

# CYREN LTD.

## FORM 20-F/A

(Amended Annual and Transition Report (foreign private issuer))

Filed 11/02/00 for the Period Ending 12/31/99

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# COMMTOUCH SOFTWARE LTD

## FORM 20-F/A

(Amended Annual and Transition Report (foreign private issuer))

Filed 11/2/2000 For Period Ending 12/31/1999

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Industry	Communications Services
Sector	Services
Fiscal Year	12/31

# COMMTOUCH SOFTWARE LTD

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

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AMENDMENT NO. 1  
TO  
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, 1999

Commission file number 000-26495

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COMMTOUCH SOFTWARE LTD.

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(Exact name of Registrant as specified in its charter and translation of Registrant's name into English)

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Israel

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(Jurisdiction of incorporation or organization)

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(name, address, including zip code, and telephone number, including area code of agent for service of process)

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

Title of each class -----	Name of each exchange on which registered -----
N/A	None

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

Ordinary Shares, par value NIS 0.05 per share

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(Title of Class)

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

None

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

**Ordinary Shares, par value NIS 0.05 15,199,344**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act

of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark which financial statement item the registrant has elected to follow.

**Item 17**  **Item 18**

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## PART I

### Item 1. Description of Business.

This Annual Report on form 20-F contains forward-looking statements. These forward-looking statements include, but are not limited to, statements about our plans, objectives, expectations and intentions and other statements contained in this annual report that are not historical facts. 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 identifies important factors that could cause such differences.

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

#### Overview

CommTouch Software Ltd. ("CommTouch" or the "Company") and its subsidiaries are a leading global provider of outsourced integrated Web-based email and messaging solutions to businesses. Our solutions are flexible, highly customizable and enable us to satisfy the unique email and messaging needs of our customers worldwide. Our customers are large and small businesses who offer our Web-based email through their website to their end users. As of December 31, 1999, we had over 250 global customers. Through our customers' sites we serve approximately 8.4 million active emailboxes. We also serve over 1.0 million active emailboxes to small businesses and websites through our ZapZone Network.

#### Industry Background

##### Growth of the Internet Worldwide and Proliferation of Email

The Internet has become a vitally important global medium for communication, commerce, content distribution and advertising. International Data Corporation, or IDC, estimates that as of December 1999, there were over 80 million Web users in the United States and over 115 million users outside of the U.S. IDC

projects that, by the end of 2003, these numbers will increase to over 175 million Web users in the United States and over 325 million users outside of the U.S. This growth in the global usage of the Web provides significant opportunities for emerging Web-based businesses and other companies developing an online presence.

Email is one of the most widely used applications on the Internet and has become a primary platform for business and personal communication. According to Forrester Research, over 80% of Internet users access their email while online, making this activity the most popular use of the Internet. IDC estimates that at the end of 1999 there were over 180 million emailboxes in the United States and over 130 million outside of the United States. IDC projects that by the end of 2003, these numbers will increase to over 280 million emailboxes in the United States and over 305 million emailboxes outside the United States.

### **Web-based Email**

Historically, most email systems were provided by employers, Internet service providers (ISPs) or universities to individuals or closed groups of end users through software applications located on the users' desktops or local area networks. Such email systems, however, only permit access through the computer or network on which the email software resides or through cumbersome remote access systems. The emergence of email systems that use Internet browsers as the application for sending and receiving email has resulted in tremendous advances in email access, functionality and ease of use. This email standard is commonly referred to as "Web-based email."

Web-based email offers the following benefits over traditional closed systems:

- o anytime, anywhere (universal) access to both business and personal email accounts;
- o advanced integrated communication services over the Web, such as unified messaging (receiving faxes and voicemail via email) and integrated calendars and directories; and
- o easy to use registration, setup and administration.

Businesses worldwide are seeking to differentiate themselves online. A Web-based email service provides an optimal solution to address this business need because it increases brand awareness, builds and reinforces a loyal, connected member base and facilitates commerce in the following ways:

- o Companies embracing Web-based email can enhance their brand identity by controlling the look and feel of their Web-based email interface and also by providing end users with distinctive branded email addresses such as user@companyname.com.
- o Web-based email significantly enhances the frequency and duration of website visits, commonly referred to as the website's "stickiness." The personalized nature of email and the ability to bundle it with additional services, such as calendaring, scheduling and unified messaging, establishes an important one-to-one relationship with email users.
- o Email is emerging as an effective application for direct marketing online, as email users provide important demographic data when they register for and use email services. This information can be used to create highly targeted marketing campaigns with minimal distribution costs.

### **The Opportunity to Provide Outsourced Web-based Email Services**

While many organizations worldwide recognize the advantages of Web-based email services, they often lack the infrastructure, expertise and resources to fully realize these benefits through internal development. Due to the growing

complexity of in-house email systems and the increasing levels of infrastructure investment and management resources needed to provide comprehensive email services, organizations around the world are seeking to outsource email services. Businesses worldwide seek to partner with a dedicated provider of Web-based email to quickly implement high quality, feature-rich email services without having to invest internally in email management and systems.

## **The Commtouch Solution**

We are a leading global provider of outsourced Web-based email and other messaging services to businesses worldwide. Our flexible and highly customizable solutions enable us to satisfy the different email and messaging needs of a wide range of customers.

## **Benefits of The Commtouch Solution**

**Extensive Email Features.** Our solution is easy to use and provides a broad range of industry-leading functionality. This includes the ability for end users to collect email from other email accounts, to create folders, to attach electronic documents, to store messages, to maintain a contact center, to maintain an integrated calendar, to create distribution lists and to establish user profiles and signatures. Our service uses IMAP4, an advanced email protocol, which allows email folders to be accessed from multiple email environments.

The value of our solution is increased by our provision of premium services, which allow end users to send and receive faxes, voicemail and pages from the mailbox; access the Web-based mailbox from an off-line client (such as Microsoft Outlook); and have email forwarded to other addresses. We believe that, by providing a single platform which integrates multiple communication services and devices, the Web-based mailbox we provide has the potential to become our end users' primary online communications center.

**Ability to Support Hundreds of Millions of Mailboxes.** Our modular technology architecture enables the rapid set up of full-service hosting facilities and enables us to rapidly and easily expand our system as our user base grows. In addition, we utilize redundant servers and server load balancing to re-direct traffic to prevent service interruptions. Our system architecture and software platform have been designed to provide high quality service to hundreds of millions of mailboxes across millions of domains. We believe that our robust and flexible technology platform enables us to maintain one of the highest service performance levels in the industry.

**Customization.** Our solutions enable our customers to leverage their email as a brand building tool. Customers offer our email and messaging services to their end users with the customer's domain name. For example, a customer can provide email at its website with an address such as user@companyname.com. This repeated visibility of the customer's name on every email message promotes brand awareness and customer loyalty. In addition, our customers can use our proprietary customization tool to design the look and feel of their Web-based email interface so that it reflects their own brand image.

**Rapidly Deployable and Cost-Effective Solutions.** Our solutions for customers can be implemented in as few as several days.

Our flexible technology and economies of scale enable us to provide email solutions in a cost-effective manner, allowing businesses to achieve significant economic advantages. We believe that this rapid time to market is critical to our customers, who desire to realize the benefits of Web-based email as quickly as possible. We also provide comprehensive maintenance and administration of our email service, which eliminates the need for our customers to undertake the significant burden of developing and maintaining an in-house email system.

**Extensive Language Capabilities.** We provide email services in the following 18 languages: English, Chinese (Simplified and Traditional), Japanese, Spanish, French, German, Portuguese, Dutch, Finnish, Danish, Norwegian, Swedish, Russian, Hebrew, Icelandic, Korean and Italian. Additionally, we can support multiple languages on the same site for any of our customers and offer spell-checking in many of these languages. Our multi-lingual capabilities enable us to serve the needs of businesses worldwide as well as multinational organizations.

**Increased Website Usage.** Our solutions increase the potential for our customers to generate revenue by increasing the stickiness of their websites. We believe that traffic to our customers' websites increases as end users frequently visit the website to check their email. The benefits of increased website stickiness include more frequent communication with end users, enhanced customer loyalty and the opportunity to generate revenues from advertising, direct marketing and ecommerce transactions.

**Online Marketing Capabilities.** Our customers can leverage our email solutions along with the demographic information of their end users to conduct one-to-one marketing and targeted advertising campaigns. We collect demographic information from end users when they register for their mailbox. We believe this information provides a powerful platform on which to design targeted marketing campaigns. To enhance our customers' marketing capabilities, we provide our MailTarget tool which enables them to select and deliver tailored messages to targeted segments of their user population.

## **Commtouch Strategy**

Our objective is to be the leading global provider of outsourced, Web-based integrated email and messaging services. We plan to achieve this goal by pursuing the following key strategies:

### **Focus Sales and Marketing Efforts on Acquiring New Business Customers**

We are focused on selling our outsourced email communications solution to business customers, which enables them to rapidly provide our service to their users and customers without needing to build or maintain an infrastructure to support the service. We target customers who are increasingly relying on the Internet to conduct their business and communications but do not want to devote the time and resources to develop, support, or maintain an integrated email service. Commtouch enables our business customers to quickly implement our co-branded "Powered by Commtouch" service with minimal upfront investment while retaining their direct user and customer relationships.

We are focusing our business-to-business sales efforts on several target markets which we believe are particularly receptive to using our solution. These include application service providers (ASPs), Internet service providers (ISPs), large corporations, and web portals. Businesses in these target markets are experiencing increasing pressure to offer enhanced Web-based email to their customers. However, because they need to remain focused on their own core business operations, we believe that they will outsource their email capabilities.

### **Accelerate Transition to a Price-Per-Emailbox Fee Structure**

We generate an increasing share of our revenue through a pricing strategy based on a per-emailbox fee. We believe that this fee structure results in a higher and more predictable revenue stream compared with one based on a share of advertising revenue. Contracts with individual business customers typically include a guaranteed revenue component and fees per mailbox based on the total number of emailboxes and level of service provided.

## **Leverage Business Accounts Through Focused Sales Force**

We believe that there is a significant opportunity for us to further penetrate and derive increasing revenues from our existing customer base. A portion of our sales force is dedicated to building our relationships with existing accounts, selling them product upgrades and enhancements and keeping abreast of their growing email and messaging requirements. As our customers grow, develop new online strategies and expand geographically, our sales force plans to identify new ways we can offer them enhanced messaging services. We believe this sales effort will also serve to solidify our business relationships.

## **Extend International Leadership**

We plan to continue to aggressively market our solutions to businesses in non-U.S. markets that we believe will experience significant growth in Web-based email usage. We have developed multiple language interfaces for our email services to be used in the world's most widely used non-English languages. We have also established marketing groups in Israel, to support our expansion in Europe and Asia, and in the United States to support our expansion in North America and Latin America. We have a sales office in London, England and we plan to open a sales office in Japan. Additionally, we plan to pursue joint ventures with local partners in attractive non-U.S. markets to accelerate our penetration globally. We believe that our multi-language capabilities, targeted international sales efforts and experience in penetrating non-U.S. markets positions us favorably in non-U.S. markets.

## **Enhance Technology Leadership in Email Services**

We intend to leverage our core technology, software platform and expertise in developing and managing a comprehensive Web-based email service to deliver industry-leading functionality and advanced messaging services. We have recently added new services, including calendar integration, webmaster administration tools, message boards, list server features and HTML editing. We also plan to offer new services including email message language translation and integration of our email services with remote personal devices and wireless access. We intend to continue to work closely with our customers to identify new trends and functionality that will be popular with end users. In addition to internal development, we plan to seek, partner with and invest in companies developing leading edge technologies to enhance our existing functionality.

## **Maintain Our Cost-Effective Technology Platform**

Our proprietary, open and scalable architecture gives us the flexibility to use servers that provide us with the best cost-quality combination and to leverage third-party hosting providers. This enables us to achieve a low service cost-per-emailbox while maintaining a high level of service quality. We will seek to maintain this cost-effective technology platform as we add additional functionality and features to our solution.

## **Leverage Relationships with Go2Net, Vulcan Ventures and Microsoft**

Go2Net, Vulcan Ventures and Microsoft have invested an aggregate of \$40 million in our Company. Go2Net and Vulcan Ventures have a joint representative on our Board of Directors and we have entered into business relationships with both Go2Net and Microsoft. We will seek to leverage our relationships with these customers to expand our service offerings to them and to gain access to other potential customers with whom they have relationships.

## **Services**

We provide outsourced email and messaging services to customers of all sizes. Our solutions enable these organizations to attract, retain, communicate and

conduct ecommerce with their end users.

We provide our email and messaging solutions through a variety of service arrangements. These arrangements typically consist of one of the following:

- o price-per-emailbox, subject to a minimum annual service fee;
- o a minimum annual service fee plus advertising revenue sharing; or
- o advertising revenue sharing only.

We also provide direct marketing and communications services for a fee.

For our ZapZone Network service members, we provide our email and messaging solutions free of charge. We currently derive revenue from this network through advertising and direct online marketing.

### Classic Service

Our Classic Service provides the following features:

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Feature	Description
Web-based Emailbox	Includes a full range of industry-standard functionality, such as the ability for end users to create folders, attach electronic documents, store messages, maintain a contact center, distribute lists, and establish user profiles and signatures.
Highly Customized Interface	Customers offer our email services to their end users with the customer's name included in the domain address. This repeated visibility of the customer's name promotes brand awareness and customer loyalty. Additionally, our customers can design the look and feel of their Web-based email interfaces with our proprietary customization wizard tool.
Unified Messaging	This service enables the emailbox to become an integrated communications platform allowing the user to access email and send and receive voicemail messages, faxes and pages via land or mobile phones or personal computers.
Enhanced Management Features	Includes advanced email functionality such as the ability to collect email from other email accounts, sort email and access a sent messages folder. Also includes a draft folder option, message notification upon login and IMAP4 support, which allows email folders to be accessed from multiple email environments.
Contact Center	Enhanced address book functionality that includes the ability to create and manage groups and to import personal information from the contact databases.
Calendar Integration	The web-based calendar feature allows users to access their events and tasks from any browser. Functionality includes adding, modifying, and viewing appointments, to-do tasks, notes or events. Create recurring appointments and tasks on a daily, weekly or monthly basis setting notifications for upcoming events via email, ICQ (instant messaging) or pager.
Spam Protection	Advanced anti-spamming controls and email filtering.

