developments, we experienced a decrease in the average dollar amount of our transactions, which was only partially offset by an increased number of transactions. The decrease from 2001 to 2002 was primarily due to sluggish global economic conditions. For the years ended December 31, 2003 and 2002, no customer represented 10% or more of our revenues, while for the year ended December 31, 2001, we had one such customer.

Software license revenues were \$8.3 million, or 40.6% of revenues for the year ended December 31, 2003, compared to \$9.8 million, or 45.4% of revenues for the year ended December 31, 2002, and \$10.9 million, or 42.8% of revenues, for the year ended December 31, 2001. The 15.3% reduction in software revenues during 2003 as compared to 2002 was related to the changes in our competitive environment discussed above. Those factors continued a 2002 and 2001 trend involving increased pricing pressures as a result of our competitors reducing their prices and customers aggressively seeking lower prices. The 10.9% reduction in 2002 as compared to 2001 was also directly related to the continuing downturn in global economic conditions, as a result of which many customers delayed purchases or placed smaller initial orders for our software products.

Service revenues were \$4.7 million or 22.9% of revenues for the year ended December 31, 2003, compared to \$4.5 million or 21.0% of revenues for the year ended December 31, 2002 and \$9.0 million or 35.2% of revenues for the year ended December 31, 2001. Service revenues are generated primarily from supporting customers during the implementation of projects, including our software products. The increase in service revenues in 2003 reflected stabilization in the competitive environment for services after a downward trend in service rates in 2002, as well as a number of large orders in 2003 that involved significant service components. Service revenues decreased significantly in 2002 due to a decline in our software revenues and a decrease in average rates charged for services, as we experienced a greater degree of competition from customers' in-house technical resources.

Maintenance revenues were \$7.5 million or 36.5% of revenues for the year ended December 31, 2003, compared to \$7.2 million or 33.6% of revenues for the year ended December 31, 2002 and \$5.6 million or 22.0% of revenues, for the year ended December 31, 2001. The increase in maintenance revenues during 2003 and 2002 was primarily related to our expanding customer base and related annual maintenance contract renewals.

Cost of Revenues. Cost of revenues was \$4.0 million or 19.6% of revenues for the year ended December 31, 2003, compared to \$4.6 million or 21.4% of revenues for the year ended December 31, 2002 and \$7.1 million or 27.7% of revenues for the year ended December 31, 2001. The decreases in cost of revenues during these periods were primarily due to decreases in the costs of service and maintenance revenues, discussed below, which together comprised 87% of total cost of revenues in 2003 as compared with 93% in 2002.

Cost of software license revenues was \$0.5 million or 2.6% of revenues for the year ended December 31, 2003 compared to \$0.3 million or 1.1% of revenues for the year ended December 31, 2002 and \$0.5 million or 2.0% of revenues for the year ended December 31, 2001. The increase in cost of software license revenues in 2003 is due to an increase in payment of royalties to our partners, while the decrease from 2001 to 2002 was due to a decrease in payment of royalties to the Office of the Chief Scientist with respect to certain products and amortization of acquired technology.

Cost of service revenues was \$2.4 million or 11.6% of revenues for the year ended December 31, 2003, compared to \$3.1 million or 14.5% of revenues for the year ended December 31, 2002 and \$4.9 million or 19.0% of revenues for the year ended December 31, 2001. The decrease in cost of service revenues from 2002 to 2003 was due to our realizing a full year of benefits from the work force reduction we effected in mid-2002 in order to adjust the number of our service professionals to actual and anticipated near term business levels. The decrease in cost of service revenues during 2002 was primarily due to that work force reduction.

Cost of maintenance revenues was \$1.1 million or 5.4% of revenues for the year ended December 31, 2003, compared to \$1.2 million or 5.8% of revenues for the year ended December 31, 2002 and \$1.7 million or 6.7% of revenues for the year ended December 31, 2001. The decrease in cost of maintenance revenues, as a percentage of maintenance revenues for 2003 and 2002, is related to efficiencies gained from providing support to an expanding customer base.

#### **Operating Expenses**

The decrease in total operating expenses to \$19.7 million in 2003 from \$20.2 million in 2002 and from \$26.7 million in 2001, exclusive of nonrecurring expenses, was primarily due to reductions in manpower and related costs to support actual and projected business levels. These changes included the benefits from a restructuring and cost reduction plan implemented in 2002 after the impact of the global economic slowdown in 2001. The further reduction from 2002 to 2003 was due to our realization of a full year of benefits from that restructuring in 2003 and to a nonrecurring charge in 2002 for acquired technology. The restructurings were at least partially responsible for reducing operating expenses (excluding nonrecurring charges) as a percentage of revenues to 96.0% in 2003 compared to 94.0% in 2002 and 104.6% in 2001.

Research and Development. Research and development expenses were \$5.6 million, \$6.2 million and \$6.4 million for the years ended December 31, 2003, 2002 and 2001, respectively. The progressive decreases during these periods were primarily due to the reduction in work force as part of our restructuring in mid–2002 and our realization of a full year of benefits from that restructuring in 2003. In addition, during the fourth quarter of 2002 we acquired technology components for incorporation into our future product suite, resulting in approximately \$0.4 million of incremental expense, partially offsetting some of our expense reduction efforts. The nonrecurring nature of this expense was partially responsible for the decline in research and development expenses in 2003. As a percentage of total revenues, research and development expenses were 27.3%,

28.7% and 25.2% for the years ended December 31, 2003, 2002 and 2001, respectively. The increase in percentage of total 2002 revenues represented by research and development expenses as compared to 2001 was due to the decline in revenues, which was not offset by a similar decrease in research and development expenses.

Sales and Marketing. Sales and marketing expenses were \$9.4 million, \$9.4 million and \$14.6 million for the years ended December 31, 2003, 2002 and 2001, respectively. The 35.6% decrease in 2002 compared to 2001 was attributable to reductions in our sales and marketing personnel in support of business levels, the impact of different revenue levels on variable compensation costs, such as sales commissions, and increased spending on marketing programs aimed at increasing our brand awareness. As a percentage of total revenues, sales and marketing expenses were 45.6%, 43.9% and 57.2% for the years ended December 31, 2003, 2002 and 2001, respectively.

General and Administrative. General and administrative expenses were \$4.7 million, \$4.6 million and \$5.7 million for the years ended December 31, 2003, 2002 and 2001, respectively. The decrease in general and administrative expenses between 2001 and 2002 was in part due to decreases in the number of personnel and related overhead required in support of our operations. During 2001, we also increased our reserve for potential noncollectable trade receivables associated with the worsening global economy. As a percentage of total revenues, general and administrative expenses were 22.9%, 21.4% and 22.2% of total revenues for the years ended December 31, 2003, 2002 and 2001, respectively.

Restructuring and other Nonrecurring Charges. During 2002, we recorded a charge in the amount of \$0.5 million, or 2.3% of revenues, associated primarily with a reduction in work force as part of the July 2002 restructuring plan discussed below. During 2001, we recorded a charge of \$2.8 million, or 11.2% of revenues, including charges associated with an arbitration award (\$0.2 million), the write-off of previously acquired technology (\$1.2 million) and the cost of our fourth quarter 2001 restructuring plan (\$1.4 million). Each of these charges is discussed in more detail below.

Arbitration Charge. In August 1999, a former distributor filed an arbitration complaint against one of our subsidiaries, alleging, among other things, that the subsidiary breached its agreement with the distributor by directly selling our products to a customer with respect to which the distributor claimed it had the exclusive right to sell, entitling the distributor to damages. The arbitration was held in November 2000 and a decision by the arbitrators was entered on April 3, 2001. The arbitrators awarded the distributor a net amount of \$392,000, including costs, and 50% of amounts collected from the customer in the future. We had previously established a reserve for a potential settlement of \$125,000, representing an amount equal to the limitation of liability clause in the agreement. As a result of the award, we recorded a charge in the first quarter of 2001 of \$417,000, representing the arbitration award plus \$150,000 for amounts billed to the customer, less the reserve previously recorded. During the fourth quarter of 2001, we reduced the reserve by \$150,000 based on the customer's failure to pay the amounts billed during the first quarter of 2001.

We appealed the decision of the arbitrators on the grounds that the decision did not cap the subsidiary's exposure to the amount set forth in the limitation of liability provision of the agreement. In the interim, pursuant to the arbitrators' decision, we have accrued and will accrue on a prospective basis as a selling expense an amount equal to 50% of amounts collected from the customer that relate to the agreement that was the subject of the arbitration proceeding. Pursuant to an October 21, 2003 order, the arbitration award was confirmed by the United States District Court for the Western District of Michigan, and our Motion to Vacate was denied. We have filed an appeal with the United States Court of Appeals for the Sixth Judicial Circuit. The parties have filed briefs in connection with the appeal and oral arguments are pending.

Technology Write Off. During the third quarter of 2001 and as part of our 2001 restructuring, we revised our product development plan and abandoned the use of technology previously acquired for use in the product development cycle. As a result, we wrote off unamortized technology in the amount of \$1.2 million during 2001.

Restructuring. As a result of the downturn in global economic conditions, the resulting decline in overall business levels and the related impact on our operations, we implemented two worldwide restructuring and cost reduction plans, during the fourth quarter of 2001 and again in the third quarter of 2002. The plans included the elimination of approximately 45% of our worldwide work force on a cumulative basis and a general reduction in all operating expenses. As a result of implementing the restructuring plans and through attrition, by year-end 2002, total employment was reduced to 156 from a peak of 273 in September 2001. During 2002, total costs and expenses, excluding nonrecurring expenses, were reduced by approximately \$9.0 million. The cost of implementing the restructuring plans was \$1.4 million in 2001 and \$0.5 million in 2002.

Financial Income, Net. Financial income, net, was \$1.0 million for the year ended December 31, 2003, \$0.9 million for the year ended December 31, 2002 and \$2.3 million for the year ended December 31, 2001. In October 1999, we raised approximately \$51 million, net of expenses, in an initial public offering. We maintained most of the funds raised in the public offering throughout 2000 and the first half of 2001. In August 2001, we used approximately \$6.9 million for the acquisition of certain assets of Propelis Software, Inc., a business unit of Computer Network Technology Corporation, and related expenses. Most of the financial income was generated from investments of our funds in certain financial instruments, which generate interest and investment income. The decline from 2001 to 2002 is also associated with a general reduction in interest rates during the 2000 to 2002 period.

*Income Taxes*. As of December 31, 2003, we had approximately \$4.3 million of net operating loss carryforwards for Israeli tax purposes, approximately \$2.9 million of net operating loss carryforwards for United States federal tax purposes, approximately \$4.7 million of net operating loss carryforwards for United Kingdom tax purposes, and approximately \$1.0 million of net operating loss carryforwards for German tax purposes. The carryforwards are available to offset future taxable income. The United States net operating loss carryforwards expire in various amounts between the years 2010 and 2022. The Israeli and the United Kingdom net operating loss carryforwards have no expiration date.

*Net Loss*. As a result of the above factors, our operations resulted in net losses of \$2.1 million in 2003, \$2.9 million in 2002 and \$8.8 million in 2001.

### **B.** Liquidity and Capital Resources

Since our inception, we have funded operations through the private placement and public offering of equity securities, internal operations and, to a lesser extent, borrowings from financial institutions.

As of December 31, 2003, we had \$41.8 million in cash and investments, all of which were interest and dividend bearing. During 2003, operating activities provided approximately \$0.8 million in cash. One of the major components providing cash during 2003 was an increase in deferred revenues of \$1.2 million. This increase was due to our ability to structure transactions that feature multiyear maintenance commitments and yield up front payments. Other major components providing cash during 2003 included noncash depreciation and amortization of \$1.4 million and the accrued interest and amortization of premium on marketable securities of \$0.4 million. Partially offsetting the provision of cash was the net loss of \$2.1 million generated from operations and a reduction in trade payables of \$0.2 million.

As of December 31, 2002, we had \$41.4 million in cash and investments, all of which were interest and dividend bearing. During 2002, operating activities provided approximately \$0.2 million in cash. One of the major components providing cash during 2002 was a reduction in trade receivables of \$1.6 million. Our ability to structure transactions to yield up front payment and our collection efforts resulted in a decline in trade receivables expressed in days outstanding from 66 in 2001 to 44 in 2002. Other major components providing cash during 2002 included noncash depreciation and amortization of \$1.6 million and the accrued interest and amortization of premium on marketable securities of \$0.4 million. Partially offsetting the provision of cash was the net loss of \$2.9 million generated from operations and nonrecurring charges and a reduction in accrued expenses and other liabilities of \$0.6 million.

As of December 31, 2001, we had \$41.6 million in cash and investments, all of which were interest and dividend bearing. During 2001, operating activities used approximately \$1.8 million in cash. The major components using cash during 2001 included the net loss of \$8.8 million from operations, nonrecurring charges and a reduction in trade payables of \$1.6 million. Partially offsetting the use of cash was a reduction in trade receivables of \$4.4 million at the end of 2001, the noncash write-off of acquired technology of \$1.2 million and noncash depreciation and amortization of \$1.5 million. The reduction in trade receivables resulted from a decline in days sales outstanding from 74 in 2000 to 66 in 2001 and from a reduction in fourth quarter 2001 revenues compared to fourth quarter 2000.

Expenditures for property and equipment were approximately \$0.3 million, \$0.6 million and \$1.5 million for the years ended December 31, 2003, 2002 and 2001, respectively. These expenditures include computer hardware and software used in product development and testing, leasehold improvements relating to new and existing facilities and office equipment in support of our operations. In addition, during 2001 we invested approximately \$6.9 million in the acquisition of certain assets of Propelis Software Inc., a business unit of Computer Network Technology Corporation, and \$0.7 million to license technology for use in product development. The acquisition of certain assets of Anota Ltd. during 2002 did not involve the payment of cash consideration as part of the purchase price.

The purchase price of the acquisitions has been allocated to the assets acquired and the liabilities assumed based on the estimated fair value of such assets at the date of acquisition. The excess of the purchase price over the estimated fair value of the net assets acquired has been recorded as goodwill. Fair value of assets acquired and liabilities assumed approximate their book value. Fair value of technology rights was determined using the income approach, which reflects the present value of the projected earnings to be generated by the product which incorporates the technology. Based on the income approach, Propelis technology rights were valued at \$1.3 million and determined to have a remaining life of five years, based on the income approach and the product life cycle. Anota technology rights and customer lists were each valued at \$0.2 million and determined to have remaining lives of five and three years, respectively.

In 2002 and 2001 we had a \$2.8 million credit facility with two banks, under which we had no borrowings during these periods. We terminated this facility in 2003.

Our capital requirements depend on numerous factors, including market acceptance of our products, the resources we devote to developing, marketing, selling and supporting our products, the timing and extent of establishing additional international operations, acquisitions and other factors. Over the next two years, we expect to devote substantial capital resources to expand our sales and marketing channels, and to invest in research and development activities. We believe our working capital is sufficient for our projected requirements.

Derivative Financial Instruments. Since our financial results are reported in dollars, fluctuations in the rates of exchange between the dollar and non-dollar currencies may have a material effect on our results of operations. We therefore use currency exchange forward contracts to hedge the impact of the variability in the exchange rates on accounts receivable and future cash flows from certain Euro-denominated transactions as well as certain NIS-denominated expenses. The counter-parties to our forward contracts are major financial institutions with high credit ratings. We believe the risk of incurring losses on such forward contracts related to credit risks is remote and that any losses would be immaterial. As of December 31, 2003, we had forward contracts to sell up to \$1,058,116 for a total amount of NIS 4,793,098 that matured prior to March 31, 2004.

*Impact of Taxation.* Please refer to Item 3.D and Item 10.E for certain information regarding the possible elimination of tax benefits in Israel.

## C. Research and Development, Patents and Licenses, Etc.

We believe that strong product development is essential to our strategy of continuing to enhance and expand the capabilities of our products. We have invested significant time and resources in creating a structured process for undertaking all product development. This process involves several functional groups at all levels within our organization and is designed to provide a framework for defining and addressing the activities required to bring product concepts and development projects to market successfully. In addition, we have recruited key software engineers and developers with experience in Java, .net, communications, expert systems, Windows internals and Internet technologies. Our research and development efforts have been primarily focused on enhancing and adding functionality to our existing products and adding new products based on our expectations of future technologies and industry trends.

Our research and development expenses were \$5.6 million for the year ended December 31, 2003, \$6.2 million for the year ended December 31, 2002 and \$6.4 million for the year ended December 31, 2001. As of December 31, 2003, 2002 and 2001, respectively, we had 52, 49 and 62 employees engaged in our product development activities. See also "Item 8. Financial Information, B. Significant Changes."

## **D. Trend Information**

The average selling price of our current software products has declined over the past four years due to changes in our competitive environment that have resulted in increased pricing pressures. We believe that this trend may continue. See "Risk Factors - Competitive pressures in our current market will result in continuing reductions in the average selling price of our current software products" for a discussion of the potential effects of this trend.

We expect a continued increase in our maintenance revenues in 2004 mainly due to our ongoing focus on providing customer service and our expanding customer base. In order to achieve growth in software and services revenues, we will need to develop and introduce new products for new markets.

We have developed a new product family, Jacada Fusion, that is designed to integrate different applications residing on host, Windows and Web-based platforms. However, we cannot be sure that a market for Jacada Fusion will develop, that it will achieve market acceptance or that the costs we have incurred in its development and introduction will be recovered. See "Risk Factors - Our future growth will be adversely affected and our future operating results may be adversely affected if we fail to develop and introduce new products that address new markets and that achieve market acceptance" for a discussion of the risks our business and prospects for growth face in connection with the introduction of new products.

We introduced Jacada Fusion in the second quarter of 2004 and have begun marketing it to potential customers. We expect that the average transaction size of Jacada Fusion will exceed the average transaction size for our existing products, we also expect that we will recognize higher implementation costs in conjunction with sales of Jacada

Fusion and that customers may require acceptance testing, which will mean that we may not be able to recognize revenues until acceptance has been achieved. We expect our overall expenses to increase in the second quarter of 2004 due to the combined effects of our consolidation of research and development activities in Israel and the related closing of our Minneapolis facility and the costs incurred in connection with the development and introduction of the Jacada Fusion product family in that quarter.

We increased our focus on growth in Europe in 2003 and intend to continue this focus in 2004. As part of our focus on growth outside the U.S., we are planning to expand our indirect sales and distribution channels. In addition, we intend to broaden our relationships with the partners and distributors we added to our network in Europe in 2003.

Our sales cycle generally continues to be in the range of six months from the date we qualify a prospective customer, but could be longer based on specific circumstances. We have no backlog of orders, as backlog is not a significant factor in our business.

