Future Investment Evaluator - Liam Monaghan

Stack - NextJS, Postgres, Prisma, Vercel Workflows, Vercel AI SDK, Exa.ai, Resend

User Flow (View inputs and outputs in [github readme](#))

1. A user will send an email to companies@sago.lpm.sh with information about a company they passed up on investing in.
2. The tool will parse the information in this email (can include attachments like pitch decks) and do a precursory round of research on the company to get basic info like who the founders are, the company's product, etc.
3. The tool will schedule monthly research to reevaluate whether or not the firm should reconsider investing in the company. This research includes finding up to date financial information, public sentiment about the company, and information about some of the company's customers.
4. Using this new research, the tool will decide whether or not the company is ready for investment. This leads to one of two things:
   a. The tool decides **no** and monthly research is continued like normal.
   b. The tool decides **yes** and the tool halts research and sends an email to the original user with reasoning on why the company should be reconsidered for investment and a template outreach message they could use to reach back out to the founders.

System Design - Set and Forget

Frontend - This is a simple web application that is a secondary point of contact for a user. The primary interface is email. The web interface, however, allows a user to monitor research progress and view previously researched information about the company.

Backend - The backend handles nearly everything for this tool. Email receiving/sending, AI research, and making investment decisions based on research information.

1. The main endpoint [here](#) handles incoming emails. Using AI, the incoming email content is parsed and a decision is made about whether or not the user is already watching the company discussed in the email. If they are already watching the company, updates are made accordingly, if they aren't, a new company is added to the user's account to be tracked. This triggers the continuous research workflow (covered below).
2. The workflow code [here](#) carries out continuous research for a company a user is tracking. For the sake of this demo this research is done frequently (ex. every few minutes/hours) but in a real situation this would likely be carried out every few weeks/months. This continuous research uses [Exa](#) (AI web search tool) to perform three different research queries for financials, public sentiment, and customers. Using the information from this research, another AI call makes a decision about whether or not the company should be reconsidered. If so, the research loop is ended and the tool sends an email to the user informing them of the new decision with reasoning and a template outreach message.

```
User sends email to
companies@sago.lpm.sh
           │
           ▼
Is user already watching
  company mentioned?
    ┌──────┴──────┐
    ▼             ▼
   Yes            No
    │             │
    ▼             ▼
Update company   Get initial info about
    info              company
                      │
                      ▼
                 Setup continuous
                     reasarch
                      │
                      ▼
            Create new scheduled
              research task
                      │
                      ▼
            Get financial, sentiment,
            and customer info via
            web and analyze with AI
                      │
                      ▼
                 Make investment
                    decison
                 ┌────┴────┐
      No?        Yes?
       │          │
       │          ▼
Send email to user with
reasoning and outreach
       template
```