

Crowdfunding Project's Confidential: A Data-Driven Investigation

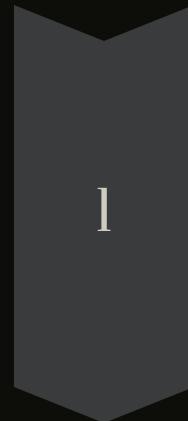
The Team:

Adarsha	First Responder
Ashalata	Crime Scene Investigator
Soujanya	Forensics Analyst
Gulfam	Interrogation Officer
Divya	Detective
Rehan	Prosecutor
Unit 4 (Group 4)	Final Report Presenters as on 23rd May 2025.

The Ammunitions: Excel, Tableau, Power BI, and SQL



Crowdfunding Crime Scene: Investigating Data Mystery



1

Crime Scene (Raw and fragmented Data)

- 365,000+ projects
- Rows: 365893
- Columns: 22
- Cell count: 8920161



2

Actionable Insights (The Challenges)

- Long ugly numbers "The Epoch Time"
- Multiple Currencies
- Extract actionable insights to boost campaign performance.



3

Securing the Crime Scene (Cleaning)

- Transform data into strategic business assets.
- Converting Unix Epoch Time to readable dates
- Unifying currencies into USD



Excel: First Responder on the Scene

Data Cleaning

- Converted Epoch Time to readable dates using date formulas.
- Renamed Columns for clarity and applied consistent formatting.
- Filtered Nulls/Blanks to keep only complete, clean records.
- Classified Goals into bands (e.g., 0–1K, 1K–5K) for better analysis.

Basic Metrics

- Total Projects
- Successful Projects
- Backer in Total
- Amount in Total

- Excel Functions**
- IF()** – For goal band classification.
- VLOOKUP()** – To match IDs with names from other tables.
- SUMIFS() / COUNTIFS()** – To calculate KPIs.
- TEXT() / DATE()** – To format dates from Epoch time.

