OIDD 899 Final Project: Zoodle.ai - Actionable meeting insights

Annonymous Team

(i) Industry Context and Background

According to Fortune Business Insights, the global market for video conferencing software is \$3.02B, and it is expected to double by 2026. Video conferencing is fast, easy, and convenient. Harvard Business Review notes that executives now spend 23 hours per week in meetings. However, as the friction to create meetings has been reduced, no solution for gaining insight from all of these interactions has arisen. With so many meetings being created, how does a manager get high level insight out of a meeting he or she didn't attend? How do people meeting about similar topics get connected? How can all of the meeting information be aggregated to give executives and understanding of what their employees are actually working on? Zoodle delivers answers to those questions.

(ii) Clear problem statement

Meetings in organizations bring employees together to share, discuss, decide and act on topics ranging from strategy to operations to initiatives to personnel. Meeting summaries and action items are critical outputs that are shared across the organization to bring relevant stakeholders up to speed on topics discussed at the meeting. However capturing meeting notes and actions is a tedious manual task that can fall through the cracks easily. Compounding the issue further, there is no solution that can identify people across different parts of the organization working on related topics using the content of the meeting summaries. Companies lose precious time, money, and value creation by having competing projects and not being aware of how those projects could negatively impact each other. Though breakthroughs in video conferencing technologies brought people across geographies together, efficient tools to capture, share meeting summaries, action items and insights are still lacking. Recent developments in Al/ML will help resolve this problem. Our proposed solution Zoodle.ai turns every meeting into actionable information.

(iii) Proposed solution leveraging Al

Zoodle makes meetings, teams, and companies more efficient. It transcribes a meeting, captures an executive summary, outlines action items, highlights overlap in meetings, and identifies topics of interest that prompt collaboration across teams.

- The solution involves software that will first transcribe meeting minutes via voice recognition. The software will then create automated meeting summaries and action items from the transcription.
- The solution will also generate key topics based on the meeting minutes, which will be queryable for insights.
- The solution will also make recommendations to stakeholders across the organization of meeting discussions they may be interested in reading or teams they may be interested in contacting.

- The software application will be integrated with existing meeting and calendar software (e.g., G-Suite) with additional optional modules for 3rd party software integrations.
- There will be an ability to provide different levels of access and permission to meeting minutes (e.g., highly confidential meeting minutes can be restricted to certain individuals or groups).

Technologies used:

Supervised learning

- A machine learning model based on supervised learning will be created to generate automated action items and summaries based on meeting minutes.
- The meeting minutes are the input while the action items and summaries are the output.
- We will train the model on existing data using a method like the Amazon Mechanical Turk. We plan to use public company earnings calls or documents from public court proceedings as initial training data. We will feed these transcripts to folks who are familiar with the subject matter and ask them to summarize the transcript and create simple questions and answers. Our model will be trained on this label data.
- Customers who use the product would have certain points where they could provide feedback on the outputs, providing further training for the model.
- We would also like to make the model industry-specific so that we can focus our training on a specific vertical and through the use of industry-specific transcripts. We realize that our model is only as good as the data so we would strike strategic partnerships in the industry to get the data or identify vendors where we might purchase data.

Unsupervised learning

- Through Latent Dirichlet Association, topics from meeting minutes will be identified by the model based on the frequency of non-common words or phrases.
- These topics are similar to hashtags for a meeting that will allow individuals in the organization to search meeting minutes by topic or hashtag.
- We can use these hashtags to find if similar hashtags are showing up across other team
 meeting minutes to identify cross-functional trends or topics. For instance, these topics
 could be problems which have already been solved by different teams or the same
 problem being faced by various teams. These insights will encourage teams to
 collaborate or coordinate.

Recommendation system

• Item-to-item recommendations could also be pushed to teams or individuals - Individuals or teams in the organization may add topics, initiatives or issues they are interested in to their internal profiles. The recommendation engine can offer up meetings that are occurring across the organization to those individuals based on a match/relationship on topics. This will promote collaboration or potential connections to occur across teams in a large organization.

(iv) Monetization: How we will make money

We will offer three tiers of account types and charge users and companies on a per user per

month basis.

In order to acquire customers quickly and minimize our sales team early on, we will offer an introductory "Basic" tier for free. This freemium tier creates network effects and a training dataset for the model for Supervised Learning. With this subscription type, users can use Zoodle on 10 meetings a month with access to limited features, including a PDF summary of the meeting, a list of action items from the meeting, and a short summary of the meeting. We expect >50% of Basic users to see value in the product, want all of their meetings to benefit from Zoodle, and upgrade to a paid account.

The "Enterprise" tier (\$10 per user per month) gives users access to Zoodle on unlimited meetings, all of the features of Basic, and also the ability to export meeting transcriptions, notes, and action items, including calendar integration, and assigns action items to individuals. Individuals then have access to reminders on their action items to meet deadlines and alert team members when action items are completed.

The Enterprise + tier (\$12 per user per month) gives users access to all of the high value features of Enterprise, *plus* access to different account types with customizable permissions, which can keep meetings private and visible to designated individuals. Enterprise + also gives companies access to Company Connect, which alerts leaders to potential overlap in content and competing and collaborative initiatives across the organization.

(v) Competition: Other players in the market and why their offering is not sufficient Reason8, Voicera, Otter, Fireflies.ai and Cisco Al assistant are the players in the market. Cisco Al Assistant does some of the things we do, using ML, but it focuses on meeting productivity, not on generating insights for the business. Fireflies.Al is the only tool that can be deemed close competition with our proposed solution. Other tools are partial solutions with very narrow feature sets. These partial solutions require lots of manual work and also don't generate insights.

Reason8 is award-winning software for recording in-person meetings. Each participant in the room needs the app on their phone. There is no desktop version.

Otter is a note-taking app that also records in-person meetings. You only need to have it on one device, so it doesn't feel like it should get good results when you've got a lot of people in the room. It does work from the browser window on a desktop, or via an app on your phone or tablet. It identifies speakers, lets you highlight key phrases and creates a transcript in real time that you can see on the screen.

Voicera is also a meetings minutes transcription tool but has other unique features. This one integrates with your calendar. It uses an AI assistant as the way to capture your meeting notes. Integrate with the calendar, and then invite Eva, the AI assistant, to the meetings. Voicera has predictive highlights, so it tries to summarise important moments in the meeting for you. As with the other tools, you can play back parts of the meeting once it is recorded to compare the transcript to the speech.

Fireflies.AI is a tool that comes very close to our proposed solution. The tool can be used to

record, transcribe, collaborate and search meeting notes. It can be used across any web conferencing platform. However the tool does not provide meeting insights that helps bring different parts of the organization working on similar topics together, an important feature in our proposed solution.