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Feature	Description
Multiple Language Capability	Our email services are provided in 18 languages: English, Chinese (Simplified and Traditional), Japanese, Spanish, French, German, Portuguese, Dutch, Finnish, Danish, Norwegian, Swedish, Russian, Hebrew, Icelandic, Korean and Italian. Additionally, we provide spell-checking in many of these languages and can support more than one language on any of our customer websites, except websites using Hebrew.
Kids' Email	An email option that enables parents to control who may correspond electronically with their children.
Unified Registration	Allows our customers to capture important demographic information as new email users sign up in conjunction with our customer's website registration process. As a result, the user will be capable of entering a single username and password for accessing other online services offered by our customers.
Integrated Instant Messaging	This integrated software application enables users to chat with one another and provide users with notification of new messages and events.
New Message Notification	For the mobile professionals, important email messages need to be alerted via offline as well as online modes. When a new message or event arrives in a user's inbox, a notification alert may be enabled via fax, pager, or voicemail. Notification at login page is also available.
Secure Login (SSL)	Secure Socket Layer (SSL) encryption protects the privacy of the login and password information transferred between end-users and the email system during sign up.
Direct Marketing Tools	With the Custom Mail Opt-In and Mail Target programs, customers have access to low-cost direct marketing tools. Custom Mail Opt-In allows users to select specific product categories from which to receive special offers and promotions targeted to their interests. Mail Target allows our customers to send targeted marketing messages to their email user database or to an imported list.
Online Statistics	Includes around the clock online access to password protected online email usage reports that include detailed information on the number of daily users, number of page views, number of active accounts, and other important usage data for auditing and billing purposes.
Premium Services	

Our premium services combine all of the features included in our Classic Service, plus the following features:

Feature	Description
Offline Email Client Access	End users can access their mailbox using either a Web browser or their offline client software, such as Microsoft Outlook or Eudora.
Additional Disk Space Storage	End users can increase their storage capacity up to an additional ten megabytes of disk space to maintain more folders and messages in their mailbox.

Automated, User-Defined  
Email Forwarding

Incoming emails can be automatically  
forwarded to an alternate mailbox based on  
the end user's pre-set criteria.

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Automated, Rules-Based  
Pager Notification

Incoming emails can be automatically  
forwarded to the end user's pager based on  
the end user's pre-set criteria.

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The unified messaging, email-by-phone and IP telephony services integrate third party technology.

### Planned Services

We are developing new messaging services to complement our existing services. We actively monitor the email and communication needs of our customers and end users and work to develop new features and enhancements to meet their evolving requirements. The following services are currently in, or planned for, development:

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Feature	Description
Enhanced Email Security	Support for SSL encryption and technologies with enhanced anti-virus and anti-vandal security measures. (Anticipated in the fourth quarter of 2000.)
Community-Building Applications	Additional functionality such as message boards and list servers, which enable frequent communication among end users. (Anticipated in the third quarter of 2000.)
Email Message Language Translation	Email messages will be automatically translated between languages according to pre-defined user preferences. (Anticipated in the fourth quarter of 2000.)

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The statements in this report regarding planned service offerings and anticipated features of such offerings are forward-looking statements. Actual service offerings and benefits could differ materially from those projected.

### Direct Online Marketing Services.

We have a large and growing network of end users. As of December 31, 1999, through our customers we serve approximately 8.4 million active emailboxes and through our ZapZone Network service, which has over 190,000 sites registered, we are serving approximately 1.0 million active emailboxes. This extensive user network, along with our advanced technologies and strategic relationships, allows us to offer value-added direct marketing services to our customers and third parties. We currently provide the following services:

**Opt-in.** Users can elect to receive specific newsletters or commerce offerings. Whenever end users choose to establish a direct communication with one of our opt-in partners, we receive a referral fee.

**MailTarget.** We provide our customers with a Web-based tool which enables them to select and send tailored messages to targeted segments of their end user base. We earn revenues by charging customers a fee for each message sent with this tool.

**Third-party marketing programs.** In addition to our own internal opt-in program, we also provide other third-party direct marketing companies with the opportunity to leverage our extensive user base to market their products. We earn revenues by charging third-party direct marketing companies a fee for each message sent.

### The ZapZone Network Email Service

Our ZapZone Network service delivers email messaging solutions to small websites and homepages. This service enables individuals and website administrators to set up Web-based email online, often in under ten minutes. ZapZone Network-enabled sites are able to provide our core Web-based email

services to their end users in multiple languages. Our ZapZone Network service enables websites to collect valuable user demographic information, which facilitates their ability to conduct targeted marketing campaigns with their members. Webmasters can then communicate with and market to those users.

## **Customers**

We offer email and messaging communications services to businesses worldwide. As of December 31, 1999, we provided our email services to over 250 global customers. Our customer base includes Internet-centric businesses like community sites and portals, and companies where a significant online presence is integral to the overall enterprise. These customers represent a broad range of businesses and services and are geographically diverse. We also have customers comprised of small websites and website owners who offer Web-based email and messaging to their end users through our ZapZone Network service.

## **Sales and Marketing**

### **Sales Strategy**

Our sales strategy is to target businesses worldwide through a combination of direct, indirect and online selling initiatives. While our salespeople are responsible for selling our solutions in a geographic area, they often collaborate to recruit new customers, particularly when dealing with multinational organizations. Our sales offices are located in Santa Clara, California, New York, New York, London, England, and Netanya, Israel. We plan to extend our sales force into Europe and Japan within the next 12 months. Our sales force includes salespeople who focus on acquiring new customers, as well as dedicated salespeople who cultivate existing customers and seek to sell them premium and other services. As of December 31, 1999, we had 30 salespeople. We also plan to pursue joint ventures with local partners in attractive non-U.S. markets to assist us in the penetration of those markets.

### **Marketing Strategy**

Our marketing strategy is focused on increasing global awareness of our solution and building our brand as a leading international provider of email and messaging services. We plan to market our solution primarily through a mix of print advertising, direct marketing, public relations and online initiatives. Through our "Powered by Commtouch" co-branding of our email solution on customers' websites, we increase our brand awareness and receive a significant number of click-through business leads. We plan to aggressively promote our premium services to our customers and their end users and our direct e-marketing services to our customers and third parties. We intend to leverage our direct sales force and develop co-branding and marketing opportunities with other online organizations to augment our marketing efforts.

### **Customer Support**

Commtouch provides its customers rapid callback technical support 24 hours a day, seven days a week. We initially developed a proprietary software tool that provides end users with immediate online support without intervention from customer service representatives or technical staff and subsequently have begun implementation of other customer relationship management applications. We believe that this technical support model enables us to provide high quality and cost-effective support service to our customers and end users.

### **Technology**

We leverage our nine years of email and technology experience to create world-class, robust, full-featured, reliable email solutions. We believe that

our Web-based email solutions possess three major advantages over other Web-based email solutions:

### **Scalable and Reliable Modular System Architecture**

Our Web-based email system is designed to provide maximum flexibility. We have developed a system architecture consisting of three main components: Web servers, mail servers and database servers. Web servers are responsible for the front-end email application, mail servers are responsible for the storage and transmittal of email messages and database servers are responsible for storing all other important end user and customer information. These servers interact through standard communications protocols such as HTTP, IMAP4, POP3 and SMTP and ODBC.

### **Hardware Infrastructure**

The modularity of our network architecture provides several key technological advantages:

Rapidly deployable and cost-effective. The design of our system enables us to significantly reduce our deployment time as well as costs to support each mailbox.

o We outsource server hosting and Internet backbone access to third party providers because they are able to offer such services at bulk rates. In addition, there are numerous third-party providers from whom we can obtain these services, so our capacity is not limited and we are able to obtain favorable rates. This significantly reduces our Internet connectivity and server maintenance costs.

o The modularity of our system architecture allows us to choose from among a broad range of industry-standard mail servers, and select the servers with optimal price/performance characteristics. Again, we are able to obtain these servers from a number of vendors, so our capacity is not limited.

o The outsourcing of our server needs enables us to focus on the rapid deployment of applications for our clients rather than on the costly and time-consuming maintenance and development of an internal hardware infrastructure.

o Because third-party mail servers are constantly upgraded with the most advanced features (LDAP support, HTML messaging, etc.), we are able to reduce our development time by leveraging existing off-the-shelf technology and immediately integrating these features into our service offerings.

Scalable and reliable. Our modular technology architecture enables the rapid setup of full-service email hosting facilities and enables us to quickly and seamlessly expand our system as our user base grows. In addition, we utilize redundant servers and server load balancing capabilities to re-direct traffic if a server malfunctions. Our system architecture and software platform have been designed to provide excellent service to hundreds of millions of emailboxes across millions of domains. We believe that our robust and flexible technology platform enables us to maintain one of the highest service performance levels in the industry.

Portable. As the market for outsourced email systems evolves, some organizations may demand their own in-house hosting facility. The highly modular nature of our system architecture provides us with the ability to duplicate a system in another location within a period of several days. As a result, we are well-equipped to rapidly deploy email services to this growing subset of the outsourced email systems market.

## **Proprietary Development Language**

We have custom-built a proprietary software development language called Application Dynamic Markup Language (ADML) in order to maximize the flexibility and minimize the development time of our email solutions.

The ADML environment encapsulates the functionality and layout of a generic Web-based email interface, while allowing our developers to rapidly customize a business partner's email system with specific features. All external resources, such as text strings, images and site-dependent parameters are stored in various databases. When a new site is built, the ADML code is compiled into ASP (Microsoft's Active Server Pages technology) code which runs on the web servers and translates the ADML code into HTML. This enables the developer to build an email interface for a business partner without having to write a single line of HTML code. This provides us with a competitive advantage for several reasons:

- o we can add new functionality and features (languages, premium and direct marketing services, etc.) to any business partner's existing email system in as little as a few hours;
- o we can simultaneously upgrade more than one email system (for example, immediately making additional languages available to any end user of a ZapZone Network service email site); and
- o we can offer automated email customization tools to our end users. For example, the ZapZone Network service takes advantage of the flexibility provided by ADML to allow webmasters to build, customize and deploy ready-to-use email sites in very little time.

## **Advanced Proprietary Technologies**

We have developed the following proprietary technologies:

- o Complex Foreign Language Support. Currently, our system is fully double-byte-enabled to handle intricate character languages such as Chinese, Korean and Japanese, as well as right-to-left support for languages like Hebrew and Arabic.
- o Integrated Open Platform Interface. We have developed an integrated platform and series of application programming interfaces that enable us to rapidly and fully integrate additional communications features and functionality into our service offering.
- o Advanced Direct Marketing Technology. Our MailTarget service is a Web-based tool which provides customers with a user-friendly method of selecting and delivering tailored messages to a targeted segment of their user populations.
- o Customization Wizard Tool. We have developed a proprietary technology tool which enables customers to design the look and feel of their Web-based email interface so that it is consistent with their own brand images.

## **Competition**

In the market for email and messaging services, we compete directly with Web-based email service providers, including Critical Path, Mail.com and USA.NET, as well as with companies that develop and maintain in-house email solutions. In addition, companies such as Software.com currently offer email software products to ISPs, web hosting companies, web portals and corporations. Furthermore, numerous small-scale email providers offer low-cost basic services, but without scalable systems or value-added functionality. These and other companies could potentially leverage their existing capabilities and relationships to enter the email service industry by redesigning their system

architecture, pricing and marketing strategies to sell through to the entire market. The ability of these competitors to offer a broader suite of complementary services may give them a considerable advantage over us. In the future, ISPs, web hosting companies and outsourced application companies may broaden their service offerings to include outsourced email.

Our market's level of competition is likely to increase as current competitors increase the sophistication of their offerings and as new participants enter the market. In the future, as we expand our service offerings, we may encounter increased competition in the development and delivery of these services. Many of our current and potential competitors have longer operating histories, larger customer bases, greater brand recognition and greater financial, marketing and other resources than we do and may enter into strategic or commercial relationships on more favorable terms. Further, certain of our competitors may offer services at or below cost. In addition, new technologies and the expansion of existing technologies may increase competitive pressures on us. Increased competition may result in reduced operating margins and loss of market share.

We believe that our solution has the following competitive advantages:

- o highly customizable and flexible;
- o rapidly deployable;
- o available in 18 languages;
- o designed to integrate numerous messaging applications; and
- o has the ability to effectively address multiple market needs.

However, despite our competitive positioning, we may not be able to compete successfully against current and future competitors.

## **Intellectual Property**

We regard our copyrights, service marks, trademarks, trade secrets and similar intellectual property as critical to our success, and rely on trademark and copyright law, trade secret protection and confidentiality and/or license agreements with our employees, customers, partners and others to protect our proprietary rights. We have the following registered trademarks: COMMTOUCH (registered in the U.S.); PRONTO (U.S. and other countries); COMMTOUCH SOFTWARE (Australia and New Zealand); PRONTO FAMILY, PRONTO SECURE (Japan); PRONTO MAIL (Japan and New Zealand). We also have the following pending trademark applications: COMMTOUCH (Israel and other countries), ZAPZONE NETWORK, ZZN (U.S., Israel and other countries) and PRONTO (Mexico, European Community and India). It may be possible for unauthorized third parties to copy or reverse engineer certain portions of our products or obtain and use information that we regard as proprietary. Certain end user license provisions protecting against unauthorized use, copying, transfer and disclosure of the licensed program may be unenforceable under the laws of certain jurisdictions and foreign countries. In addition, the laws of some foreign countries do not protect proprietary rights to the same extent as do the laws of the United States. There can be no assurance that our means of protecting our proprietary rights in the United States or abroad will be adequate or that competing companies will not independently develop similar technology.

Other parties may assert infringement claims against us. We may also be subject to legal proceedings and claims from time to time in the ordinary course of our business, including claims of alleged infringement of the trademarks and other intellectual property rights of third parties by us and our licensees. Such claims, even if not meritorious, could result in the expenditure of significant financial and managerial resources.

Our ZapZone Network service allows webmasters to select the email service name

of their choice. There is, therefore, the possibility that they will select email service names that may infringe the rights of others under U.S. state and/or federal or foreign trademark and/or anti-dilution or similar laws. ZapZone Network service's placement of ZapZone Network service icons and advertisements on ZapZone Network service webmasters' web pages may contribute to our perceived liability for any allegedly infringing acts. We do not audit webmasters' email service name choices for compliance with any intellectual property rights of others. However, in our current webmaster license agreements, we require webmasters to indemnify us for claims resulting from their chosen email service names; we also require users to indemnify us in their license agreements. Furthermore, in our license agreements with webmasters and users, we expressly reserve the right to eliminate their account or to change their email service names, in our sole discretion. We have received complaints from several parties that email service names chosen and registered by ZapZone Network service users are similar or identical to domain names and/or trademarks in which the complainants claim an interest. We have responded by reviewing the content of the complainants' complaints, and either (a) sought additional substantiating information (b) requested a response to the complaint from the relevant webmaster, and/or (c) changed or deleted the email service name in question.