- **E. Off-balance sheet arrangements**. We are not party to any material off-balance sheet arrangements.
- **F. Tabular Disclosure of Contractual Obligations.** The following table summarizes our contractual obligations and commercial commitments as of December 31, 2003:

			Payments due by p	eriod	
Contractual Obligations	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Facilities	1,232	612	621		
Vehicles	281	83	198		

## Item 6: DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

# A. Directors and Senior Management

The following table sets forth certain information regarding our executive officers and directors as of June 15, 2004:

Name	Age	Position
Gideon Hollander(1)(2)	39	Chief Executive Officer and Director
Robert C. Aldworth	51	Chief Financial Officer
David Holmes	48	Executive Vice President, Sales and Marketing
James M. Breen	56	Senior Vice President of North American Sales
Tzvia Broida	34	Vice President, Finance
Christian Singer	40	Managing Director, Jacada Deutschland GmbH
Jeffrey Roth	42	Senior VP of Israeli Operations
Ofer Yourvexel	40	Senior Vice President Sales – Europe
Yossie Hollander(1)	46	Chairman of the Board and Director
Amnon Shoham $(1)(2)(3)$	46	Director
Ohad Zuckerman(3)	39	Director
Naomi Atsmon(3)	51	Director

- (1) Member of the Executive Committee
- (2) Member of the Compensation Committee
- (3) Member of the Audit Committee

Gideon Hollander was a co-founder of Jacada in 1990 and has served as our Chief Executive Officer and a Director since 1990. From 1988 to 1990, Mr. Hollander worked in the area of research and development at Comverse Technology. From 1982 to 1987, Mr. Hollander served in various technology and management positions in an elite unit of the Israeli Defense Forces, where he specialized in expert systems and user interface design. Two of the projects that Mr. Hollander managed won the most prominent Israeli award for technological innovations. Gideon Hollander is Yossie Hollander's brother.

Robert C. Aldworth has been the Chief Financial Officer since January 2001. From August 1999 to July 2000, he was Chief Financial Officer and a director of Real Estate.com, Inc., an internet service provider to real estate professionals, and from June 1997 to March 1999 he was Chief Financial Officer at Homestead Village Inc., a publicly held provider of extended stay lodging. From January 1996 to June 1997, he was Chief Operating Officer of L.A. T Sportswear Inc., a publicly held manufacturer and distributor of sporting apparel.

David Holmes has been Executive Vice President of Sales and Marketing since December 2002. He served as Senior Vice President, Marketing from June 1998 through December 2002 and as Vice President of Marketing from October 1995 to June 1998. From June 1991 to October 1995, Mr. Holmes was Marketing Director for KnowledgeWare, Inc., later acquired by Sterling Software, Inc. From March 1984 to June 1991, Mr. Holmes was a consultant for Deloitte & Touche.

James M. Breen has been Senior Vice President of North American Sales since January 2003. From October 2001 to December 2002, Mr. Breen was National Sales Director for Metavante Corporation, a provider of Internet billing solutions. From March 2001 to October 2001, Mr. Breen was a Regional Vice President for QuickArrow, a provider of professional services automation solutions. From June 2000 to March 2001, Mr. Breen was Vice President of Business-to-Business Sales for Derivion Corporation, an application services provider. From July 1998 to June 2000, Mr. Breen was Vice President of Sales for Fuego Inc., a company he cofounded and a provider of EAI / business process automation software.

*Tzvia Broida* is the Vice President, Finance, having served in this capacity since March 2000. Mrs. Broida has held various positions at Jacada since August 1995. From 1994 to 1995, Mrs. Broida worked as an accountant at the accounting firm of Yehuda Ehrlich & Partners. From 1992 to 1994, Mrs. Broida worked as an accountant at the accounting firm of Vexler, Kodenzick & Partners.

Christian Singer has been Managing Director of Jacada Deutschland GmbH since February 2001. From April 2000 until he joined Jacada, Mr. Singer worked as Business

Unit Manager and Director Sales & Marketing for Geac Central Europe, a company that develops and markets business software. From 1997 to 2000, he held various positions in Baan Company in Germany and the UK, where he successfully established the Baan Automotive Organisation. Between 1992 and 1997, Mr. Singer was employed at Zeuna Stärker GmbH & Co KG, a German Tier 1 automotive supplier with operations in three continents.

Jeffrey Roth has been Senior Vice President of Israeli Operations since March 2000. He served as Vice President, Customer Support from 1998 through March 2000. From 1993 to 1997, Mr. Roth was Vice President of Service and Support for Gerber Systems Inc, later acquired by Kronos, Inc., a provider of HR, payroll, scheduling, and time and labor solutions. From 1990 to 1993, Mr. Roth was Operations Manager for Pacer/CATS Corporation, a provider of admissions, point-of-sale and management systems to the leisure industry.

Ofer Yourvexel joined us in March 2004 as our Senior Vice President Sales – Europe. From March 2003 to March 2004, Mr. Yourvexel was Executive Vice President of Visonic Technologies, a provider of integrated identification solutions to enhance security, safety and communications throughout enterprises. From September 1998 to March 2003, Mr. Yourvexel headed the Marketing and Sales division at Elpas, a Visonic Technologies company. From June 1996 to August 1998, Mr. Yourvexel held the position of President at Enigma U.S.A. Inc., stationed in Boston; Enigma is a worldwide leader in the development, implementation and marketing of electronic publishing solutions. From June 1991 to May 1996.Mr. Yourvexel began his career in the high-tech industry at Tefen Ltd., a leading industrial engineering and system analysis consulting firm, where he advanced to Vice President of Operations in the Central U.S.A. region.

*Yossie Hollander* has been Chairman of the Board of Directors since November 1995 and a director since 1990. Mr. Hollander was a founder, and from 1983 to 1994 served as the Chief Executive Officer, of New Dimension Software Ltd., an enterprise system and management software company that was acquired by BMC Software in April 1999. Yossie Hollander is Gideon Hollander's brother.

Amnon Shoham has served as a director since January 1994. Mr. Shoham is the Managing Director of Cedar Advisors Inc., a provider of investment and financial advice for high technology companies and venture capital funds. Mr. Shoham has held this position since 2001. From 1997 to 2000, Mr. Shoham was the Managing Director of Cedar Financial Advisors (Israel) Ltd, an Israeli affiliate of Cedar Advisors Inc. Mr. Shoham is also associated with the Cedar Funds, venture capital funds investing in Israel-related, high technology companies. From 1993 to 1997, Mr. Shoham served as a Managing Partner of Star Ventures, a venture capital firm in Israel. Mr. Shoham serves on the board of directors of several private companies.

*Ohad Zuckerman* has served as a director since December 2000. Mr. Zuckerman is the CEO and President of Zeraim Gedera Ltd., an agricultural company which specializes in development and production of vegetable seeds, a position he has held since January 2000. From 1998 to January 2000, Mr. Zuckerman served as the Executive

Vice President of Zeraim Gedera and from 1990 to 1998 he served at the same company as the Marketing Manager. Mr. Zuckerman served as a member of the board of directors at Maximal Innovative Intelligence LTD, a provider of software for extracting information from data warehouses, from 1998 to 2002.

*Naomi Atsmon* has served as a director since June 2001. In addition, Ms. Atsmon has served as a director of MessageVine Inc., a private emerging growth company, since October 2002, and as a director of Clicksoftware Technologies Ltd. (NASDAQ: CKSW) since May 2003. Ms. Atsmon served as a Division President of Amdocs Ltd., a provider of information system solutions to communications companies, from July 1997 to December 2002. From 1994 until 1997, Ms. Atsmon served as a vice president at Amdocs Ltd. Ms. Atsmon held various positions at Amdocs since 1986.

### **B.** Compensation

The aggregate remuneration we paid for the year ended December 31, 2003 to all executive officers as a group (9 persons, excluding our Senior Vice President of Sales – Europe, who joined us in March 2004), including amounts paid to our former President, who resigned as President effective May 2003, for services rendered by him through the date of his resignation and for services rendered by him as a consultant through December 2003, and to our former Managing Director of Jacada (Europe) Limited, who resigned effective January 2003, was \$1,689,680 in salaries, fees, commissions and bonuses. This also includes \$56,319 set aside or accrued to provide for pension, retirement or similar benefits provided to our executive officers. As of May 20, 2003, directors (except the CEO) each receive \$750 for each meeting of the board of directors attended and each meeting of a committee of the board of directors attended. In addition, all directors are entitled to be reimbursed for their expenses incurred in connection with the discharge of their responsibilities as board members, including attending board of directors meetings. Directors also receive options to purchase our ordinary shares.

As of May 31, 2004 options to purchase 1,618,466 ordinary shares granted to our directors and executive officers (12 persons) under our option plans were outstanding. The weighted average exercise price of these options was \$3.07 per share ranging from \$0.99 to \$9.125, and the expiration dates of the options range from July 30, 2006 to August 26, 2013.

## C. Board Practices

### **Election and Term of Directors**

Directors are elected by an ordinary resolution at the annual general meeting of shareholders, and by a vote of the holders of a majority of the voting power represented at the meeting. Our ordinary shares do not have cumulative voting rights in the election of directors. As a result, the holders of ordinary shares that represent more than 50% of the voting power have the power to elect all of our directors.

As of the date of filing of this form, we have authorized five directors. In accordance with the terms of our articles of association, the board of directors is divided into three classes, with the following terms of office:

- Class I directors, whose terms expire at the annual meeting of shareholders to be held in 2006;
- Class II directors, whose terms expire at the annual meeting of shareholders to be held in 2004; and
- Class III directors, whose terms expire at the annual meeting of shareholders to be held in 2005.

Our Class I directors are Amnon Shoham and Ohad Zuckerman. Our Class II director is Naomi Atsmon. Our Class III directors are Gideon Hollander and Yossie Hollander.

At each annual meeting of shareholders, the successors to directors whose terms will then expire will be elected to serve from the time of election and qualification until the third annual meeting following the election. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. This classification of our board of directors may have the effect of delaying or preventing changes in control or management of our company.

Directors may be removed at any time by the holders of 75% of the voting power at a general meeting of shareholders. Shareholders may, by a majority vote (Ordinary Resolution), elect a director to fill the vacancy. If the shareholders do not elect a director to fill such vacancy within 30 days after the removal of the incumbent director, the board of directors may also elect a director to fill such vacancy. Any director elected to fill a vacancy will hold office for the remainder of the full term of the class of directors in which the vacancy occurred and until such director's successor is elected and qualified.

#### **Alternate Directors**

Our articles of association provide that a director may appoint, by written notice to us, any individual, whether or not the person is then a member of the board of directors, to serve as an alternate director. The appointment of an alternate director is subject to the consent of the board of directors if the appointee is not then a member of the board of directors. Any alternate director shall have all of the rights and obligations of the director appointing him or her, except the power to appoint an alternate, unless otherwise specifically provided for in the appointment of such alternate. The alternate director may not act at any meeting at which the director appointing him or her is present. The alternate director may act as an alternate for several directors and have the corresponding number of votes. Unless the time period or scope of any appointment is limited by the appointing director, the appointment is effective for all purposes and for a

period of time concurrent with the term of the appointing director. Currently, no alternate directors have been appointed. We do not have service contracts with any of our directors; however, Gideon Hollander, our Chief Executive Office and a member of our board of directors is party to an employment agreement with us that has been filed as an exhibit to this annual report.

### **Audit Committee**

Under the Companies Law, an audit committee is required to be appointed by the board of directors. The audit committee must consist of at least three members, and include the two external directors we are also required to appoint pursuant to Israeli law. Neither the Chairman of the board of directors, directors employed by us or granting services to us on a permanent basis, nor any controlling shareholder or any relative of a controlling shareholder may serve on the audit committee.

The responsibilities of the audit committee include identifying irregularities in the management of our business and approving related-party transactions as required by law. In addition, under its charter, our audit committee is responsible for monitoring the integrity of our financial statements and auditing, accounting and financial reporting processes, appointing and evaluating the qualifications and independence of the external auditor.

Pursuant to the current listing requirements of the Nasdaq National Market, we are required to have at least three independent directors on our audit committee. We have appointed such audit committee. Pursuant to the Sarbanes-Oxley Act of 2002, the Nasdaq National Market has introduced new listing standards requiring all members of an audit committee to comply with tightened independence requirements. All three members of our audit committee currently comply with those requirements.

The current members of the audit committee are: Amnon Shoham, Ohad Zuckerman and Naomi Atsmon.

In addition, the Companies Law requires the board of directors of a public company to appoint an internal auditor nominated by the audit committee. A person who does not satisfy certain independence requirements may not be appointed as an internal auditor. We have appointed Fahn Kanne Control Management Ltd. to serve as our internal auditor.

## **Compensation Committee**

The responsibilities of the compensation committee include reviewing and, as required, approving policies under which compensation is awarded to our executive officers and key managers and overseeing the administration of our executive compensation programs, including the stock option plans.

The current members of the compensation committee are Gideon Hollander and Amnon Shoham.

## **External Directors**

Under the Companies Law, Israeli companies that are registered under the laws of Israel and whose shares are listed for trading on a stock exchange outside of Israel are treated as public companies. Under this law, a public company, like ours, is required to appoint two external directors. This law provides that a person may not be appointed as an external director if the person or the person's relative, partner, employer or any entity under the person's control, has, as of the date of the person's appointment to serve as external director, or had, during the two years preceding that date, any affiliation with the company, any entity controlling the company or any entity controlled by the company or this controlling entity. The term "affiliation" includes an employment relationship, a business or professional relationship maintained on a regular basis, control and service as an office holder. External directors are elected at a shareholders meeting, provided that either the majority of shares voted at the meeting, including at least one third of the shares of non-controlling shareholders voted at the meeting, vote in favor of such election or the total number of shares voted against the election does not exceed one percent of the aggregate voting rights in the company. External directors do not have powers or authority that are different from those granted to all other directors. An external director is appointed for a term of three years.

A person may not serve as an external director if the person's position or other business creates, or may create, conflict of interests with the person's responsibilities as an external director. Any committee of the board of directors must include at least one external director, except that the audit committee must include both external directors. An external director is only entitled to compensation as provided in regulations promulgated under the Companies Law. Amnon Shoham, Ohad Zuckerman, and Naomi Atsmon are currently serving as our external directors.

# D. Employees

As of December 31, 2003, we had 60 employees in Israel, 86 in the United States, 11 in Europe and 5 in Latin America. Of our 162 employees, 52 were engaged in research and development, 47 in sales, marketing and business development, 34 in professional services and technical support and 29 in finance, administration and operations. With respect to our Israeli employees, we are subject to Israeli labor laws and regulations. These laws principally concern matters such as paid annual vacation, paid sick days, length of the workday and work week, minimum wages, pay for overtime, insurance for work-related accidents, severance pay and other conditions of employment.

Furthermore, with respect to our Israeli employees, we are subject to provisions of the collective bargaining agreements between the Histadrut (General Federation of Labor in Israel) and the Coordination Bureau of Economic Organizations (including the Industrialists Association) by order of the Israeli Ministry of Labor and Welfare. These provisions principally concern cost of living increases, recreation pay and other conditions of employment. To date, we have not experienced any work stoppages.

# E. Share Ownership

- 1. Not applicable.
- 2. Option Plans. We currently maintain four option plans, the 1994 Option Plan, 1996 Option Plan, the 1999 Option Plan and the 2003 Share Option Plan. However, the 1994 Option Plan, pursuant to its terms, expired on December 31, 2003, meaning that we can no longer grant new options under that plan, although options granted prior to its expiration are still exercisable.

The purpose of our option plans is to afford an incentive to officers, directors, employees and consultants of ours, or any of our subsidiaries, to acquire a proprietary interest in us, to continue as officers, directors, employees and consultants, to increase their efforts on behalf of us and to promote the success of our business.

We have reserved 7,760,450 ordinary shares under these option plans for issuance upon the exercise of options to be granted to officers, directors, employees and consultants. As of December 31, 2003, options to purchase 4,348,756 ordinary shares were outstanding under the option plans. As of December 31, 2003, the weighted average exercise price of options outstanding under our option plans is \$3.18. Our option plans are administered by our board of directors and the compensation committee of our board of directors. Under the option plans, options to purchase our ordinary shares may be granted to officers, directors, employees or consultants. In addition, pursuant to the option plans, the exercise price of options shall be determined by our compensation committee but may not be less than the par value of the ordinary shares and is typically the fair market value on the date of grant. The vesting schedule of the options is also determined by our compensation committee but generally the options vest over a three to four year period. Generally, options granted under the option plans are exercisable until ten years from the date of the grant. The 1996 Option Plan, the 1999 Option Plan and the 2003 Share Option Plan will expire on December 31, 2005, December 31, 2009 and December 31, 2012, respectively.

## Item 7: MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

## A. Major Shareholders

The following table sets forth, to the best of our knowledge, as of May 31, 2004, those shareholders that own 5% or more of our capital stock.

Name of Beneficial Owner	Number of Shares Owned Percentag		
Yossie Hollander (1)	2,144,010	11.3%	
Airbus Foundation (2)	2,025,590	10.6%	
Gideon Hollander (3)	1,905,613	10.0%	

- (1) Based on a Directors and Officers Questionnaire submitted to us by Mr. Hollander. Represents 1,341,280 ordinary shares owned individually by Mr. Hollander, 302,670 ordinary shares owned by Mr. Hollander's spouse and 500,060 ordinary shares owned by Dana Hollander Settlement 1991, LLC, a Nevada limited liability company, as to which Mr. Hollander is an income beneficiary of a trust holding a 99% membership interest therein. Does not include an aggregate of 1,549,600 ordinary shares owned indirectly by various trusts, as equity holders of certain foreign entities, as to which Mr. Hollander and/or his children, as beneficiaries of such trusts, may be deemed to have interests. Any such interest would be in an indeterminable number of the ordinary shares owned indirectly by such trusts. Mr. Hollander disclaims beneficial ownership of any ordinary shares so held by such trusts. We make no representation as to the accuracy or completeness of the information reported. The address of Mr. Hollander is 400 Perimeter Center Terrace, Suite 100, Atlanta, Georgia 30346.
- (2) Based on a Schedule 13G/A filed with the Commission on January 9, 2003, this amount represents 2,025,590 ordinary shares held by Airbus Foundation. Based on a Schedule 13G/A filed with the Commission on January 30, 2002, Airbus Foundation held 1,146,300 ordinary shares as of such date. Based on a Schedule 13G filed with the Commission on July 19, 2001, Airbus Foundation held 1,002,500 ordinary shares as of such date. We make no representation as to the accuracy or completeness of the information reported. The address of Airbus Foundation is c/o Allegemeines, Treuunternehmen, P.O. Box 83, FL 9490 Vaduz, Liechtenstein
- (3) Based on a Schedule 13G/A filed with the Commission on April 5, 2004. Includes 715,625 ordinary shares issuable pursuant to options held by Mr. Hollander which are exercisable within 60 days of the date hereof. We make no representation as to the accuracy or completeness of the information reported. The address of Mr. Hollander is 11 Galgalei Haplada Street, Herzliya, 46722, Israel.

Based upon a Schedule 13G/A filed in February, 2004 pursuant to Rule 13d-1(d), Dr. Meir Barel beneficially owns, through the following entities, 883,019 of our ordinary shares, constituting 4.7% of our capital stock: (a) 208,483 ordinary shares through SVM Star Venture Capital Management Ltd. (b) 647,242 ordinary shares through Star Ventures Management GmbH no. 3. Accordingly, Dr. Barel has been removed from the above table. This represents a decrease of 829,795 ordinary shares as compared to his previously reported beneficial ownership by Dr. Barel of our capital stock. The decrease resulted from the distribution of those shares by Star Management of Investments (1993) Limited Partnership to its limited partners.

