

Tab 1

Yappy

Adaptive Global Campaign

Sponsor	Role in your product
OpenAI	Reasoning — understand messy multimodal brand material, strategy, planning, interpretation
Tavily	Sensing — live market research, competitors, trends, events, cultural context
Pioneer / Fastino	Specialisation — fine-tuned small model that learns a brand's campaign judgement
fal	Generation — market-specific visual campaign assets/variations
VEED	Production — turn selected concepts into finished video creatives
H Company	Execution — computer-use agent carrying out approved campaign operations

PRD

PRD

Product Requirements Document

Adaptive Global Campaign Intelligence

0. Build instruction

Build a polished, demo-ready web application demonstrating an **adaptive campaign intelligence system**.

This is a hackathon prototype, not a production marketing platform.

Prioritise:

1. **Campaign Model generation**
2. **Market Intelligence + geographic adaptation**
3. **Strategy + Creative Production**
4. A convincing **feedback → interpretation → adaptation loop**

Do not spend significant time building authentication, billing, complex integrations, production deployment infrastructure, or a complete advertising platform.

The demo must make one idea obvious:

Give the system everything a brand knows about itself, choose a market and objective, and it determines how that brand should grow and communicate there — then learns from the market's response.

1. Product thesis

Existing generative marketing tools primarily answer:

“What content should I create?”

Existing campaign-management tools primarily answer:

“How is my campaign performing?”

This product asks:

“Given who this product is, what it wants to achieve, and what is happening in this specific market, what should it do next?”

The system builds two persistent representations:

Campaign Model

A machine-operable understanding of the product, brand, audience, creative identity, constraints and campaign intent.

Market Model

A contextual understanding of the geographic market the campaign is entering.

The central operation is:

CAMPAIGN MODEL × MARKET MODEL → ADAPTATION PLAN

That plan then drives both:

Growth Strategy

How should we grow here?

and:

Creative Strategy

What should we communicate here?

2. Core system loop

The product follows:

INGEST → CONTEXTUALISE → PLAN → PRODUCE → EXECUTE → OBSERVE → PRESENT → INTERPRET → ADAPT

More concretely:

Raw brand artifacts



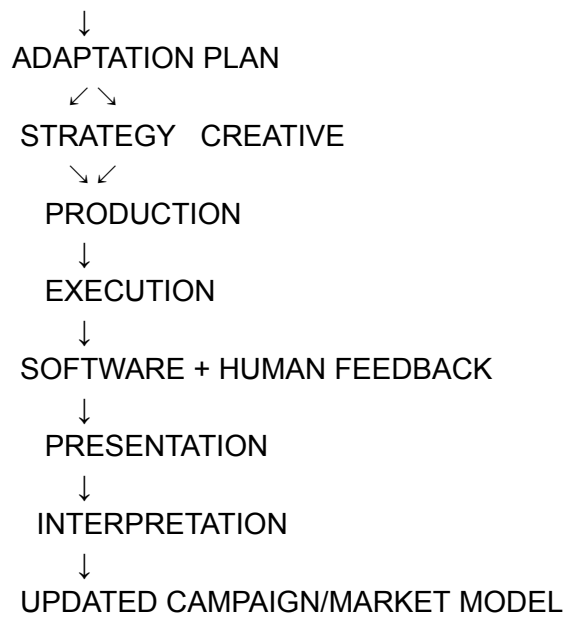
CAMPAIGN MODEL



Market research



MARKET MODEL



The application must visually communicate this loop.

3. Target users

The architecture should be product-agnostic enough to support:

- SaaS products
- consumer apps
- physical products
- fashion brands
- social-media projects
- enterprise campaigns
- creator products

For the hackathon demo, choose **one strong seeded example** rather than trying to demonstrate every category.

4. Primary user story

A founder/marketer wants to launch an existing product into a particular geographic market.

Example:

Product: social consumer app

Market: Manchester, UK

Audience: university students

Budget: £3,000

Goal: acquire 500 active users

Campaign emotion: intimate, spontaneous, exciting, socially aspirational — never corporate networking.

The user supplies existing brand/product material.

The system understands the brand, researches Manchester, determines what should remain constant versus adapt, proposes a local growth strategy and produces locally appropriate creative.

5. Feature 1 — Brand / Campaign ingestion

Goal

Allow the user to dump existing product and brand context into the system rather than manually rebuilding that knowledge.