We also intend to continue to strategically license certain technology from third parties, including our mail server and SSL encryption technology. In the future, if we add certificate technology to our systems, we may license additional technology from third-party vendors. We cannot be certain that these third-party content licenses will be available to us on commercially reasonable terms or that we will be able to successfully integrate the technology into our products and services. These third-party in-licenses may expose us to increased risks, including risks associated with the assimilation of new technology, the diversion of resources from the development of our own proprietary technology, and our inability to generate revenues from new technology sufficient to offset associated acquisition and maintenance costs. The inability to obtain any of these licenses could result in delays in product and service development until equivalent technology can be identified, licensed and integrated. Any such delays in services could cause our business, financial condition and operating results to suffer.

### **Government Regulation**

There are currently few laws and regulations directly applicable to the Internet and commercial email services. Examples include the Children's Online Privacy Protection Act and related regulations in the U.S. and restrictions on the export of personal data from the European Community. However, it is possible that a number of laws and regulations may be adopted with respect to the Internet or commercial email services covering issues such as user privacy, pricing, content, copyright, distribution, antitrust and characteristics and quality of products and services. Further, the growth and development of the market for online email may prompt calls for more stringent consumer protection laws that may impose additional burdens on companies conducting business online. The adoption of additional laws or regulations may impair the growth of the Internet or commercial online services, which could, in turn, decrease the demand for our products and services and increase our cost of doing business, or otherwise have a material adverse effect on our business, operating results and financial condition. Moreover, the applicability to the Internet of existing laws in various jurisdictions governing issues such as property ownership, sales and other taxes, libel and personal privacy is uncertain and may take years to resolve. Any such new legislation or regulation, the application of laws and regulations from jurisdictions whose laws do not currently apply to our business or the application of existing laws and regulations to the Internet could have a material adverse effect on our business, operating results and financial condition.

### **Employees**

As of December 31, 1999, we had 214 full-time employees. None of our U.S.

employees is covered by a collective bargaining agreement. We believe that our relations with our employees are good.

Israeli law and certain provisions of the nationwide collective bargaining agreements between the Histadrut (General Federation of Labor in Israel) and the Coordinating Bureau of Economic Organizations (the Israeli federation of employers' organizations) apply to Commtouch's Israeli employees. These provisions principally concern the maximum length of the work day and work week, minimum wages, contributions to a pension fund, insurance for work-related accidents, procedures for dismissing employees, determination of severance pay and other conditions of employment. Furthermore, pursuant to such provisions, the wages of most of Commtouch's employees are subject to cost of living adjustments, based on changes in the Israeli Consumer Price Index. The amounts and frequency of such adjustments are modified from time to time. Israeli law generally requires the payment of severance pay upon the retirement or death of an employee or upon termination of employment by the employer or, in certain circumstances, by the employee. Commtouch currently funds its ongoing severance obligations by making monthly payments for insurance policies and by an accrual.

A general practice in Israel followed by Commtouch, although not legally required, is the contribution of funds on behalf of certain employees to an individual insurance policy known as "Managers' Insurance." This policy provides a combination of savings plan, insurance and severance pay benefits to the insured employee. It provides for payments to the employee upon retirement or death and secures a substantial portion of the severance pay, if any, to which the employee is legally entitled upon termination of employment. Each participating employee contributes an amount equal to 5% of such employee's base salary, and the employer contributes between 13.3% and 15.8% of the employee's base salary. Full-time employees who are not insured in this way are entitled to a savings account, to which each of the employee and the employer makes a monthly contribution of 5% of the employee's base salary. Commtouch also provides certain employees with an Education Fund, to which each participating employee contributes an amount equal to 2.5% of such employee's base salary, and the employer contributes an amount equal to 7.5% of the employee's base salary.

## **RISK FACTORS**

You should carefully consider the following risk factors before you decide to buy our ordinary shares. You should also consider the other information in this report. If any of the following risks actually occur, our business, financial condition, operating results or cash flows could be materially adversely affected. This could cause the trading price of our ordinary shares to decline, and you could lose part or all of your investment.

This report contains forward-looking statements that involve risks and uncertainties. These statements relate to our future plans, objectives, beliefs, expectations and intentions. In some cases, you can identify forward-looking statements by our use of words such as "expects," "anticipates," "believes," "intends," "plans," "seeks" and "estimates" and similar expressions. You will find forward-looking statements under the captions "Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business" and elsewhere in this report. Our actual results, levels of activity, performance or achievements may differ materially from those expressed or implied by these forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this report.

### **Risks Relating to the Company**

Because we have a limited operating history as a Web-based email service provider, it is difficult to evaluate our business and prospects.

We commenced operations in 1991, but we began commercially selling Web-based

email services only in 1998 after changing our strategic focus from the sale, maintenance and service of stand-alone email client software products for mainframe and personal computers. This change required us to adjust our business processes and to restructure Commtouch to become a Web-based email service provider. Therefore, we have only a limited operating history as a provider of Web-based email services upon which you can evaluate our business and prospects.

We have a history of losses and may never achieve profitability.

We incurred net losses of approximately \$3.5 million in 1997, \$4.4 million in 1998 and \$19.9 million in 1999. As of December 31, 1999, we had an accumulated deficit of approximately \$31.5 million. We have not achieved profitability in any period, and we expect to continue to incur net losses for the foreseeable future.

Our future email services revenues are unpredictable and our quarterly operating results may fluctuate and fluctuations could adversely affect the value of your investment.

Because we have a limited operating history in the provision of Web-based email services and because of the emerging nature of the markets in which we compete, our revenue is unpredictable. Our current and future expense levels are to a large extent fixed. We may be unable to adjust spending quickly to compensate for any revenue shortfall, and any significant revenue shortfall would have an immediate negative effect on our results of operations and stock price.

A number of factors, many of which are enumerated in this "Risk Factors" section, are likely to cause fluctuations in our operating results. Other factors which may cause such fluctuations include:

- o the size, timing and fulfillment of orders for our email services;
- o the receipt or payment of irregular or nonrecurring revenues or expenses;
- o our mix of service offerings, including our ability to successfully implement new services;
- o pricing of our services; and
- o effectiveness of our customer support.

Because of these factors, period-to-period comparisons of our operating results are not a good indication of our future performance. It is likely that our operating results in some quarters will be below market expectations.

We have recently changed our fee structure and cannot predict the effect this change will have on our future revenues.

In recent months we have moved from a pricing strategy based primarily on a share of advertising revenues with a minimum annual service fee to one based primarily on charging a per-emailbox fee with a minimum annual commitment fee. While we believe that this new fee structure will result in a higher and more predictable revenue stream compared with one based on a share of advertising

revenues, we cannot predict whether this new pricing strategy will in fact be successful in generating higher and more predictable revenues. We may need to change our pricing strategy again from time to time.

If the market for our Web-based email services does not grow rapidly, we will fail to generate revenues.

Our success will depend on the widespread acceptance and use of Web-based email by our customers as a means to increase the value of their services or as a means of communication. The market for Web-based email services is new and rapidly evolving. We cannot estimate the size or growth rate of the potential market for our service offerings. If the market for Web-based email fails to grow or grows more slowly than we currently anticipate, our business will suffer dramatically. Even if that market grows, our service may not achieve broad market acceptance. Since we have only recently introduced our services, we do not have sufficient experience to evaluate whether they will achieve broad market acceptance. Also, because all of our revenue is derived directly or indirectly from our Web-based email solutions, if that market does not grow, our business will likely fail.

If we do not expand our sales and marketing organization we will not be able to increase our revenues.

Our ability to increase our revenues will depend on our ability to successfully expand our sales and marketing organization. The complexity of our Internet messaging services and the emerging nature of the Web-based email market require highly trained sales and marketing personnel to educate prospective customers regarding the use and benefits of our services. The majority of our sales and marketing personnel have only recently joined Commtouch and have limited experience working together. It will take time for these employees to learn how to market our solutions and to be integrated into our sales and marketing organization. Some of them may not succeed in making this transition. Additionally, we are planning to introduce additional services that we have no experience marketing and will rely on these services to produce a substantial portion of our revenues in the future. As a result of these factors, our sales and marketing organization may not be able to compete successfully against the bigger and more experienced sales and marketing organizations of our competitors.

Even if our email services are successful with our customers, we may not derive revenue from the users of the emailboxes, which would prevent our business from growing.

Even if our services are a success with our customers, we will not succeed if we do not derive revenue from the email users that our customers give us access to. We plan to derive revenue from these email users primarily by charging our customers per-emailbox fees for our email services, as well as by selling access to email users for direct marketing services and from the sale of advertisements that the email users will see. If one or more of these revenue sources is not successful, we will not succeed. To date, we have generated only limited revenue from these potential revenue sources and they may not be successful. Our existing and potential customers may not be willing to pay for our email services. Advertisers and direct marketers may not accept email as a means of placing advertisements and conducting direct marketing and email users may not want to receive direct marketing materials.

Our ability to generate revenues from the mailbox base that our customers bring to us also depends on the emailboxes being used on a regular basis. On an ongoing basis, many of our end users will not regularly use their emailboxes, and a significant number will cease using our services each month. Accordingly, there may be no relationship between the number of active emailboxes and our revenues.

We have a strategic relationship with Go2Net pursuant to which we issued a

warrant to Go2Net that diluted our shareholders, but we may not realize substantial revenues or other business benefits from this or any similar transaction.

We entered into a strategic relationship with Go2Net simultaneously with the closing of our initial public offering. Our Customized Web-Based Email Service Agreement with Go2Net provides that we share revenues from advertising and premium services offered to Go2Net's end users through our email service. The terms of this agreement are substantially the same as our commercial agreements with other customers except that we have agreed that Go2Net will receive a materially greater portion of advertising revenues than other customers receive under other similar agreements. As part of this transaction, we issued to Go2Net a warrant to purchase up to 1,136,000 ordinary shares at an exercise price of \$12.80 per share. This warrant is exercisable at any time until it expires on July 16, 2004. We agreed to register these shares, the warrant and the shares issuable upon exercise of the warrant with the Securities and Exchange Commission and the registration statement relating to those securities became effective on January 7, 2000. Exercise of the warrant will cause existing investors significant dilution. However, we may not realize any revenues or any other business benefits from this strategic relationship with Go2Net because we and Go2Net may not be able to sell significant amounts of advertising and premium Web-based email services to Go2Net's end users. In the future, we may have to issue in-the-money warrants to acquire our ordinary shares to customers who provide us with a large base of potential end users. We may also have to provide these customers with more favorable commercial terms than we have previously provided to our customers. The issuance of in-the-money warrants and the grant of more favorable terms to customers may further dilute our shareholders, increase our operating loss in the future and cause our stock price to fall.

We entered into an email services agreement with Microsoft Corporation in connection with which we issued a warrant to Microsoft that diluted our shareholders, but we may not realize substantial revenues or other business benefits from this transaction.

We entered into an Email Services Agreement dated October 26, 1999 with Microsoft Corporation. Under this agreement, Commtouch will, at Microsoft's option, customize, host and maintain email services for Microsoft websites in the U.S. and internationally. Microsoft will pay one-time fees for the set-up and customization of the email service for each website with respect to which Microsoft chooses to use our services, as well as quarterly service fees for the email service based on the number of mailboxes hosted. The term of the agreement shall continue for 12 months after the first commercial distribution date of the email service and Microsoft may extend the initial term on a quarterly or annual basis upon 60 days prior written notice. The agreement may be terminated by Microsoft for convenience upon 90 days' prior written notice, or by either party upon a material breach by the other party upon the terms specified in the agreement. In connection with the agreement, Commtouch issued to Microsoft a warrant, exercisable until December 29, 1999, to purchase 707,965 of Commtouch's ordinary shares at an exercise price of \$28.25 per share for an aggregate exercise price of approximately \$20.0 million. On December 29, 1999, Microsoft exercised the warrant and now holds 707,965 ordinary shares. We agreed to register these shares with the Commission. The registration became effective on January 7, 2000. However, we may not realize any revenues or any other business benefits from this transaction because Microsoft is not obligated to use our services with respect to any website and has not agreed to provide us with any other business benefits.

We depend on our customer relationships, which are based on relatively short term, nonexclusive agreements, and the loss of one or more customers could harm our business.

Our ability to increase revenues depends upon successful marketing of our services through new and existing customers. Our agreements with our customers generally can be terminated for any or for no reason after the first year. The agreements with our customers are non-exclusive and do not restrict them from introducing competing services. Also, some of our relationships allow

termination earlier than one year. Loss of one or a few key customers could damage our reputation and hurt our ability to develop new relationships. If we fail to develop new relationships or if our customers terminate or do not renew their contracts with us, our business will suffer, as we will lose potential revenue from the lost customers and from their underlying base of email users. One customer, Excite, accounted for 54% of our revenues in 1998. Revenues from MyPoints, a permission based email service company, represented 11% of our revenues in 1999. Customers may provide us with a large number of users but pay a relatively small minimum annual service fee.

We have many established competitors who are offering the same or similar services and we will not be able to compete effectively against them if they provide superior services at better prices.

The market for Web-based email services is intensely competitive and we expect it to be increasingly competitive. Increased competition could result in pricing pressures, reduced operating margins and loss of market share, any of which could cause our business to suffer.

In the market for email and messaging services, we compete directly with Web-based email service providers, including Critical Path, Mail.com and USA.NET, as well as with companies that develop and maintain in-house email solutions. In addition, companies such as Software.com currently offer email software products to ISPs, web hosting companies, web portals and corporations. Furthermore, numerous small-scale email providers offer low-cost basic services, but without scalable systems or value-added functionality. These and other companies could potentially leverage their existing capabilities and relationships to enter the email service industry by redesigning their system architecture, pricing and marketing strategies to sell through to the entire market. The ability of these competitors to offer a broader suite of complementary services may give them a considerable advantage over us. In the future, ISPs, web hosting companies and outsourced application companies may broaden their service offerings to include outsourced email.

Our market's level of competition is likely to increase as current competitors increase the sophistication of their offerings and as new participants enter the market. In the future, as we expand our service offerings, we may encounter increased competition in the development and delivery of these services. Many of our current and potential competitors have longer operating histories, larger customer bases, greater brand recognition and greater financial, marketing and other resources than we do and may enter into strategic or commercial relationships on more favorable terms. Further, certain of our competitors may offer services at or below cost. In addition, new technologies and the expansion of existing technologies may increase competitive pressures on us. We may not be able to compete successfully against current and future competitors and increased competition may result in reduced operating margins and loss of market share.

We are experiencing rapid internal growth which has and likely will strain our management resources.

We recently began to expand our operations rapidly and intend to continue this expansion. The number of employees increased from 45 on December 31, 1998 to 214 on December 31, 1999. This expansion has placed, and is expected to continue to place, a significant strain on our managerial, operational and financial resources. To manage any further growth, we will also need to improve or replace our existing operational, customer service and financial systems, procedures and controls.

The loss of our key employees would adversely affect our ability to manage our business, therefore causing our operating results to suffer and the value of your investment to decline.