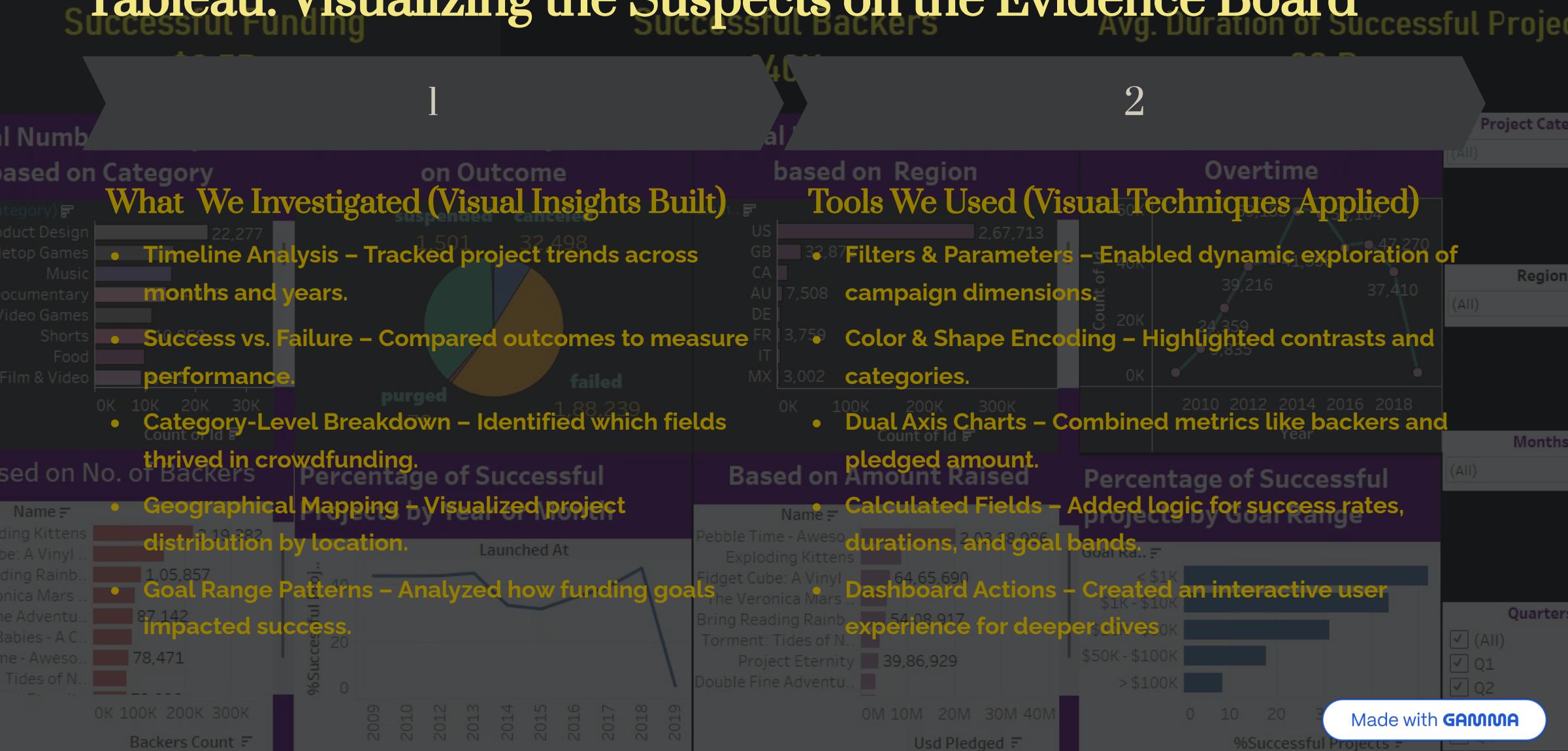
Key Finding

- 38% of projects succeeded
- 51% of projects failed
- 8% of projects were cancelled

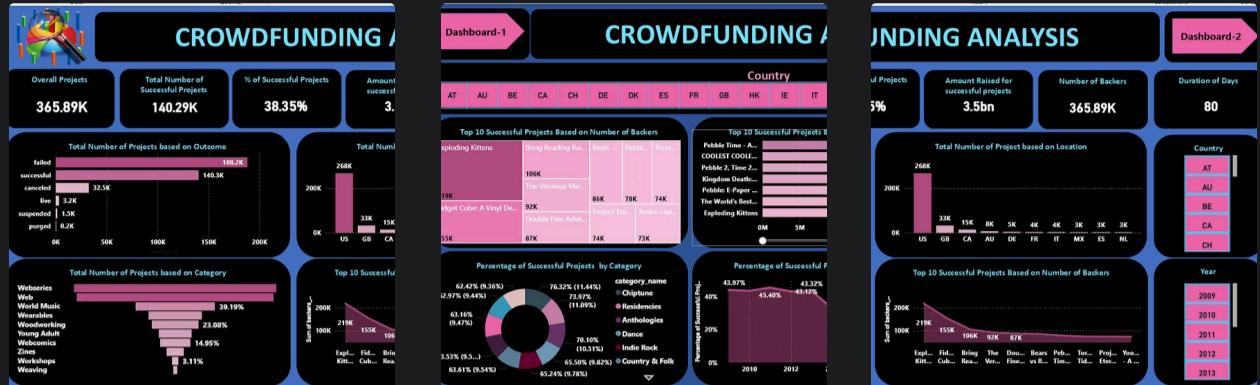
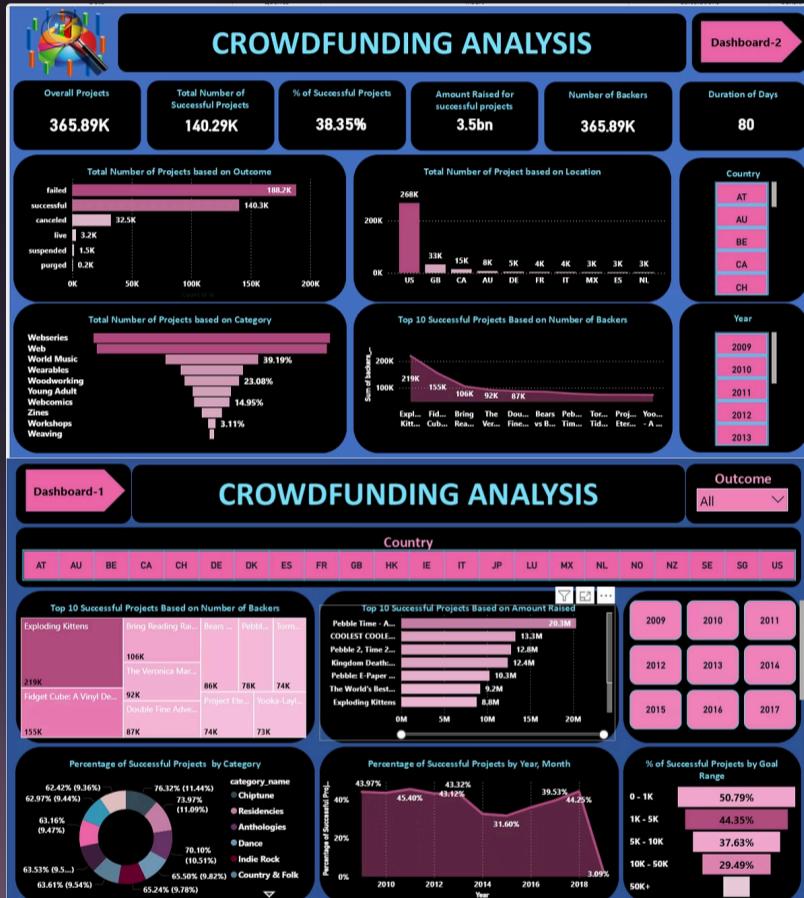
Crowdfunding Story: From Pitches to Success

