



Developer Brief: AI Outreach System Across Social Media



Project Overview

I am building a high-volume, AI-enhanced influencer outreach system to help me initiate and manage conversations across all major social platforms — at scale, safely, and with brand consistency.

The goal is to contact hundreds/thousands of influencers per day across multiple accounts, and respond to their replies faster using AI-powered suggestions embedded directly inside each platform's native messaging UI.

The structure outlined below reflects my **proposed implementation** based on current capabilities, but I'm also open to **alternative technical suggestions** if there are safer, faster, or more scalable ways to achieve the same goal.

The system is split into three core modules:

1. **Cold Outreach Automation**
2. **AI-Powered Reply Assistant (in native inbox)**
3. **Inbox Monitoring + Telegram Bot Notifications**

This setup runs across multiple browser profiles (via AdsPower) for platforms like Twitter/X, Instagram, TikTok, Telegram, Facebook, and Email.

1❑ Cold Outreach Automation



Goal

Automate personalized cold DMs at scale, using GPT-4 and browser automation, with no human approval required.



Workflow

- Input: CSV or Airtable list with @handle, platform, niche, and notes
- GPT-4 generates a unique message per influencer
- Browser automation (Selenium or Playwright) logs into AdsPower profile
- Navigates to user's DM interface
- Sends message with human-like delay (20–60s)
- Logs message to CSV or DB

Platforms

Platform	Method	Notes
Twitter/X	AdsPower + Selenium/Playwright	Verified accounts preferred (up to 500 DMs/day)
Instagram	AdsPower + Playwright/Selenium	Target: 30–50/day/account
TikTok	AdsPower + Playwright/Selenium	Carefully mimic DM behavior
Telegram	Python + Telethon	Uses real Telegram user accounts
Facebook Messenger	AdsPower + browser automation	Via <code>messenger.com</code>
Email	Python + SMTP	GPT-generated subject + body, 50–100/day/account

Output Logging

Each message should log:




- Handle
- Platform
- Message (text)
- Timestamp
- Account used
- Success/failure

2 AI Reply Assistant (Browser Extension)

Goal

Help humans respond faster by showing GPT-4-powered reply suggestions **inside the platform's native inbox** (e.g., `twitter.com/messages`).

Features

- Runs as Chrome Extension or Tampermonkey Script
- On DM view:
 - Detects active thread
 - Parses last messages
 - Sends context to GPT-4
 - Displays reply suggestion under input field
 - Buttons:  Use |  Edit |  Regenerate
- Manual sending only (for safety)

Supported URLs

Platform	URL Example
Twitter/X	<code>https://twitter.com/messages</code>
Instagram	<code>https://www.instagram.com/direct/*</code>
TikTok	<code>https://www.tiktok.com/messages*</code>
Telegram Web	<code>https://web.telegram.org/*</code>
Facebook/Messenger	<code>https://www.messenger.com/*</code>
Gmail (optional)	<code>https://mail.google.com/*</code>

Configuration

- Each profile (in AdsPower) can use its own GPT prompt + tone
- Configurable locally or via JSON config file


3 Inbox Monitoring + Telegram Notifications

Goal

Every 30 minutes, check inboxes across all AdsPower profiles.
If there are new messages, send Telegram alerts.

How It Works

- Script runs every 30 min (JS or Python)
- For each platform/account:
 - Opens DM inbox (e.g., `twitter.com/messages`)
 - Parses unread threads or highlights
 - Captures sender + preview
- Sends alert via Telegram Bot:

```
less
KopierenBearbeiten
 New DM on Twitter (@football_now)
From @jesskicks: "Sounds cool - tell me more?"
```

Setup Instructions

- Use @BotFather to create a Telegram bot
- Use @userinfobot to get Telegram user ID
- Use this Python library: `python-telegram-bot`
- Send message using:

```
python
KopierenBearbeiten
from telegram import Bot
```

```
bot = Bot(token='YOUR_BOT_TOKEN')
bot.send_message(chat_id='YOUR_USER_ID', text='New DM detected...')
```

Optional: Batch Summary Format

Every 30 min, send 1 message with all new unread DMs across accounts.

Tech Stack Summary

Component	Tool/Framework
Automation	Python + Selenium or Playwright
Inbox overlay	Chrome Extension (Manifest v3) or Tampermonkey
GPT Integration	OpenAI GPT-4 API
Telegram Alerts	python-telegram-bot
Account Profiles	AdsPower (with proxies)
Logging	SQLite or CSV
Optional UI	Streamlit dashboard (future phase)

Each social media account runs inside a dedicated AdsPower browser profile, assigned to a unique residential or mobile proxy.

The outreach and inbox scripts must run within those isolated environments to avoid detection. Proxy rotation and fingerprinting (via AdsPower) ensure safe scaling across 10–50 accounts.

Final Deliverables

- Cold Outreach Scripts**
 - Per-platform DM sender with GPT-generated messages
 - Account rotation, safe delays, success logs
- Browser Extension / Script**
 - Injects AI reply suggestions into native inbox UIs
 - Fully working for Twitter, Instagram, Telegram (more later)
- Inbox Alert System**
 - Telegram bot sending new DM summaries every 30 minutes
 - Works across all AdsPower browser profiles