Our success depends on the skills, experience and performance of our senior management and other key personnel, many of whom have worked together for only a short period of time. The loss of the services of any of our senior management or other key personnel, including Gideon Mantel, our Chief Executive Officer,

Isabel Maxwell, the President of our United States subsidiary, and Amir Lev, our President and Chief Technical Officer, could materially and adversely affect our business. We do not have employment agreements with any of our senior management or other key personnel. We cannot prevent them from leaving at any time. We do not maintain key-person life insurance policies on any of our employees.

Because our business is based on communications and messaging services, we are susceptible to system interruptions and capacity constraints, which could harm our business and reputation.

Our ability to successfully receive and send our end users' email messages and provide acceptable levels of service largely depends on the efficient and uninterrupted operation of our computer and communications hardware and network systems and those of our outsourced hosting service. In addition, the growth in the use of the Internet has caused frequent interruptions and delays in accessing the Internet and transmitting data over the Internet. We do not possess insurance to cover losses caused by unplanned system interruptions and software defects. In the past, we have experienced some interruptions in our email service. We believe that these interruptions will continue to occur from time to time. These interruptions may be due to hardware failures, unsolicited bulk email (also known as "spam"), operating system failures, inadequate Internet infrastructure capacity, and other mechanical and human causes. We expect to experience occasional, temporary capacity constraints due to sharply increased traffic, which may cause unanticipated system disruptions, slower response times, impaired quality and degradation in levels of customer service. If we experience frequent or long system interruptions that reduce our ability to provide email services, we may have fewer users of our email services. In addition, we have entered into service agreements with some of our customers that require minimum performance standards. If we fail to meet these standards, our customers could terminate their relationships with us.

We must continue to expand and adapt our network infrastructure to changing requirements and increasing numbers of end users. The expansion and adaptation of our network infrastructure will require substantial financial, operational and managerial resources. In addition, we depend on improvements being made to the entire Internet infrastructure to alleviate overloading and congestion of the Internet. The ability of our network to continue to connect and manage an expanding number of customers, end users and messages at high transmission speeds is unproven and uncertain. We face risks related to our network's and the Internet's ability to operate with higher use levels while maintaining expected performance levels.

Although we are a leading global provider in our particular field of outsourced, Web-based email, we are a relatively small competitor in the electronic messaging industry as a whole. As a result, we may not have the resources to adapt to the changing technological requirements and the shifting consumer preferences of our industry.

The Internet messaging industry is characterized by rapid technological change, changes in end user requirements and preferences, and the emergence of new industry standards and practices that could render our existing services and proprietary technology obsolete. Our success depends, in part, on our ability to continually enhance our existing email and messaging services and to develop new services, functions and technology that address the increasingly sophisticated and varied needs of our prospective customers. The development of proprietary technology and necessary service enhancements entails significant technical and business risks and requires substantial expenditures and lead-time. We may not be able to keep pace with the latest technological developments. We may not be able to use new technologies effectively or adapt our services to customer or end user requirements or emerging industry standards. Also, in addition to addressing changing technologies and end user needs, we must also do so more quickly than our competition.

Our services may be adversely affected by software defects, which could cause our customers or end users to stop using our services.

Our service offerings depend on complex software. Complex software often

contains defects, particularly when first introduced or when new versions are released. Although we conduct extensive testing, we may not discover software defects that affect our new or current services or enhancements until after they are deployed. Although we have not experienced any material software defects to date, it is possible that, despite testing by us, defects may exist in the software we use. These defects could cause service interruptions that could damage our reputation or increase our service costs, cause us to lose revenue, delay market acceptance or divert our development resources, any of which could cause our business to suffer. Some of our services are based on software provided by third parties. We have no control over the quality of such software.

We rely on the integrity of our network security, which may be susceptible to breaches that could harm our reputation and business.

A fundamental requirement for online communications is the secure transmission of confidential information over public networks. Third parties may attempt to breach our security or that of our customers. Despite our implementation of third party encryption technology and network security measures, our servers are vulnerable to computer viruses, physical or electronic break-ins and similar disruptions, which could lead to interruptions, delays or loss of data. We may be liable to our customers and their end users for any breach in our security, including claims for impersonation or other similar fraud claims, as well as claims for other misuses of personal information, for example for unauthorized marketing purposes. Also, such a breach could harm our reputation and consequently our business. We may also be required to expend significant capital and other resources to license encryption technology and additional technologies to protect against security breaches or to alleviate problems caused by any breach. Our failure to prevent security breaches could have a material adverse effect on our business and operating results.

In addition, the Federal Trade Commission and several states have been investigating some Internet companies regarding their use of personal information. We could incur additional expenses if new regulations regarding the use of personal information are introduced, if our privacy practices are investigated or if our privacy policies are viewed unfavorably by users or potential users.

If we fail to adequately protect our intellectual property rights or face a claim of intellectual property infringement by a third party, we could lose our intellectual property rights or be liable for significant damages.

We regard our copyrights, service marks, trademarks, trade secrets and similar intellectual property as critical to our success, and rely on trademark and copyright law, trade secret protection and confidentiality or license agreements with our employees and customers to protect our proprietary rights. Third parties may infringe or misappropriate our copyrights, trademarks and similar proprietary rights. Although we have not filed any patent applications, we may seek to patent certain software or other technology in the future. Any such future patent applications may not be issued with the scope of the claims we seek, or at all. We cannot be certain that our software does not infringe issued patents that may relate to our software products. In addition, because patent applications in the United States are not publicly disclosed until the patent is issued, applications may have been filed which relate to our software products.

Despite our precautions, unauthorized third parties may copy certain portions of our technology or reverse engineer or obtain and use information that we regard as proprietary. End user license provisions protecting against unauthorized use, copying, transfer and disclosure of the licensed program may be unenforceable under the laws of some jurisdictions and foreign countries. In addition, the laws of some foreign countries do not protect proprietary rights to the same extent as do the laws of the United States. Our means of protecting our proprietary rights in the United States or abroad may not be adequate and competitors may independently develop similar technology.

Our ZapZone Network service allows webmasters to select the email service name

of their choice (although we reserve the right to eliminate their account or to change their email service name).

There is, therefore, the possibility that they will select email service names that may infringe the rights of others. We have received several complaints about ZapZone Network service webmasters' registered email service names and we have referred these complainants directly to the ZapZone Network service subscribers who are allegedly engaging in the infringing activities. However, these complainants may seek to enforce their rights against us in addition to, or instead of, the infringing webmasters.

We may have liability for email content and we may not have adequate liability insurance.

As a provider of email services, we face potential liability for defamation, negligence, copyright, patent or trademark infringement and other claims based on the nature and content of the materials transmitted via email. We do not and cannot screen all of the content generated by end users, and we could be exposed to liability with respect to this content. Some foreign governments, such as the government of Germany, have enforced laws and regulations related to content distributed over the Internet that are more strict than those currently in place in the United States. Although we carry general and professional liability insurance coverage, our insurance may not adequately protect us from such claims. Any imposition of liability, particularly liability that is not covered by insurance, or is in excess of insurance coverage, could damage our reputation and hurt our business and operating results, or could result in criminal penalties.

Governmental regulation and legal uncertainties could impair the growth of the Internet and decrease demand for our services or increase our cost of doing business.

There are currently few laws and regulations directly applicable to the Internet and commercial email services. However, a number of laws have been proposed involving the Internet, including laws addressing user privacy, pricing, content, copyright, antitrust, distribution and characteristics and quality of products and services. Further, the growth and development of the market for email may prompt calls for more stringent consumer protection laws that may impose additional burdens on companies conducting business online. Moreover, the applicability to the Internet of existing laws in various jurisdictions governing issues such as property ownership, sales and other taxes, libel and personal privacy is uncertain and may take years to resolve. The adoption of additional laws or regulations, or the application of existing laws or regulations to the Internet, may impair the growth of the Internet or commercial online services. This could decrease the demand for our services and increase our cost of doing business, or otherwise harm our business and operating results.

Due to the global nature of the Web, it is possible that, although our transmissions currently originate in California, the governments of other states or foreign countries might attempt to regulate our transmissions or levy sales or other taxes relating to our activities. The European Union recently adopted a directive addressing data privacy that may result in limits on the collection and use of user information.

On October 20, 1999, The Federal Trade Commission issued the final rule to implement the Children's Online Privacy Protection Act of 1998 ("COPPA"). The main goal of the COPPA and the rule is to protect the privacy of children using the Internet. As of April 21, 2000, certain commercial websites and online services directed to, or that knowingly collect information from, children must obtain parental consent before collecting, using, or disclosing personal information from children under 13. The COPPA regulations could reduce our ability to engage in direct marketing. The cost to the Company of complying with the new requirements is not known and such cost may have a material effect upon operating results or financial condition.

We may need additional capital and raising additional capital may dilute existing shareholders.

We have invested heavily in technology and infrastructure development. We expect to continue to spend substantial financial and other resources on developing and introducing new service offerings and expanding our sales and marketing organizations, strategic relationships and operating infrastructure. We expect that our expenses will continue to increase in absolute dollars. If our revenues do not correspondingly increase, our operating results and financial condition will be negatively affected. We may never attain sufficient revenues to achieve profitability. If we do achieve profitability, we may not sustain or increase profitability in the future. This may, in turn, cause our stock price to decline.

We believe that our existing capital resources will enable us to maintain our current and planned operations for at least the next 12 months. However, we may be required to raise additional funds due to unforeseen circumstances. If our capital requirements vary materially from those currently planned, we may require additional financing sooner than anticipated. Such financing may not be available in sufficient amounts or on terms acceptable to us and may cause dilution to existing shareholders. Also, we may raise additional capital in the future by issuing securities that have superior rights and preferences to our ordinary shares.

Our directors, executive officers and principal shareholders will be able to exert significant influence over matters requiring shareholder approval and could delay or prevent a change of control.

Our directors and affiliates of our directors, our executive officers and our shareholders who currently own over five percent of our ordinary shares beneficially own approximately 30% of our outstanding ordinary shares. If they vote together, these shareholders will be able to exercise significant influence over all matters requiring shareholder approval, including the election of directors and approval of significant corporate transactions. This concentration of ownership could also delay or prevent a change in control of Commtouch.

Go2Net and Vulcan Ventures beneficially own approximately 14% of our outstanding ordinary shares (assuming exercise of the Go2Net warrant on a net issuance basis). Vulcan Ventures is a significant shareholder of Go2Net. Accordingly, Go2Net and Vulcan Ventures will be able to significantly influence and possibly exercise control over most matters requiring approval by our shareholders, including the election of directors and approval of significant corporate transactions. This concentration of ownership may also have the effect of delaying or preventing a change in control. Go2Net and Vulcan also have the right to name one director to our Board as long as they continue to hold at least 620,022 shares, including the shares issuable upon exercise of the Go2Net warrant. They have named Thomas Camp to the Board under this provision. In addition, conflicts of interest may arise as a consequence of Go2Net's control relationship with us, including:

- o conflicts between Go2Net and Vulcan Ventures, as significant shareholders, and our other shareholders, whose interests may differ with respect to, among other things, our strategic direction or significant corporate transactions;
- o conflicts related to corporate opportunities that could be pursued by us, on the one hand, or by Go2Net, on the other hand; or
- o conflicts related to existing or new contractual relationships between us, on the one hand, and Go2Net and its other affiliates, on the other hand.

Our business and operating results could suffer if we do not successfully address the risks inherent in the expansion of our international operations.

At present, we have sales offices in the United States, Israel and England. We intend to continue to expand into international markets and to spend significant financial and managerial resources to do so. We have limited experience in international operations and may not be able to compete effectively in international markets. The Company will face risks inherent in conducting business internationally, such as:

- o difficulties and costs of staffing and managing international operations;
- o fluctuations in currency exchange rates;

- o imposition of currency exchange controls;
- o differing technology standards;
- o export restrictions, including export controls relating to encryption technologies;
- o difficulties in collecting accounts receivable and longer collection periods;
- o unexpected changes in regulatory requirements;
- o political and economic instability;
- o potentially adverse tax consequences; and
- o potentially reduced protection for intellectual property rights.

Any of these factors could adversely affect the Company's international operations and, consequently, business and operating results. Specifically, failure to successfully manage international growth could result in higher operating costs than anticipated or could delay or preclude altogether the Company's ability to generate revenues in key international markets.

Substantial sales of our ordinary shares could adversely affect our stock price.

The sale, or availability for sale, of substantial quantities of our ordinary shares may have the effect of depressing its market price by potentially introducing a large number of sellers into the market. A large number of our ordinary shares are currently eligible for resale. In addition a significant number of shares will be eligible for resale at various dates in the future. See "Shares Eligible for Future Sale."

### **Risks Relating to Operations in Israel**

We have important facilities and resources located in Israel, which has historically experienced severe economic instability and military and political unrest.

We are incorporated under the laws of the State of Israel. Our principal research and development facilities are located in Israel. Although substantially all of our sales currently are being made to customers outside Israel, we are nonetheless directly influenced by the political, economic and Military conditions affecting Israel. Any major hostilities involving Israel, or the interruption or curtailment of trade between Israel and its present trading partners, could significantly harm our business, operating results and financial condition.

Israel's economy has been subject to numerous destabilizing factors, including a period of rampant inflation in the early to mid-1980's, low foreign exchange reserves, fluctuations in world commodity prices, military conflicts and civil unrest. In addition, Israel and companies doing business with Israel have been the subject of an economic boycott by the Arab countries since Israel's establishment. These restrictive laws and policies may have an adverse impact on our operating results, financial condition or expansion of our business.

Since the establishment of the State of Israel in 1948, a state of hostility has existed, varying in degree and intensity, between Israel and the Arab countries. Although Israel has entered into various agreements with certain Arab countries and the Palestinian Authority, and various declarations have been signed in connection with efforts to resolve some of the economic and political problems in the Middle East, we cannot predict whether or in what manner these problems will be resolved.

Our results of operations may be negatively affected by the obligation of key personnel to perform military service.

In addition, certain of our officers and employees are currently obligated to perform annual reserve duty in the Israel Defense Forces and are subject to being called for active military duty at any time. Although Commtouch has operated effectively under these requirements since its inception, we cannot predict the effect of these obligations on Commtouch in the future. Our operations could be disrupted by the absence, for a significant period, of one or more of our officers or key employees due to military service.

Because a substantial portion of our revenues are generated in U.S. dollars, while a significant portion of our expenses are incurred in New Israeli Shekels, our results of operations may be adversely affected by inflation and currency fluctuations.