The shareholders that own 5% or more of our capital stock do not have different voting rights.

Based on information available to us, as of June 14, 2004, there were 59 record holders of Jacada shares in the United States, which represented 41.2% of the outstanding shares as of such date. To our knowledge, no corporation, foreign government or other natural or legal person directly or indirectly controls Jacada.

### **B. Related Party Transactions**

A loan in the amount of \$60,000 was made in November 2000 to Tzvia Broida, who is our Vice President of Finance. The amount outstanding on such loan on December 31, 2002 was NIS 150,007 (approximately \$31,667) and the balance was repaid in full in August 2003.

## C. Interests of Expert and Counsel

Not applicable.

## **Item 8: FINANCIAL INFORMATION**

### A. Consolidated Statements and Other Financial Information

See Item 18 for audited consolidated financial statements.

# **Export Sales**

We generated approximately 80% of our revenues in North and Latin America and approximately 20% in Europe through wholly owned subsidiaries during the period beginning January 1, 2003 and ending December 31, 2003. Our export sales consist mainly of intercompany transactions with our subsidiaries.

## **Legal Proceedings**

We are, from time to time, a party to legal proceedings that are incidental to our business.

We do not believe that any legal proceeding to which we currently are a party is likely to have a material impact upon us.

## **Dividend Policy**

We have no current intention of paying dividends.

# **B. Significant Changes**

Other than as disclosed below, there have been no significant changes since the date of our financial statements filed with this Annual Report for the year 2003.

During the first quarter of 2004, we initiated a plan to consolidate all of our research and development in our Israeli facilities. As a result, we closed our research and development operations in Minneapolis, Minnesota and transitioned the knowledge and skills associated with those operations to our team in Israel. The consolidation, which was completed in June 2004, is expected to improve overall development efficiency, accelerate new product releases and reduce operating expenses. We anticipate incurring an aggregate charge of approximately \$1.0 million as a nonrecurring expense during the first and second quarters of 2004 and to generate savings in the range of \$1.0 million annually.

In the second quarter of 2004, we introduced our new product family, Jacada Fusion. This product family is designed to integrate different applications residing on host, Windows and Web-based platforms. Jacada Fusion products are designed to provide a complete solution that enables non-invasive access to software applications residing on host, Windows and Web-based platforms, meaning that applications can be utilized and data entered and retrieved without the need to rewrite code or reinsert data. See Item 4.B. "Business of the Company –Business Overview – New Product" for additional information about this development.

# **Item 9: THE OFFER AND LISTING**

## A. Offer and Listing Details

## **Share History**

Our ordinary shares are quoted on the Nasdaq National Market under the symbol "JCDA" and on the Tel Aviv Stock Exchange ("TASE") under the same symbol or its Hebrew equivalent.

The following table shows the high and low market prices on the Nasdaq National Market of our ordinary shares in the indicated years. Trading in our shares on the Nasdaq commenced on October 14, 1999.

Year	Period	High	Low
1999	10/14/99 – 12/31/99	\$37.375	\$8.000
2000	01/01/00 - 12/31/00	33.375	4.375
2001	01/01/01 - 12/31/01	6.300	2.050
2002	01/01/02 - 12/31/02	3.740	1.080
2003	1/01/03 - 12/31/03	3.740	1.180

The following table shows the high and low market prices on the Nasdaq National Market for our ordinary shares for each financial quarter during our two most recent financial years.

Period	High	Low
01/01/02 - 03/31/02	3.74	2.82
04/01/02 - 06/30/02	3.50	2.36
07/01/02 - 09/30/02	2.44	1.49
10/01/02 – 12/31/02	1.85	1.08
01/01/03 - 03/31/03	1.71	1.18
04/01/03 - 06/30/03	3.00	1.47
07/01/03 - 09/30/03	3.26	2.40
10/01/03 – 12/31/03	3.74	2.49
01/01/04 - 03/31/04	4.73	2.86

The following table shows the high and low market prices on the Nasdaq National Market for our ordinary shares for the most recent six months.

Month	High	Low
May 2004	3.27	2.67
April 2004	3.57	2.73
March 2004	3.90	3.00
February 2004	4.00	2.86
January 2004	4.73	3.16
December 2003	3.69	3.00

The following table shows the high and low market prices on the TASE of our ordinary shares in the indicated years. Trading in our shares on the TASE commenced on June 18, 2001. Share prices in the TASE are denominated in New Israeli Shekels (NIS). The following prices are denominated in U.S. Dollars in accordance with the applicable exchange rate between the U.S. Dollar and the NIS.

Year	Period	High	Low
2001	06/18/01 - 12/31/01	3.88	1.91
2002	01/01/02 - 12/31/02	3.48	1.21
2003	01/01/03 - 12/31/03	3.87	1.59

The following table shows the high and low market prices on the TASE for our ordinary shares for each financial quarter during our two most recent financial years. Share prices in the TASE are denominated in New Israeli Shekels (NIS). The following prices are denominated in U.S. Dollars in accordance with the applicable exchange rates between the U.S. Dollar and the NIS.

Period	High	Low
<del></del>		
01/01/02 - 03/31/02	3.76	2.88
04/01/02 - 06/30/02	3.76	2.74
07/01/02 – 09/30/02	2.29	1.69
10/01/02 – 12/31/02	1.71	1.31
01/01/03 - 03/31/03	1.70	1.59
04/01/03 - 06/30/03	2.97	1.64
07/01/03 - 09/30/03	3.15	2.28
10/01/03 – 12/31/03	3.87	2.40
01/01/04 - 03/31/04	4.79	3.02

The following table shows the high and low market prices on the TASE for our ordinary shares for the most recent six months. Share prices in the TASE are denominated in New Israeli Shekels (NIS). The following prices are denominated in U.S. Dollars in accordance with the applicable exchange rates between the U.S. Dollar and the NIS.

Month	High	Low
<del></del>		
May 2004	3.18	2.72
April 2004	3.51	2.84
March 2004	4.08	3.08
February 2004	4.08	3.02
January 2004	4.79	3.30
December 2003	3.68	3.10

### B. Plan of distribution

Not applicable.

### C. Markets

Our ordinary shares are quoted on the Nasdaq National Market under the symbol "JCDA" and on the TASE under the same symbol or its Hebrew equivalent.

## **D. Selling Shareholders**

Not applicable.

## E. Dilution

Not applicable.

# F. Expenses of the Issue

Not applicable.

## **Item 10: ADDITIONAL INFORMATION**

# A. Share Capital

Not applicable.

## B. Memorandum and Articles of Association

For a copy of our Memorandum of Association and our Articles of Association, see Item 19, Exhibits 1.1 and 1.2 which have been incorporated by reference as part of this Annual Report from our Registration Statement on Form F-1, File No. 333-10882, as well as Exhibit 1.3 to this annual report. In addition, because we are an Israeli company, we are governed by the provisions of the Companies Law, which are described below along with certain provisions of our governing documents.

# **Objects and Purposes**

The objects and purposes of our company appear in our Memorandum of Association and include engaging in all businesses of trade, finance, import, export, distribution, services, economic initiatives and capital investments; production, processing and development of any kind; engaging in any activities of initiators, founders, and managers of plants, companies, corporations, and real estate; serving as brokers and agents for any person, business or corporation in Israel and abroad; and engaging in research, exploration, and development.

# **Approval of Specified Related Party Transactions**

The Companies Law imposes a duty of care and a duty of loyalty on all of the company's office holders as defined below, including directors and executive officers. The duty of care requires an office holder to act with the level of care that a reasonable office holder in the same position would have acted under the same circumstances. The duty of loyalty generally requires an office holder to act in good faith and for the good of the company. An "office holder" as defined in the Companies Law is a director, a general manager, a chief executive officer, a deputy chief executive officer, a vice chief executive officer, other managers directly subordinate to the chief executive officer and any person who fills one of the above positions without regard to title.

The Companies Law requires that an office holder of a company promptly disclose any personal interest that he or she may have and all related material information known to him or her, in connection with any existing or proposed transaction by the company. Once an office holder complies with these disclosure requirements, the board of directors may approve a transaction between the company and the office holder, or a third party in which an office holder has a personal interest, unless the articles of association provide otherwise. A transaction that is adverse to the company's interest cannot be approved. If the transaction is an extraordinary transaction under the Companies Law, then, in addition to any approval stipulated by the articles of association, it also requires audit committee approval before board approval and, in specified circumstances, subsequent shareholder approval. Any transaction between a company and one of its directors relating to the conditions of the director's service, including in relation to compensation exculpation, insurance or indemnification, or in relation to the terms of the director's service in any other capacity requires audit committee approval before board approval and subsequent shareholder approval. The Companies Law also provides that a director with an interest in an extraordinary transaction brought before the board or the audit committee for its approval may not vote on the approval and may not be present for the discussion of the issue. However, this rule would not apply if a majority of the directors or a majority of the members of the audit committee also possessed an interest in the transaction.

Under our articles of association, our board can, among other things, determine our plans of activity and the principles of financing such plans, examine our financial situation and set the framework of credit which we may take and decide to issue a series of debentures.

Our directors are not subject to any age limit requirement, nor are they disqualified from serving on our board of directors because of a failure to own our shares.

### Insurance, Indemnification, and Exculpation of Directors and Officers

Under the Companies Law, a company may not indemnify an office holder, nor enter into an insurance contract that would provide coverage for any monetary liability incurred as a result of any of the following:

- a breach by the office holder of his duty of loyalty unless the office holder acted in good faith and had a reasonable basis to believe that the act would not prejudice the company;
- a breach by the office holder of his duty of care if such breach was done intentionally or in disregard of the circumstances of the breach or its consequences;
- any act or omission done with the intent to derive an illegal personal benefit; or
- any fine levied against the office holder as a result of a criminal offense.

Our articles of association, as amended by a resolution of our shareholders passed on August 24, 2003, provide that, subject to the provisions of the Companies Law, we may enter into a contract for the insurance of all or part of the liability of any of our office holders with respect to:

- a breach of his duty of care to us or to another person;
- a breach of his duty of loyalty to us, provided that the office holder acted in good faith and had reasonable cause to assume that his act would not prejudice our interests; or
- a financial liability imposed upon such office holder in favor of another person concerning an act performed by the office in his/her capacity as an office holder.

Our articles of association, as amended, also provide that we may indemnify an office holder against:

- a financial liability imposed on him in favor of another person by a court judgment, including a compromise judgment or an arbitrator's award which has been confirmed by a court; and
- reasonable litigation expenses, including attorneys' fees, expended by the office holder or which were imposed on the office holder by a court in proceedings instituted against the office holder by us or in our name or by any other person or in a criminal charge from which the office holder was acquitted or in a criminal proceeding in which the office holder was convicted for a criminal offense that does not require proof of criminal intent.

Our articles of association also authorize us to release in advance all or part of an office holder's liability to us for damages which arises from the breach of the office holder's duty of care to us.

### **Required Approvals**

Under the Companies Law, indemnification of, and procurement of insurance coverage for office holders must be approved by the audit committee and board of directors and, in specified circumstances, by the shareholders of a company. In August 2003, our shareholders approved indemnification agreements with our directors and chief financial officer under which we have undertaken to indemnify our directors and chief financial officer to the fullest extent permitted under the Companies Law.

## Rights, Preferences and Restrictions upon Shares

Our Board of Directors may from time to time declare, and cause us to pay, an interim dividend and final dividend for any fiscal year only out of retained earnings, or earnings derived over the two most recent fiscal years, whichever is higher. Our articles provide that the final dividend in respect of any fiscal year shall be proposed by the Board of Directors and shall be payable only after the same has been approved by a resolution of our shareholders, approved by a majority of the shares voting thereon. However, no such resolution shall provide for the payment of an amount exceeding the amount proposed by the Board of Directors for the payment of such final dividend, and no such resolution or any failure to approve a final dividend shall affect any interim dividend theretofore declared and paid. The Board of Directors shall determine the time for payment of such dividends, both interim and final, and the record date for determining the shareholders entitled thereto.

Subject to the provisions of our articles of association and subject to any rights or conditions attached at that time to any of our shares granting preferential, special or deferred rights or not granting any rights with respect to dividends, profits which shall be declared as dividends shall be distributed according to the proportion of the nominal value paid upon account of the shares held at the date so appointed by us, without regard to the premium paid in excess of the nominal value, if any. No amount paid or credited as paid on a share in advance of calls shall be treated as paid on a share.

If we are wound up, after satisfying liabilities to creditors, then subject to applicable law and to the rights of the holders of shares with special rights upon winding up, our assets available for distribution among the shareholders shall be distributed to them in proportion to their respective holdings.

Holders of ordinary shares have one vote for each fully-paid share held of record, on every resolution, without regard to whether the vote thereon is conducted by a show of hands, by written ballot or by any other means.

We may, subject to applicable law, issue redeemable shares and redeem the same. In addition, our Board of Directors may, from time to time, as it, in its discretion, deems fit, make calls for payment upon shareholders in respect of any sum which has not been paid up in respect of shares held by such shareholders.

Under the Companies Law, the disclosure requirements that apply to an office holder also apply to a controlling shareholder of a public company. A controlling shareholder includes a shareholder that holds 25% or more of the voting rights in a public company if no other shareholder owns more than 50% of the voting rights in the company. Extraordinary transactions with a controlling shareholder or in which a controlling shareholder has a personal interest, and the terms of compensation of a controlling shareholder who is an office holder, require the approval of the audit committee, the board of directors and the shareholders of the company. The shareholder approval requires that: (a) the majority of shares voted at the meeting, including at least one third of the shares of disinterested shareholders voted at the meeting, vote in favor of the transaction; or (b) the total number of shares of disinterested shareholders voted against the transaction does not exceed one percent of the aggregate voting rights in the company.

The Companies Law also requires a shareholder to act in good faith towards a company in which he holds shares and towards other shareholders and to refrain from abusing his power in the company, including in connection with voting at a shareholders' meeting on:

- Any amendment to the articles of association;
- An increase in the company's authorized capital;
- A merger; or
- Approval of some of the acts and transactions which require shareholder approval.

A shareholder has the general duty to refrain from depriving other shareholders of their rights. Any controlling shareholder, any shareholder that knows that it possesses the power to determine the outcome of a shareholder vote and any shareholder that, under the provisions of the articles of association, has the power to appoint an office holder in the company, is under a duty to act in fairness towards the company. The Companies Law does not describe the substance of this duty.

### **Amendment of Articles of Association**

Our Articles of Association require, in order to amend the articles, the approval of the holders of at least 75% of the shares represented at a meeting, in person or by proxy, with the right to vote on the issue. Our articles differ from the Companies Law in this respect as the law requires only the consent of at least 50% of the voting power of the company represented at a meeting and voting on the change for amendment of articles of association.

### **Shareholders Meetings and Resolutions**

We are required to hold an annual general meeting of our shareholders once every calendar year, but no later than 15 months after the date of the previous annual general meeting. All meetings other than the annual general meeting of shareholders are referred to as extraordinary general meetings. Extraordinary general meetings may be called by our board whenever it sees fit, at such time and place, within or without the State of Israel, as it may determine. In addition, the Companies Law provides that the board of a public company is required to convene an extraordinary meeting upon the request of (a) any two directors of the company or one quarter of the company's board of directors or (b) one or more shareholders holding, in the aggregate, (i) five percent of the outstanding shares of the company and one percent of the voting power in the company or (ii) five percent of the voting power in the company.

The quorum required by our articles for a meeting of shareholders consists of at least two shareholders present in person or by proxy who hold or represent between them at least 33.3% of the voting power in our Company. Our articles differ from the Companies Law in this respect, as under the Companies Law only the presence of two shareholders holding at least 25% of the voting power in the Company is required for a quorum. A meeting adjourned for lack of quorum is adjourned to the same day in the following week at the same time and place or any time and place as the chairman of the meeting decides with the consent of the holders of a majority of the voting power represented at such meeting. At such reconvened meeting, the required quorum consists of any two shareholders present in person or by proxy.

Our articles enable our board to fix a record date to allow us to determine the shareholders entitled to notice of, or to vote at, any general meeting of our shareholders. The Companies Law provides that a record date may not be more than 40 nor less than four days before the date of the meeting. Each shareholder of record as of the record date determined by the board may vote the shares then held by that shareholder unless all calls and other sums then payable by the shareholder in respect of its shares have not been paid.

# **Limitation on Ownership of Securities**

The ownership and voting of our ordinary shares by non-residents of Israel are not restricted in any way by our articles or by the laws of the State of Israel, except for shareholders who are subjects of countries that are in a state of war with the State of Israel.

## Mergers and Acquisitions; Anti-takeover Provisions

The Companies Law includes provisions allowing corporate mergers. These provisions require that the board of directors of each company that is party to the merger approve the transaction. In addition, the shareholders of our Company must approve a merger involving our company by a vote of the 75% of our shares, present and voting on the proposed merger at a shareholders' meeting, provided that the merger is not objected to by a majority of the shares represented at the meeting after excluding shares held by the other party to the merger or any person holding at least a 25% interest in such other party, including related parties or entities under the other party's control.

The Companies Law does not require court approval of a merger other than in specified situations. However, upon the request of a creditor of either party to the proposed merger, a court may delay or prevent the merger if it concludes that there exists a reasonable concern that as a result of the merger, the surviving company will be unable to satisfy the obligations of any of the parties of the merger to their creditors.

A merger may not be completed unless at least 70 days have passed from the time that a request for the approval of the merger has been filed with the Israeli registrar of companies. This request may be filed once a shareholder meeting has been called to approve the merger.

The Companies Law also provides that the acquisition of shares in a public company on the open market must be made by means of a tender offer if, as a result of the acquisition, the purchaser would become a 25% shareholder of the company. The rule does not apply if there already is another 25% shareholder of the company. Similarly, the law provides that an acquisition of shares in a public company must be made by means of a tender offer if, as a result of the acquisition, the purchaser would become a 45% shareholder of the company, unless there already is a 50% shareholder of the company.

If, following any acquisition of shares, the purchaser would hold 90% or more of the shares of the company, that acquisition must be made by means of a tender offer for all of the target company's shares. An acquirer who wishes to eliminate all minority shareholders must do so by means of a tender offer and acquire 95% of all shares not held by or for the benefit of the acquirer prior to the acquisition. However, the acquirer may not acquire in such tender offer any tendered shares to the extent that the acquisition of those shares would bring the acquirer's ownership to more than 90% but less than 95% of the shares of the target company. In addition, in the event that the tender offer to acquire that 95% is not successful, the acquirer may not acquire tendered shares if by doing so the acquirer would own more than 90% of the shares of the target company.

Our articles contain provisions which could delay, defer or prevent a change in our control. These provisions include the staggered board provisions of our articles described above under Item 6C.

### **Changes in Capital**

Our articles enable us to increase our share capital. Any such changes are subject to the provisions of the Companies Law and must be approved by a resolution passed by a majority of the holders of at least 75% of our shares represented, in person or by proxy, at a general meeting voting on such change in the capital. Our articles differ from the Companies Law in this respect, as under the law changes in capital require approval only of a majority of the voting power of a company represented at the relevant shareholders meeting and voting thereon.

