Business Proposal and Social Impact

Overview

Gathering and retaining information from others, in a professional setting or during day-to-day interactions, presents challenges that this project attempts to overcome. A good memory or good record keeping skills are often required to remember minute details from important conversations. For those working in information-sensitive fields, forgetting such details may result in repercussions in the workplace or legal consequences. Similarly, medical workers rely upon accurate information to provide effectual treatment, and errors in reporting may cause detrimental health effects. In our day-to-day interactions with others, persons with poor memories, or at the extreme, those affected with such disorders such as Alzheimer’s disease, may require assistance remembering names, dates, faces, or simply recalling conversations had with others.

This application attempts to address these issues by recording, transcribing, and summarizing much of the information that presently must be documented by hand. The application first identifies the person standing directly in front of the user by matching the recognized face to previously recorded data, or by creating a new record. By prompt of the user, the application will record and store all desired conversations and transcribe audio recordings to text. This application will then summarize transcribed conversations and provide these summaries and other requested information on a heads-up display. The form that this project will take is an application on the Google Glass. This technology was chosen as the least obstructive method of obtaining all required information. Previous methods of obtaining the data required, such as note-taking or using a smart phone, would require the user to break eye-contact, or fiddle with a distracting device. The Google Glass will allow the user to retain the effect of having unaided interactions by using the Glass’s hands-free interface and discrete design.

The user of Mem-Friend will be able to access this program on the Google Glass. The end user will install Mem-Friend on a Google Glass and use Mem-Friend to identify persons in front of the user, cause Mem-Friend to record and transcribe conversations, and view summaries of conversations and identities on the Google Glass display.

The user of the Mem-Friend will first install the Mem-Friend onto a Google Glass. The user will open and use Mem-Friend during a meeting or conversation with one other person. To use the application, the user will first open the Mem-Friend application on the Google Glass. The user will then, using the Mem-Friend user interface, indicate to the program that he or she wants to record a conversation. After the conversation is over, the user will indicate to the Mem-Friend that it should stop recording. The user then is able to view the summary of the conversation and identity of the person on the Google Glass display upon user request. If a data entry using facial recognition already exists for a person with whom the user has met with in the past, the identity and summaries of past conversations will be displayed to the user on heads-up display upon recognition.

A Google Glass unit will be required by the user to access Mem-Friend. The Google Development Kit will be needed to develop an application that can access the camera and microphone. The GDK will also handle storage, speech recognition and transcription of conversations. On the back end, Google’s Mirror API will be used to develop aspects of the Mem-Friend retrieving and transferring information back and forth from the Google Glass and server. Heroku will be used as a platform for the Mem-Friend’s back-end services, such as the summarization algorithm, and data-storage and retrieval functions. Heroku Postgres will be used as the database service for the Mem-Friend, and will store facial recognition information, person identification (name), and transcribed conversations. On the front-end, the user will be presented with an option to open the Mem-Friend from the Google Glass timeline user interface.

Business Plan

At this time, our company is focusing largely upon the legal professionals as end users of the Mem-Friend. Attorneys and other legal staff often rely heavily upon notes, recordings, and transcriptions in many ways. Legal professionals are also very sensitive to accuracy and time efficiency in their methods of retaining information. For example, attorneys and staff often interview clients or potential clients before and through the duration of a legal matter. Retaining accurate information is important in shielding the legal professional from malpractice liability, and to further the interests of a client. Furthermore, attorneys and staff often bill by the hour. Having access to efficient means of recording information allows an attorney or other legal professional to service more clients, and eases the financial burden upon a given client. Furthermore, this application may be used in the context of trial and discovery by attorneys and court reports to reduce the need for costly legal transcription services.

Currently, law firms often use legal transcription services that are both costly and work intensive. These services and other productivity related applications are in competition with the Mem-Friend. However, the Mem-Friend will be the first application using the hands-free Google Glass to provide transcription and summarization services to legal professionals. In this regard, we aim to be the first to occupy this sphere.

The legal market was also chosen because of its size. As of 2012, there were 1,268,011 licensed attorneys in the United States[[1]](#footnote-1). The legal market grew by 1% in 2013, with 146,288 law students graduating law school in 2012[[2]](#footnote-2). The legal market for paralegals and legal assistants, however, has been projected to grow by 17% from 2012 to 2022, with the total amount of legal occupations growing by 11%[[3]](#footnote-3). Furthermore, attorneys and staff are needed in all 50 states, giving our company access to a nationwide market.

Currently, our company is searching for investors to initially bring the Mem-Friend to market. Capital gained from these efforts will be used to develop and market the prototype Mem-Friend application. After development, the Mem-Friend will be available to users using a subscription based model. Like other legal services, the Mem-Friend will be made available to whole law firms or individual users with corresponding packages and fees. The Mem-Friend will receive continued support by our team by providing users with new features and customer support.

The Mem-Friend will be marketed to law firms and solo practitioners using legal trade associations and by targeting the largest firms in the market through a network of contacts our company has been building. Legal professionals often use similar services, such as LexisNexis. By gaining the support of the largest firms in the legal market, we hope to become the standard for legal transcription and summarization services. Legal professionals and attorneys are also members of centralized organizations, such as the American Bar Association. We hope to be able to reach a wide number of legal professionals by targeting our marketing efforts on these organizations.

There are numerous obstacles that our company hopes to overcome in bringing the Mem-Friend to market. Since 2009, the demand for legal services has suffered a decline[[4]](#footnote-4). Many law firms have changed or are in the process of changing plans for future hiring or growth. Despite the decline of demand for legal services, we believe our product will be successful because the Mem-Friend will lower the costs of transcription services upon firms or solo practitioners, while providing additional summarization services. The subscription fee for the Mem-Friend will be significantly less than hiring legal transcription services because the Mem-Friend application itself will be transcribing the information, not a human being.

Social Impact

The use of the Mem-Friend would drastically decrease the need for transcription and summarization by human beings, and would lower the cost of obtaining these services. Our company aims to provide the legal market with efficient transcription and summarization services without having to hire third party services and without having to transcribe or summarize information by oneself. As such, widespread usage of our application would decrease the need for actual human beings to process or handle our users’ information.

The biggest social concern many of our users will have with the Mem-Friend deals with security and privacy of information. Most of the information transcribed, summarized, and stored by the Mem-Friend will be protected under privilege, and will contain highly sensitive information. If compromised, an individual could harm our users, our users’ clientele, and our own company using the information stored by the Mem-Friend. Thus, our company has put security of information and privacy at our highest priority. We are currently researching and implementing methods of keeping this information safe for both our users, and our users’ clients.

1. http://www.americanbar.org/content/dam/aba/administrative/market\_research/lawyer\_demographics\_2013.authcheckdam.pdf [↑](#footnote-ref-1)
2. *Id.* [↑](#footnote-ref-2)
3. http://www.bls.gov/ooh/legal/paralegals-and-legal-assistants.htm [↑](#footnote-ref-3)
4. https://peermonitor.thomsonreuters.com/wp-content/uploads/2014/01/2014\_PM\_GT\_Report.pdf [↑](#footnote-ref-4)