2.1 EXECUTIVE SUMMARY

The primary goal of this project is to develop an AI solution for The Company that can suggest tagging features to their users whilst using their platform as opposed to the random method of proposing tags that is currently used. The proposed solution involves the use of an Amazon Comprehend model trained using data manually tagged by The Company to suggest the tags that a user could utilise. This document includes information on the project team and the success criteria of the project, the work within and outside of the project scope, the technical implementation of the project and a cost breakdown.

2.2 PROJECT SUCCESS CRITERIA

The Company are a startup that have developed a platform that enables a user to simply tag single words, phrases or entire sentences with structural and sentimental information across a variety of languages. Whilst tagging the user is presented with a variety of tags, however, these suggestions are random. As such The Company would like to implement an AI component into their product where the user has tags suggested to them rather than a random selection being proposed. We have proposed a solution that involves training a Comprehend model with the tags that The Company have provided for us and constructing the necessary infrastructure required for simple use, including APIs, Lambdas and S3 buckets. Success would be the capability to send a sentence via an API gateway and the user is returned the sentence with accurate tagging.

2.3 ASSUMPTIONS

• Training data containing the required tags will be supplied by The Company.

• Unless a more suitable service is identified, Amazon Comprehend will be used as the principal service for this solution.

• Further data manipulation or processing will be performed by 3Gi.

• The required services (API, Lambda, (S3 bucket if applicable)) will be created by 3Gi

• The project will be developed by 3Gi then deployed in The Company’s environment where it will ultimately be hosted

• A demonstration of how to use the project, the required materials and documentation will be provided by 3Gi to The Company

• Technical lead understands the knowledge that is shared as part of the cloud accelerator, assist with the POC delivery and continue the model development within SageMaker

• The customer purchases an AWS support plan

2.4 OUT OF SCOPE

• In depth training on AWS services

• Multi-environment setup

• Integration with existing product – this project is for a standalone AI project

• Ongoing break-fix support

3 SCOPE OF WORK - TECHNICAL PROJECT PLAN

• Upload labelled data to S3 bucket and train Amazon Comprehend model.

• Create lambda and other infrastructure if required (SNS, SQS, etc) capable of taking sample text, sending it to comprehend and returning information.

• Create API required to send file to lambda and return results from Amazon Comprehend to user.

• Appropriate testing of the AI solution on data provided by The Company prior to handover with client with accompanying documentation and guidance on use.

4 SOLUTION ARCHITECTURE / ARCHITECTURAL DIAGRAM

There is one solution proposed. A file (most likely JSON) will be sent to a Lambda via an API. This Lambda will communicate with an Amazon Comprehend model that has been trained on data provided by The Company. Once the analysis by Amazon Comprehend is complete a lambda will handle any post processing required and return the results of the analysis to the user. One lambda may be used for this entire process or multiple may be used.

5 SUMMARY OF MILESTONES & DELIVERABLES

The project milestones are:

• Training of Amazon Comprehend model using data provided by The Company

• Development of Lambda to interact with Amazon Comprehend

• Set up of an API to send JSON messages to the Lambda

• Internal testing and best processes checking

• Hand over to The Company