We generate a substantial portion of our revenues in U.S. dollars but incur a significant portion of our expenses, principally salaries and related personnel expenses, in New Israeli Shekels, commonly referred to as NIS. As a result, we are exposed to the risk that the rate of inflation in Israel will exceed the rate of devaluation of the NIS in relation to the dollar or that the timing of any devaluation may lag behind inflation in Israel. While in recent years the rate of devaluation of the NIS against the dollar has generally exceeded the rate of inflation, which is a reversal from prior years, we cannot be sure that this reversal will continue. If the dollar cost of our operations in Israel increases, our dollar-measured results of operations will be adversely affected. Our operations also could be adversely affected if we are unable to guard against currency fluctuations in the future. Accordingly, we may enter into currency hedging transactions to decrease the risk of financial exposure from fluctuations in the exchange rate of the dollar against the NIS. These measures, however, may not adequately protect us from material adverse effects due to the impact of inflation in Israel.

Israeli courts might not enforce judgments rendered outside of Israel and it might therefore be difficult for an investor to recover any judgment against any of our officers or directors resident in Israel.

We are organized under the laws of Israel, and we maintain significant operations in Israel. Certain of our officers and directors named in this report reside outside of the United States. Therefore, you might not be able to enforce any judgment obtained in the U.S. against us or any of such persons. You might not be able to bring civil actions under U.S. securities laws if you file a lawsuit in Israel. However, we have been advised by our Israeli counsel that, subject to certain limitations, Israeli courts may enforce a final judgment of a U.S. court for liquidated amounts in civil matters after a hearing in Israel. We have appointed Commtouch Software Inc., our U.S. subsidiary, as our agent to receive service of process in any action against us arising from this report. We have not given our consent for our agent to accept service of process in connection with any other claim and it may therefore be difficult for an investor to effect service of process against us or any of our non-U.S. officers, directors and experts relating to any other claims. If a foreign judgment is enforced by an Israeli court, it will be payable in Israeli currency.

Provisions of Israeli law may delay, prevent or make difficult an acquisition of Commtouch, which could prevent a change of control and therefore depress the price of our stock.

Israeli corporate law regulates mergers, votes required to approve mergers and acquisitions of shares through tender offers, requires special approvals for transactions involving significant shareholders and regulates other matters that may be relevant to these types of transactions. Furthermore, Israel tax considerations may make potential transactions unappealing to us or to some of our shareholders.

The new Israeli Companies Law imposes substantial duties on shareholders and may cause uncertainties regarding corporate governance.

The new Israeli Companies Law, which became effective on February 1, 2000, has brought about significant changes to Israeli corporate law. The new law includes provisions imposing substantial duties on certain controlling and non-controlling shareholders.

**Item 2. Description of Property.**

Our principal executive offices are located at 6 Hazoran Street, Poleg Industrial Park, Netanya 42504, Israel, where our telephone number is 011-972-9-863-6888, and 2029 Stierlin Court, Mountain View, California 94043, where our telephone number is (650) 864-2000. In addition, we have sales offices in London and New York. All of our properties are leased. Our principal research and development facilities are located in our principal executive offices in Israel. Our Mountain View office is used for sales, marketing, finance and hosting operations.

**Item 9. Management's Discussion and Analysis of Financial Condition and Results of Operations.**

The following discussion should be read in conjunction with the Consolidated Financial Statements and the Notes thereto included elsewhere in this report. This discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties. Any statements

contained herein that are not statements of historical fact may be deemed to be forward-looking statements. For example, the words "expects," "anticipates," "believes," "intends," "plans," "seeks" and "estimates" and similar expressions are intended to identify forward-looking statements. Commtouch's actual results and the timing of certain events may differ significantly from those projected in the forward-looking statements. Factors that might cause future results to differ materially from those projected in the forward-looking statements include, but are not limited to, those set forth under "Item 1--Risk Factors" and in the Company's other filings with the Securities and Exchange Commission.

## **Overview**

We are a leading global provider of outsourced integrated Web-based email and messaging solutions to businesses. Our solutions are flexible, highly customizable and enable us to satisfy the unique email and messaging needs of our customers worldwide. Our customers are large and small businesses who offer our Web-based email through their website to their end users and employees. As of December 31, 1999, we had over 250 global customers. Through our customers' sites we serve approximately 8.4 million active emailboxes. We also serve over 1.0 million active emailboxes to small businesses and websites through our ZapZone Network.

## **Revenue Sources**

**Service Fees.** During 1999, most of our email service revenue resulted from contracts that required our customers to pay us either a share of advertising revenues subject to a minimum annual revenue commitment or a monthly per mailbox price subject to a minimum commitment fee, and fees for direct marketing and communications services.

Prior to 1999, some of our contracts with customers provided for email service fees based solely on a share of banner advertising revenue, recognized only when such revenues were earned by the customers, with no minimum annual commitment.

**Direct E-marketing.** Ecommerce vendors seek channels through which they can market goods and services. Because of our installed user base and our agreements with our customers, we can assist ecommerce companies in distributing their services to our customers' end users who have opted to receive offers by email. We share with our customers the revenues from this direct e-marketing, which are earned either on a per-message basis, a referral basis, or as a commission on products sold. In the fourth quarter of 1998, we began to offer direct e-marketing opportunities to ecommerce vendors on a test basis. In 1999, direct e-marketing revenues became a meaningful portion of revenue. We recognized 11% of our total revenues from MyPoints, a permission based email service company.

## **Strategic Transaction with Go2Net**

Concurrent with the sale of our shares in the initial public offering we entered into an agreement with Go2Net, a network of branded, technology- and community-driven websites focused on personal finance, commerce, and games. Go2Net also develops Web-related software. Pursuant to the agreement we are offering Go2Net's end users a private label email service, including our email, calendaring and other services. The services are customized to the look and feel of Go2Net's websites. The terms of this agreement are substantially the same as our commercial agreements with other customers except that we have agreed to share a materially greater portion of our advertising revenues with Go2Net than we are sharing under other similar agreements. In addition, in connection with the agreement, we issued to Go2Net a warrant to purchase 1,136,000 ordinary shares at a per share exercise price of \$12.80, subject to adjustment as set forth in the warrant. The warrant is fully vested and non-forfeitable. The warrant will expire on July 16, 2004, the fifth anniversary of the initial public offering. The fair value of the warrant,

estimated at \$5.8 million, is being amortized to operating expenses ratably over the minimum term of the agreement, which is one year. Simultaneously with the sale of the shares in the initial public offering, we sold a total of 1,344,086 ordinary shares to Go2Net and Vulcan Ventures Incorporated at \$14.88 per share in a private placement. In the future, we may have to issue in-the-money warrants to acquire our ordinary shares to customers who provide us with a large base of potential end users. We may also have to provide these customers with more favorable commercial terms than we have previously provided to our customers. The issuance of in-the-money warrants and the grant of more favorable terms to customers may further dilute our shareholders, increase our operating loss in the future and cause our stock price to fall.

### Issuance of Shares Upon Exercise of Microsoft Warrant

We entered into an Email Services Agreement with Microsoft Corporation dated October 26, 1999. Under this agreement, Commtouch will, at Microsoft's option, customize, host and maintain email services for Microsoft websites in the U.S. and internationally. Microsoft will pay one-time fees for the set-up and customization of the email service for each website with respect to which Microsoft chooses to use our services, as well as quarterly service fees for the email service based on the number of mailboxes hosted. The term of the agreement shall continue for 12 months after the first commercial distribution date of the email service and Microsoft may extend the initial term on a quarterly or annual basis upon 60 days prior written notice. The agreement may be terminated by Microsoft for convenience upon 90 days' prior written notice, or by either party upon a material breach by the other party upon the terms specified in the agreement. In connection with the agreement, Commtouch issued to Microsoft a fully vested warrant, exercisable until December 29, 1999, to purchase 707,965 of Commtouch's ordinary shares at an exercise price of \$28.25 per share for an aggregate exercise price of \$20.0 million. On December 29, 1999, Microsoft exercised the warrant and now holds 707,965 ordinary shares. The fair value of the warrant, estimated at \$1.9 million, is amortized to operating expenses over the minimum term of the agreement (12 months).

### Results of Operations

The following table sets forth financial data for the years ended December 31, 1997, 1998 and 1999 (in thousands):

	Year Ended December 31,		
	1997	1998	1999
Revenues:			
Email services .....	\$ --	\$ 389	\$ 4,251
Software licenses, maintenance and services .....	899	--	--
Total revenues .....	899	389	4,251
Cost of revenues:			
Email services .....	--	569	3,643
Software licenses, maintenance and services .....	165	--	--
Total cost of revenues .....	165	569	3,643
Gross profit (loss) .....	734	(180)	608
Operating expenses:			
Research and development, net .....	1,108	1,149	2,942
Sales and marketing .....	2,202	2,001	7,722
General and administrative .....	829	604	4,328
Amortization of prepaid marketing expenses .....	--	--	3,263
Amortization of stock-based employee deferred compensation .....	--	91	3,436
Total operating expenses .....	4,139	3,845	21,691
Operating loss .....	(3,405)	(4,025)	(21,083)
Interest and other income (expenses), net .....	(68)	(326)	1,232

Net loss .....	\$ (3,473)	\$ (4,351)	\$ (19,851)
	=====	=====	=====

### Comparison of Years Ended December 31, 1997, 1998 and 1999

In 1997, we ceased all sales of stand-alone email client software licenses, maintenance and services and focused on developing our Web-based email service business. Accordingly, comparisons between 1997 and 1998 are not meaningful.

**Revenues.** Email service revenues increased 993% from \$389,000 in 1998 to \$4.3 million in 1999. One customer, Excite, represented 54% of the revenue in 1998. Revenues from MyPoints, a permission based email service company, represented 11% of total revenues during 1999. As of December 31, 1999, the Company had firm backlog from minimum commitments under take or pay contracts amounting to approximately \$13.1 million, which will be recognized as revenue over future quarters.

**Cost of Revenues.** Cost of revenues increased 540% from \$569,000 in 1998 to \$3.6 million in 1999, due to the increase in contracts with customers during 1999 and the related service provided. Cost of revenues consisted primarily of costs related to Internet data center services from a third-party provider, depreciation of equipment, Internet access, personnel and related costs. We expect cost of revenues to increase on an absolute basis, primarily as a result of an increase in our email service revenues, but to decrease as a percentage of email service revenues due to economies of scale.

**Research and Development Costs, Net.** Research and development expenses increased 156% from \$1.1 million in 1998 to \$2.9 million in 1999 due to an increase in personnel and other related costs. In previous years, we received royalty-bearing grants from the Israeli government, recorded as a reduction of research and development costs. We have an obligation to pay royalties to the Israeli government with a remaining future liability of \$270,000. In 1998, we transferred several key research and development personnel into our operations group to support and maintain our newly developed Web-based email services infrastructure. Costs relating to these personnel were included in cost of revenues in 1998. We expect that research and development costs will increase due to increased personnel and related costs associated with the accelerated development of new email service offerings.

**Sales and Marketing.** Sales and marketing expenses increased 286% from \$2.0 million in 1998 to \$7.7 million in 1999, due to increased personnel and related costs, public relations, other marketing expenses and direct sales costs to support the growth of our email service revenues. We expect sales and marketing expenses to increase significantly in the future in absolute dollar amounts due to increases in personnel costs related directly to new employees being hired to conduct sales and the related market support to further develop our brand. Sales and marketing expenses were \$2.2 million in 1997 and related only to the software license sales that were discontinued in 1997.

**General and Administrative.** General and administrative expenses increased 617% from \$604,000 in 1998 to \$4.3 million in 1999, due primarily to substantially higher personnel and related costs, facility costs, higher fees for outside professional services and other costs to support the growth of our email service revenues. We expect general and administrative costs to increase on an absolute basis due to increased personnel and related costs, higher facility costs associated with additional personnel and other costs necessary to support and develop the email service business. General and administrative expenses were \$829,000 in 1997 and related only to the software license sales that were discontinued in 1997.

**Amortization of Prepaid Marketing Expenses.** Amortization of prepaid marketing expenses related to the Go2Net and Microsoft warrants and totaled \$3.3 million

for 1999. The prepaid marketing expense is being amortized using the straight-line method over the one-year minimum term of each of the commercial agreements.

Amortization of Stock-based Employee Deferred Compensation. Our stock-based employee deferred compensation expenses increased 3,676% from \$91,000 for 1998 to \$3.4 million for 1999. The deferred compensation is being amortized using the sum-of-digits method over the vesting schedule, generally four years.

Interest and Other Income (Expense), Net. Our interest and other income (expense), net, increased from a net expense of \$326,000 for 1998 to a net income of \$1.2 million for 1999, due primarily to increased interest income earned from cash equivalents and marketable securities.

Income Taxes. As of December 31, 1999, we had approximately \$22.5 million of Israeli net operating loss carryforwards and \$14.2 million of U.S. federal net operating loss carryforwards available to offset future taxable income. The U.S. net operating loss carryforwards will expire in various amounts in the years 2008 to 2020. The Israeli net operating loss carryforwards have no expiration date.

## Quarterly Results of Operations

The following table sets forth certain unaudited quarterly statements of operations data for the eight quarters ended December 31, 1999. This information has been derived from the Company's consolidated unaudited Financial Statements, which, in management's opinion, have been prepared on the same basis as the audited Consolidated Financial Statements, and include all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the information for the quarters presented. This information should be read in conjunction with our audited Consolidated Financial Statements and the Notes thereto included elsewhere in this report. The operating results for any quarter are not necessarily indicative of the operating results for any future period.

	Three Months Ended							
	Mar. 31, 1998	Jun. 30, 1998	Sept. 30, 1998	Dec. 31, 1998	Mar. 31, 1999	Jun. 30, 1999	Sept. 30, 1999	Dec. 31, 1999
	(in thousands)							
Email service revenues .....	\$ 32	\$ 59	\$ 130	\$ 168	\$ 346	\$ 552	\$ 1,117	\$ 2,236
Cost of email service revenues .....	59	85	166	259	435	605	1,043	1,560
Gross profit (loss) .....	(27)	(26)	(36)	(91)	(89)	(53)	74	676
Operating expenses:								
Research and development, net .....	266	305	308	270	340	510	857	1,235
Sales and marketing .....	459	506	509	527	608	1,363	2,368	3,383
General and administrative .....	138	137	151	178	617	683	1,345	1,683
Amortization of prepaid marketing expenses .....	--	--	--	--	--	--	1,464	1,799
Amortization of stock-based employee compensation .....	2	8	18	63	386	1,013	1,096	941
Total operating expenses .....	865	956	986	1,038	1,951	3,569	7,130	9,041
Operating loss .....	(892)	(982)	(1,022)	(1,129)	(2,040)	(3,622)	(7,056)	(8,365)
Interest and other income (expenses), net .....	(27)	(59)	(28)	(212)	(271)	6	577	920
Net loss .....	\$ (919)	\$ (1,041)	\$ (1,050)	\$ (1,341)	\$ (2,311)	\$ (3,616)	\$ (6,479)	\$ (7,445)

## Fluctuations in Quarterly Results

We have incurred operating losses since inception, and we cannot be certain that we will achieve profitability on a quarterly or annual basis in the future. Our results of operations have fluctuated and are likely to continue to fluctuate significantly from quarter to quarter as a result of a variety of factors, many of which are outside of our control. A relatively large expense in a quarter could have a negative effect on our financial performance in that quarter. Additionally, as a strategic response to a changing competitive

environment, we may elect from time to time to make certain pricing, service, marketing or acquisition decisions that could have a negative effect on our quarterly financial performance. Other factors that may cause our future operating results to fluctuate include, but are not limited to:

- o continued growth of the Internet and of email usage;
- o demand for Web-based email services;
- o our ability to attract and retain customers and maintain customer satisfaction;
- o our ability to upgrade, develop and maintain our systems and infrastructure;
- o the amount and timing of operating costs and capital expenditures relating to expansion of our business and infrastructure;
- o the size, timing and fulfillment of orders for our email services;
- o the receipt or payment of irregular or nonrecurring revenues or expenses;
- o technical difficulties or system outages;
- o foreign exchange rate fluctuations;
- o the announcement or introduction of new or enhanced services by our competitors;
- o our ability to attract and retain qualified personnel with Internet industry expertise, particularly sales and marketing personnel;
- o the pricing policies of our competitors;
- o failure to increase our sales; and
- o governmental regulation relating to the Internet, and email in particular.