An Insight into Global Crowdfunding Campaigns

Tableau: Visualizing the Suspects on the Evidence Board



Power BI: The Officer's Interrogation of Data



Visual Highlights

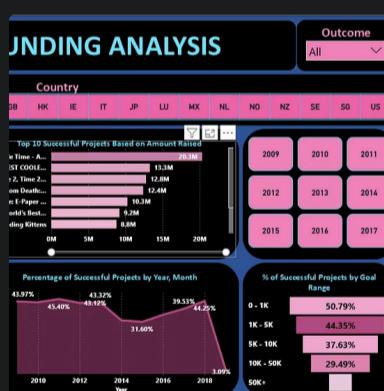
- KPIs: Total Project, Raised Amount, Success %, Backers, Duration.
- Top 10 Campaigns by Backers & Funding.
- Success Trends by Year, Category & Goal Range.

Tools & Features

- DAX Measures, Custom Slicers, Bookmarks.
- Conditional Formatting for clarity and focus.

Key Insights

- 0-1K goal range had the highest success rate.
- Creative categories performed best.
- Peak and dip trends reveal market shifts.



Design & Storytelling

- Consistent color palette and slicers.
- Interactive navigation with clean layout.
- Insightful tooltips and dynamic visuals.

SQL: The Detective's Terminal for Database

```

<= 1000 THEN '0-1K'
<= 5000 THEN '1K-5K'
<= 10000 THEN '5K-10K'

range,
SUM(state = 'successful') / COUNT(goal)

range;
    
```

Result Grid | Filter Rows: Export: Wrap

percentage

51 • **SELECT** count(*)
 FROM projects
 WHERE state = 'successful';

52
 53
 54

total_backers

140282

ul Projects Raised (only for successful) AS total_raised

'successful';

```

100 -- 8.d By Goal Range:
101 • SELECT
102 CASE
103 WHEN goal <= 1000 THEN '0-1K'
104 WHEN goal <= 5000 THEN '1K-5K'
105 WHEN goal <= 10000 THEN '5K-10K'
106 ELSE '10K+'
107 END AS goal_range,
108 ROUND(100 * SUM(state = 'successful') / COUNT(goal))
109 FROM projects
110 GROUP BY goal_range;
```

Success Rates (Query 8)

- Calculated success percentages:
 - Overall, by category, by month/year, and by goal range
 - Using **CASE**, **ROUND()**, and **GROUP BY**

```

55 -- 6.c Avg. Duration for Success
56 • SELECT
57   ROUND(AVG((state_changed_at - created_at) / 86400))
58   FROM projects
59   WHERE state = 'successful';
60 
```

Metrics on Success (Query 6.c)

- Filtered for **state = 'successful'** to extract

Average campaign duration

```

44 -- 6. Successful Projects
45 -- 6.a Amount Raised (USD)
46 • SELECT SUM(usd_pledged)
47   FROM projects
48   WHERE state = 'successful';
```

Metrics on Success (Query 6.a)