Acceptable inputs

Build an ingestion interface supporting some combination of:

- website URL
- product description
- uploaded images
- campaign banners
- screenshots
- moodboards/inspiration boards
- previous campaign examples
- pasted business documentation
- campaign objective
- target audience
- target geography
- campaign emotional intent
- design preferences
- audience preferences
- optional previous campaign performance

For the prototype, actual ingestion can be simplified.

Do NOT build every possible parser.

Support:

- text input
- URLs
- images/files if practical

Seed richer examples where necessary.

6. Feature 2 — Campaign Model

After ingestion, transform messy input into a concise structured representation.

This is a critical product artifact.

Display it clearly.

Suggested schema:

```
{
  "product": {
    "name": "",
    "category": "",
    "description": "",
    "core_value": "",
    "differentiators": []
  },

  "positioning": {
    "core_message": "",
    "why_people_care": "",
    "competitive_position": ""
  },

  "audience": {
    "primary": [],
    "secondary": [],
    "needs": [],
    "motivations": [],
    "barriers": []
  },

  "brand": {
    "personality": [],
```

```
"tone": [],
"visual_language": [],
"creative_patterns": []
},

"emotional_intent": {
  "desired_emotions": [],
  "avoid_emotions": []
},

"constraints": {
  "must_preserve": [],
  "must_avoid": [],
  "claims_constraints": []
},

"campaign": {
  "objective": "",
  "geography": "",
  "budget": "",
  "target_outcome": ""
},

"learned_insights": []
}
```

The Campaign Model should be editable.

The user must feel:

“The AI understands my brand before it starts generating marketing.”

7. Governing principles

From the Campaign Model, generate a compact set of campaign principles.

Example:

Preserve

- intimate human connection
- dinner as core metaphor
- premium editorial imagery
- serendipity

- warmth

Avoid

- corporate networking language
- generic friendship-app positioning
- overly polished advertising language
- dating-app framing

Campaign objective

Establish initial adoption among Manchester university students through socially credible local entry points.

These principles govern downstream agents.

8. Feature 3 — Market Intelligence

The user selects a geographic market.

Examples:

Manchester
London
Berlin
Milan
New York

Create a Market Model containing useful campaign context.

Suggested structure:

```
{  
  "market": "Manchester, UK",  
  
  "audiences": [],  
  
  "communities": [],  
  
  "cultural_context": [],  
  
  "competitors": [],  
  
  "local_behaviours": [],  
}
```

```
"relevant_events": [],  
"creators": [],  
"channels": [],  
"visual_signals": [],  
"current_trends": [],  
"opportunities": [],  
"risks": []  
}
```

Where possible, use live research.

The Market Model should distinguish between:

facts/evidence

and:

AI interpretations/hypotheses

Do not present speculation as established fact.

9. Market Intelligence interface

Make geographic adaptation visually important.

A user should be able to move between markets:

GLOBAL



UNITED KINGDOM



MANCHESTER



UNIVERSITY STUDENTS



LOCAL COMMUNITIES / CHANNELS / SIGNALS

A map is optional.

Do not spend excessive hackathon time building GIS functionality.

The important thing is demonstrating that:

Manchester is represented as a distinct market context rather than a string inserted into generic advertising copy.

10. Feature 4 — Adaptation Plan

This is the central intelligence output.

Calculate:

Campaign Model × Market Model

Then explicitly separate:

What remains invariant

These are fundamental brand/product properties.

Example:

- intimate
- serendipitous
- dinner-centred
- premium visual identity

What should adapt

Example:

- messaging
- creator strategy
- local imagery
- channel mix
- partnerships

- launch locations
- cultural references
- activation strategy

Present this as a clear comparison.

Example:

Campaign property	Core	Manchester adaptation
Emotional identity	Intimate	Preserve
Visual quality	Premium/editorial	Preserve
Social proposition	Serendipitous dinners	Preserve
Messaging	Generic connection	Student-life framing
Imagery	London	Manchester
Distribution	Generic paid social	Campus/community-led
Creator strategy	General lifestyle	Local student micro-creators

The system must explain **why** each adaptation is recommended.

11. Feature 5 — Strategy Engine

The first downstream application answers:

How should this product grow in this market?

Generate a concise actionable market strategy.

Include:

Market diagnosis

What matters about this geography?

Entry strategy

Where should the product enter the market first?

Audience sequence

Which audiences should be targeted first, second and third?

Channels

Where should the campaign operate?

Community strategy

Which communities or cultural entry points matter?

Partnerships

What types of organisations/creators/venues should be considered?

Budget hypothesis

How should resources roughly be allocated?

Experiments

Generate 3–5 testable campaign experiments.