In addition to the factors set forth above, our operating results will be impacted by the extent to which we incur non-cash charges associated with stock-based arrangements with employees and non-employees.

### **Liquidity and Capital Resources**

We have financed our operations principally from the sale of equity securities and to a lesser extent from bank loans and research and development grants from the Israeli government. In the first quarter of 1999, we issued Series C Convertible Preferred Shares to investors resulting in net proceeds of \$5.3 million. In the second quarter of 1999, we issued to investors Convertible Promissory Notes which later converted into 42,081 Series D Convertible Preferred Shares, resulting in net proceeds of approximately \$13.2 million. All of our convertible preferred shares automatically converted into ordinary shares upon the closing of our initial public offering on July 16, 1999. On July 16, 1999, we raised \$70.8 million, net of underwriters commissions, from our initial public offering (including the exercise of the underwriters' over-allotment option) and the private placement of our ordinary shares in connection with the strategic partnership with Go2Net and Vulcan Ventures. On December 29, 1999 we raised an additional \$20.0 million from the sale of ordinary shares to Microsoft Corporation upon the exercise of a warrant issued in connection with an email services agreement with Microsoft. As of December 31, 1999, we had \$66.0 million in cash and cash equivalents and \$18.1 million in marketable securities.

Net cash provided by financing activities was \$102.9 million in 1999. Net cash used in operating activities was \$11.2 million in 1999. Net cash used for

operating activities is primarily comprised of a net loss for 1999, partially offset by depreciation and amortization expenses, increases in other accounts receivable and prepaid expenses. Net cash used in investing activities was \$26.5 million in 1999. These investing activities consisted primarily of purchases of property and equipment and purchases of marketable securities.

As of December 31, 1999, we had net working capital of \$88.1 million. As of that date, we had no material commitments for capital expenditures.

We believe that the existing cash and our other financing arrangements, provide us with sufficient funds to finance operations and continued growth through the next 12 months.

### **Effective Corporate Tax Rates**

Our tax rate will reflect a mix of the U.S. statutory tax rate on our U.S. income and the Israeli tax rate discussed below. We expect that most of our taxable income will be generated in Israel. Israeli companies are generally subject to corporate tax at the rate of 36% of taxable income. The majority of our income, however, is derived from our company's capital investment program with Approved Enterprise status under the Law for the Encouragement of Capital Investments in three separate plans, and is therefore eligible for certain tax benefits. Pursuant to these benefits, we will enjoy a tax exemption on income derived during the first two years in which such investment plans produce taxable income (provided that we do not distribute such income as a dividend) and a reduced tax rate of 10% to 25% for an additional period of five to eight years depending on the level of foreign investment in Commtouch. All of these tax benefits are subject to various conditions and restrictions. There can be no assurance that we will obtain approval for additional Approved Enterprise programs, or that the provisions of the law will not change. Moreover, notwithstanding these tax benefits, to the extent we receive income from countries other than Israel, such income may be subject to withholding tax. Since we have incurred tax losses in every year through 1999, we have not yet used the tax benefits for which we are eligible.

### **Impact of Inflation and Currency Fluctuations**

Most of our sales are in dollars. However, a large portion of our costs relates to our operations in Israel. A substantial portion of our operating expenses, primarily our research and development expenses, is denominated in NIS. For the purposes of our financial statements, costs not effectively denominated in dollars are translated to dollars at prevailing exchange rates when recorded, and will increase if the rate of inflation in Israel exceeds the devaluation of the NIS as compared to the dollar or if the timing of such devaluations lags considerably behind inflation. Consequently, we are and will be affected by changes in the prevailing NIS/dollar exchange rate. We might also be affected by the dollar exchange rate to the major European and Asian currencies, due to the fact that we derive revenues from customers in Europe and Asia.

The rate of inflation in Israel was 8.1% and 10.6% in 1995 and 1996. The rate of devaluation in Israel was 3.9% and 3.7% in 1995 and 1996. This imbalance was reversed when the rate of inflation was 7.0% and 8.6% in 1997 and 1998. The rate of devaluation in Israel was 8.8% and 17.6% in 1997 and 1998. In 1999, the rate of inflation was 1.3% and the rate of devaluation in Israel was 0.2%.

Because exchange rates between the NIS and the dollar fluctuate continuously (albeit with a historically declining trend in the value of the NIS), exchange rate fluctuations and especially larger periodic devaluations will have an impact on our profitability and period-to-period comparisons of our results. The effects of foreign currency remeasurements are reported in the Consolidated Financial Statements in current operations.

The representative exchange rate, as reported by the Bank of Israel, was NIS 4.153 for one dollar on December 31, 1999 (NIS 4.160 on December 31, 1998 and NIS 3.536 on December 31, 1997).

## **PART IV**

### **Item 17. Financial Statements.**

The Company has responded to Item 18.

### **Item 18. Financial Statements**

Reference is made to Item 19 for a list of all financial statements filed as part of this Annual Report on Form 20-F.

**Item 19. Financial Statements and Exhibits**

(a) (1) Financial Statements:

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Report of Independent Auditors .....	F-1
Consolidated Balance Sheets .....	F-2
Consolidated Statements of Operations .....	F-3
Statement of Changes in Shareholders' Equity (Deficit) .....	F-4
Consolidated Statements of Cash Flows .....	F-5
Notes to Consolidated Financial Statements .....	F-6

(a) (2) Financial Statement Schedules:

The following financial statement schedule of Commtouch Software Ltd. for each of the three years in the period ended December 31, 1999 is filed as part of the Annual Report and should be read in conjunction with the consolidated financial statements of Commtouch Software, Inc.

**Schedule II --Valuation and Qualifying Accounts**

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the consolidated financial statements or notes thereto.

(b) Exhibits

**Exhibit 4.1--Consent of Independent Auditors**

**REPORT OF INDEPENDENT AUDITORS**

**The Board of Directors and Shareholders COMMTOUCH SOFTWARE LTD.**

We have audited the accompanying consolidated balance sheets of Commtouch Software Ltd. and its subsidiaries as of December 31, 1998 and 1999, and the related consolidated statements of operations, changes in shareholders' equity (deficit), and cash flows for each of the three years in the period ended December 31, 1999. 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 generally accepted auditing standards, in the 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 the Company's 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 Commtouch Software Ltd. and its subsidiaries as of December 31, 1998 and 1999, and the consolidated results of their operations, and their cash flows for each of the three years in the period ended December 31, 1999, in conformity with generally accepted accounting principles in the United States.

Tel-Aviv, Israel  
January 31, 2000

**KOST, FORER & GABBAY**  
**A Member of Ernst & Young International**

COMMTOUCH SOFTWARE LTD.

CONSOLIDATED BALANCE SHEETS  
(In thousands, except share and per share data)

	December 31,	
	1998	1999
Assets		
Current Assets:		
Cash and cash equivalents .....	\$ 834	\$ 65,996
Marketable securities .....	--	18,050
Trade receivables, net .....	133	2,378
Prepaid marketing expenses .....	--	4,508
Prepaid expenses and other accounts receivable .....	244	1,648
	-----	-----
Total current assets .....	1,211	92,580
	-----	-----
Long-term Lease Deposits .....	--	1,254
Severance Pay Fund .....	223	354
Property and Equipment, net .....	932	6,148
	-----	-----
	\$ 2,366	\$ 100,336
	=====	=====
Liabilities and Shareholders' Equity (Deficit)		
Current Liabilities:		
Short-term bank credit .....	\$ 1,328	\$ --
Current portion of capital leases .....	112	120
Accounts payable .....	446	1,510
Employees and payroll accruals .....	313	1,032
Deferred revenues .....	74	561
Accrued expenses and other liabilities .....	378	1,304
	-----	-----
Total current liabilities .....	2,651	4,527
	-----	-----
Long-term portion of capital leases .....	164	44
Accrued severance pay .....	366	453
	-----	-----
	530	497
	-----	-----
Commitments and Contingent Liabilities (Note 6) .....	--	--
Shareholders' Equity (Deficit)		
Convertible Preferred Shares of NIS 1 par value -- Authorized: 524,250 shares as of December 31, 1998; and none as of December 31, 1999; Issued and outstanding: 221,265 shares as of December 31, 1998 and none as of December 31, 1999 Aggregate liquidation preference of approximately \$13,200 as of December 31, 1998 and none as of December 31, 1999 .....	74	--
Ordinary Shares of NIS 0.05 par value -- Authorized: 11,515,000 and 40,000,000 shares as of December 31, 1998 and 1999, respectively; Issued and outstanding: 1,450,040 and 15,199,344 shares as of December 31, 1998 and 1999, respectively .....	27	213
Additional paid-in capital .....	11,256	133,403
Deferred compensation .....	(418)	(5,779)
Notes receivable from shareholders .....	(77)	(1,060)
Accumulated other comprehensive income .....	--	63
Accumulated deficit .....	(11,677)	(31,528)
	-----	-----
Total shareholders' equity (deficit) .....	(815)	95,312
	-----	-----
	\$ 2,366	\$ 100,336
	=====	=====

The accompanying notes are an integral part of these consolidated financial statements.

COMMTOUCH SOFTWARE LTD.

CONSOLIDATED STATEMENTS OF OPERATIONS  
(In thousands, except per share data)

	Year ended December 31,		
	1997	1998	1999
Revenues:			
Email services .....	\$ --	\$ 389	\$ 4,251
Software licenses .....	711	--	--
Software maintenance and services .....	188	--	--
Total revenues .....	899	389	4,251
Cost of revenues:			
Email services .....	--	569	3,643
Software licenses .....	21	--	--
Software maintenance and services .....	144	--	--
Total cost of revenues .....	165	569	3,643
Gross profit (loss) .....	734	(180)	608
Operating expenses:			
Research and development, net .....	1,108	1,149	2,942
Sales and marketing .....	2,202	2,001	7,722
General and administrative .....	829	604	4,328
Amortization of the prepaid marketing expenses .....	--	--	3,263
Amortization of stock-based employee compensation (1) .....	--	91	3,436
Total operating expenses .....	4,139	3,845	21,691
Operating loss .....	(3,405)	(4,025)	(21,083)
Interest and other income (expenses), net .....	(68)	(326)	1,232
Net loss .....	\$ (3,473)	\$ (4,351)	\$ (19,851)
Basic and diluted net loss per share .....	\$ (2.40)	\$ (3.00)	\$ (2.65)
Weighted average number of shares used in computing basic and diluted net loss per share .....	1,450	1,450	7,487

	Year ended December 31,		
	1997	1998	1999
(1) Stock-based Employee Compensation Relates to the following:			
Cost of revenues	\$ --	\$ --	\$ 113
Research and development, net		60	320
Sales and marketing		25	897
General and administrative		6	2,106
Total	\$ --	\$ 91	\$ 3,436

The accompanying notes are an integral part of these consolidated financial statements.

COMMTOUCH SOFTWARE LTD.

STATEMENT OF CHANGES IN SHAREHOLDERS' EQUITY (DEFICIT)  
(In thousands, except share data)

	Convertible Preferred shares		Ordinary shares		Additional paid-in capital
	Shares	Amount	Shares	Amount	
Balance as of January 1, 1997	160,316	\$ 56	1,450,040	\$ 27	\$ 4,624
Issuance of shares, net	23,321	7	--	--	1,625
Warrants issued for services received and bank line of credit	--	--	--	--	46
Net loss	--	--	--	--	--
Balance as of December 31, 1997	183,637	63	1,450,040	27	6,295
Issuance of shares, net	37,628	11	--	--	4,061
Warrants issued for services received and bank line of credit	--	--	--	--	391
Deferred compensation	--	--	--	--	509
Amortization of deferred compensation	--	--	--	--	--
Net loss	--	--	--	--	--
Balance as of December 31, 1998	221,265	74	1,450,040	27	11,256
Issuance of shares, net	134,225	33	--	--	18,417
Issuance of shares at initial public offering, net	--	--	4,794,086	58	65,948
Conversion of preferred shares to ordinary shares	(355,490)	(107)	7,109,800	107	--
Fair value of warrants issued for services and bank line of credit	--	--	--	--	8,131
Deferred compensation	--	--	--	--	8,797
Ordinary shares issued for notes	--	--	670,180	8	1,029
Issuance of shares upon exercise of warrants, net	--	--	1,105,378	12	19,808
Issuance of shares upon exercise of options	--	--	69,860	1	17
Amortization of deferred compensation	--	--	--	--	--
Repayment of notes receivable	--	--	--	--	--
Other comprehensive income--unrealized holding gains on marketable securities	--	--	--	--	--
Net loss	--	--	--	--	--
Total comprehensive loss	--	--	--	--	--
Balance as of December 31, 1999	--	\$ --	15,199,344	\$ 213	\$ 133,403

	Stock-based employee deferred compensation	Notes receivable from shareholders	Accumulated other comprehensive income	Accumulated deficit	Total
Balance as of January 1, 1997	\$ --	\$ (77)	\$ --	\$ (3,853)	\$ 777
Issuance of shares, net	--	--	--	--	1,632
Warrants issued for services received and bank line of credit	--	--	--	--	46
Net loss	--	--	--	(3,473)	(3,473)
Balance as of December 31, 1997	--	(77)	--	(7,326)	(1,018)
Issuance of shares, net	--	--	--	--	4,072
Warrants issued for services received and bank line of credit	--	--	--	--	391
Deferred compensation	(509)	--	--	--	--
Amortization of deferred compensation	91	--	--	--	91
Net loss	--	--	--	(4,351)	(4,351)
Balance as of December 31, 1998	(418)	(77)	--	(11,677)	(815)
Issuance of shares, net	--	--	--	--	18,450
Issuance of shares at initial public offering, net	--	--	--	--	66,006
Conversion of preferred shares to ordinary shares	--	--	--	--	--
Fair value of warrants issued for services and bank line of credit	--	--	--	--	8,131
Deferred compensation	(8,797)	--	--	--	--
Ordinary shares issued for notes	--	(1,037)	--	--	--
Issuance of shares upon exercise of warrants, net	--	--	--	--	19,820
Issuance of shares upon exercise of options	--	--	--	--	18
Amortization of deferred compensation	3,436	--	--	--	3,436
Repayment of notes receivable	--	54	--	--	54
Other comprehensive income--unrealized holding gains on marketable securities	--	--	63	--	63
Net loss	--	--	--	(19,851)	(19,851)
Total comprehensive loss	--	--	--	--	(19,788)
Balance as of December 31, 1999	\$ (5,779)	\$ (1,060)	\$ 63	\$ (31,528)	\$ 95,312

The accompanying notes are an integral part of these consolidated financial statements.