## C. Material Contracts

On July 31, 2002 we acquired certain assets and assumed certain liabilities of Anota Ltd. for an aggregate purchase price of approximately \$763,000, including acquisition costs of \$123,000 paid in cash, the issuance of 367,373 of our ordinary shares at a fair value of \$640,000 and an earnout arrangement on the basis of future revenues. These assets include key technology and intellectual property related to thin-client, Web-to-host, emulation software for desktop connectivity. These technologies enable organizations to make their business critical applications easily available over the Web, without installing any software on the host system or client machines.

Other than the foregoing, we have entered into no material contracts outside of the ordinary course of business for the two year period ending December 31, 2003.

# **D. Exchange Controls**

In 1998, the Israeli currency control regulations were liberalized significantly, so that Israeli residents generally may freely deal in foreign currency and foreign assets, and nonresidents may freely deal in Israeli currency and Israeli assets. There are currently no Israeli currency control restrictions on remittances of dividends on the ordinary shares or the proceeds from the sale of the shares provided that all taxes were paid or withheld; however, legislation remains in effect pursuant to which currency controls can be imposed by administrative action at any time.

Nonresidents of Israel may freely hold and trade our securities. Neither our Memorandum of Association nor our Articles of Association nor the laws of the State of Israel restrict in any way the ownership or voting of ordinary shares by nonresidents, except that such restrictions may exist with respect to citizens of countries which are in a state of war with Israel. Israeli residents are allowed to purchase our ordinary shares.

### E. Taxation

The following discussion sets forth the material United States and Israeli tax consequences of the ownership of ordinary shares by a holder that holds our ordinary shares, as capital assets.

The following discussion does not address the tax consequences to holders of ordinary shares to which special tax rules may apply, such as tax-exempt entities, certain insurance companies, broker-dealers, traders in securities that elect to mark to market, holders liable for alternative minimum tax, holders that actually or constructively own 10% or more of our voting stock, holders that hold ordinary shares as part of a straddle or a hedging or conversion transaction or holders whose functional currency is not the U.S. dollar. This discussion also does not apply to holders who acquired their ordinary shares pursuant to the exercise of employee stock options or otherwise as compensation or through a tax-qualified retirement plan. This discussion is based on the tax laws of Israel and the United States, including the Internal Revenue Code of 1986, as amended, its legislative history, existing and proposed regulations under the Internal Revenue Code, published rulings and court decisions, as in effect on the date of this document, as well as the Income Tax Treaty Between the United States of America and Israel, as amended (the "Treaty"), all of which are subject to change or change in interpretation, possibly with retroactive effect.

For purposes of this discussion, a "U.S. holder" is any beneficial owner of ordinary shares that is: a citizen or resident of the United States;

a corporation or other entity taxable as a corporation organized under the laws of the United states or any political subdivision of the United States:

an estate the income of which is subject to United States federal income taxation without regard to its source; or

a trust if a court within the United States is able to exercise primary supervision over the administration of the trust and one or more United States persons have the authority to control all substantial decisions of the trust.

This discussion does not address any aspects of United States taxation other than federal income taxation. Holders are urged to consult their tax advisors regarding the United States federal, state and local and the Israeli and other tax consequences of owning and disposing of ordinary shares.

# **Information Reporting and Backup Withholding**

U.S. information reporting requirements and backup withholding tax generally will apply to payments to some non-corporate holders of ordinary shares. Information reporting generally will apply to payments of dividends on, and to proceeds from the sale or redemption of, ordinary shares by a payor within the United States to a holder of ordinary shares other than an "exempt recipient," including a corporation and any payee that is not a U.S. holder that provides an appropriate certification.

A payor within the United States will be required to withhold at the fourth lowest rate of tax applicable to single individual taxpayers (currently 28%) on any payments of dividends on, or proceeds from the sale of, ordinary shares within the United States to a holder, other than an "exempt recipient," if the holder fails to furnish its correct taxpayer identification number or otherwise fails to comply with, or establish an exemption from, backup withholding tax requirements.

## United States Federal Income Taxation of Owning and Selling Ordinary Shares.

## **Dividends and Distributions**

### U.S. Holders

Subject to the passive foreign investment company rules discussed below, U.S. holders will include in gross income the gross amount of any dividend paid, before reduction of Israeli withholding taxes, by us out of current or accumulated earnings and profits, as determined for Untied States federal income tax purposes, as ordinary income when the dividend is actually or constructively received by the U.S. holder. Dividends will be income from sources outside the United States for foreign tax credit limitation purposes, but generally will be "passive income" or "financial services income," which are treated separately from other types of income for foreign tax credit limitation purposes. Dividends will not be eligible for the dividends-received deduction generally allowed to United States corporations in respect of dividends received from other United States corporations. The amount of the dividend distribution included in income of a U.S. holder will be the U.S. dollar value of the NIS payments made, determined at the spot NIS/U.S. dollar rate on the date such dividend distribution is included in the income of the U.S. holder, regardless of whether the payment is in fact converted into U.S. dollars. Generally, any gain or loss resulting from currency exchange fluctuations during the period from the date the dividend distribution is included in income to the date such dividend distribution is converted into U.S. dollars will be treated as ordinary income or loss. Such gain or loss will generally be income from sources within the United States for foreign tax credit limitation purposes. Distributions in excess of current and accumulated earnings and profits, as determined for United States federal income tax purposes, will be treated as a return of capital to the extent of the U.S. holder's basis in the ordinary shares and thereafter as capital gain. We will notify our shareholders of any distribution in excess of current and accumulated earnings and profits at the time of such distribution in accordance with the requirements of the Internal Revenue Code.

Subject to certain limitations, the Israeli tax withheld in accordance with the Treaty and paid over to Israel will be creditable against the U.S. holder's United States federal income tax liability. To the extent a refund of the tax withheld is available to a U.S. holder under the laws of Israel or under the Treaty, the amount of tax withheld that is refundable will not be eligible for credit against the U.S. holder's United States federal income tax liability, whether or not the refund is actually obtained.

### Non-U.S. Holders

A non-U.S. holder is not subject to United States federal income tax with respect to dividends paid on ordinary shares unless (i) the dividends are "effectively connected" with that non-U.S. holder's conduct of a trade or business in the United States, and attributable to a permanent establishment maintained in the United States (if that is required by an applicable income tax treaty as a condition for subjecting that non-U.S. holder to United States taxation on a net income basis), or (ii) that non-U.S. holder is an

individual present in the United States for at least 183 days in the taxable year of the dividend distribution and certain other conditions are met. In such cases, a non-U.S. holder will be taxed in the same manner as a U.S. holder. A corporate non-U.S. holder may also, under certain circumstances, be subject to an additional branch profits tax at a 30% rate, or at a lower rate if that corporate non-U.S. holder is eligible for the benefits of an income tax treaty providing for a lower rate, with respect to gains that are "effectively connected" with its conduct of a trade or business in the United States.

# Sale or Exchange of Ordinary Shares

### U.S. Holders

Subject to the passive foreign investment company rules discussed below, a U.S. holder that sells or otherwise disposes of ordinary shares generally will recognize capital gain or loss for United States federal income tax purposes equal to the difference between the U.S. dollar value of the amount realized on the sale or disposition and the tax basis, determined in U.S. dollars, in the ordinary shares. Capital gain of a non-corporate U.S. holder is generally taxed at a maximum rate of 15% if the ordinary shares were held for more than one year. The gain or loss will generally be income or loss from sources within the United States for foreign tax credit limitation purposes.

### Non-U.S. Holders

A non-U.S. holder will not be subject to United States federal income tax on gain recognized on the sale or other disposition of ordinary shares unless (i) the gain is "effectively connected" with the non-U.S. holder's conduct of a trade or business in the United States, and the gain is attributable to a permanent establishment maintained in the United States (if that is required by an applicable income tax treaty as a condition for subjecting that non-U.S. holder to United States taxation on a net income basis), or (ii) the non-U.S. holder is an individual and present in the United States for at least 183 days in the taxable year of the sale and certain other conditions are met. In such cases, a non-U.S. holder will be taxed in the same manner as a U.S. holder. A corporate non-U.S. holder may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate, or at a lower rate if eligible for the benefits of an income tax treaty that provides for a lower rate, on "effectively connected" gains recognized.

# **Passive Foreign Investment Company Rules**

We believe that our ordinary shares should not be treated as stock of a passive foreign investment company for United States federal income tax purposes, but this conclusion is a factual determination made annually and may be subject to change. In general, we will be a passive foreign investment company with respect to a U.S. holder if, for any taxable year in which the U.S. holder held ordinary shares, either at least 75% of our gross income for the taxable year is passive income or at least 50% of the value, determined on the basis of a quarterly average, of our assets is attributable to assets that produce or are held for the production of passive income. If we were to be treated as a passive foreign investment company, then unless a U.S. holder makes a mark-to-market

election, gain realized on the sale or other disposition of our ordinary shares would in general not be treated as capital gain. Instead, a U.S. holder would be treated as if the holder had realized such gain and certain "excess distributions" ratably over the holder's holding period for the shares and would be taxed at the highest tax rate in effect for each such year to which the gain was allocated, together with an interest charge in respect of the tax attributable to each such year.

### Israeli Taxation

The following is a summary of the principal tax laws applicable to companies in Israel, with special reference to their effect on us, and certain Israeli Government programs benefiting us. This section also contains a discussion of certain Israeli tax consequences to persons acquiring ordinary shares. This summary does not discuss all the acts of Israeli tax law that may be relevant to a particular investor in light of his or her personal investment circumstances or to certain types of investors subject to special treatment under Israeli law, such as traders in securities or persons that own, directly or indirectly, 10% or more of our outstanding voting share capital. To the extent that the discussion is based on new tax legislation which has not been subject to judicial or administrative interpretation, there can be no assurance that the views expressed in this discussion will be accepted by the tax authorities. This discussion should not be construed as legal or professional tax advice and is not exhaustive of all possible tax considerations.

Potential investors are urged to consult their own tax advisors as to the Israeli or other tax consequences of the purchase, ownership and disposition of ordinary shares, including, in particular, the effect of any foreign, state or local taxes.

## **General Corporate Tax Structure**

The general corporate tax rate in Israel is currently 36%, although the tax rate on capital gains was lowered to 25% on January 1, 2003. However, the effective tax rate payable by a company which derives income from an "Approved Enterprise" may be considerably less.

Under the Law for the Encouragement of Industry (Taxes), 1969, which is referred to below as the Industry Encouragement Law, a company qualifies as an "Industrial Company" if it is resident in Israel and at least 90% of its income in a given tax year, determined in NIS, exclusive of income from certain loans, marketable securities, capital gains, interest and dividends, is derived from Industrial Enterprises owned by it. An "Industrial Enterprise" is defined as an enterprise whose major activity in a given tax year is industrial manufacturing. We currently qualify as an Industrial Company.

Pursuant to the Industry Encouragement Law, an Industrial Company is entitled to deduct the purchase price of know-how, patents or rights over a period of eight years beginning with the year in which such rights were first used.

Qualification as an Industrial Company under the Industrial Encouragement Law is not conditioned upon the receipt of prior approval from any Israeli Government authority. No assurance can be given that we will continue to qualify as an Industrial Company or will be able to avail ourselves in the future of any benefits available to companies so qualifying.

## Law for the Encouragement of Capital Investments, 1959

The Law for Encouragement of Capital Investments, 1959, which is referred to below as the Capital Investments Law, provides that capital investments in a production facility or other eligible assets may, upon application to the Israeli Investment Center of the Ministry of Industry and Commerce, be designated as an "Approved Enterprise." Each certificate of approval for an Approved Enterprise relates to a specific investment program in the Approved Enterprise, delineated both by the financial scope of the investment and by the physical characteristics of the facility or the asset. An Approved Enterprise is entitled to certain benefits, including Israeli Government cash grants, state-guaranteed loans and tax benefits.

### **Tax Benefits**

Taxable income derived from an Approved Enterprise is subject to a reduced corporate tax rate of 25%. That income is eligible for further reductions in tax rates depending on the percentage of the foreign investment in our share capital conferring rights to profits, voting and appointment of directors and the percentage of its combined share and loan capital owned by non-Israeli residents. The tax rate is 20% if the foreign investment is 49% or more but less than 74%, 15% if the foreign investment is 74% or more but less than 90%, and 10% if the foreign investment is 90% or more. The lowest level of foreign investment during the year will be used to determine the relevant tax rate for that year. These tax benefits are granted for a limited period not exceeding seven years or 10 years for a company whose foreign investment level exceeds 25% from the first year in which the Approved Enterprise has taxable income. The period of benefits may in no event, however, exceed the lesser of 12 years from the year in which the production commenced or 14 years from the year of receipt of Approved Enterprise status.

An Approved Enterprise approved after April 1, 1986 may elect to forego any entitlement to the grants otherwise available under the Capital Investments Law and, in lieu of the foregoing, may participate in an Alternative Benefits Program, under which the undistributed income from the Approved Enterprise is fully exempt from corporate tax for a defined period of time. The period of tax exemption ranges between two and 10 years commencing in the first year in which the company generates taxable income, depending upon the location within Israel of the Approved Enterprise and the type of the Approved Enterprise. On expiration of the exemption period, the Approved Enterprise would be eligible for the otherwise applicable beneficial tax rates under the Capital Investments Law, ranging from 10% to 25%, for the remainder, if any, of the otherwise applicable benefits period. There can be no assurance that the current benefit programs will continue to be available or that we will continue to qualify for benefits under the current programs.

We currently have Approved Enterprise programs under the Capital Investments Law, which entitle us to certain tax benefits. The tax benefit period for these programs has not yet commenced. We have elected the Alternative Benefits Program which provides for the waiver of grants in return for tax exemption. Accordingly, our income is tax exempt for a period of two years commencing with the year we first earn taxable income relating to each expansion program, and is subject to corporate taxes at the reduced rate of 10% to 25%, for an additional period of five years. The exact rate reduction is based on the percentage of foreign ownership in each tax year. See note 9 to our consolidated financial statements. A company that has elected to participate in the Alternative Benefits Program and that subsequently pays a dividend out of the income derived from the Approved Enterprise during the tax exemption period will be subject to corporate tax in respect of the amount distributed, including withholding tax thereon, at the rate that would have been applicable had the company not elected the Alternative Benefits Program, ranging from 10% to 25%. The dividend recipient is taxed at the reduced rate of 15%, applicable to dividends from Approved Enterprises if the dividend is distributed within 12 years after the benefits period. The withholding tax rate will be 25% after such period. In the case of a company with over 25% foreign investment level, as defined by law, the 12-year limitation on reduced withholding tax on dividends does not apply. This tax should be withheld by the company at the source, regardless of whether the dividend is converted into foreign currency. See "Withholdings and Capital Gains Taxes Applicable to Non-Israeli Shareholders."

From time to time, the Israeli Government has discussed reducing the benefits available to companies under the Capital Investments Law. The termination or substantial reduction of any of the benefits available under the Capital Investments Law could materially impact the cost of our future investments.

Each application to the Investment Center is reviewed separately, and a decision as to whether or not to approve such application is based, among other things, on the then prevailing criteria set forth in the Capital Investments Law, on the specific objectives of the applicant company set forth in such application and on certain financial criteria of the applicant company. Accordingly, there can be no assurance that any such application will be approved. In addition, the benefits available to an Approved Enterprise are conditional upon the fulfillment of certain conditions stipulated in the Capital Investments Law and its regulations and the criteria set forth in the specific certificate of approval, as described above. In the event that these conditions are violated, in whole or in part, we would be required to refund the amount of tax benefits, together with linkage differences to the Israeli CPI and interest. We believe that our Approved Enterprise programs operate in compliance with all such conditions and criteria.

# **Other Benefits**

An Approved Enterprise is also entitled to the following two other incentives from the Israeli Government regardless of whether the Alternative Benefits Program is elected:

- loans to Approved Enterprises, approved prior to January 1, 1997, which also qualify as Industrial Companies, from banks and other financial institutions, of up to 70% of approved project expenditures, of which 75% or in certain cases 85%, are State-guaranteed; and
- accelerated rates of depreciation applied on a straight-line basis in respect of property and equipment, generally ranging from 200% in respect of equipment to 400% of the ordinary depreciation rates in respect of buildings, during the first five years of service of the assets, subject to a ceiling of 20% per year with respect to depreciation of buildings.

## **Measurement of Taxable Income**

Results for tax purposes are measured in real terms, in accordance with the changes in the Israeli Consumer Price Index, or changes in exchange rate of the NIS against the dollar, for a "foreign investors" company. Until taxable year 2002, Jacada measured its results for tax purposes in accordance with changes in the Israeli consumer price index. Commencing with taxable year 2003, Jacada has elected to measure its results for tax purposes on the basis of the changes in the exchange rate of NIS against the dollar. This election obligates Jacada for three years.

## Tax Benefits of Research and Development

Israeli tax law permits, under certain conditions, a tax deduction in the year incurred for expenditures, including capital expenditures, in scientific research and development projects, if the expenditures are approved by the relevant government ministry, determined by the field of research, and if the research and development is for the promotion of the enterprise and is carried out by, or on behalf of, a company seeking such deduction. Expenditures not so approved are deductible over a three year period; however, expenditures made out of proceeds made available to us through government grants are not deductible.

## Withholding and Capital Gains Taxes Applicable to Non-Israeli Shareholders

Nonresidents of Israel are subject to income tax on income accrued or derived from sources in Israel. These sources of income include passive income such as dividends, royalties and interest, as well as non-passive income from services rendered in Israel. We are generally required to withhold income tax at the rate of 25% on all distributions of dividends, although if the dividend recipient holds 10% of our voting stock for a certain period prior to the declaration and payment of the dividend, we are only required to withhold at a 12.5% rate. Notwithstanding the foregoing, with regard to dividends generated by an Approved Enterprise, we are required to withhold income tax at the rate of 15%.

Israeli law generally imposes a capital gains tax on the sale of publicly traded securities. Pursuant to changes made to the Israeli Income Tax Ordinance in January 2003, capital gains on the sale of our ordinary shares will be subject to Israeli capital gains tax, generally at a rate of 15%. However, as of January 1, 2003, nonresidents of Israel will be exempt from capital gains tax in relation to the sale of our ordinary shares for so long as (a) our ordinary shares are listed for trading on a stock exchange outside of Israel, (b) the capital gains are not accrued or derived by the nonresident shareholder's permanent enterprise in Israel, (c) the ordinary shares in relation to which the capital gains are accrued or derived were acquired by the nonresident shareholder after the initial listing of the ordinary shares on a stock exchange outside of Israel, and (d) neither the shareholder nor the particular capital gain is otherwise subject to certain sections of the Israeli Income Tax Ordinance. As of January 1, 2003, nonresidents of Israel are also exempt from Israeli capital gains tax resulting from the sale of securities on the Tel Aviv Stock Exchange; provided that the capital gains are not accrued or derived by the nonresident shareholder's permanent enterprise in Israel.

In addition, under the income tax treaty between the United States and Israel, a holder of ordinary shares who is a United States resident will be exempt from Israeli capital gains tax on the sale, exchange or other disposition of such ordinary shares unless the holder owns, directly or indirectly, 10% or more of our voting power during the 12 months preceding such sale, exchange or other disposition.

