

Project Milestone 4

Team 5

Team member: Lavender Juan, Fengze Han, Shradha Tiwari, Vineesha Devathi, Tejas Dhomne, Wangzhen Yu

Our product is Cloud-Native Analytical Pipeline, which provides retail businesses with a faster intelligent decision-making process by processing real-time data and extracting timely insights, eliminating delays between data and business.

Our product is a membership and subscription based SaaS business, therefore, our products will be charged weekly, monthly or annual membership fees. For revenue from membership fees, Gross Sale Revenue, each period prices (weekly, monthly, and annual) x number of customers in corresponding period, is a good metric to measure. It represents the total income from sales. And Net Sale Revenue is the other great metric, using the Gross Sale Revenue minus discounts and returns.

Not to mention, as our product is a SaaS, we will charge our clients through the licensing and subscriptions of our software in order to fund our revenue goals. A pay-based on-usage revenue model is what we intend to develop. Pay as you go is seen favorably because our model is a SaaS business model. The estimation of the quantity of new clients we will gain over time is the first stage in creating our revenue model. We can divide them into 3 different subscription options once we know how many additional clients we will bring on board.

The main cost of our product is made up of five parts: AWS service fee, marketing expense, personnel cost, infrastructure cost and attorney fee. Firstly, we need to pay AWS a certain amount of money to use their services, including Amazon S3, Amazon Kinesis Data Streams, Amazon Kinesis Data Analytics, Amazon Kinesis Data Firehose, AWS Glue, Amazon QuickSight, AWS Lambda, Amazon DynamoDB, Amazon CloudWatch and Amazon SNS. Secondly, we need to pay a marketing team to help us advertise and find potential customers. Since it is a new product, we are in great need of promotion and advertising to expand the market and build relationships with potential customers. For the personnel cost, we need to hire relevant technical personnel to help us build our business model, build our web pages or computer programs, and design an easy-to-use and attractive user interface(UI). Meanwhile, we also need operators to monitor data in real time and deal with problems arising from data analysis. Infrastructure costs are the costs we incur from renting office space, purchasing office supplies and related electronics while developing and operating our products. Attorney fees are paid to attorneys who provide us with legal services, such as drafting contracts with clients.

Estimate growth rate:

Monitoring a company's SaaS growth rate is crucial since it'll indicates how successful our products, it can be calculated using the formula for revenue growth rate i.e. $(\text{Second Year Revenue} - \text{First Year Revenue}) / \text{First Year Revenue} * 100 = \% \text{ Revenue Growth Rate}$. This number can be useful if our product has to make any long-term adjustments to its marketing tactics or service delivery. To monitor and evaluate growth over a five-year period, we can compute the growth rates by using either of the five strategies such as Monetization, Moving into new markets, Moving upmarket, Moving downmarket or Product expansion. Using these strategies, if our product is widely accepted we can estimate an increase of more than 100% growth rate for a year and steady for upcoming 2 years. Therefore, the overall estimated growth rate can reach up to at least 400% (Approx) during the 5th year after our product launch.

We will be performing product analysis and customer analysis to enhance the features and gain insights which lines with the user needs and boosts sales for the grocers. Analysis on the product will give us information about the consumer behaviour and guides us in making further decisions. Analytics on the sales data and customer data is a vital source for this product. To increase the sales, we need to understand the customer shopping patterns, festival shopping patterns and most purchased items. Moreover, competitor analytics such as discounts and hyped products need to be identified. The next step would be targeting, which would incorporate behavioral factors (recent activity, category clusters), derived factors (transaction data, propensity models), and demographic factors (gender, geography, consumer/business).