COMMTOUCH SOFTWARE LTD.

CONSOLIDATED STATEMENTS OF CASH FLOWS  
(In thousands)

	Year Ended December 31,		
	1997	1998	1999
Cash flows from operating activities:			
Net loss	\$ (3,473)	\$ (4,351)	\$ (19,851)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	206	236	1,706
Amortization of stock-based employee deferred compensation and warrants issued for service received and bank line of credit	46	482	3,796
Decrease (increase) in trade receivables, net	738	(84)	(2,245)
Amortization of prepaid marketing expenses	--	--	3,263
Decrease (increase) in prepaid expenses and other accounts receivable	14	(164)	(1,028)
Increase in accounts payable	99	91	1,064
Increase (decrease) in employee and payroll accruals and other liabilities	(147)	128	1,645
Increase in deferred revenues	--	74	487
Increase (decrease) in accrued severance pay, net	(54)	19	(44)
Other	--	--	(9)
Net cash used in operating activities	(2,571)	(3,569)	(11,216)
Cash flows from investing activities:			
Purchase of available-for-sale marketable securities	--	--	(17,987)
Long-term lease deposits	--	--	(1,254)
Advance to related party	--	--	(364)
Proceeds from sale of property and equipment	--	--	13
Purchase of property and equipment	(93)	(442)	(6,938)
Net cash used in investing activities	(93)	(442)	(26,530)
Cash flows from financing activities:			
Short-term bank credit, net	733	595	(1,328)
Repayment of note receivable by shareholder	--	--	54
Principal payment of capital lease	(67)	(146)	(112)
Proceeds from issuance of shares, net	1,632	4,072	104,294
Net cash provided by financing activities	2,298	4,521	102,908
Increase (decrease) in cash and cash equivalents	(366)	510	65,162
Cash and cash equivalents at the beginning of the year	690	324	834
Cash and cash equivalents at the end of the year	\$ 324	\$ 834	\$ 65,996
Supplemental disclosure of cash flows activity:			
Cash paid during the year:			
Interest	\$ 48	\$ 97	\$ 117
Supplemental disclosure of non-cash activity:			
Capital lease obligations	\$ --	\$ 328	\$ --
Ordinary shares issued for notes receivable from shareholders	\$ --	\$ --	\$ 1,037
Issuance of Warrants for Prepaid Marketing Expenses	\$ --	\$ --	\$ 7,771

The accompanying notes are an integral part of these consolidated financial statements.

## COMMTOUCH SOFTWARE LTD.

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### NOTE 1: GENERAL

Commtouch Software Ltd. (the "Company" or "Commtouch") was incorporated under the laws of Israel in 1991. The Company, together with its United States subsidiary, Commtouch Software Inc., ("CSI") a California corporation, is a provider of Web-based email and communications solutions to customers who in turn offer those solutions to their end-users. From inception through 1997, the Company generated revenues primarily from sale, maintenance and service of stand-alone email client software products for both mainframe and personal computers. From 1998, the Company began to generate revenues by providing email services to its customers. Email service revenues are derived from contracts that provide for either a share of advertising revenues subject to a minimum annual revenue commitment or a monthly per-email box fee, and fees for direct

marketing and communications services. In November 1999, the Company established a wholly-owned subsidiary in England, Commtouch Software (UK) Ltd. (the "UK company"). The UK company had not yet commenced operations.

During 1999, approximately 11% of the revenues were derived from a single customer. During 1998, approximately 54% of the revenues were derived from another single customer.

#### NOTE 2: SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States.

##### a. Use of Estimates:

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

##### b. Financial Statements Denominated in United States Dollars:

Most of the Company's revenues are denominated in United States dollars. In addition, a substantial portion of the Company's costs are incurred in dollars. Since the dollar is the primary currency in the economic environment in which the Company and its subsidiaries operate, the dollar is their functional currency, and, accordingly, monetary accounts maintained in currencies other than the dollar are remeasured using the foreign exchange rate at the balance sheet date. Operational accounts and non-monetary balance sheet accounts are measured and recorded at the rate in effect at the date of the transaction. The effects of foreign currency remeasurement are reported in current operations.

##### c. Principles of Consolidation:

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

##### d. Cash Equivalents and Marketable Securities:

The Company considers all highly liquid investments originally purchased with maturities of three months or less to be cash equivalents.

The Company accounts for its marketable securities in accordance with Statement of Financial Accounting Standards ("SFAS") No. 115, "Accounting for Certain Investments in Debt and Equity Securities". All debt securities are designated as available-for-sale. Available-for-sale securities are carried at fair value, which is determined based upon the quoted market prices of the securities, with unrealized gains and losses reported in shareholders' equity, as items of other comprehensive income.

##### e. Prepaid Marketing Expenses:

The Company recorded prepaid marketing expenses, representing the fair value of warrants which have been issued to Go2Net Inc. and Microsoft Corporation in connection with commercial agreements into which the Company entered during 1999.

The prepaid marketing expenses are amortized using the straight-line method

over the minimum term of the agreements (twelve months).

In 1999, operating expenses included amortization of prepaid marketing expenses amounting to \$3.3 million.

f. Property and Equipment:

Property and equipment are stated at cost and depreciated using the straight line method over the estimated useful lives of the assets ranging from two to sixteen years. Leasehold improvements are amortized by the straight-line method over the lease term.

The Company periodically assesses the recoverability of the carrying amount of property and equipment and provides for any possible impairment loss based upon the difference between the carrying amount and fair value of such assets. As of December 31, 1999, no impairment losses have been identified.

g. Research and Development:

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

Based on the Company's product development process, technological feasibility is established upon completion of a working model. The Company does not incur any material costs between the completion of the working model and the point at which the product is ready for general release. Therefore, through December 31, 1999, the Company has charged all software development costs to research and development expense in the period incurred.

h. Revenue Recognition:

Since 1998, the Company has derived its revenues from providing Web-based email services. Revenues from contracts that are not dependent upon the number of mailboxes and provide non-refundable fixed payments are recognized ratably over the contract term. Revenues from contracts specifying a contractual rate per mailbox per month are recognized monthly for mailboxes covered by the respective contracts. Revenues from contracts based on a share of advertising revenues earned by business partners are recognized when such revenues are earned. Amounts billed or received in advance of service delivery are recorded as deferred revenues.

Revenues from software products sales that occurred through 1997 were recognized upon delivery of the software master for reproduction and distribution provided no significant vendor obligations remained, and collection of the related receivable was probable in accordance with Statement of Position 91-1.

i. Royalty-Bearing Grants:

Royalty-bearing grants from the Government of Israel for funding approved research and development projects are recognized at the time the Company is entitled to such grants, when expenses under such approved projects are incurred. Development grants amounted to \$288 in 1997 and none in 1998 and 1999.

j. Concentrations of Credit Risk:

Financial instruments that potentially subject the Company to concentrations of

credit risk consist principally of trade receivables, cash equivalents and marketable securities. The majority of the Company's cash, cash equivalents and marketable securities are invested in dollar and dollar linked investments and are deposited in major banks in Israel and in the United States. Management believes that the financial institutions that hold the Company's investments are financially sound and, accordingly, minimal credit risk exists with respect to these investments.

The Company's trade receivables are derived from transactions with companies located primarily in North America, Europe, Israel and the Far East. The Company maintains an allowance for doubtful trade receivables based upon the expected collectibility of trade receivables. The allowance for doubtful accounts was none and \$405,000 at December 31, 1998 and 1999, respectively. In 1997, the Company wrote off approximately \$170,000 of trade receivables that were derived from revenues recognized in 1996.

k. Accounting for Stock-Based Compensation:

The Company has elected to follow Accounting Principles Board Opinion No. 25 ("APB 25"), "Accounting for Stock Issued to Employees", in accounting for its employee stock option plans. Under APB 25, when the exercise price of the Company's stock options equals or is above the market value of the underlying stock on the date of grant, no compensation expense is recognized. The pro-forma information with respect to the fair value of the options is provided in accordance with the provisions of Statement No. 123.

In accounting for warrants granted to those other than employees, the Company applied the provisions of SFAS No. 123, "Accounting for Stock-Based Compensation" and Emerging Issues Task Force ("EITF") 96-18 "Accounting for Equity Instruments That Are Issued to other than Employees Acquiring or in Conjunction with Selling, Goods or Services." . The fair value of these warrants was estimated at the grant date, using the Black-Scholes option-pricing model.

l. Basic and Diluted Net Loss Per Share:

Basic and diluted net loss per share are presented in accordance with SFAS No. 128, "Earnings per Share" ("SFAS 128"), for all periods presented.

Basic net loss per share has been computed using the weighted-average number of ordinary shares outstanding during the period. Diluted net loss per share is computed based on the weighted average number of ordinary shares outstanding during each year, plus the weighted average number of dilutive potential ordinary shares considered outstanding during the year.

All convertible preferred shares, outstanding stock options, and warrants have been excluded from the calculation of the diluted loss per share because all such securities are antidilutive for all periods presented. The total number of shares related to the outstanding options and warrants excluded from the calculations of diluted net loss per share were 911,680, 1,236,100 and 2,497,470 for 1997, 1998 and 1999, respectively.

m. Severance Pay:

The Company's liability for severance pay 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. Employees are entitled to one month's salary for each year of employment or a portion thereof. The Company's liability for all of its employees is fully provided by monthly deposits with severance pay funds insurance policies and by an accrual.

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 surrender value of these policies, and includes immaterial profits.

Severance expenses for 1997, 1998 and 1999 were approximately \$73,000, \$62,000 and \$129,000, respectively.

n. Fair Value of Financial Instruments:

The carrying amounts of cash and cash equivalents, marketable securities, trade receivables and accounts payable, approximate their fair values due to the short-term maturities of these instruments.

The fair value of long term deposits is estimated based on current interest rates available to the Company for debt instruments with similar terms, degrees of risk and remaining maturities. The carrying value of these obligations approximates their respective fair values as of December 31, 1999.

o. Future Adoption of New Accounting Standards:

In June 1998, the Financial Accounting Standards Board ("FASB") issued Statement No. 133 "Accounting for Derivative Instruments and Hedging Activities" ("SFAS No. 133"). This statement establishes accounting and reporting standards requiring that every derivative instrument (including certain derivative instruments embedded in other contracts) be recorded in the balance sheet as either an asset or liability measured at its fair value. The statement also requires that changes in the derivative's fair value be recognized currently in earnings unless specific hedge accounting criteria are met. Special accounting for qualifying hedges allows a derivative's gains and losses to offset related results on the hedged item in the income statement, and requires that a company must formally document, designate, and assess the effectiveness of transactions that receive hedge accounting.

The FASB has issued SFAS No. 137, "Accounting for Derivative Instruments and Hedging Activities--Deferral of the Effective Date of FASB Statement No. 133". The Statement defers for one year the effective date of SFAS No. 133. The rule will apply to all fiscal quarters of all fiscal years beginning after June 15, 2000. The Company does not expect the impact of this new statement on the consolidated financial statements to be material.

**NOTE 3: MARKETABLE SECURITIES**

December 31,  
1999

Marketable securities are as follows (in thousands):

Commercial papers .....	\$ 2,230
Government securities .....	9,918
Corporate debt securities .....	5,902
	-----
	\$18,050
	=====

During 1999, the unrealized gross holding gains on marketable securities were \$80,000, while the unrealized gross holding losses were \$17,000.

**NOTE 4: PROPERTY AND EQUIPMENT**

December 31,

1998 1999

Property and equipment are as follows (in thousands):

Computers and peripheral equipment .....	\$1,260	\$7,704
Office furniture and equipment .....	90	232
Motor vehicles .....	118	135
Leasehold improvements .....	137	454
	-----	-----
	1,605	8,525
Less accumulated depreciation .....	673	2,377
	-----	-----
	\$ 932	\$6,148
	=====	=====

Computers and peripheral equipment under various capital lease agreements amounted to approximately \$328,000 and \$328,000 as of December 31, 1998 and 1999, respectively, and their accumulated depreciation amounted to approximately \$38,000 and \$185,000 as of December 31, 1998 and 1999, respectively.

Depreciation expenses amounted to approximately \$145,000, \$236,000 and \$1,706,000 for 1997, 1998 and 1999, respectively.

#### **NOTE 5: CAPITAL LEASES**

During 1998, CSI leased computers and peripheral equipment under various capital lease agreements, with an option to purchase the equipment upon the expiration of the initial lease term, for the fair market value prevailing at that time, not to exceed 10% of the original cost of the equipment. The annual interest rate of such capital leases ranges between 19.5% and 23%.

#### **NOTE 6: COMMITMENTS AND CONTINGENT LIABILITIES**

##### **Operating Leases:**

The facilities of the Company and CSI are leased under operating lease agreements expiring through 2007. Future minimum lease payments under these non-cancelable leases are as follows (in thousands):

2000 .....	\$ 2,251
2001 .....	2,803
2002 .....	2,889
2003 .....	2,782
2004 .....	2,770
Thereafter .....	6,168
	-----
	\$ 19,663
	=====

Rent expenses for 1997, 1998 and 1999 were approximately \$55,000, \$56,000 and \$578,000, respectively. In connection with the lease agreement on an office building, CSI deposited \$1.3 million in long term lease deposits of which \$1.1 million was held as collateral.

##### **Royalties:**

The Company is required to pay royalties on grants received from the Government of Israel for research and development projects at the rate of 3%--5% of total revenues, up to an amount equal to 100% to 150% of the original amount received linked to the dollar.

As of December 31, 1999, the Company had an outstanding contingent obligation to pay royalties in the aggregate amount of \$275,000.