A nonresident of Israel who receives interest, dividend or royalty income derived from or accrued in Israel, from which tax was withheld at the source, is generally exempt from the duty to file tax returns in Israel with respect to such income, provided such income was not derived from a business conducted in Israel by the taxpayer.

Israel presently has no estate or gift tax.

### F. Dividends and Paying Agents

Not applicable.

# G. Statement by Experts

Not applicable.

## H. Documents on Display

We are currently subject to the information and periodic reporting requirements of the U.S. Securities Exchange Act of 1934, as amended, and file periodic reports and other information with the Securities and Exchange Commission through its electronic data gathering, analysis and retrieval (EDGAR) system. Our securities filings, including this Annual Report and the exhibits thereto, are available for inspection and copying at the public reference facilities of the Securities and Exchange Commission located at Room

1024, 450 Fifth Street, NW, Washington, D.C. 20549, and the Commission's regional offices located in New York, New York and Chicago, Illinois. Copies of all or any part of our registration statement or other filings may be obtained from these offices after payment of fees required by the Commission. Please call the Commission at 1-800-SEC-0330 for further information. The Commission also maintains a website at <a href="http://www.sec.gov">http://www.sec.gov</a> from which certain EDGAR filings may be accessed.

As a foreign private issuer, we are exempt from certain rules under the Securities Exchange Act of 1934, as amended, prescribing the furnishing and content of proxy statements to our shareholders. In addition, we, our directors, and our officers are also exempt from the shortswing profit recovery and disclosure regime of Section 16 of the Exchange Act.

## I. Subsidiary Information

Not applicable.

## Item 11: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We develop products in Israel and sell them worldwide. As a result, our financial results could be affected by factors such as changes in foreign currency exchange rates or weak economic conditions in foreign markets. As most of our sales are currently made in dollars, an increase in the value of the dollar could make our products less competitive in foreign markets. The foreign currency exchange rate effects for the years ended December 31, 2003, 2002, and 2001 were immaterial.

In addition, since our financial results are reported in dollars, fluctuations in the rates of exchange between the dollar and non-dollar currencies may have a material effect on our results of operations. We therefore use currency exchange forward contracts to hedge the impact of the variability in the exchange rates on accounts receivable and future cash flows from certain Euro-denominated transactions as well as certain NIS-denominated expenses. The counter-parties to our forward contracts are major financial institutions with high credit ratings. We believe the risk of incurring losses on such forward contracts related to credit risks is remote and that any losses would be immaterial. As of December 31, 2003, we had forward contracts to sell up to \$1,058,116 for a total amount of NIS 4,793,098 that matured prior to March 31, 2004.

We invest in U.S. Treasury notes, investment grade U.S. corporate securities and dollar deposits with banks. These investments typically carry fixed interest rates. Until September 2001 our marketable securities were designated under FAS 115 as held-to-maturity marketable securities. As a result of unexpected events, we sold our held-to-maturity marketable securities. As of December 31, 2003, our marketable securities were designated as available for sale. If we hold these securities to the maturity date, financial income over the holding period is not sensitive to changes in interest rates.

As of December 31, 2003, we had no other exposure to changes in interest rates and had no interest rate derivative financial instruments outstanding.

## Item 12: DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

Not applicable.

## **PART II**

## Item 13: DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None

### Item 14: MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

There have been no changes in the rights of holders of any of our registered securities.

The effective date of the registration statement (No. 333-10882) for our initial public offering of our ordinary shares, par value NIS 0.01 per share, was October 14, 1999. The offering commenced on October 20, 1999, and terminated after the sale of all the securities registered. The managing underwriter of the offering was Lehman Brothers. We registered 5,175,000 ordinary shares in the offering, including shares issued pursuant to the exercise of the underwriters' over-allotment option. We sold 5,175,000 ordinary shares at an aggregate offering price of \$56,925,000 (\$11.00 per share). Under the terms of the offering, we incurred underwriting discounts of \$3,984,750. We also incurred expenses of \$2,769,250 million in connection with the offering. None of these amounts was paid directly or indirectly to any director, officer, general partner of ours or to their associates, persons owing ten percent or more of any class of our equity securities, or to any of our affiliates.

The net proceeds that we received as a result of the offering were \$50,568,390. As of December 31, 2003, the net proceeds have been used to invest in a variety of financial instruments and for general corporate purposes. More specifically, a portion of the proceeds, \$6.9 million, was used in August 2001 to purchase certain assets of Propelis Software, Inc., a business unit of Computer Network Technology Corporation. None of the net proceeds of the offering was paid directly or indirectly to any director, officer, general partner of ours or to their associates, persons owning ten percent or more of any class of our equity securities, or to any of our affiliates.

## **Item 15: CONTROLS AND PROCEDURES**

(a) Disclosure Controls and Procedures. We performed an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), of the effectiveness of the design and

operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of December 31, 2003. Following that evaluation, our management, including the CEO and CFO, concluded that based on the evaluation, the design and operation of our disclosure controls and procedures were effective at that time. Since the evaluation, there have been no significant changes in our internal controls or in factors that could significantly affect internal controls, including, because we have not identified any significant deficiencies or material weaknesses in our internal controls, any corrective actions with regard to significant deficiencies and material weaknesses.

- (b) Not yet applicable
- (c) Not yet applicable
- (d) Changes in Internal Control Over Financial Reporting. There has been no change in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during 2003, that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

### Item 16A: AUDIT COMMITTEE FINANCIAL EXPERT

As of the date of filing of this report, the Board of Directors has determined that the Company does not have an audit committee financial expert sitting on its audit committee. However, the Board of Directors intends to nominate Mr. Dan Falk, who has agreed to be so nominated, for election by our shareholders to our Board of Directors. We anticipate that the shareholders meeting at which this election will be held will occur in August 2004. Mr. Falk has consented to serve on our audit committee if elected to our Board of Directors, and our Board of Directors has determined that he qualifies as an audit committee financial expert. Mr. Falk also meets the requirements of the NASDAQ Stock Market listing standards to be an "independent" director and audit committee member.

### **Item 16B: CODE OF ETHICS**

In March 2003, our Board of Directors adopted a Code of Ethics relating to, among others, our principal executive officer, principal financial officer and principal accounting officer. The code is filed as exhibit 11 to this Annual Report, which is available and can be reached through the Investor Relations link on our website, www.jacada.com. Pursuant to new requirements of the Nasdaq Stock Market, we adopted in May 2004 a Code of Business Conduct and Ethics that is applicable to all our directors, officers and employees. This code is also available on our website.

### Item 16C: PRINCIPAL ACCOUNTANT FEES AND SERVICES

Audit Fees

	2002	\$77,500
	2003	\$77,500
Audit Related Fees		
	2002	\$ 0
	2003	\$16,500
Tax Fees		
	2002	\$120,000
	2003	\$ 34,000
Other Fees		
	2002	\$27,000
	2003	\$ 0

The tax fees we incurred in 2002 and 2003 were related to preparation of tax returns, consultations regarding international tax planning and a valuation for PFIC (Passive Foreign Investment Company) purposes. The Audit Related Fees we incurred in 2003 are related to consultations regarding revenue recognition policy. The Other Fees incurred in 2002 are related to services performed in connection with the acquisition of certain assets of Anota Ltd. during 2002.

Our audit committee is responsible for the appointment and oversight of our independent auditors' work. Pursuant to its charter, the audit committee also has the sole authority to review in advance, and grant any appropriate pre-approvals of, (a) all auditing services to be provided by our independent auditors as permitted by Section 10A of the U.S. Securities Exchange Act of 1934; and (c) all fees and other terms of engagement. The audit committee's policy is to specifically pre-approve all annual services provided by our independent auditors in connection with the preparation of their audit, which may include audit services, audit-related services, tax services and other services. The audit committee sets forth the basis

for its pre-approval in detail, listing the particular services or categories of services which are pre-approved, and setting a specific budget for such services. Additional services may be commissioned on the basis of a pre-approval by the audit committee for non-annual audit related services up to a specified amount. Once such services have been pre-approved and performed, the independent auditors and our management report to the audit committee on a periodic basis regarding the extent of services actually provided in accordance with the applicable pre-approval, and regarding the fees for the services performed.

# Item 16D: EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES Not applicable.

**Item 16E: PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS** Not applicable.

# PART III

# **Item 17: FINANCIAL STATEMENTS**

See Item 18.

# **Item 18: FINANCIAL STATEMENTS**

# **Item 19: EXHIBITS**

Exhibit Number	Description of Document
1.1	Memorandum of Association of the Company (incorporated by reference to Exhibit 3.1 from the Company's Registration Statement filed on Form F-1 (file no. 333-10882)).
1.2	Articles of Association of the Company (incorporated by reference to Exhibit 3.2 from the Company's Registration Statement filed on Form F-1 (file no. 333-10882)).
1.3	Amendments to the Company's Articles of Association, dated August 24, 2003.
4.2	1994 Stock Option and Incentive Plan (incorporated by reference to Exhibit 10.1 from the Company's Registration Statement filed on Form F-1 (file no. 333-10882)).
4.3	1996 Stock Option and Incentive Plan (incorporated by reference to Exhibit 10.2 from the Company's Registration Statement filed on Form F-1 (file no. 333-10882)).
4.4	1999 Share Option and Incentive Plan (incorporated by reference to Exhibit 10.3 from the Company's Registration Statement filed on Form F-1 (file no. 333-10882)).
4.5	Restated Employment Agreement of Gideon Hollander with Jacada Ltd. dated as of October 1, 2001 (incorporated by reference to Exhibit 4.5 to the Company's Annual Report on Form 20-F for the year ended December 31, 2001).
4.6	Technology and Product License Agreement between the Company and Cortlandt Reade Technical Corporation dated May 25, 2000 (incorporated by reference to the Company's Annual Report on Form 20-F for the year ended December 31, 2000).
4.7	Amendment to 1999 Share Option and Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Registration Statement on Form S-8 (file no. 333-73650)).
4.8	Asset Purchase Agreement dated as of August 19, 2001 among the Company and its subsidiaries and Computer Network Technology Corporation and its subsidiaries (incorporated by reference to Exhibit 4.10 to the Company's Annual Report on Form 20-F for the year ended December 31, 2001).

- 4.9 2003 Share Option Plan (incorporated by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8 (file no. 333-111303).
- 8 List of Jacada's Subsidiaries (incorporated by reference to the Company's Annual Report on Form 20-F for the year end December 31, 2000).
- 9.1 First Amendment to Asset Purchase Agreement among the Company and its subsidiaries and Computer Network Technology Corporation and its subsidiaries dated August 23, 2001(incorporated by reference to Exhibit 4.11 to the Company's Annual Report on Form 20-F for the year ended December 31, 2001).
- Purchase Agreement dated as of June 28, 2002 among the Company and Anota Ltd. (incorporated by reference to Exhibit 4.11 to the Company's Annual Report on Form 20-F for the year ended December 31, 2002).
- Amendment No. 1 to Purchase Agreement dated as of July 31, 2002 among the Company and Anota Ltd. (incorporated by reference to Exhibit 4.11.1 to the Company's Annual Report on Form 20-F for the year ended December 31, 2002).
- 11 Code of Ethics of the Company.
- 12.1 Certificate of Chief Executive Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a).
- 12.2 Certificate of Chief Financial Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a).
- 13.1 Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350.
- 14.1 Consent of Kost, Forer, and Gabbay, a member of Ernst & Young International.

# **SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and it has duly caused and authorized the undersigned to sign this Annual Report on its behalf on June 28, 2004.

# JACADA LTD.

By: /s/ Robert C. Aldworth

Robert C. Aldworth Chief Financial Officer

# JACADA LTD. AND ITS SUBSIDIARIES

# CONSOLIDATED FINANCIAL STATEMENTS

# AS OF DECEMBER 31, 2003

# U.S. DOLLARS IN THOUSANDS

# **INDEX**

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# To the Shareholders of JACADA LTD.

REPORT OF INDEPENDENT AUDITORS

We have audited the accompanying consolidated balance sheets of Jacada Ltd. ("the Company") and its subsidiaries as of December 31, 2003 and 2002 and the related consolidated statements of operations, changes in shareholders' equity and cash flows for each of the three years in the period ended December 31, 2003. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company and its subsidiaries as of December 31, 2003 and 2002 and the consolidated results of their operations and cash flows for each of the three years in the period ended December 31, 2003, in conformity with U.S. generally accepted accounting principles.

Tel-Aviv, Israel February 3, 2004 KOST FORER GABBAY & KASIERER A Member of Ernst & Young Global

# U.S. Dollars in thousands

	Decem	iber 31,
	2003	2002
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 9,845	\$15,319
Marketable securities	6,638	22,326
Trade receivables (net of allowance for doubtful accounts of \$ 234 and \$ 398 at December 31, 2003 and 2002, respectively)	2,759	2,661
Other current assets	561	645
Total current assets	19,803	40,951
Total cultent assets	19,803	40,931
LONG-TERM INVESTMENTS:		
Marketable securities	25,310	3,737
Severance pay fund	758	576
Other long-term assets	61	79
Total long-term investments	26,129	4,392
PROPERTY AND EQUIPMENT, NET	1,874	2,804
TROTERT THE EQUITMENT, THE	1,071	2,001
OTHER ASSETS, NET:		
Technology, net	865	1,177
Other intangibles, net	86	140
Total other assets, net	951	1,317
GOODWILL	4,630	4,554
Total assets	\$53,387	\$54,018

# U.S. Dollars in thousands, except share data

	Decem	ber 31,
	2003	2002
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Trade payables	\$ 515	\$ 760
Deferred revenues	3,348	2,144
Accrued expenses and other liabilities	3,776	3,599
Total current liabilities	7,639	6,503
LONG-TERM LIABILITIES:		
Accrued severance pay	1,189	927
Accrued expenses	55	124
Total long-term liabilities	1,244	1,051
SHAREHOLDERS' EQUITY:		
Share capital:		
Ordinary shares of NIS 0.01 par value:		
Authorized: 30,000,000 shares as of December 31, 2003 and 2002; Issued and outstanding:		
19,033,778 and 18,935,903 shares as of December 31, 2003 and 2002, respectively	55	55
Additional paid-in capital	69,277	69,143
Deferred stock compensation	_	(25)
Accumulated other comprehensive income	111	81
Accumulated deficit	(24,939)	(22,790)
Total shareholders' equity	44,504	46,464
Total liabilities and shareholders' equity	\$ 53,387	\$ 54,018
Tour naointies and shareholders equity	Ψ 55,567	Ψ 54,010

	Year ended December 31,					
	2003			2002		2001
Revenues:						
Software licenses	\$	8,354	\$	9,783	\$	10,930
Services		4,704		4,518		8,986
Maintenance		7,504		7,235		5,630
Total revenues		20,562		21,536		25,546
Cost of revenues:						
Software licenses		534		248		520
Services		2,384		3,115		4,859
Maintenance		1,110		1,247		1,705
Total cost of revenues		4,028		4,610		7,084
Gross profit		16,534		16,926		18,462
Operating expenses:						
Research and development		5,620		6,191		6,446
Sales and marketing		9,386		9,450		14,619
General and administrative		4,714		4,602		5,679
Restructuring and other non-recurring charges		_		501		2,846
Total operating expenses		19,720		20,744		29,590
Operating loss	_	(3,186)		(3,818)	_	(11,128)
Financial income, net						2,337
rinanciai income, net		1,037		909		2,337
Net loss	\$	(2,149)	\$	(2,909)	\$	(8,791)
Basic and diluted net loss per share	\$	(0.11)	\$	(0.16)	\$	(0.48)
Weighted average number of shares used in computing basic and diluted net loss per share	19	0,011,435	18	3,710,105	18	8,465,127

# U.S. Dollars in thousands, except share data

	Ordinary s	shares	Additional Deferred		Accumulated other		Total	Total
	Shares	Amount	paid-in capital	stock compensation	comprehensive income	Accumulated deficit	comprehensive loss	shareholders' equity
Balance as of								
January 1, 2001	18,428,531	\$ 54	\$ 67,843	\$ (161)	\$ —	\$ (11,090)		\$ 56,646
Exercise of stock								
options	109,173	*) —	158	_	_	_		158
Cancellation of deferred stock compensation in respect of forfeited options	_	_	(15)	15	_	_		_
Amortization of			(10)	10				
deferred stock								
compensation		_		75	_	_		75
Issuance of warrant in respect of the acquisition of								
Propelis	_	_	500	_	_	_		500
Comprehensive loss:								
Net loss	_	_	_	_	_	(8,791)	\$ (8,791)	(8,791)
Total comprehensive loss							\$ (8,791)	
D 1 6								
Balance as of December 31,								
2001	18,537,704	54	68,486	(71)	_	(19,881)		48,588
Exercise of stock	20,227,70		55,155	()		(=2,000)		10,200
options	30,826	*) —	43	_	_			43
Cancellation of deferred stock compensation in respect of								
forfeited options			(25)	25	_	_		_
Amortization of deferred stock compensation	_	_	_	21	_	_		21
Issuance of Ordinary shares in respect of the acquisition								
of Anota	367,373	1	639	_	_	_		640

Comprehensive loss:									
Net loss	_	_	_	_	_	(2,909)	\$	(2,909)	(2,909)
Unrealized gains from available for sale marketable						(,,,			
securities					81			81	81
Total comprehensive loss							\$	(2,828)	
Balance as of December 31, 2002	18,935,903	55	69,143	(25)	81	(22,790)			46,464
Exercise of stock			,	(==)		(==,,,,,,,			
options Amortization of	97,875	*) —	134	_	_	<u> </u>			134
deferred stock compensation	_	_	_	25	_	_			25
Comprehensive loss:									
Net loss	_	_	_	_	_	(2,149)	\$	(2,149)	(2,149)
Unrealized loss from available for sale marketable						( ) ,			
securities	_	_	_	_	(11)	_		(11)	(11)
Unrealized gains from derivatives	_	_	_	_	41	_		41	41
Total comprehensive loss							\$	(2,119)	
							_		
Balance as of December 31,									
2003	19,033,778	\$ 55	\$ 69,277	\$ —	\$ 111	\$ (24,939)			\$ 44,504
Accumulated unrealized gains from derivatives:									
Accumulated foreign									
translation adjustments					\$ 41				
Accumulated other									
comprehens income as of December 3									
December 3									

200	3	70
	<del>-</del>	
	\$	111

<sup>\*)</sup> Represents an amount lower than \$ 1.

