## Dual-Factor Urgency Assessment System for Legal Case Prioritization

## Introduction:

Our key question: What's the urgency level of processing law consulting requests? Requests that have a higher urgency level should be given priority over those with a lower level. By reordering requests based on their urgency levels, ABA lawyers can ensure that their resources are allocated in the most efficient and effective manner possible, and that urgent cases are given the attention they need. This change can help improve the quality of legal services provided to clients, and ultimately contribute to higher confidence by public to lawyers.

## Methodology:

The goal of analyzing this surprising dataset is to assign a significance level to each text or case, which can help attorneys prioritize the most urgent cases first. This is achieved by combining two criteria - the category of the case and the sentiment of the text. The first criterion is determined using a machine learning model to predict the category of the case based on the non-stop words in the clients' questions. The first urgency factor is then assigned by categories, where health has the highest urgency level, followed by housing, family, work, income, education, consumer, juvenile, and individual rights. The sentiment of each text is determined using an external dataframe that contains words and their associated sentiment. Sentiment scores of emotions are assigned to each word, and the overall sentiment of the text is inferred from these scores. An equation is then used to calculate the second urgency factor based on the sentiment analysis results.

When two urgency factors are multiplied for the same text, the larger result indicates a higher level of urgency. Therefore, attorneys should prioritize the cases with the larger urgency factor and handle them first. This approach helps attorneys manage their workload effectively and ensures that urgent cases are dealt with promptly, resulting in better outcomes for clients.

## Results and Suggestions:

The approach of determining the urgency level of law consulting requests can serve as a reference for planning how to handle urgent issues in the future. By prioritizing urgent cases, ABA can allocate their resources in the most efficient manner possible and improve outcomes for clients.

Automatic responses can be set up to help clients describe their problems more clearly. This can aid lawyers in assessing the urgency of the case and responding appropriately. By making it easier for clients to provide information about their situation, lawyers can provide better support and improve client satisfaction. Setting up better and eye-catching tips can help make clients aware of the untimely nature of responses. This can help manage client expectations and reduce frustration. By improving communication and transparency, lawyers can improve client trust and confidence in the legal system.