## **NOTE 7: INCOME TAXES**

### **Israeli Income Tax**

The Company's production facilities in Israel have been granted "Approved Enterprise" status for two separate investment programs approved in 1992 and 1996 by the Israeli Investment Center under the Law for Encouragement of Capital Investments, 1959 ("the Law").

The Company's first program was approved in 1995. The Company's second program received a letter of approval in April 1996 and an application for an enlargement was submitted in February 2000 and has not yet been approved.

In February 2000 the Company submitted an application for another expansion (third program).

Undistributed Israeli income derived from each of its "Approved Enterprise" programs entitle the Company to a tax-exemption for a period of two years commencing with the first year it will earn taxable income (not commenced yet) and to a reduced tax rate of 10%--25% for an additional period of five to eight years (depending on the level of foreign investment in the Company). These tax benefits cannot continue beyond the earlier of twelve years from commencement of operations, or fourteen years from receipt of approval. Thereafter, the Company's income will be subject to the regular income tax rate of 36%. Income that was not derived from "Approved Enterprise" in its period of benefit mentioned above is taxed at the regular rate of 36%.

Distribution of cash dividends from income that was tax exempt due to the "approved enterprise" status are subject to a tax of 10%-25%. In addition, these dividends will be subject to a 15% withholding tax.

The tax exempt income attributable to the "Approved Enterprise" can be distributed to shareholders without subjecting the Company to taxes only upon the complete liquidation of the Company.

The Company's Board of Directors has determined that such tax exempt income will not be distributed as dividends. The Company is an "industrial company" under the Law for the Encouragement of Industry (Taxation), 1969 and as such is entitled to certain tax benefits, mainly accelerated rates of depreciation and the right to claim public issuance expenses.

As of December 31, 1999, Israeli net operating loss carryforwards amounted to approximately \$22.5 million. Such net operating loss may be carried forward indefinitely and offset against future taxable income.

### **U.S. Income Tax:**

CSI is taxed based upon tax laws in the U.S.

As of December 31, 1999, CSI had a U.S. federal net operating loss carryforward of approximately \$14.2 million. The net operating loss expires in various amounts between the years 2008 and 2020.

Utilization of U.S. net operating losses may be subject to the 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.

### **Deferred Income Taxes:**

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

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:

	December 31,	
	----- 1998 -----	----- 1999 -----
Deferred tax assets are as follows (in thousands):		
U.S. operating loss carryforwards .....	\$ 1,656	\$ 4,970
Reserves and allowances not currently deductible .....	15	57
	-----	-----
Net deferred tax asset before valuation allowance .....	1,671	5,027
Valuation allowance .....	(1,671)	(5,027)
	-----	-----
Net deferred tax asset .....	\$ --	\$ --
	=====	=====

For the year ended December 31, 1999 the valuation allowance increased by approximately \$3.4 million. No utilization of CSI's tax losses carryforwards is expected in the foreseeable future, because of its history of operating losses. In 1997, 1998 and 1999, the Company provided a 100% valuation allowance against the deferred tax assets in respect of these tax loss carryforward and other temporary differences because of the uncertainty of realizing these deferred tax assets.

Pretax loss:

Pretax losses are as follows (in thousands):

	1997	1998	1999
	-----	-----	-----
Israel .....	\$ 1,602	\$ 2,497	\$ 11,259
U.S. ....	1,871	1,854	8,592
	-----	-----	-----
	\$ 3,473	\$ 4,351	\$ 19,851
	=====	=====	=====

#### NOTE 8: SHAREHOLDERS' EQUITY

The ordinary shares of the Company are traded on the NASDAQ National Market.

##### a. Capital Shares:

In April 1999, the Company's Board of Directors approved: a 20 for 1 split of ordinary shares, a change in the conversion ratio of preferred shares to ordinary shares to 1 to 20 and an increase to the authorized ordinary shares to 40,000,000 shares of NIS 0.05 par value. The consolidated financial statements have been retroactively adjusted to reflect such changes for all periods presented.

In July 1999, the Company completed an Initial Public Offering ("IPO") of its ordinary shares. The Company sold 3,450,000 shares to the public at \$16 per share. Concurrent with the closing of the IPO, the Company sold 1,344,086 shares at \$14.88 per share to Go2Net, Inc. In addition, the holders of Series A, Series B, Series C and Series D convertible preferred shares received ordinary shares pursuant to an automatic conversion, resulting in the issuance of 7,109,800 ordinary shares in exchange for all outstanding convertible preferred shares.

b. Warrants Issued:

Warrants to Investors. In 1996, the Company issued to certain Series B investors warrants to purchase 13,873 Series B Convertible Preferred shares at an exercise price of \$44.04. These warrants were exercised concurrently with the closing of the IPO.

Warrants Issued for Services Received and Financing Transactions. Through 1999, the Company granted warrants in connection with a bank line of credit, loans and consulting services received. At December 31, 1999, one warrant for 4,860 ordinary shares with an exercise price of \$3.61 per share remained outstanding. This warrant was net exercised into 4,461 shares in January 2000.

The Company recorded \$17,000, \$264,000, and \$360,000 as interest expenses in 1997, 1998 and 1999, respectively. The Company recorded \$29,000, \$127,000 and none in 1997, 1998 and 1999, respectively, as compensation expense and included these amounts in operating expenses.

Warrants Issued to Strategic Partners and Customers. Concurrent with the closing of the IPO, the Company entered into a customary commercial email service agreement with Go2Net, a related party. Under this agreement, the Company provides email services to the end users of Go2Net's various email properties. In connection with this agreement, the Company issued a warrant expiring in July 2004 to purchase 1,136,000 Ordinary Shares at an exercise price of \$12.80 per share. As of December 31, 1999, this warrant had not been exercised. At the grant date, the fair value of this warrant was estimated as \$5.9 million and is being amortized to operating expenses over the minimum term of the contract (twelve months).

In October 1999, the Company entered into a customary email service agreement with Microsoft Corporation. Under this agreement, the Company delivers email services to Microsoft Web sites. In connection with this agreement, the Company issued a warrant to purchase 707,965 ordinary shares at an exercise price of \$28.25 per share. The warrant was exercised on December 29, 1999. At the grant date, the fair value of this warrant was estimated at \$1.9 million and is being amortized to operating expenses over the minimum term of the contract (twelve months).

c. Issuance of Ordinary Shares Against Promissory Notes:

During 1999, several employees and officers early exercised 670,180 options granted to them by Commtouch. In consideration for the ordinary shares purchased pursuant to the early exercise of the options, they provided Commtouch with full recourse promissory notes in the original principal amount of approximately \$1.0 million. The promissory notes bear interest at 4.83%, with interest payment due at the end of each calendar year, with the principal due on the fourth anniversary of the date of the promissory notes. The shares purchased are subject to a right of repurchase in favor of Commtouch according to the original vesting schedule of the options exercised, generally four years. As of December 31, 1999, approximately 279,584 shares are subject to this right of repurchase.

d. Employee Stock Purchase Plan:

Commtouch reserved a total of 150,000 shares for issuance under the plan. Eligible employees may purchase ordinary shares at 85% of the lower of the market value of the Company's Ordinary shares on the first day of the applicable offering period or the last day of the applicable purchase period.

e. Stock Options:

The Company has reserved 5,000,000 ordinary shares for issuance under employee stock option plans and agreements. Options granted under such plans and agreements expire generally after 10 years from the date of grant and terminate

upon termination of the optionee's employment or other relationship with the Company. The options generally vest ratably over a 4-year period. The exercise price of the options granted under the individual agreements may not be less than the nominal value

of the shares into which such options are exercisable or in the case of the subsidiary's plan it may not be less than fair market value. Any options that are canceled or not exercised within the options period become available for future grant.

In 1996, the Company adopted the 1996 CSI Stock Option Plan for granting options to its U.S. employees to purchase ordinary shares of the Company. The Company issued options to purchase ordinary shares to its Israeli employees pursuant to individual agreements. In 1999 the Company approved the 1999 Section 3(i) Share Option Plan for its Israeli employees.

A summary of the company's share option activity under the plans is as follows:

	Number of Shares			Weighted Average Exercise Price		
	1997	1998	1999	1997	1998	1999
Outstanding at beginning of period	457,520	607,040	849,520	\$ 0.99	\$ 1.10	\$ 1.20
Granted	213,820	251,900	1,342,670	1.45	1.45	10.13
Exercised	--	--	(740,040)	--	--	1.42
Canceled	(64,300)	(9,420)	(69,040)	1.45	1.45	4.49
Outstanding at end of period	607,040	849,520	1,383,110	1.10	1.20	9.62
Exercisable at end of period	165,480	375,580	381,315	1.45	1.45	3.50
Deemed fair value of options granted at an exercise price of:						
-- Less than fair market value at date of grant	\$ --	\$ 2.46	\$ 3.65			
-- Equals to fair market value at date of grant	\$ 0.61	\$ --	\$ 15.75			
-- Exceeds fair market value at date of grant	\$ --	\$ --	\$ --			

The options outstanding as of December 31, 1999, have been separated into ranges of exercise price, as follows:

Exercise Price	Options Outstanding as of December 31, 1999	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price	Options Exercisable as of December 31, 1999	Weighted Average Price of Exercisable Options
\$ 0.55-\$ 2.50	660,760	8.23	\$ 1.52	320,282	\$ 1.42
\$11.00-\$15.75	522,500	9.56	\$14.13	61,033	\$14.43
\$16.06-\$48.56	199,850	9.84	\$24.65	--	--
\$ 0.55-\$48.56	1,383,110	8.96	\$ 9.62	381,315	\$ 3.50

Under SFAS 123, pro forma information regarding net income (loss) and earnings (loss) per share is required and has been determined as if the Company had accounted for its employee stock options under the fair value method of that Statement. The fair value for these options was estimated at the date of grant using a Black-Scholes Option Pricing Model with the following weighted-average

assumptions for 1997, 1998 and 1999: risk-free interest rates of 6% for 1997 and 1998 and 5.5% for 1999, dividend yields of 0%, volatility factors of the expected market price of the Company's ordinary shares of 0.5 for 1997, 1998 and 0.5 - 0.56 for 1999 and an expected life of the option of 6 months after the option is vested.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in management's opinion, the existing models do not necessarily provide a reliable single measure of the fair value of its employee stock options.

Pro forma information under SFAS 123 are as follows (in thousands except per share amounts):

	1997	1998	1999
	-----	-----	-----
Net loss as reported .....	\$ (3,473)	\$ (4,351)	\$(19,851)
	=====	=====	=====
Pro forma net loss .....	\$ (3,600)	\$ (4,402)	\$(20,224)
	=====	=====	=====
Pro forma basic and diluted net loss per share	\$ (2.48)	\$ (3.04)	\$ (2.70)
	=====	=====	=====

The Company recorded deferred compensation representing the difference between the exercise price and the deemed fair value of the Company's ordinary shares at the date of grant. Such amount is being amortized based on an accelerated vesting method over the vesting period of the options, generally 4 years.

Deferred compensation is as follows (in thousands):

Balance as of January 1, 1999 .....	\$ 418
Deferred compensation related to options issued to employees .....	8,797
Less amortization of deferred compensation .....	(3,436)
	-----
Balance as of December 31, 1999 .....	\$ 5,779
	=====

#### f. Non-Employee Directors Stock Option Plan:

The Company adopted the 1999 Non-Employee Directors Stock Option Plan. Commtouch reserved a total of 250,000 shares for issuance under this plan. Each individual who first joined the Board of Directors as a nonemployee director on or after the effective date of the initial public offering received an option grant for 10,000 ordinary shares. Each option granted under the Non-Employee Directors Plan would become exercisable with respect to one-fourth of the number of shares covered by such option three months after the date of grant and with respect to one-third of the remaining shares subject to the option every three months thereafter. Each option has an exercise price equal to the fair market value of the ordinary shares on the grant date of such option. Each option has a maximum term of ten years, but will terminate earlier if the optionee ceases to be a member of the Board of Directors.

During 1999, the Company granted 60,000 shares to directors at a weighted average exercise price of \$15.83 per share. As of December 31, 1999, 25,000 shares were exercisable and 60,000 shares were outstanding.

**NOTE 9: RELATED PARTY TRANSACTION**

Other accounts receivables includes an advance to a related party of the Company. In October 1999, the Company advanced \$364,000 to an officer who is also a director. The loan is linked to the Israeli Consumer Price Index, plus a 2% interest rate. The loan was fully repaid on February 10, 2000.

**NOTE 10: SELECTED STATEMENTS OF OPERATIONS DATA**

Geographic information:

The Company conducts its business on the basis of one reportable segment. Revenues from external customers (in thousands):

	Revenues		
	1997	1998	1999
Israel .....	\$ 1	\$ --	\$ 369
U.S.A .....	543	109	3,056
Europe .....	28	130	344
Japan .....	282	103	250
Other .....	45	47	232
	\$ 899	\$ 389	\$ 4,251
	=====	=====	=====

The Company's long-lived assets as of December 31, are as follows (in thousands):

	1998	1999
Israel .....	\$ 291	\$ 789
U.S.A .....	641	5,359
	\$ 932	\$ 6,148
	=====	=====

COMMTOUCH SOFTWARE LTD.

SCHEDULE II -- VALUATION AND QUALIFYING ACCOUNTS  
U.S. Dollars in thousands

	Balance at the beginning of the period	Charged to costs and expenses	Deductions	Balance at end of the period
Year ended December 31, 1997:				
Bad debt .....	--	170	170	--
	==	===	===	===
Year ended December 31, 1998:				
Bad debt .....	--	--	--	--
	==	===	===	===
Year ended December 31, 1999:				
Bad debt .....	--	405	--	405
	==	===	===	===

## CONSENT OF INDEPENDENT AUDITORS

We consent to the incorporation by reference in the Registration Statement on Form S-8 (333-94995) pertaining to the 1996 CSI Stock Option Plan, the 1999 Section 3(i) Share Option Plan, the 1999 Employee Stock Purchase Plan and the 1999 Nonemployee Directors Stock Option Plan of Commtouch Software Ltd. of our report dated January 31, 2000 with respect to the consolidated financial statements and schedule of Commtouch Software Ltd. included in its Annual Report on Form 20-F for the year ended December 31, 1999, as amended by Amendment No. 1, filed with the Securities and Exchange Commission.

Tel-Aviv, Israel  
November 2, 2000

**KOST, FORER & GABBAY**  
A member of Ernst & Young international

### SIGNATURES

Pursuant to the requirements of Section 12 of the Securities and Exchange Act of 1934, the registrant certifies that it meets all of the requirements for filing on Form 20-F and has duly caused this amendment to annual report to be signed on its behalf by the undersigned, thereunto duly authorized.

### COMMTOUCH SOFTWARE LTD.

By: /s/ JAMES E. COLLINS

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James E. Collins  
Chief Financial Officer

November 2, 2000

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**End of Filing**

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