	Year ended December 31,		
	2003	2002	2001
Cash flows from operating activities:			
Net loss	\$ (2,149)	\$ (2,909)	\$ (8,791
Adjustments required to reconcile net loss to net cash provided by (used in) operating			
activities:			
Depreciation and amortization	1,444	1,619	1,474
Write-off of Precise Technology	_	_	1,188
Amortization of deferred stock compensation	25	21	75
Accrued interest on short-term bank deposits	_	_	49
Accrued interest and amortization of premium on marketable securities	388	356	329
Gain on sales of available for sale marketable securities	_	(6)	(192
Decrease (increase) in accrued interest on other long-term assets	(16)	17	27
Increase (decrease) in accrued severance pay, net	80	(49)	(88)
Decrease (increase) in trade receivables	(98)	1,607	4,439
Decrease (increase) in other current assets	98	(36)	188
Decrease in trade payables	(235)	(29)	(1,596
Increase in deferred revenues	1,204	57	246
Increase (decrease) in accrued expenses and other liabilities	101	(637)	877
Increase (decrease) in long-term accrued expenses	(69)	124	_
Other	(16)	75	1
et cash provided by (used in) operating activities	757	210	(1,774
ash flows from investing activities:		(7.122)	
Investment in short-term bank deposits		(7,133)	
Proceeds from sale of short-term bank deposits	_	7,133	5,260
Investment in held to maturity marketable securities	<del>_</del>	<del></del>	(22,825
Investment in available for sale marketable securities	(83,478)	(95,886)	(35,660
Redemption of held to maturity marketable securities			37,84
Proceeds from sale and redemption of available for sale of marketable securities	77,194	105,214	_
Proceeds from sale of held to maturity marketable securities	_		22,639
Purchase of property and equipment (b)	(318)	(613)	(1,475
Payment in respect of other assets	_		(700
Proceeds from sale of property and equipment	176	213	32
Proceeds from (investment in) other long-term assets	61	(18)	(9)
Cash with respect of Propelis acquisition (c)	_	_	(6,863)
Cash with respect of Anota acquisition, net of cash acquired (d)	_	28	_
Other	_	146	86
let cash provided by (used in) investing activities	(6,365)	9,084	(1,750
Cash flows from financing activities:			
Exercise of stock options	134	43	158
	134	43	
Payment of principal of long-term debt			(12
Net cash provided by financing activities	134	43	146
persona (degreese) in each and each equivalents	(5,474)	9,337	(3,378
ncrease (decrease) in cash and cash equivalents			
Cash and cash equivalents at the beginning of the year	15,319	5,982	9,360
Cash and cash equivalents at the end of the year	\$ 9,845	\$ 15,319	\$ 5,982

		Year ended December 31,		
		2003	2002	2001
Sup	plemental disclosure of cash flows activities:	<u> </u>		
(a)	Non-cash activities:			
(u)	Purchase of property and equipment	\$10	\$ 33	\$ 17
	Additional goodwill in respect of Anota acquisition	76	—	_
		\$86	\$ 33	\$ 17
(b)	Cash in respect of Propelis acquisition			
` ′	(See also Note 1c(1)):			
	Estimated net fair value of the assets acquired and liabilities assumed at the date of acquisition:			
	Working capital, excluding cash and cash equivalents			\$1,355
	Property and equipment			385
	Goodwill			4,283
	Propelis technology			1,340
				7,363
	Less - amounts acquired by issuance of warrant			(500)
				Φ.(.0.(2)
				\$6,863
( )				
(c)	<u>Cash in respect of Anota acquisition</u> (See also Note 1c(2)):			
	Estimated net fair value of the assets acquired and liabilities assumed at the date of acquisition:			
	Working capital deficiency, excluding cash and cash equivalents		\$(181)	
	Property and equipment		141	
	Other intangibles		163	
	Goodwill		271	
	Anota Technology		218	
			612	
	Less - amounts acquired by issuance of shares		(640)	
			\$ (28)	
			φ (20)	

#### **NOTE 1:- GENERAL**

- a. Jacada Ltd. (the "Company") was incorporated under the laws of Israel in December 1990.
- b. Jacada Ltd. and its wholly-owned subsidiaries develop and market web application hosting and business-to-business infrastructure software. The Company and its subsidiaries generate revenues from licensing their software products and from services such as maintenance, support, consulting and training.

The majority of the Company's and its subsidiaries' sales are made in North America and Europe.

#### c. Acquisitions:

1. Acquisition of Propelis Software Inc. ("Propelis")

On August 23, 2001, the Company and its U.K. and U.S. subsidiaries acquired certain assets and assumed certain liabilities related to Propelis, a business unit of Computer Network Technology Corporation ("CNT"), for an aggregate purchase price of approximately \$ 7,463 of which \$ 6,963 in cash (of which \$ 100 were paid in 2002), and a warrant to purchase 350,000 Ordinary shares of the Company at a fair value of \$ 500. (See Note 11d and Note16).

Technology acquired as part of the Propelis acquisition enables organizations to leverage their existing information assets and infrastructure in highly collaborative e-business solutions that integrate critical business processes, information and people.

The operations of Propelis are included in the consolidated statements from the date of acquisition.

The acquisition was accounted for by the purchase method of accounting, in accordance with Statement of Financial Accounting Standards No. 141, "Business Combination" ("SFAS No. 141"), and accordingly, the purchase price has been allocated to the assets acquired and the liabilities assumed based on their estimated fair value at the date of acquisition. The excess of the purchase price over the estimated fair value of the net assets acquired has been recorded as goodwill.

The following table summarizes the estimated fair value of assets acquired and liabilities assumed at the date of acquisition:

	August 23, 2001
Working capital	\$ 1,455
Property and equipment	385
Goodwill (1)	4,283
Propelis Technology (1)	1,340
Net assets acquired	\$ 7,463

<sup>(1)</sup> See also Notes 6 and 7.

#### **NOTE 1:- GENERAL (Cont.)**

The following represents the unaudited pro-forma results of operations for the year ended December 31, 2001, assuming that the Propelis acquisition had been consummated as of January 1, 2001:

	Year ended December 31, 2001
Revenues	\$ 32,507
Net loss	\$ (16,686)
Basic and diluted net loss per share	\$ (0.89)

The pro-forma financial information is not necessarily indicative of the consolidated results that would have been attained had the acquisition taken place at the beginning of 2001, nor is it necessarily indicative of future results.

## 2. Acquisition of Anota Ltd. ("Anota"):

On July 31, 2002, the Company acquired certain assets and assumed certain liabilities related to Anota for an aggregate purchase price of approximately \$ 763 including acquisition costs of \$ 123 in cash, issuance of 367,373 Ordinary shares at a fair value of \$ 640. The value of the ordinary shares issued was determined based on the average market price of the Company's ordinary shares close to the acquisition date. In addition, Anota has the right to receive additional cash, based on a percentage of certain post-acquisition revenues, until December 31, 2003. When the contingency is resolved and additional consideration is distributable, the Company will record the consideration paid or to be paid as an additional goodwill.

As of December 31, 2003, related revenues were generated and as a result an additional goodwill in the amount of \$ 76 has been recorded. In accordance with the provisions of the acquisition agreement, the right to receive additional cash expired on December 31, 2003.

Technology acquired as part of the Anota acquisition enables organizations to make their business critical applications available over the Web in a matter of minutes without installing any software on the host system or client machine. Following Anota's acquisition the Company enhanced the functionality of its existing products.

The operations of Anota are included in the consolidated statements from the date of acquisition.

#### **NOTE 1:- GENERAL (Cont.)**

The acquisition was accounted for by the purchase method of accounting, in accordance with SFAS No. 141, and accordingly, the purchase price has been allocated to the assets acquired and the liabilities assumed based on their estimated fair value at the date of acquisition. The excess of the purchase price over the estimated fair value of the net assets acquired has been recorded as goodwill.

The following table summarizes the estimated fair value of assets acquired and liabilities assumed at the date of acquisition:

	July 31, 2002
Current assets	\$ 162
Property and equipment	141
Anota Technology	218
Other Intangibles	163
Goodwill	271
Current liabilities	(192)
Net assets acquired	\$ 763
<u>-</u>	

The following represents the unaudited pro-forma results of operations for the years ended December 31, 2002 and 2001 assuming that the Anota acquisition had been consummated as of January 1, 2002 and 2001, respectively:

	Year ended December 31,		
	2002	2001	
Revenues	\$21,546	\$ 25,675	
Net loss	\$ (3,587)	\$(11,163)	
Basic and diluted net loss per share	\$ (0.19)	\$ (0.59)	

The pro-forma financial information is not necessarily indicative of the consolidated results that would have been attained had the acquisition taken place at the beginning of 2002 or 2001, nor is it necessarily indicative of future results.

# d. Restructuring charges:

1. In October 2001, due to a slowdown in the software industry, the Company and its subsidiaries made changes in their business strategies, operations and structure in an attempt to improve future operating results, by adopting a restructuring plan.

The plan consisted of the involuntary termination of 56 employees (14 research and development employees, 16 professional services and support employees, 22 sales and marketing employees and 4 administrative employees), the subletting of a portion of the existing office space of the Company and its subsidiaries and decreasing compensation and benefits to the Company's employees.

#### **NOTE 1:- GENERAL (Cont.)**

2. In July 2002, the Company and its subsidiaries adopted another restructuring plan in an attempt to improve future operating results. The plan consisted of the involuntary termination of 39 employees (14 research and development employees, 5 professional service and support employees, 11 sales and marketing employees and 9 administrative employees) and the subletting of a portion of the existing office space of the Company.

In connection with the 2002 and 2001 restructuring plans, EITF 94-3 "Liability Recognition for Certain Employee Termination Benefits and Other Cost to Exit an Activity (including certain cost in restructuring)" and Staff Accounting Bulletin No. 100 "Restructuring and Impairment Charges" ("SAB No. 100") were applied and accordingly, the Company and its subsidiaries incurred expenses of \$ 501 and \$ 1,391, respectively, of which, as of December 31, 2003 and 2002, \$ 55 and \$ 254 remain accrued.

The major components of restructuring charges are as follows:

	Year e	Year ended December 31,		
	2003	2002	2001	
Employee termination benefits	\$ <i>—</i>	\$395	\$ 916	
Facilities closures	_	106	411	
Other	_	_	614	
	\$ <b>—</b>	\$501	\$1,391	

#### **NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES**

The consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States ("US GAAP").

a. Use of estimates:

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

b. Financial statements in U.S. Dollars:

A majority of the revenues of the Company and its subsidiaries is generated in United States dollars ("dollars"). The Company and its subsidiaries' management believes that the dollar is the primary currency of the economic environment in which the Company and its subsidiaries operate. Thus, the functional and reporting currency of the Company and its subsidiaries is the dollar.

#### NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

Accordingly, monetary accounts maintained in currencies other than the dollar are remeasured into U.S. dollars in accordance with Statement of Financial Accounting Standard No. 52, "Foreign Currency Translation" ("SFAS No. 52"). All transaction gains and losses of the remeasurement of monetary balance sheet items are reflected in the statement of operations as financial income or expenses, as appropriate.

## c. Principles of consolidation:

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. Intercompany transactions and balances have been eliminated upon consolidation.

#### d. Cash equivalents:

Cash equivalents are short-term, highly liquid investments that are readily convertible to cash with maturities of three months or less at the date acquired.

#### e. Marketable securities:

Management determines the classification of investments in debt securities with fixed maturities at the time of purchase and reevaluates such designations as of each balance sheet date. At December 31, 2003 and 2002, all marketable securities covered by Statement of Financial Accounting Standard No. 115 "Accounting for Certain Investments in Debt and Equity Securities", ("SFAS No. 115") were designated as available-for-sale. Accordingly, these securities are stated at fair value, with unrealized gains and losses reported in accumulated other comprehensive income, a separate component of shareholders' equity. In 2001, debt securities were classified as held-to-maturity, as the Company had the intent and ability to hold the securities to maturity, and were stated at amortized cost. The amortized cost of held-to-maturity and available-for-sale securities is adjusted for amortization of premiums to maturity. Such amortization and decline in value judged to be other than temporary and interest are included in financial income, net.

Realized gains and losses on sales of investments, as determined on a specific identification basis, are included in the consolidated statement of operations.

## f. Property and equipment:

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation is calculated by the straight-line method over the estimated useful lives of the assets at the following annual rates:

	<b>%</b>
Computers and peripheral equipment	20 - 33
Office furniture and equipment	6 - 15
Motor vehicles	15
Leasehold improvements	Over the term of the lease

#### **NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)**

### g. Other assets:

Intangible assets acquired in a business combination for which date is on or after July 1, 2001, should be amortized over their useful life using a method of amortization that reflects the pattern in which the economic benefits of the intangible assets are consumed or otherwise used up, in accordance with Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets" ("SFAS No. 142").

The Propelis Technology (see Note 1c(1)) is being amortized using the straight-line method over the estimated economic life of the technology rights, which is five years (for impairment see also Note 2h).

The Anota Technology (see Note 1c(2)) is being amortized using the straight-line method over the estimated economic life of the technology rights, which is five years and the other intangibles associated with the acquisition of Anota, are amortized over 3 years (for impairment see also Note 2h).

# h. Impairment of long-lived assets:

The Company and its subsidiaries' long-lived assets and certain identifiable intangibles are reviewed for impairment in accordance with Statement of Financial Accounting Standard No.144 "Accounting for the Impairment or Disposal of Long-Lived Assets" ("SFAS No.144") whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the future undiscounted cash flows expected to be generated by the assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. During 2003, no impairment losses have been identified.

#### i. Goodwill:

Goodwill represents excess of the costs over the net assets of businesses acquired. Under SFAS No.142, goodwill acquired in a business combination on or after July 1, 2001, is deemed to have indefinite life and shall not be amortized.

SFAS No.142 requires goodwill to be tested for impairment on adoption and at least annually thereafter or between annual tests in certain circumstances, and written down when impaired, rather than being amortized as previous accounting standards required. Goodwill is tested for impairment by comparing the fair value of the reporting unit with its carrying value. Fair value is determined using market capitalization. The Company performs the impairment tests during the third fiscal quarter. As of December 31, 2003, no impairment losses have been identified.

#### NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

## j. Research and development costs:

Research and development costs are charged to the Statement of Operations as incurred. Statement of Financial Accounting Standards No. 86 "Accounting for the Costs of Computer Software to be Sold, Leased or Otherwise Marketed" ("SFAS No. 86"), requires capitalization of certain software development costs subsequent to the establishment of technological feasibility.

Based on the Company and its subsidiaries product development process, technological feasibility is established upon completion of a working model. Cost incurred by the Company between the completion of the working model and the point at which the products are ready for general release have been insignificant. Therefore, research and development costs have been expensed.

#### k. Government grants:

Royalty-bearing grants from the Government of Israel for funding approved research and development projects were recognized at the time the Company was entitled to such grants, on the basis of the costs incurred and included as a deduction of research and development costs. Royalties accrued or paid were recorded as part of the cost of goods sold.

#### 1. Income taxes:

The Company and its subsidiaries account for income taxes in accordance with Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes" ("SFAS No. 109"). This statement prescribes the use of the liability method, whereby deferred tax asset and liability account balances are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company and its subsidiaries provide a valuation allowance, if necessary, to reduce deferred tax assets to their estimated realizable value.

## m. Revenue recognition:

The Company and its subsidiaries generate revenues mainly from license fees for the right to use their software products, maintenance, support and rendering of services including consulting and training. The Company and its subsidiaries sell their products primarily through their direct sales force to customers and indirectly through resellers. Both the customers and the resellers are considered end users.

#### NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)

The Company and its subsidiaries account for software sales in accordance with Statement of Position No. 97-2, "Software Revenue Recognition", as amended ("SOP No. 97-2"). SOP No. 97-2 generally requires revenue earned on software arrangements involving multiple elements to be allocated to each element based on the relative fair value of the elements. The Company and its subsidiaries have also adopted Statement of Position No. 98-9, "Modification of Statement of Position 97-2, Software Revenue Recognition with Respect to Certain Transactions" ("SOP No. 98-9"). SOP No. 98-9 requires that revenue be recognized under the "residual method" when Vendor Specific Objective Evidence ("VSOE") of fair value exists for all undelivered elements and no VSOE exists for all of the delivered elements. The Company's VSOE of fair value used to allocate the sales price to maintenance is based on a consistent renewal percentage out of the stipulated license fee. The VSOE of other services is determined based on the price charged for the undelivered element when sold saparately. Under the residual method any discount in the arrangement is allocated to the delivered elements. The Company and its subsidiaries have also adopted Staff Accounting Bulletin ("SAB") No. 104, "Revenue Recognition," ("SAB No. 104").

Revenue from license fees is recognized when persuasive evidence of an agreement exists, delivery of the product has occurred, no significant obligations with regard to implementation remain, the fee is fixed or determinable and collectibility is probable. The Company and its subsidiaries do not grant a right of return to their customers.

Maintenance and support revenue included in multiple element arrangements is deferred and recognized on a straight-line basis over the term of the maintenance and support agreement.

Arrangements that include consulting and training services are evaluated to determine whether those services are essential to the functionality of other elements of the arrangement. To date, the Company and its subsidiaries had determined that the consulting and training services are not considered essential to the functionality of other elements of the arrangement, therefore, these revenues are recognized as the services are performed.

Deferred revenue includes unearned amounts received under maintenance and support contracts, and amounts received from customers but not yet recognized as revenues.

#### **NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)**

n. Accounting for stock-based compensation:

The Company and its subsidiaries have elected to follow Accounting Principles Board Opinion No. 25 "Accounting for Stock Issued to Employees" ("APB No. 25") and FASB Interpretation No. 44 "Accounting for Certain Transactions Involving Stock Compensation" ("FIN No. 44") in accounting for its employee stock option plans. Under APB No. 25, when the exercise price of the Company's stock options is less than the market price of the underlying shares on the date of grant, compensation expense is recognized.

Pro forma information regarding the Company's net loss and net loss per share is required by Statement of Financial Accounting Standards No. 123, "Accounting for Stock-Based Compensation" ("SFAS No. 123") and has been determined as if the Company had accounted for its employee stock options under the fair value method prescribed by SFAS No. 123.

The fair value for options granted in 2003, 2002 and 2001 is amortized over their vesting period and estimated at the date of grant using a Black-Scholes options pricing model with the following weighted average assumptions:

	2003	2002	2001
Dividend yield	0%	0%	0%
Expected volatility	66%	60%	114%
Risk-free interest	3%	2.5%	4%
Expected life	2.5 years	2.5 years	2.5 years

Pro forma information under SFAS No. 123:

	Year ended December 31,			
	2003	2002	2001	
Net loss as reported	\$(2,149)	\$(2,909)	\$ (8,791)	
Add: Stock-based compensation expenses included in reported net loss - intrinsic value	\$ 25	\$ 21	\$ 75	
Deduct: Stock-based compensation expense determined under fair value method for all awards	\$ 2,636	\$ 3,270	\$ 2,613	
Pro forma net loss	\$(4,760)	\$(6,158)	\$(11,329)	
Basic and diluted net loss per share as reported	\$ (0.11)	\$ (0.16)	\$ (0.48)	
Pro forma basic and diluted net loss per share	\$ (0.24)	\$ (0.33)	\$ (0.61)	

The Company and its subsidiaries apply SFAS No. 123 and Emerging Issues Task Force No. 96-18, "Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Conjunction with Selling, Goods or Services" ("EITF No. 96-18") and its amendments with respect to options issued to non-employees. SFAS No. 123 requires use of an option valuation model to measure the fair value of the options at the date of grant.

### **NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)**

### o. Advertising expenses:

Advertising expenses are charged to the statement of operations, as incurred. Advertising expenses for the years ended December 31, 2003, 2002 and 2001 were \$ 530, \$ 539 and \$ 633, respectively.

