# LLM Acquisition Analysis Worksheet

This worksheet is designed to help contracting offices perform an Analysis of Alternatives (AoA) for evaluating LLM-based products. The worksheet is based on initial data captured through strategic prompts, allowing acquisition teams to assess various LLM solutions, their licensing models, cost structures, and added features. Use this template to organize findings, compare options, and make informed contracting decisions. This worksheet is a work in progress but serves as a base 0.1.0 for a blueprint on how to gauge LLM-added value products in the AI space.

## 1. Base LLM Capture Data

Please fill in the information below based on responses received during the initial evaluation:

|  |  |
| --- | --- |
| Model Name (ex. GPT 4o) |  |
| Vendor (ex. OpenAI) |  |
| Core Architecture: (ex. GPT 4o) |  |
| Token Specification(s): |  |
| Token Cost Per Specification: |  |

## 2.Vendor LLM Capture Data

|  |  |
| --- | --- |
| Model Name: |  |
| Vendor: |  |
| Core Architecture: |  |
| Licensing Model (e.g., FFP, CPFF, CPIF, T&M): |  |
| Additional Features Offered: |  |

## Cost Analysis

This section allows you to capture and compare the cost structures of various LLM products. Ensure that all relevant costs (e.g., setup, operational, customization) are included to accurately assess total expenses. The following table is an example and you must utilize the Vendor’s costs to mirror your need. For example, if the Vendor is a FFP setup fee + per seat cost, you will need to put those costs (and remove unnecessary cost components below).

|  |  |
| --- | --- |
| **Cost Component** | **Estimated Cost** |
| Initial Setup | $10,000 |
| Seat Cost (Annual) | $2,500 |
| Seat Qty | 5 |
| Total Cost (Initial) | $22,500 |
| Annual Cost (Off Years) | $12,500 |
| Total Years | 22,500 + (12,500\*4) = $72,500 |
| Averaged Annual Cost |  |

## Base LLM Token Estimate

This section requires some additional deep dives on the usage of the system and will be the biggest thing. Based on whatever the model is, you will need to determine the token cost, average token size, usage of token and other related API call costs. We utilize a “TB-WBS” or Token-Based Work Breakdown structure that will simulate the work efforts of the team members that utilize this product.

The TB-WBS requires a knowledge of the scope to which the product will be used and the objectives that commit the resources to invest in this product. Below is a simplified version of what you should be accounting for. It may also help to utilize a BoE of all your FTEs and how each position may use it. For example, in our example below, we are pricing the use of a Proposal Assistant. A Proposal Manager, three team members and a Capture Manager may all use the tool differently, so we can also map FTEs to Tasks to create a better cost model. Second, we can also create better cost models by understanding if there is variability in cost based on the need or utilization of a certain model over another (API costs).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Task** | **Estimated Tokens per Action** | **Average Actions per Day** | **FTE Utilization** | **Work Rate Variability** | **Cost per 1M Tokens** | **Estimated Tokens per Action (M)** | **Daily Token Cost** |
| Draft Creation | 48000 | 0.3 | 1 | 1 | 2.5 | 0.048 | 0.036 |
| Content Review & Edit | 1200 | 3 | 4 | 0.6 | 2.5 | 0.0012 | 0.0216 |
| Real-Time Query Response | 50 | 55 | 4 | 1 | 2.5 | 5.00E-05 | 0.0275 |
| Summary Generation | 2500 | 1 | 2 | 1 | 2.5 | 0.0025 | 0.0125 |
| Formatting Adjustments | 10 | 20 | 1 | 1 | 2.5 | 1.00E-05 | 0.0005 |
| **Total** | | | | | | | **0.0981** |

Based on this, we now know the cost per day is $ .0981 in API calls. We must then total by estimated working days (work variability accounts of volatility in work stream, such as seasonal or surge work capabilities and likelihood).

We take .0981 \* 240= $23.54

## 4. Cost Delta Calculation

Calculate the delta between the total product cost and the underlying API cost to determine the value proposition of added features. Use the following fields to capture the necessary data:

Total Product Cost (e.g., from FFP, CPFF): CPFF

Total Estimated API Usage: $23.54

**Cost Delta** (Estimated Annual API Cost - Average Annual Product Cost): $23.54- $14,500= -14,476.49

**Cost Variance**: (Average Annual Product Cost-Estimated Annual API Cost/ Estimated Annual API Cost) \* 100: %61,454.58

## 4. Value Proposition Analysis

There is now a visible 61,654% discrepancy between the LLM model, and the project API costs, so the platform will need to provide some manner of cost benefit to allow for that. This is where we can bring in additional values in service, setup and support, as well as extra features that may have to be customized/programmed.

We provide insights into the value of additional features offered by the LLM product. Evaluate if the cost delta is justified based on tangible benefits such as performance improvements, customization, or integration capabilities. You can use an Analogous Estimate of other products now that provides you a cost basis for what these other features may be worth.

|  |  |  |  |
| --- | --- | --- | --- |
| **Feature(s)** | **Estimated Value ($/month)** | **Seats/Licenses** | **Total Costs (x12 months)** |
| Automatic Update (Version Control) | $150 | 5 | $9,000 |
| Compliance Evaluation | $250 | 1 | $3,000 |
| Document Parser | $125 | 5 | $7,500 |
| Automated Email and Scheduler | $250 | 1 | $3,000 |
| **Total** | | | $22,500 |

## 5. Final Recommendation

We now see that if we take those other features, we can then analyze the relative cost of AI between the two models and look to justify the award fee presented by the company. The company actually has additional value features that coincide with other licenses but include the AI value model.

**Cost Delta + Additional Value Analogous Total =** Final Cost Value

-14,476.49 + 22,500= **$ 8,023.51**

Based on this, there is a positive value from the API cost to the feature cost, even though originally the API calls seemed overprice. In the case where there were not features, this would be a good time to make the business decision if this product is at all worth it (if its an open-ended product, versus has additional built features that uses other features).