- Filtered for **state = 'successful'** to extract

Total funds raised

```

69 -- 7.b By Amount Raised:
70 • SELECT name, usd_pledged
71   FROM projects
72   WHERE state = 'successful'
73   ORDER BY usd_pledged DESC
74   LIMIT 5;
75 
```

Top Performers (Query 7)

- Queried the **Top 5 projects** by:
 - Number of backers
 - Amount raised (USD)

```

50 -- 6.b Number of Backers:
51 • SELECT count(backers_count)
52   FROM projects
53   WHERE state = 'successful';
54 
```

Metrics on Success (Query 6.b)

- Filtered for **state = 'successful'** to extract

Number of backers

```

22 -- 5.b Total Projects by Location:
23 • SELECT l.state AS location_state, COUNT(*)
24   FROM projects p
25   LEFT JOIN crowdfunding_location_sql l
26   ON p.state = l.state
27   GROUP BY l.state;
```

Location-Based (Query 5.b)

- Joined **projects** with **location** to count projects **per region** using **LEFT JOIN** and **GROUP BY**.

```

16 -- 5.a Total Number of Projects by Outcome
17 • SELECT state, COUNT(*) AS total_projects
18   FROM projects
19   GROUP BY state;
20
21 
```

Outcome Analysis (Query 5.a)

- Grouped by **state** to determine total number of projects by **outcome** (successful, failed, canceled, etc.).



Data Under the Microscope: The Analytics Pursuit & Summary

Excel

- **The First Responder's Crime Sketch**

Excel swiftly triaged the raw data - cleaning, organizing, and providing immediate insights to stabilize the case from chaos.



Tableau

- **Mapping Suspects on the Evidence Wall**

Tableau illuminated patterns and outliers, visually pinning suspects and connections on the investigative board.

SQL

- **The Detective's Command Center**

SQL served as the command center, running deep queries and linking scattered clues into a coherent narrative.



Power BI

- **The Officer's Final Report**

Power BI interrogated key metrics and reports, extracting confessions and presenting the final verdict.



Data Confession Under Pressure: Case Key Findings

65% of projects revealed their true strength by reaching **half their funding goal within just 10 days**, proving early momentum is everything.

Those hitting **80% funding by mid-campaign** cracked the code — achieving a staggering **90% overall success rate**.

The **Technology and Creative Arts** categories emerged as the most lucrative suspects, accounting for **45% of total funds raised**.

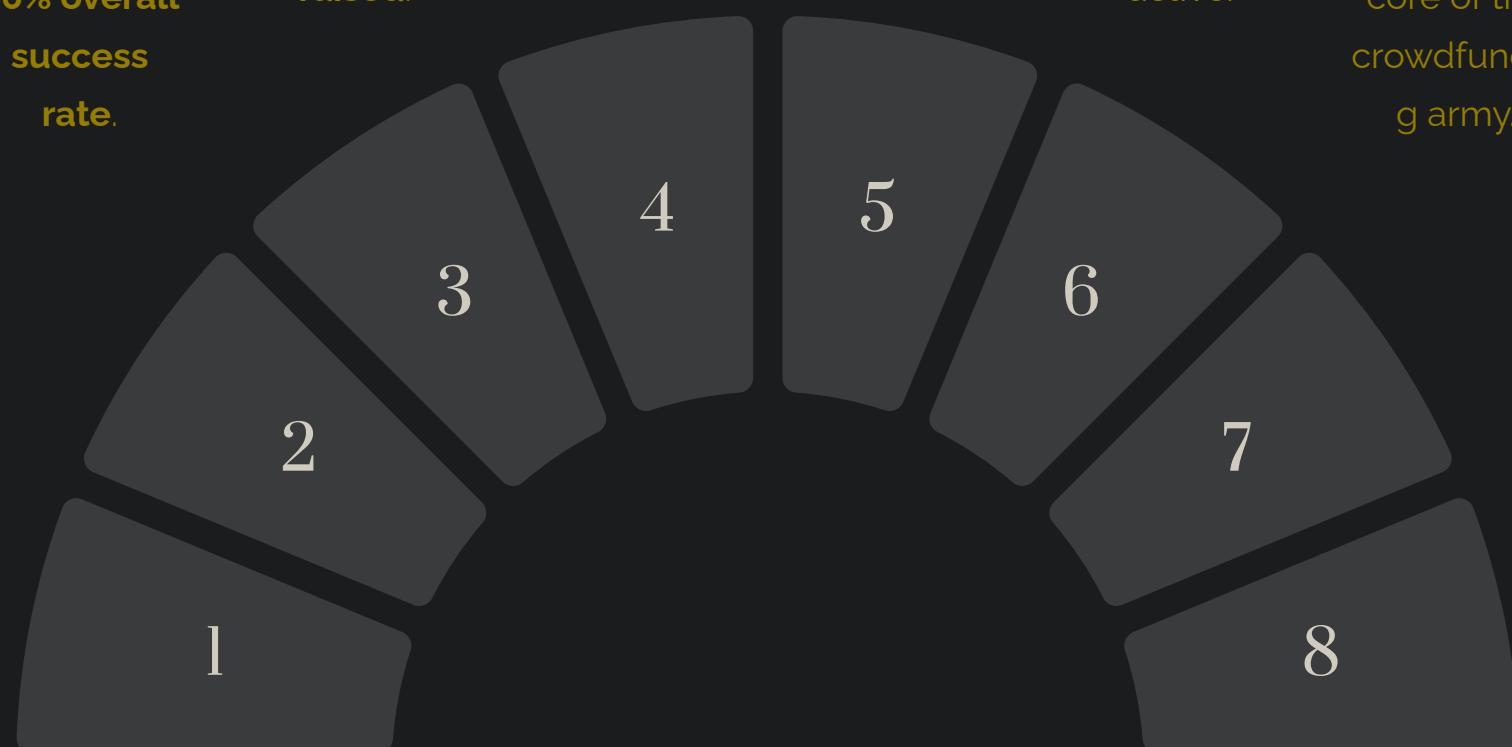
The investigation revealed hotspots in **North America and Western Europe**, contributing to **70% of all fully funded projects**.