Success metrics

What should determine whether the strategy worked?

Avoid generic marketing advice.

Every recommendation should connect to either:

- Campaign Model
- Market Model
- previous campaign learning

12. Feature 6 — Creative Strategy

The second downstream application answers:

What should we create for this market?

Generate several creative concepts.

Each concept should include:

CONCEPT

Target audience

Market insight

Campaign insight

Emotional objective

Hook

Core message

Visual direction

Format

Channel

CTA

Why it should work here

The creative concepts should clearly differ between geographic markets while retaining brand identity.

13. Feature 7 — Creative Production

Allow the user to select one creative concept.

Then generate production-ready assets.

For the prototype, prioritise:

- campaign copy
- short-form video script
- storyboard
- shot list
- visual direction
- social caption

If VEED API access is practical within the hackathon environment, integrate VEED to create a short campaign video.

If full automated video generation becomes technically expensive, do NOT allow it to block the product.

The system should still produce a complete VEED-ready creative brief/script.

Creative production should inherit:

Campaign Model + Market Model + Adaptation Plan + selected Creative Concept

Do not regenerate from scratch.

14. Feature 8 — Execution

Execution is not the primary hackathon feature.

Represent execution as campaign actions such as:

- publish creative
- launch paid experiment
- contact creators
- activate partnership
- launch event
- update landing page

For the prototype these can be represented as:

Planned → Approved → Live → Completed

Do not build production integrations unless core functionality is already complete.

15. Feature 9 — Software feedback

Create seeded campaign results demonstrating how the system learns.

Example:

```
{  
  "creative_A": {  
    "views": 42000,  
    "ctr": 0.021,  
    "conversion_rate": 0.008,  
    "retention": 0.12  
  },  
}
```

```
"creative_B": {  
  "views": 18000,  
  "ctr": 0.034,  
  "conversion_rate": 0.027,  
  "retention": 0.41  
}
```

The product should NOT simply say:

Creative B won.

It should interpret **why the result matters**.

16. Feature 10 — Human feedback

Allow the campaign owner to add qualitative judgement.

Example:

“Creative B performed well, but it felt too much like a dating app.”

This is essential.

The system should distinguish:

Market feedback

What performed?

from:

Human/brand feedback

What was appropriate?

Performance alone must not be allowed to gradually destroy brand identity.

17. Feature 11 — Interpretation Engine

This is another important differentiator.

Convert campaign performance into **learning**.

Instead of:

CTR increased 21%.

Generate:

Manchester students responded substantially better to experience-led creative than explicit friendship/networking language. However, the highest-performing creative introduced dating-app associations that conflict with the Campaign Model. Future iterations should retain the experiential framing while removing romantic visual cues.

Then show:

What we learned about the audience

What we learned about the market

What we learned about the brand

What changes next

18. Feature 12 — Adaptive loop

Allow the user to click:

Adapt Campaign

The new learning should modify relevant structured state.

For example:

LEARNED INSIGHT

Manchester:

Experience-led messaging > explicit networking messaging.

BRAND CONSTRAINT

Avoid:

Romantic/dating visual language.

Then regenerate the next strategy/creative iteration.

The demo should visibly show:

CAMPAIGN V1



MARKET RESPONSE



INTERPRETATION



NEW KNOWLEDGE



CAMPAIGN V2

This is what makes the system **adaptive**.

19. AI responsibilities

Use AI for:

- multimodal brand understanding
- summarising product/business information
- extracting campaign identity
- market research interpretation
- contextualisation
- strategy reasoning
- creative ideation
- content generation
- feedback interpretation
- generating hypotheses
- updating Campaign Model learnings

Do NOT rely on the model for:

- arithmetic
- campaign metric calculation
- budget totals
- deterministic state
- storing history
- basic comparisons

Use normal application code for those.

20. Sponsor integration

Integrations must feel native to the product.

OpenAI

Use as the central reasoning layer:

ingestion → Campaign Model → contextualisation → strategy → interpretation

Tavily

Use for current external market intelligence:

- local trends
- competitors
- events
- creators
- cultural context
- current market information

Tavily represents the system's ability to **sense the external market**.

VEED

Use for creative execution where feasible:

creative strategy → video concept → production

Do not force additional sponsor integrations if they do not improve the demo.

The architecture should communicate:

Tavily senses the market → OpenAI understands and plans → VEED creates.

21. Application structure

Suggested navigation:

Campaign

Current Campaign Model and objective.

Market

Market Intelligence and geographic context.

Adapt

Invariant vs adaptive campaign properties.