## p. Severance pay:

The Company's liability for severance pay for its Israeli employees is calculated pursuant to Israeli severance pay law based on the most recent salary of the employees multiplied by the number of years of employment, as of the balance sheet date. Israeli employees are entitled to severance equal to one month's salary for each year of employment or a portion thereof. The Company's liability for all of its Israeli employees, is fully provided by monthly deposits with insurance policies and by an accrual. The value of these policies is recorded as an asset in the Company's balance sheet.

The deposited funds include profits accumulated up to the balance sheet date. The deposited funds may be withdrawn only upon the fulfillment of the obligation pursuant to Israeli severance pay law or labor agreements. The value of the deposited funds is based on the cash surrendered value of these policies and includes immaterial profits.

Severance pay expenses for the years ended December 31, 2003, 2002 and 2001, were \$ 533, \$ 305 and \$ 566, respectively.

#### q. Fair value of financial instruments:

The following methods and assumptions were used by the Company and its subsidiaries in estimating their fair value disclosures for financial instruments:

Cash and cash equivalents, trade receivables and trade payables approximate their fair value due to the short-term maturities of such instruments.

The fair value of marketable securities is based on the quoted market prices and do not differ significantly from the carrying amount (see Note 3).

### **NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)**

#### r. Derivative instruments:

Financial Accounting Standards Board Statement No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS No. 133"), requires companies to recognize all of its derivative instruments as either assets or liabilities in the statement of financial position at fair value. The accounting for changes in the fair value (i.e., gains or losses) of a derivative instrument depends on whether it has been designated and qualifies as part of a hedging relationship and further, on the type of hedging relationship. For those derivative instruments that are designated and qualify as hedging instruments, the Company must designate the hedging instrument, based upon the exposure being hedged, as a fair value hedge, cash flow hedge or a hedge of a net investment in a foreign operation.

For derivative instruments that are designated and qualify as a fair value hedge (i.e., hedging the exposure to changes in the fair value of an asset or a liability or an identified portion thereof that is attributable to a particular risk), the gain or loss on the derivative instrument as well as the offsetting loss or gain on the hedged item attributable to the hedged risk are recognized in the same line item associated with the hedged item in current earnings during the period of the change in fair values. For derivative instruments that are designated and qualify as a cash flow hedge (i.e., hedging the exposure to variability in expected future cash flows that is attributable to a particular risk), the effective portion of the gain or loss on the derivative instrument is reported as a component of other comprehensive income and reclassified into earnings in the same line item associated with the forecasted transaction in the same period or periods during which the hedged transaction affects earnings.

#### s. Net loss per share:

Basic net loss per share is computed based on the weighted average number of ordinary shares outstanding during each year. Diluted net earnings per share is computed based on the weighted average number of ordinary shares outstanding during each year, plus dilutive potential ordinary shares considered outstanding during the year, in accordance with Statement of Financial Accounting Standard No. 128, "Earnings Per Share" ("SFAS No. 128").

All outstanding stock options and warrants have been excluded from the calculation of the diluted net loss per ordinary share because the securities are anti-dilutive for all periods presented. The total weighted average number of shares related to the outstanding stock, options and warrants excluded from the calculations of diluted net loss per share were 4,717,397, 4,296,953 and 4,115,720 for the years ended December 31, 2003, 2002 and 2001, respectively.

### **NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)**

#### t. Concentrations of credit risk:

Financial instruments that potentially subject the Company and its subsidiaries to concentrations of credit risk consist principally of cash and cash equivalents, marketable securities, trade receivables and other long-term assets.

Cash and cash equivalents are mainly invested in U.S. dollars with major banks in the United States, England, Germany and Israel. Such cash and cash equivalents in the United States may be in excess of insured limits and are not insured in other jurisdictions. However, management believes that the financial institutions that hold the Company's and its subsidiaries investments are financially sound, and accordingly, minimal credit risk exists with respect to these investments.

The Company and its subsidiaries' marketable securities include investments in debentures of the U.S government and U.S. corporations securities. Management believes that those corporations are financially sound, the portfolio is well diversified, and accordingly, minimal credit risk exists with respect to these marketable securities.

The Company and its subsidiaries' trade receivables are mainly derived from sales to customers in North America and Europe. The Company and its subsidiaries perform ongoing credit evaluations of their customers. An allowance for doubtful accounts is determined with respect to those amounts that the Company and its subsidiaries have determined to be doubtful of collection. Adjustments to allowance account for the years ended December 31, 2003, 2002 and 2001, were \$ (63), \$ (165) and \$ 903, respectively. Write-offs of uncollectible accounts for the years ended December 31, 2003, 2002 and 2001 were \$ 101, \$ 459 and \$ 85, respectively.

# u. Impact of recently issued accounting standards:

In April 2003, the FASB issued SFAS No. 149 ("SFAS No. 149"), "Amendment of Statement 133 on Derivative Instruments and Hedging Activities". SFAS No. 149 amends and clarifies (1) the accounting guidance on derivative instruments (including certain derivative instruments embedded in other contracts) and (2) hedging activities that fall within the scope of FASB Statement No. 133 ("SFAS No. 133"), "Accounting for Derivative Instruments and Hedging Activities." SFAS No. 149 amends SFAS No. 133 to reflect decisions made (1) as part of the Derivatives Implementation Group ("DIG") process that effectively required amendments to SFAS No. 133, (2) in connection with other projects dealing with financial instruments, and (3) regarding implementation issues related to the application of the definition of a derivative. SFAS No. 149 is effective (1) for contracts entered into or modified after June 30, 2003, with certain exceptions, and (2) for hedging relationships designated after June 30, 2003. The guidance is to be applied prospectively.

### **NOTE 2:- SIGNIFICANT ACCOUNTING POLICIES (Cont.)**

Generally, SFAS No. 149 improves financial reporting by (1) requiring that contracts with comparable characteristics be accounted for similarly and (2) clarifying when a derivative contains a financing component that warrants special reporting in the statement of cash flows. SFAS 149 is not expected to have a material impact on the Company's financial statements.

#### **NOTE 3:- MARKETABLE SECURITIES**

The following is a summary of available-for-sale marketable securities:

		December 31,						
		2003				2	002	
	Amortized cost	unre	ross ealized ain	Estimated fair value	Amortized cost	unre	ross ealized ain	Estimated fair value
Available-for-sale:								
U.S. corporate debentures	\$ 20,681	\$	44	\$20,725	\$ 5,498	\$	19	\$ 5,517
U.S. Government debentures	11,197		26	11,223	20,484		62	20,546
						_		
	\$ 31,878	\$	70	\$31,948	\$ 25,982	\$	81	\$26,063

During 2001, the Company sold held-to-maturity securities at an amortized cost of \$22,447, and recorded realized gain in the amount of \$192.

Long-term marketable securities mature within three years.

# **NOTE 4:- OTHER CURRENT ASSETS**

	Decem	ber 31,
	2003	2002
Recoverable value added tax	\$ 39	\$ 61
Prepaid expenses	436	443
Rent deposits	20	65
Others	66	76
	\$561	\$645

# NOTE 5:- PROPERTY AND EQUIPMENT, NET

Composition of property and equipment is as follows:

	Decen	nber 31,
	2003	2002
Cost:		
Computers and peripheral equipment	\$4,888	\$4,617
Office furniture and equipment	1,009	1,027
Motor vehicles	800	1,124
Leasehold improvements	645	641
	<del></del>	
	7,342	7,409
Accumulated depreciation	5,468	4,605
-		
Depreciated cost	\$1,874	\$2,804

Depreciation expenses for the years ended December 31, 2003, 2002 and 2001 were \$ 1,078, \$ 1,310 and \$ 1,193, respectively.

# **NOTE 6:- OTHER ASSETS, NET**

		Decem	iber 31,
		2003	2002
a.	Original amounts:		
	Propelis Technology and Anota Technology	\$1,558	\$1,558
	Other intangibles	163	163
		1,721	1,721
	Accumulated amortization:		
	Propelis Technology and Anota Technology	693	381
	Other intangibles	77	23
		770	404
	Amortized cost	\$ 951	\$1,317

b. Amortization expense for the years ended December 31, 2003, 2002 and 2001 amounted to \$ 366, \$ 309 and \$ 281, respectively. As of December 31, 2003, the weighted average amortization period is 2.6 years.

Estimated amortization expenses for the years ended:
 Year ended December 31,

·	
2004	\$366
2004 2005	\$366 342 225
2006	225
2007	18
	<del>-</del>
	\$951

#### **NOTE 6:- OTHER ASSETS, NET (Cont.)**

d. During 2000, the Company purchased and capitalized software technology in accordance with SFAS No. 86, in the amount of \$1,500 ("Precise Technology").

The Precise Technology was amortized using the straight-line method over the estimated economic life of the technology, which was four years.

Due to the slowdown in the software industry and to the purchase of Propelis Technology, the Company and its subsidiaries decided in 2001 to cease the sales and marketing efforts of the Precise Technology's product. Therefore, the unamortized capitalized cost of Precise Technology exceeded its net realizable value and the balance was written off. As of December 31, 2001, Precise Technology's unamortized balance was charged as expenses to the statement of operations (see also Note 13).

## **NOTE 7:- GOODWILL**

The changes in the carrying amount of goodwill for the year ended December 31, 2003, are as follows:

Balance as of January 1, 2003	\$4,554
Addition (see Note 1c(2))	76
Balance as of December 31, 2003	\$4,630

## NOTE 8:- ACCRUED EXPENSES AND OTHER LIABILITIES

	December 31,	
	2003	2002
Employee and payroll accruals	\$1,465	\$1,648
Accrued expenses	1,348	904
Restructuring accruals (1)	_	130
Precise Technology	300	300
Accrued arbitration charges (2)	663	617
	\$3,776	\$3,599

<sup>(1)</sup> See also Note 1d.

<sup>(2)</sup> See also Note 10d.

#### **NOTE 9:- DERIVATIVE INSTRUMENTS**

To protect against changes in the value of forecasted foreign currency transactions and balances, the Company has instituted a foreign-currency hedging program. The Company hedges portions of its forecasted cash flows and balances denominated in foreign currencies with forward contracts.

During 2003, the Company entered into forward contracts to hedge a portion of anticipated New Israeli Shekel ("NIS") payroll payments and other expenses. These forward contracts are designated as cash flows hedges, as defined by SFAS No. 133, as amended, and are all highly effective as hedges of these expenses when the salary and other expenses are recorded. The effective portion of the derivative instruments is included in operating expenses in the statements of operations.

At December 31, 2003, the Company expects to reclassify \$41 of net gains on derivative instruments from accumulated other comprehensive income to earnings during the next three months.

## NOTE 10:- COMMITMENTS AND CONTINGENT LIABILITIES

#### a. Royalties:

The Company participated in programs sponsored by the Israeli Government for the support of research and development activities. Through December 31, 2003, the Company had obtained grants from the Office of the Chief Scientist of the Israeli Ministry of Industry and Trade ("the OCS") in the aggregate amount of \$2,178 for certain of the Company's research and development projects. The Company is obligated to pay royalties to the OCS, amounting to 3%-5% of the sales of the products and other related revenues generated from such projects, up to 100%-150% of the grants received, linked to the U.S. dollar and for grants received after January 1, 1999 also bearing interest at the rate of LIBOR. The obligation to pay these royalties is contingent on actual sales of the products and in the absence of such sales no payment is required.

Through December 31, 2003, the Company has paid or accrued royalties to the OCS in the amount of \$1,839. As of December 31, 2003, the aggregate contingent liability to the OCS amounted to \$441.

### b. Lease commitments:

The Company and its subsidiaries facilities are leased under various operating lease agreements, which expire on various dates, the latest of which is in 2007. Future minimum lease payments under non-cancelable operating leases are as follows:

Year ended December 31,	
2004	\$ 612
2004 2005	276
2006 2007	276
2007	69
	\$1,233

#### NOTE 10:- COMMITMENTS AND CONTINGENT LIABILITIES (Cont.)

Total rent expenses for the years ended December 31, 2003, 2002 and 2001 were approximately \$ 798, \$ 1,130 and \$ 1,164, respectively.

#### c. Guarantees:

The Company has obtained guarantees, in favor of a lessor, totaling \$ 116 as of December 31, 2003.

#### d. Litigation:

In August 1999, a former distributor filed an arbitration demand against a subsidiary of the Company. This demand alleged that the subsidiary breached its agreement with the distributor by directly selling products to a customer, while the distributor had an exclusive right to sell products to said customer, and that the distributor was entitled to damages of \$ 3,500. A decision by arbitration was entered during 2001. The arbitrators awarded the distributor a net amount of \$ 392 and 50% of amounts collected from this customer in the future and legal expenses related to the arbitration.

In 1999, the Company made a provision for a potential liability of \$ 125. As a result of the arbitration the Company recorded in 2001 a non-recurring charge of \$ 267 (See Note 13). During 2003 and 2002, the Company recorded recurring expenses of \$ 46 and \$ 225, which include amounts collected from the customer, and related legal expenses.

On April 24, 2001, the subsidiary of the Company filed a separate action to vacate the arbitration award. Subsequently, the distributor filed an application for enforcement of the arbitration award. Pursuant to an October 21, 2003 Order, the arbitration award was confirmed by the United States Court for the Western District of Michigan, and the subsidiary's motion to vacate was denied. The subsidiary has filed a timely appeal with the United States Court of Appeals for the Sixth Judicial Circuit. The Company has stated the intention of vigorously contesting the arbitration award. The parties have filed briefs in connection with the appeal, and oral arguments are pending.

### **NOTE 11:- SHAREHOLDERS' EQUITY**

#### a. General:

Since October 1999, the Company's shares have been traded on the NASDAQ, National Market. Since June 2001, the Company's shares have been traded on the Tel-Aviv Stock Exchange as well.

Ordinary shares confer upon their holders the right to receive notice to participate and vote in general meetings of the Company, and the right to receive dividends if declared.

## **NOTE 11:- SHAREHOLDERS' EQUITY**

### b. Stock Option Plans:

As of December 31, 2003, the Company has four Incentive Share Option Plans (the 1994, 1996, 1999 and 2003 plans), which provide for the grant of options to officers, management, other key employees, directors, consultants and others of up to 7,760,450 of the Company's ordinary shares. The options granted generally become fully exercisable after two to four years and expire ten years from the grant date. Any options that are forfeited or canceled before expiration, become available for future grants.

Pursuant to the option plans, the exercise price of options shall be determined by the Company's compensation committee but may not be less than the par value of the ordinary shares.

As of December 31, 2003, an aggregate of 2,292,307 ordinary shares of the Company are still available for future grant under the Incentive Share Option Plans.

A summary of the Company's share option activity (except options to consultants) and related information is as follows:

Year ended December 31,

	2003		2002		2001	
	Number of options	Weighted average exercise price	Number of options	Weighted average exercise price	Number of options	Weighted average exercise price
		\$		\$		\$
Outstanding - at the						
beginning of the year	3,522,382	3.74	3,596,270	4.52	2,957,787	5.02
Granted	1,326,700	1.98	1,112,352	2.60	1,320,750	4.32
Exercised	97,875	1.40	30,826	1.40	109,173	1.45
Forfeited and cancelled	424,701	4.50	1,155,414	5.11	573,094	7.23
Outstanding - at the end of						
the year	4,326,506	3.18	3,522,382	3.74	3,596,270	4.52
•						
Exercisable options at the						
end of the year	2,381,142	3.86	2,042,641	3.83	1,832,792	3.86

The exercise price of the options is equal to the market value of the ordinary shares on the date the option is granted. Weighted average fair value of options granted during 2003, 2002 and 2001, using the Black-Scholes option pricing model, is \$ 0.60, \$ 0.95 and \$ 2.81, respectively.

\*\*\* \* 1 4 1

## U.S. Dollars in thousands, except share and per share data

## NOTE 11:- SHAREHOLDERS' EQUITY (Cont.)

The options outstanding as of December 31, 2003 have been classified by exercise price, as follows:

Exercise price	Options outstanding as of December 31, 2003	Weighted average remaining contractual life (years)	Weighted average exercise price	Options exercisable as of December 31, 2003	Weighted average exercise price of options exercisable
\$			<u> </u>		\$
0.99 - 1.18	553,382	3.48	1.04	504,882	1.02
1.20 - 1.40	696,000	9.12	1.26	3,375	1.40
1.60 - 2.22	346,077	4.74	2.10	308,577	2.09
2.50 - 3.14	1,437,136	8.62	2.78	415,640	2.79
4.04 - 5.06	958,936	6.94	4.58	825,062	4.58
9.00 -11.00	334,975	6.03	9.50	323,606	9.52
	4,326,506	7.14	3.18	2,381,142	3.86

The Company has recorded deferred stock compensation in 1999 for options issued with an exercise price below the fair market value of the ordinary shares, the deferred stock compensation has been amortized and recorded as compensation expense ratably over the vesting period of the options.

### c. Options issued to consultants:

The Company's outstanding options to consultants as of December 31, 2003, are as follows:

Issuance date	Options for Ordinary shares	Exercise price per share	Options exercisable	Exercisable through
		\$		
1999	1,500	11.00	1,500	*)
2000	4,750	4.38	4,750	*)
2001	5,000	2.89	5,000	*)
2002	11,000	2.61	8,500	*)
Total	22,250		19,750	

<sup>\*) 10</sup> years from the date of grant.

The Company had accounted for its options to consultants under the fair value method of SFAS No. 123 and EITF 96-18. The fair value for these options was estimated using Black-Scholes option-pricing model with the following weighted-average assumptions for 2003, 2002 and 2001: risk-free interest rates of 3% for 2003, 2.5% for 2002 and 4% for 2001, dividend yields of 0% for each year, volatility factors of the expected market price of the Company's Ordinary shares of 0.6, 0.6 and 1.14, respectively and a weighted-average contractual life of approximately 10 years for each year. Due to immateriality, no compensation expenses have been recorded in the financial statements.

#### NOTE 11:- SHAREHOLDERS' EQUITY (Cont.)

#### d. Warrant:

During 2001, in connection with the acquisition of Propelis, the Company issued CNT a warrant to purchase 350,000 Ordinary shares of the Company at an exercise price of \$ 3.26. This warrant is exercisable until August 2004. As of December 31, 2003, the warrant was not exercised. (See also Note 1c(1) and Note 16).

The fair value of the warrant was included in the purchase price. The fair value of the warrant amounting to \$500 was estimated using a Black-Scholes Option-Pricing Model with the following weighted-average assumptions for 2001: risk-free interest rate of 4%, dividend yields of 0%, volatility factors of the expected market price of the Company's Ordinary shares of 0.808 and a weighted-average expected life of the warrant of approximately 2 years.

#### e. Dividends:

In the event that cash dividends are declared in the future, such dividends will be paid in NIS. The Company does not intend to pay cash dividends in the foreseeable future.

#### **NOTE 12:- TAXES ON INCOME**

a. Tax benefits under the Law for the Encouragement of Capital Investments, 1959 (the "law"):

The production facilities of Jacada Ltd. have been granted the status of "Approved Enterprise" under the law, for four separate investment programs, which were approved in July 1994, July 1995, December 1996 and April 2002. The investment programs expiration dates are July 2007, July 2008 and December 2010, respectively. As of December 31, 2003, the investments under April 2002 investment program remain in progress and were not completed.

