

# 1. THE COMPANY & THE PRODUCT

## 1.1 Overview

Virtual Ink Corporation is a privately held computer peripherals company founded by a group of MIT graduate students in engineering and business. We have worked to design a prototype system and business strategies, consulting with numerous academic and professional contacts to assess the feasibility and utility of our product and business model. Virtual Ink won \$10,000 in cash and \$15,000 in in-kind services from professional services firms as the first runner up in the 1997 MIT Entrepreneurship and Business Plan Competition for its primary product, **e•pen™**. In July 1997 Virtual Ink developed and tested the first fully functional proof-of-concept prototype model.

The **e•pen™** is an electronic transcription system that retrofits conventional whiteboards to automatically capture and transcribe handwritten text from the whiteboard to a personal computer, solving the problem of capturing and storing meeting notes or lecture notes on a whiteboard or chalk board. Imagine how valuable it would be to immediately store in manipulable form the notes generated in brainstorming sessions, reminders of things to do or even design sketches. Imagine how a device that allows one to do so effortlessly by retrofitting existing whiteboards and marker pens could revolutionize the way office workers interface with their computers and each other.

## 1.2 Business Model

Our business model is clear. Our value proposition is to provide an affordable, comprehensive electronic transcription system that allows for accurate, immediate data transcription of notes and sketches written or drawn on a conventional dry erase whiteboard and the ability to archive to a personal computer the captured data in manipulable form. Our promotional proposition is to sell through large office products stores, computer stores, mail order and specialty retailers, as well as to bundle with various hardware manufacturers and conventional whiteboard manufacturers. We intend to generate profits by producing products that will be augmented by software modules permitting handwriting recognition, the development of user tool kits and web-direct transcription. We anticipate that our pen product alone will be profitable, however, we perceive substantial opportunities in software application extensions for the **e•pen™** Electronic Transcription System.

Existing technologies to solve this problem have only focused on providing digitized writing surfaces such as electronic whiteboards or smart boards. These boards either photocopy the entire writing surface or serve as the actual input devices or electronic templates. As a result, they are large, cumbersome, expensive, and often immobile.

We see the **e•pen™** as a catalyst for revolutionizing data capture technologies. The **e•pen™** is not merely an innovative product substitute for electronic whiteboards, it is a comprehensive electronic transcription and data acquisition system that captures the image in manipulable form, not merely a bit map rendition. Therefore, users may manipulate the stored data in many popular computer applications, such as word processing or presentation software. Coupled with hand writing recognition software, the E-Pen will revolutionize the way people interface with their computers.

## 1.3 The Product

Our system consists of an electronic position-detection stylus-holder that holds either a conventional dry-erase marker pen or piece of chalk, a minimum of three position detection sensors that are mounted on the conventional surface and proprietary software and drivers to enable hand writing recognition and data manipulation amongst other features. Once activated, the stylus-holder transmits its position to the detection sensors placed around the edges of the writing surface. These sensors then wirelessly transmit the digital information to your existing computer. The stylus will be designed to be unobtrusive and require no specialized training to operate.

Aside from your existing personal computer, no additional hardware will be required to operate the E-Pen System. Further, the detection sensors are designed to be easily removed and remounted elsewhere, making the E-Pen System readily portable. Furthermore, we intend to bundle several compelling software applications with the pen product targeted to unique market segments and their needs. For example, through additional software and Internet access, the device may be configured to transmit from its host computer to a network server, allowing for distance learning, data conferencing, or distributed collaborative work.

On May 14, 1997, the intellectual property law firm of Wolf, Greenfield & Sacks filed a provisional patent application for using pen-based position detection technology for electronic transcription on behalf of the officers of Virtual Ink Corporation. On July 26, 1997, Virtual Ink tested the first operational proof-of-concept prototype system. We are presently filing a non-provisional patent application and applying for a registered trade mark.

