



**Project Title:** UpWork Agency Management System

**Document Version:** 1.3

## 1. Purpose:

The purpose of this application is to streamline the end-to-end internal workflow of a freelancing agency operating on UpWork. The system automates job discovery and feasibility evaluation, generates personalized bid proposals using Google Gemini, and sends detailed email summaries to decision-makers for manual bidding decisions. The system aims to enhance operational efficiency, improve response time to new leads, and manage workload distribution.

## 2. Scope

This system will:

- Scrape or receive job posts from UpWork in real time.
- Compute bid feasibility (costs, profit margins).
- Use Google Gemini to generate personalized bid proposals if job is feasible.
- Generate detailed emails with job metadata, proposal, feasibility analysis, and team alignment included.
- Allow agency owners / admins to assign tasks to project managers and team members.
- Track deadlines and statuses for each task / project.
- Include access control for Admins, Managers, and Members.
- Allow admins to define per-category, per-hour, or per-project budget thresholds.
- Generate operational reports / dashboards.

## 3. Target Users

- Agency Owners / Admins
- Project Managers
- Freelancers / Team Members

## 4. Assumptions & Constraints

- Assumes API or scraping access to UpWork job listings (limited by ToS).
- Uses Google Gemini for bid content generation (via API).
- Email service will be configured via Outlook.
- Users must have a stable internet connection.
- System will be served as a web app.

## 5. Functional Requirements

### 5.1. Job Discovery & Bidding Analysis

FR ID	Functionality	Description
FR-1	Job Feed Aggregation	Pull or receive job postings from UpWork in real-time or at intervals via scraping/API.
FR-2	Smart Bidding Rules	Allow admin to define rules for smart job filtering and feasibility analysis.
FR-3	Gemini Prompt Engine	If job is feasible, use job post metadata to generate personalized proposals using Google Gemini.
FR-4	Proposal Logging	Log all proposals with metadata (time, job identifier, earning prospect, connects used).

### 5.2. Task Assignment & Workflow Management

FR ID	Functionality	Description
FR-5	Task Creation	Manually create tasks tied to a project (linked to an accepted UpWork job).
FR-6	Member Assignment	Manually assign tasks to team members with priority and deadlines.
FR-7	Task Status Tracking	Manually allow updates on status: To Do, In Progress, Review, Completed.
FR-8	Workload Balancer	Suggest optimal team member based on availability and skill match.
FR-9	Comments & Notes	Add comments to tasks for internal communication.

### 5.3. Notifications and Communication

FR ID	Functionality	Description
FR-10	Opportunity Email Trigger	Conduct feasibility analysis for new opportunities. If job is feasible, generate and send an email to admins with job link, description, Gemini generated proposal, feasibility analysis, and team breakdown for manual review.
FR-11	Daily Digest (Optional)	Send daily summary of pending tasks, deadlines, and performance.

## 5.4.Reporting & Dashboards

FR ID	Functionality	Description
FR-12	Operations Overview	Visual summary of active jobs, task status, pending bids, success rate, etc.
FR-13	Project Delivery Overview	Track individual and team performance metrics (turnaround time, completion rate).
FR-14	Financial Overview	Visual overview of current projects' budgets, estimated vs. actual costs.

## 5.5.User & Role Management

FR ID	Functionality	Description
FR-15	Role-Based Access	Define roles: Admin, Manager, Member with permissions.
FR-16	Member Profile	Manage skills, availability, project history.

## 5.6.Budget Management

FR ID	Functionality	Description
FR-19	Budget Threshold Rules	Admins define budget rules per category, client history, or similar criteria.
FR-20	Profit Margin Calculator	Computes a real-time estimate of expected profit before submitting a proposal.
FR-21	Bid Sensibility Filter	Automatically reject or flag jobs that fall outside profitability thresholds.

## 6. Non-Functional Requirements

NFR ID	Requirement	Description
NFR-1	Scalability	Support growing number of team members and tasks.
NFR-2	Security	Secure login, encrypted data at rest and in transit.
NFR-3	Availability	99.9% uptime with alert system for downtime.
NFR-4	Performance	System should handle real-time bidding and notifications with <5 mins latency.
NFR-5	Usability	Mobile-responsive UI, intuitive design.

## 7. User Stories

- As an Admin, I want to set rules for analyzing bid feasibility so that only relevant jobs are targeted.
- As an Admin, I want to receive emails summarizing feasible job opportunities with proposed bids and team breakdowns so I can manually decide on next steps.
- As an Admin, I want to track which bids converted into contracts.
- As an Admin, I want to assign projects and tasks to Project Managers and Freelancer team.
- As an Admin, I want to see if ongoing projects are staying within the expected cost limits.
- As a Project Manager, I want to assign tasks and receive notifications when deadlines approach.
- As a Freelancer, I want to see my assigned tasks and mark them as completed when done.

## 8. System Architecture

### Modules:

- UpWork Job Feed Handler (API/Scraper)
- Google Gemini Bid Generator
- Task Manager
- Email Engine (Outlook)
- Role & User Management
- Dashboard & Reporting Engine

### Tech Stack Suggestion:

- Tech Stack: Any
- Email: Outlook
- AI Integration: Google Gemini API
- Deployment: Any