According to the provisions of the law, the Company has elected the "alternative benefits" - waiver of grants in return for tax exemption and, accordingly, the Company's income is tax-exempt for a period of two years commencing with the year it first earns taxable income relating to each expansion program, and subject to corporate taxes at the reduced rate of 10% to 25%, for an additional period of five years, (based on the percentage of foreign ownership in each taxable year).

The period of tax benefits, detailed above, is limited to the earlier of 12 years from the commencement of production, or 14 years from the approval date.

The entitlement to the above benefits is conditional upon the Company's fulfilling the conditions stipulated by the above law, regulations published thereunder and the instruments of approval for the specific investments in "approved enterprises". In the event of failure to comply with these conditions, the benefits may be canceled and the Company may be required to refund the amount of the benefits, in whole or in part, including interest.

As of December 31, 2003, management believes that the Company is meeting all of the aforementioned conditions.

### **NOTE 12:- TAXES ON INCOME (Cont.)**

As the Company currently has no taxable income, these benefits have not yet commenced for all programs since inception.

The tax-exempt income attributable to the "Approved Enterprises" can be distributed to shareholders, without subjecting the Company to taxes, only upon the complete liquidation of the Company. If this retained tax-exempt income is distributed in a manner other than in the complete liquidation of the Company, it would be taxed at the corporate tax rate applicable to such profits as if the Company had not elected the alternative tax benefits (currently between 10% to 25% for an "Approved Enterprise"). The Company's board of directors has determined that such tax exempt income will not be distributed as dividends.

The Company expects that during the period in which these tax losses are utilized, its income would be substantially tax exempt. Accordingly, there will be no tax benefit available from such losses and no deferred income taxes have been provided in these financial statements.

Income not eligible for the "Approved Enterprise" benefits mentioned above, is taxed at the regular corporate rate of 36%.

b. Measurement of taxable income under the Income Tax (Inflationary Adjustments) Law, 1985:

Results for tax purposes of the Company are measured and reflected in real terms in accordance with the changes in the Israeli Customer Price Index. As explained in Note 2b, the financial statements are presented in U.S. dollars. The difference between the change in the Israeli Customer Price Index and in the NIS/U.S. dollar exchange rate causes a difference between taxable income or loss and the income or loss before taxes reflected in the financial statements. In accordance with paragraph 9(f) of SFAS No. 109, the Company has not provided deferred income taxes on this difference between the reporting currency and the tax bases of assets and liabilities.

Commencing with taxable year 2003, the Company has elected to measure its results for Israeli tax purposes on the basis of amounts denominated in U.S. dollars. This election obligates the Company for a period of three years.

c. Tax benefits under the Law for the Encouragement of Industry (Taxation), 1969:

The Company is an "industrial company", as defined by this law and, as such, is entitled to certain tax benefits, mainly accelerated depreciation of machinery and equipment, as prescribed by regulations published under the Inflationary Adjustments Law, the right to claim public issuance expenses and amortization of intangible property rights as a deduction for tax purposes.

d. Net operating losses carryforwards:

As of December 31, 2003, Jacada Ltd. had approximately \$4,275 of Israeli net operating loss carryforwards. The Israeli loss carryforwards have no expiration date.

### **NOTE 12:- TAXES ON INCOME (Cont.)**

As of December 31, 2003, the U.K. subsidiary had accumulated losses for income tax purposes in the amount of approximately \$4,722. These net operating losses may be carried forward and offset against taxable income in the future for an indefinite period.

As of December 31, 2003, the U.S. subsidiary had U.S. federal net operating loss carryforwards for income tax purposes in the amount of approximately \$ 2,867. Net operating loss carryforwards arising in taxable years beginning before August 6, 1997 can be carried forward and offset against taxable income for 15 years and expire from 2010 to 2012. Net operating loss carryforwards arising in taxable years beginning after August 5, 1997 can be carried forward and offset against taxable income for 20 years and expire from 2017 to 2021. Utilization of U.S. net operating losses may be subject to substantial annual limitation due to the "change in ownership" provisions of the Internal Revenue Code of 1986 and similar state provisions. The annual limitation may result in the expiration of net operating losses before utilization.

As of December 31, 2003, Jacada Deutschland GmbH ("German subsidiary") had accumulated losses for income tax purposes in the amount of approximately \$ 1,004. The net operating loss carryforwards have no expiration date.

#### e. Deferred income taxes:

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax liabilities and assets are as follows:

	Decem	December 31,	
	2003	2002	
Deferred tax assets:			
U.S. operating loss carryforward	\$ 1,003	\$ 1,457	
U.K. operating loss carryforward	944	988	
German operating loss carryforward	251	190	
Total deferred tax asset before valuation allowance	2,198	2,635	
Valuation allowance	(2,198)	(2,635)	
Net deferred tax asset	\$ —	\$ —	

The U.S., U.K. and German subsidiaries have provided valuation allowances in respect of deferred tax assets resulting from tax loss carryforwards. Management currently believes that since the subsidiaries have a history of losses it is more likely than not that the deferred tax regarding the loss carryforwards will not be realized in the foreseeable future. During fiscal 2003, the subsidiaries reduced the valuation allowance by \$ 437 to \$ 2,198.

f. The main reconciling item between the statuary tax rate of the Company and its subsidiaries and the effective tax rate are the non-recognition of tax benefits from accumulated net operating losses carryforward among the various subsidiaries worldwide due to the uncertainty of the realization of such tax benefits and the effect of approved enterprise.

# **NOTE 12:- TAXES ON INCOME (Cont.)**

g. Income (loss) before taxes is comprised as follows:

	Year	Year ended December 31,		
	2003	2002	2001	
Domestic (Israel)	\$(1,152) (997)	\$ 677	\$ 4,086	
Foreign		(3,586)	(12,877)	
	\$(2,149)	\$(2,909)	\$ (8,791)	

# NOTE 13:- RESTRUCTURING AND OTHER NON-RECURRING CHARGES

	Year	Year ended December 31,		
	2003	2002	2001	
Restructuring charges (1)	\$—	\$501	\$1,391	
Arbitration charge (2)	<del></del>	_	267	
Write-off of Precise Technology (acquired in 2000)	_	—	1,188	
	\$—	\$501	\$2,846	

<sup>(1)</sup> See also Note 1d.

<sup>(2)</sup> See also Note 10d.

## **NOTE 14:- GEOGRAPHIC INFORMATION**

Summary information about geographical areas:

The Company and its subsidiaries manage their business on a basis of one reportable segment (see Note 1b for a brief description of the Company's business) and follows the requirements of Statement of Financial Accounting Standards No. 131, "Disclosures About Segments of an Enterprise and Related Information" ("SFAS No. 131").

The following is a summary of operations within geographic areas based on end-customer's location.

	Year	Year ended December 31,		
	2003	2002	2001	
Revenues from sales to unaffiliated customers:				
North America	\$16,435	\$17,158	\$23,451	
Europe and other	4,127	4,378	2,095	
	\$20,562	\$21,536	\$25,546	
	December 31,		,	
	2003	2002	2001	
Long-lived assets:				
Israel	\$1,543	\$2,100	\$1,980	
North America	5,893	6,537	7,016	
United Kingdom	5	19	136	
Germany	14	19	28	
	\$7,455	\$8,675	\$9,160	

## NOTE 15:- FINANCIAL INCOME (EXPENSES), NET

		December 31,	
	2003	2002	2001
Financial expenses:			
Foreign currency translation adjustments	\$ —	\$ (59)	\$ (124)
Bank charges	(93)	(50)	(85)
	(93)	(109)	(209)
Financial income:			
Foreign currency translation adjustments	263	176	_
Interest on marketable securities	867	836	2,354
Gain on sale of marketable securities		6	192
	1,130	1,018	2,546
		· ·	
	\$1,037	\$ 909	\$2,337

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

# U.S. Dollars in thousands, except share and per share data

## **NOTE 16:- SUBSEQUENT EVENTS (Unaudited)**

- a. In January 2004, CNT performed a cashless exercise of its warrant, and the Company issued CNT 93,595 Ordinary shares. (See Note 1c(1)).
- b. During the first quarter of 2004, the Company initiated a restructuring plan to consolidate all of its research and development in its Israeli facilities. The plan is anticipated to be complete by the end of the second quarter of 2004 and the Company shall incur an aggregate charge of approximately \$ 1 million.

# **EXHIBIT INDEX**

Exhibit Number	Description of Document
1.1	Memorandum of Association of the Company (incorporated by reference to Exhibit 3.1 from the Company's Registration Statement filed on Form F-1 (file no. 333-10882)).
1.2	Articles of Association of the Company (incorporated by reference to Exhibit 3.2 from the Company's Registration Statement filed on Form F-1 (file no. 333-10882)).
1.3	Amendments to the Company's Articles of Association, dated August 24, 2003.
4.2	1994 Stock Option and Incentive Plan (incorporated by reference to Exhibit 10.1 from the Company's Registration Statement filed on Form F-1 (file no. 333-10882)).
4.3	1996 Stock Option and Incentive Plan (incorporated by reference to Exhibit 10.2 from the Company's Registration Statement filed on Form F-1 (file no. 333-10882)).
4.4	1999 Share Option and Incentive Plan (incorporated by reference to Exhibit 10.3 from the Company's Registration Statement filed on Form F-1 (file no. 333-10882)).
4.5	Restated Employment Agreement of Gideon Hollander with Jacada Ltd. dated as of October 1, 2001 (incorporated by reference to Exhibit 4.5 to the Company's Annual Report on Form 20-F for the year ended December 31, 2001).
4.6	Technology and Product License Agreement between the Company and Cortlandt Reade Technical Corporation dated May 25, 2000 (incorporated by reference to the Company's Annual Report on Form 20-F for the year ended December 31, 2000).
4.7	Amendment to 1999 Share Option and Incentive Plan (incorporated by reference to Exhibit 10.2 the Company's Registration Statement on Form S-8 (file no. 333-73650)).
4.9	Asset Purchase Agreement dated as of August 19, 2001 among the Company and its subsidiaries and Computer Network Technology Corporation and its subsidiaries (incorporated by reference to Exhibit 4.10 to the Company's Annual Report on Form 20-F for the year ended December 31, 2001).
4.12	2003 Share Option Plan (incorporated by reference to Exhibit 99.1 to the Company's Registration Statement on Form S-8 (file no. 333-111303)

- 8 List of Jacada's Subsidiaries (incorporated by reference to the Company's Annual Report on Form 20-F for the year end December 31, 2000).
- 9.1 First Amendment to Asset Purchase Agreement among the Company and its subsidiaries and Computer Network Technology Corporation and its subsidiaries dated August 23, 2001(incorporated by reference to Exhibit 4.11 to the Company's Annual Report on Form 20-F for the year ended December 31, 2001).
- Purchase Agreement dated as of June 28, 2002 among the Company and Anota Ltd. (incorporated by reference to Exhibit 4.11 to the Company's Annual Report on Form 20-F for the year ended December 31, 2002).
- 10.1 Amendment No. 1 to Purchase Agreement dated as of July 31, 2002 among the Company and Anota Ltd. (incorporated by reference to Exhibit 4.11.1 to the Company's Annual Report on Form 20-F for the year ended December 31, 2002).
- 11 Code of Ethics of the Company
- 12.1 Certificate of Chief Executive Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a)
- 12.2 Certificate of Chief Financial Officer pursuant to Rule 13a-14(a)/Rule 15d-14(a)
- 13.1 Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350.
- 14.1 Consent of Kost, Forer, and Gabbay, a member of Ernst & Young International.

#### AMENDMENTS TO ARTICLES OF ASSOCIATION

## DATED AUGUST 24, 2003

RESOLVED, that Article 67 of the current Articles of Association be deleted and replaced in its entirety with the following:

#### "67. INDEMNITY AND INSURANCE

Subject to the provisions of the Companies Law with regard to such matters and to the maximum extent permitted under the Companies Law:

- (a) the Company may enter into a contract for the insurance of all or part of the liability of an Office Holder (as defined in the Companies Law) with respect to an obligation imposed on such Office Holder due to an act performed by him in his capacity as an Office Holder of the Company arising from any of the following:
  - (i) a breach of his duty of care to the Company or to another person.
  - (ii) a breach of his duty of loyalty to the Company, provided that the Office Holder acted in good faith and had reasonable cause to assume that such act would not prejudice the interests of the Company.
  - (iii) a financial liability imposed on such Office Holder in favor of another person.
- (b) the Company may indemnify, and may undertake in advance to indemnify, an Office Holder in respect of liability or expense set forth in subparagraph (c) below, provided that an advance undertaking to indemnify shall be limited to those categories of events, and to such amounts, as the Board of Directors may, at the time of the giving of such undertaking to indemnify, in its opinion deem to be reasonable under the circumstances.
- (c) the Company may indemnify, and undertake to indemnify, an Office Holder for any liability and expense that may be imposed on such Office Holder due to an act performed by him in his capacity as an Office Holder as follows:
  - (1) a financial liability imposed on an Office Holder in favor of another person by a court judgment, including a compromise judgment given as a result of a settlement or an arbitrator's award which has been confirmed by a court; and
  - (2) reasonable litigation expenses, including attorneys' fees, expended by an Office Holder or which were imposed on an Office

- Holder by a court in proceedings instituted against him by the Company or in its name or by any other person or in a criminal charge on which he was acquitted or in a criminal proceeding in which he was convicted for a criminal offense that does not require proof of criminal intent.
- (d) the Company may release, in advance, all or part of an Office Holder's liability to the Company for damage which arises from the breach of his duty of care to the Company.
- (e) The provisions of this Article 67 are not intended, and shall not be interpreted, to restrict the Company in any manner in respect of the procurement of insurance and/or in respect of indemnification (i) in connection with any person who is not an Office Holder, including, without limitation, any employee, agent, consultant or contractor of the Company who is not an Office Holder, and/or (ii) in connection with any Office Holder to the extent that such insurance and/or indemnification is not specifically prohibited under law; provided that the procurement of any such insurance and/or the provision of any such indemnification shall be approved by the Board or in such manner as may be required by the Companies Law.

## JACADA LTD. CODE OF ETHICS FOR SENIOR FINANCIAL OFFICERS

This Code of Ethics applies to the Chief Executive Officer, Chief Financial Officer and Vice President of Finance ("Senior Financial Officers") of Jacada Ltd. ("Jacada" or the "Company"). Its purpose is to promote honest and ethical conduct and compliance with the law, particularly as related to the maintenance of the Company's financial records and the preparation of financial statements filed with or submitted to the Securities and Exchange Commission (the "SEC"). The obligations of this Code of Ethics are incremental to and do not supplant the general code of business conduct applicable to all Jacada employees.

- 1. Senior Financial Officers are expected to carry out their responsibilities honestly and with integrity, exercising at all times their best independent judgment. Confidential information acquired in the course of one's duties shall not be used for personal advantage.
- 2. Senior Financial Officers should avoid, to the extent possible, situations in which their own interests conflict, or may appear to conflict, with the interest of the Company. Conflicts of interest are sometimes unavoidable, however. In any case in which a Senior Financial Officer finds himself with an actual or apparent material conflict of interest, he shall promptly disclose it to Jacada's Corporate Legal Department, which will review the transaction or relationship. The Corporate Legal Department will refer all such matters to the Audit Committee of the Board of Directors, which shall determine how the situation should be resolved.
- 3. Senior Financial Officers are responsible for assuring full, fair, accurate, timely and understandable disclosure of relevant financial and other information to shareholders and investors. In particular they are responsible for assuring that Jacada complies with SEC rules governing disclosure of financial information and for assuring that press releases and other public communications are full, fair, accurate, understandable and timely made. Among other things, Senior Financial Officers shall:
  - 3.1. Establish and maintain internal controls and procedures and disclosure controls and procedures designed to assure that financial information is recorded, processed and transmitted to those responsible for preparing periodic reports and other public communications containing financial information so that they are full, fair, accurate, understandable and timely.
  - 3.2. Carefully review each periodic report for accuracy and completeness before it is filed with the SEC and carefully review each public communication containing financial information before it is released.
  - 3.3. Promptly disclose to their superiors, and if necessary to the Audit Committee of the Board of Directors and the Company's independent auditors, any material weaknesses in, or concerns regarding, the Company's disclosure controls or internal controls.
- 4. Senior Financial Officers shall comply at all times with applicable governmental laws, rules and regulations.

- 5. Senior Financial Officers shall promptly bring to the attention of the Audit Committee or the full Board of Directors:
  - 5.1. Any matters that could compromise the integrity of the Company's financial reports,
  - 5.2. Any disagreement with respect to any material accounting matter, and
  - 5.3. Any violation of this Code of Ethics or of any law or regulation related to Jacada's business, operations or accounting or financial affairs.
- 6. The approval of the Audit Committee of the Board of Directors shall be required for any waiver or amendment of this Code of Ethics, and any such waiver or amendment shall be disclosed promptly, per SEC regulations.
- 7. Senior Financial Officers should recognize that a violation of the standards contained in this Code of Ethics will result in corrective action, including possible dismissal.

#### CERTIFICATIONS

#### CEO CERTIFICATION

- I, Gideon Hollander, Chief Executive Officer of Jacada, Ltd., certify that:
  - 1. I have reviewed this annual report on Form 20-F of Jacada Ltd. (the "registrant");
  - 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
  - 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
  - 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) 15d-15(e)) for the registrant and have:
    - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
    - b. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    - c. disclosed in this annual report any change in the registrant's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting.

- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: June 28, 2004

/s/ Gideon Hollander

Gideon Hollander Chief Executive Officer

#### **CFO CERTIFICATION**

- I, Robert C. Aldworth, Chief Financial Officer of Jacada, Ltd., certify that:
  - 1. I have reviewed this annual report on Form 20-F of Jacada Ltd. (the "registrant");
  - 2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
  - 3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;
  - 4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) 15d-15(e)) for the registrant and have:
    - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
    - b. evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    - c. disclosed in this annual report any change in the registrant's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting.

- 5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a. all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b. any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: June 28, 2004

/s/ Robert C. Aldworth

Robert C. Aldworth Chief Financial Officer

# CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 20-F of Jacada Ltd. (the "Company") for the year ended December 31, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Gideon Hollander, Chief Executive Officer of the Company, and Robert C. Aldworth, Chief Financial Officer of the Company, do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of our knowledge:

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

By: /s/ Gideon Hollander

Gideon Hollander Chief Executive Officer June 28, 2004

/s/ Robert C. Aldworth

Robert C. Aldworth Chief Financial Officer June 28, 2004

## CONSENT OF INDEPENDENT AUDITORS

We consent to the incorporation by reference into the Registration Statements on Form S-8 (Registration Nos. 333-111303, 333-34420 and 333-73650), pertaining to the Jacada Ltd. 2003 Share Option and Incentive Plan, Jacada Ltd. 1999 Share Option and Incentive Plan, the Jacada Ltd. 1996 Share Option Plan and to the Jacada Ltd. 1994 Stock Option Plan, of our report, dated February 3, 2004 with respect to the consolidated financial statements of Jacada Ltd. included in its Annual Report (Form 20-F) for the year ended December 31, 2003, filed with the Securities and Exchange Commission.

Tel-Aviv, Israel June 27, 2004 KOST, FORER, GABBAY and KASEIRER A member of Ernst & Young Global