### **1.4 Product Value**

The value of any product is the functionality users derive from its use. Some **e•pen™** users may prefer to capture graphical images as opposed to transcribed text; some users may prefer to be able to review, screen by screen, various stages of meeting notes to retrace the development of a critical idea or recapture a train of thought. Yet still, other users may wish to annotate their meeting notes with descriptive reminders of important developments or to highlight in some way certain passages of notes. To serve these varying levels of needs we will introduce two models of the **e•pen™**, the Consultant's Tool bundled with a full complement of our software for more demanding commercial use and the base product for less demanding commercial or recreational use, suitable for the conventional whiteboard in an individual office. We will also market easy-to-use software applications to allow users to manipulate their archived data and exchange these files with popular software applications.

Portability and ease of use will enable executives to replace their flip-charts and easels when attempting to record meeting notes. Immediate data transcription will allow managers to automatically record their written notes, whether it be in an office or a board room, and scroll through those notes at a later date to annotate with highlights or other descriptive information. Portability will also allow consultants to carry an **e•pen™** in their briefcase and companies to easily share the devices without being tied geographically to one location.

Our system can also be used as a videoconferencing/productivity tool, allowing users to work simultaneously while in different locations. Lastly, our attractive price point combined with business-critical functionality will allow companies to own several **e•pen™** units and for the E-Pen System to be as ubiquitous as laser printers or facsimile machines. Consequently, the market for the E-Pen is the intersection of every computer owner and dry erase whiteboard owner in America and the World.

### **1.5 Market Entry and Growth Strategy**

Given our proximity to MIT, we are developing relationships with professors to commit to using prototypes of the **e•pen™** in their lectures. We intend to secure product endorsements from respected faculty members to use as part of our marketing efforts.

We intend to direct sell our product to strategy consulting firms as early adopters of this technology. Consultants are team-oriented professionals who use whiteboards to develop business critical ideas and strategies. The ability to capture this data, transmit it wirelessly to a PC and transcribe the drawings into text will greatly enhance their productivity. Further, adoption of our technology will allow them to differentiate themselves from their competitors and make them likely candidates to be early adopters of our technology. Dominance in this niche market will lead to other niche markets through custom applications and a consulting service to design, implement and train users of custom transcription and productivity enhancement systems for new niche markets. Businesses in which the ability to capture and

store notes and renderings written on the whiteboard will derive value from using our system. Examples of alternate applications include graphic design, engineering, videoconferencing, shared whiteboard, medical records annotation, and electronic signatures for electronic commerce and legal documents.

We intend to secure product endorsements from our early technology adopters as valuable references to our early majority market. The early majority market is executives and managers who, by virtue of their positions in their organizations, work collaboratively and capture their whiteboard notes. Strategy consultants will serve as valuable references to this early majority market. The late majority market will include home and recreational use, less demanding commercial use such as personal calendar, scheduling and notes, and class room use.

We intend to develop relationships with manufacturers of conventional dry-erase whiteboards and overhead projectors to determine whether or not there are any opportunities to bundle our product with the conventional board or overhead projector to tap the mass market more directly. We also intend to explore possibilities for bundling our product with manufacturers of scheduling and contact management software to provide the ability to convert any writing surface into an electronic template which may directly input information to the computer. For example:

- a white board with a template of a calendar may be used to directly and more readily input information to the scheduling software,
- project managers may more readily input project schedules and Gantt charts to the scheduling software,
- graphics artists may more readily capture their sketches drawn with a marker as opposed to a mouse.

We plan to distribute our retail products through all major channels including distributors such as Merisel and Ingram as well as retailers such as CompUSA, Egghead Software, Computer City, Staples, Office Max, and other discount office supply retailers. Our initial plans include demonstrating our prototype at the major computer peripherals trade shows and to buyers for leading retailers. We have already initiated conversations with corporate buyers from Staples and Office Max. A detailed schedule of our implementation plan and product roll out is found in Section 4, Design and Development.

We will stimulate demand and attract buyers through aggressive advertising and promotional campaigns and WWW-based media channels. We plan to continually develop and introduce new compelling software applications for the **e•pen™** System. We see our core business in the electronic transcription industry as designing custom productivity enhancement systems employing electronic transcription, offering implementation consultation services and repackaging custom applications for the mass market.

As we realize capital gains from the sale, license and royalty fees of our product, we hope to align, partner and possibly become acquired by a leading manufacturer of a competing or related product.