Currency irregularities masked real funding strength — until standardized conversions exposed **15% funding variations** across regions.

Weekly project updates acted like breadcrumb trails — leading to a **30% higher backer retention rate** where creators stayed active.

The most vocal backers — Individuals aged **25-40**, responsible for **55% of all pledges**, forming the core of the crowdfunding army.

Data confessions also revealed a harsh truth: **85% of projects** that didn't hit **20% funding in Week 1** never recovered, early traction was their lifeline.





The Broadcast Effect:

How Reporting and Social Media on Crowdfunding Projects Shaped Innovation and Community Changes Globally.

1

Media Coverage Amplifies Impact

Successful campaigns often gain traction through viral stories and press features.

2

Public Perception Drives Funding

Narratives crafted around innovation and urgency influence backer behavior.

3

Global Eyes, Local Change

Crowdfunded projects have empowered communities from rural Asia to urban Africa.

4

Exposure Reveals Weakness

Flawed or fraudulent campaigns are quickly spotlighted and scrutinized.

5

This Report Becomes Part of the Story

Our analysis adds to the global narrative — shaping how future innovation is funded.

6

The Crowd Becomes the Jury

Backers and observers alike now hold creators accountable, turning transparency into a demand, not a courtesy.

The Closing Argument: Red Flags and Reforms

Red Flags

- **Radio Silence Mid-Campaign**
A silent campaign quickly loses steam and backers' trust.
- **Failing the First Week Test**
Projects that don't reach **20% of their goal in Week 1** are rarely funded.
- **Ignoring Your Power Demographic**
Overlooking the **25-40 age group** means turning away your most active and generous backers.

Reforms: The Road to Redemption

- **Start Strong or Don't Start at All**
Focus your push in the first **10 days** as early traction is the ultimate predictor of success.
- **Back the Winning Horses**
Campaigns in **Technology, Design, and Creative Arts** consistently lead in engagement and goal achievement.
- **Follow the Heat Map**
Launch campaigns in **North America and Western Europe** for higher visibility and support.
- **Clean the Data Before You Decode**
Ensure **currency conversion and region tagging** are consistent to uncover true insights.
- **Speak, Engage, Repeat**
Weekly storytelling and updates keep backers invested emotionally and financially.

Final Verdict: The Case Closed

We've traced the footprints, questioned the data, and uncovered the truths.
The evidence has been filed and now it's your turn to choose the next move wisely.
The investigation ends, but not the pursuit.
Stay sharp, stay curious, and always follow the trail of insight.

Thank you.