Strategy

Market-entry/growth plan.

Studio

Creative concepts and generated assets.

Live

Current campaign actions/results.

Learn

Interpretation, human feedback and new knowledge.

However, avoid making this feel like seven disconnected SaaS dashboards.

Prefer a **single flowing campaign workspace** where the user can see progression:

UNDERSTAND



MARKET



ADAPT



CREATE



LEARN

22. Visual design

The product should feel like an **AI command centre for global campaign adaptation**, not Canva or HubSpot.

Design characteristics:

- premium
- editorial
- highly visual
- intelligent
- spatial where appropriate
- clear hierarchy
- restrained interface
- minimal generic dashboard components

The most important information should be immediately visible:

WHAT WE KNOW

WHAT THE MARKET IS TELLING US

WHAT WE SHOULD DO

WHAT WE CREATED

WHAT WE LEARNED

Use transitions/animations to show information flowing between stages where practical.

23. Demo mode

Seed one complete campaign.

The demo should work even if APIs fail.

Provide realistic cached/seeded data as fallback.

The ideal demo:

Step 1

Show messy source artifacts.

“This is everything the company already knows about itself.”

Step 2

Click:

Build Campaign Model

The system produces its structured understanding.

Step 3

Select:

Manchester, UK

Market Intelligence populates.

Step 4

System says:

Here's what should remain universal, and here's what needs to change for Manchester.

Step 5

Open Strategy.

Here's how we'd enter this market.

Step 6

Open Creative.

Show three locally adapted campaign concepts.

Step 7

Generate one campaign asset/video.

Step 8

Reveal seeded performance from Campaign V1.

Step 9

Add human feedback:

“This performed well but doesn't feel like us.”

Step 10

AI interprets both quantitative and human feedback.

Step 11

Click:

Adapt Campaign

Campaign V2 changes.

End with:

The system didn't just generate another campaign. It learned something about this market that changes what it will do next.

24. Six-hour priority

P0 — MUST WORK

Build these first:

1. Campaign ingestion
2. Campaign Model
3. Geographic market selection
4. Market Intelligence
5. Adaptation Plan
6. Strategy generation
7. Creative concepts
8. Feedback → interpretation → adaptation

These constitute the actual product.

P1 — BUILD IF P0 IS SOLID

- generated visual creative
- VEED video generation
- live Tavily research
- richer geographic visualisation
- comparison between two markets
- campaign history

P2 — DO NOT PRIORITISE

- authentication
- billing

- teams
 - CRM
 - advertising APIs
 - automatic posting
 - complex analytics
 - permissions
 - production database architecture
 - multiple simultaneous campaigns
 - elaborate agent orchestration
-

25. Critical engineering principle

Do not create unnecessary multi-agent complexity.

Prefer a small number of explicit pipelines:

`buildCampaignModel()`

`researchMarket()`

`buildAdaptationPlan()`

`generateStrategy()`

`generateCreativeConcepts()`

`interpretFeedback()`

`adaptCampaign()`

Persist structured JSON between stages.

Each subsequent stage receives the outputs of previous stages.

The system should be inspectable and deterministic enough that the demo never depends on one enormous LLM prompt.

26. Data model

At minimum maintain:

Campaign
CampaignModel
MarketModel
AdaptationPlan
Strategy
CreativeConcept
CreativeAsset
CampaignExecution
PerformanceData
HumanFeedback
Interpretation
Learning

Every Learning should have:

```
{  
  "scope": "brand | audience | market | creative | strategy",  
  "market": "optional",  
  "insight": "",  
  "evidence": [],  
  "confidence": 0.0,  
  "created_at": ""  
}
```

This allows knowledge to accumulate rather than disappear into chat history.

27. Most important product behaviour

Never allow the product to behave like:

“Generate me a Manchester TikTok.”

It should behave like:

“I understand what you're building, I understand what must remain true about your brand, I've investigated Manchester, here's what appears different about this market, here's my hypothesis for entering it, here's the creative expression of that strategy, and here's what we learned after trying it.”

That distinction is the entire product.

28. Final positioning

Short

Campaign intelligence that learns how your product should work in every market.

Product explanation

Give us everything your brand knows about itself. We build a Campaign Model, contextualise it against each market, determine what should adapt, produce and execute the campaign, then learn from the response.

Technical thesis

Campaign Model × Market Intelligence → Adaptation → Execution → Learning

Long-term vision

A persistent intelligence layer through which a company can ask:

“How should we grow here?”

and:

“What should we create here?”

with every previous campaign, market response and human judgement informing the answer.