| **GCP Service** | **Example Configuration** | **Approx. Monthly Cost (USD)** | **Notes** |
| --- | --- | --- | --- |
| **Document AI** | 100K pages processed/month | $500 | ~$5 per 1,000 pages for Form Parser |
| **Vertex AI** | 1 Standard model training + 1 deployment (n1-standard-4) | $300 | Varies based on training hours, deployed model hours, and tier |
| **AI and Data Kit (ADK)** | 10 hours of pipelines, 10GB data | $100 | Pricing depends on storage + execution |
| **Notebooks (Vertex)** | n1-standard-4, 8 hrs/day, 20 days/month | $120 | ~$0.75/hr for basic machine |
| **AgentSpace** | Basic usage (100K characters/month interaction) | $50 | Based on conversational AI; pricing depends on character count |

**GCP Services Cost Estimation**

| **Service** | **Usage Assumption** | **Unit Price** | **Monthly Estimate (USD)** | **Notes** |
| --- | --- | --- | --- | --- |
| **Document AI** | 100,000 pages/month using Form Parser | $30 per 1,000 pages | $3,000 | Form Parser processes structured data extraction. Volume discounts apply for higher usage. |
|  | Custom Processor Hosting | $0.05 per hour | $36 | Hosting cost for deployed custom processor versions. Calculated as $0.05 \* 24 hours \* 30 days. |
|  | OCR Add-ons | $6 per 1,000 pages | $600 | Additional OCR features like handwriting recognition. |
| **Vertex AI - Model Training** | 10 hours using n1-standard-4 VM | $0.379 per node hour | $3.79 | Training cost. Additional storage costs may apply based on data size. |
| **Vertex AI - Model Deployment** | 100 hours using n1-standard-4 VM | $0.19 per hour | $19 | Deployment cost for online predictions. |
| **Vertex AI - Generative AI** | 1 million input tokens, 1 million output tokens | Input: $0.15/million tokens Output: $0.60/million tokens | $0.75 | Costs for using generative AI models. Pricing varies by model and usage. |
| **Vertex AI Notebooks** | n1-standard-4, 8 hrs/day, 20 days/month | $0.19 per hour | $30.40 | Interactive development environment. |
| **AI and Data Kit (ADK)** | 10 hours of pipeline execution, 10 GB data storage | Execution: $0.10 per hour Storage: $0.026 per GB/month | $1.26 | Costs for data processing pipelines and storage. |
| **Agentspace** | 1 user | $25 per user per month | $25 | AI agent platform for enterprise applications. |

| **Recommendation** | **GCP Implementation** | **GCP Services Involved** | **Monthly Cost Estimate (USD)** | **Notes** |
| --- | --- | --- | --- | --- |
| **Project Structure** | Review resource hierarchy: Org > Folder > Projects. Organize based on team/env/application. | Resource Manager | $0 | No direct cost. Best practice for manageability. |
| **Naming & Tagging** | Use labels and naming conventions to enforce policies and billing segmentation. | Labels, Resource Manager | $0 | Improves visibility and governance. |
| **Identity & Access Mgmt** | Use IAM roles with minimum privilege. Integrate Cloud Identity or Google Workspace with Identity Federation. | IAM, Cloud Identity | $6/user (Cloud Identity Premium) | Secure access and SSO. |
| **Network Architecture** | Hub-and-spoke VPC design with Shared VPC. Use Cloud NAT for egress, Cloud Armor for L7 firewalling. | VPC, Cloud NAT, Cloud Armor | $100–$300 | Costs depend on egress traffic and Cloud Armor rule evaluations. |
| **Logging & Monitoring** | Centralized logs via Cloud Logging. Set up metrics and alerts using Cloud Monitoring. Forward logs to Splunk via Pub/Sub and Dataflow. | Cloud Logging, Monitoring, Pub/Sub, Dataflow | $200+ | Logging: $0.50/GB ingestion. Splunk export depends on volume. |
| **Security & Compliance** | Use Security Command Center (Premium) to manage vulnerabilities. Set up policy checks and integrate with third-party tools (e.g., Wiz.io via SCC findings export). | SCC Premium, Assured Workloads, Org Policy, Forseti (optional) | $1000+ | SCC Premium required for enterprise security integrations and export. |

| **Component** | **Usage Assumption** | **Unit Price** | **Estimated Monthly Cost (USD)** | **Notes** |
| --- | --- | --- | --- | --- |
| **Chat Agent Queries** | 2,000 queries | $12 per 1,000 queries | $24.00 | Standard rate for chat interactions. |
| **Agent Runtime** | 720 hours (24/7 operation) | $0.01 per hour | $7.20 | Cost for running a basic agent continuously. |
| **Data Indexing Storage** | 2 GiB (after free tier) | $5.00 per GiB per month | $10.00 | First 10 GiB per month are free. |
| **Web Search Integration** | 1,000 searches | $2.00 per 1,000 searches | $2.00 | Cost varies between $2–$8 per 1,000 searches depending on features used. |