Crowdfunding Kickstarter Data Analysis & Dashboard

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- Tools Used: Excel | SQL | Tableau | Power BI

Business Problem & Objective

- **Business Problem:**
- Crowdfunding platforms generate large amounts of raw data (Epoch timestamps, currencies) that make trend analysis difficult.

- **Objective:**
- To clean, model, and visualize crowdfunding data for insights into project success, funding amounts, and backer engagement.

Data Sources

- Projects.xlsx – Details of all crowdfunding projects (goal, amount raised, dates).
- Category.xlsx – Project categories for analysis.
- Location.xlsx – Geographic location data for projects.
- Creator.xlsx – Information about project creators.
- Projects.sql- SQL file containing project database setup or queries

- Excel – Data cleaning and preparation
- Power BI – Dashboard building and reporting
- Tableau – Data visualization and analysis
- SQL – Data querying and joins

Data Preparation Steps

1. Convert Epoch time → Natural date
2. Build Calendar table with fiscal metrics
3. Create data model linking all files
4. Convert Goal to USD using static rate
5. Build KPIs in Power BI/Tableau

Data transformation epoch to natural time Example

created_at	deadline	updated_at	state_changed_at
1485972639	1488571200	1488571201	1488571201
1427846948	1430507319	1430507320	1430507320
1457479696	1460073915	1460073915	1460073915
1343252842	1346342564	1397791317	1346342564
1427808214	1428676182	1428676219	1428676219
1487375929	1491605880	1491605880	1491605880
1476453763	1482022800	1482022804	1482022804
1416449727	1419459322	1419459325	1419459325
1291573834	1295303820	1397760030	1295303820
1425158544	1427804231	1427804231	1427804231
1315458608	1320080340	1463680618	1320080343
1353103044	1366578085	1397803254	1366578087

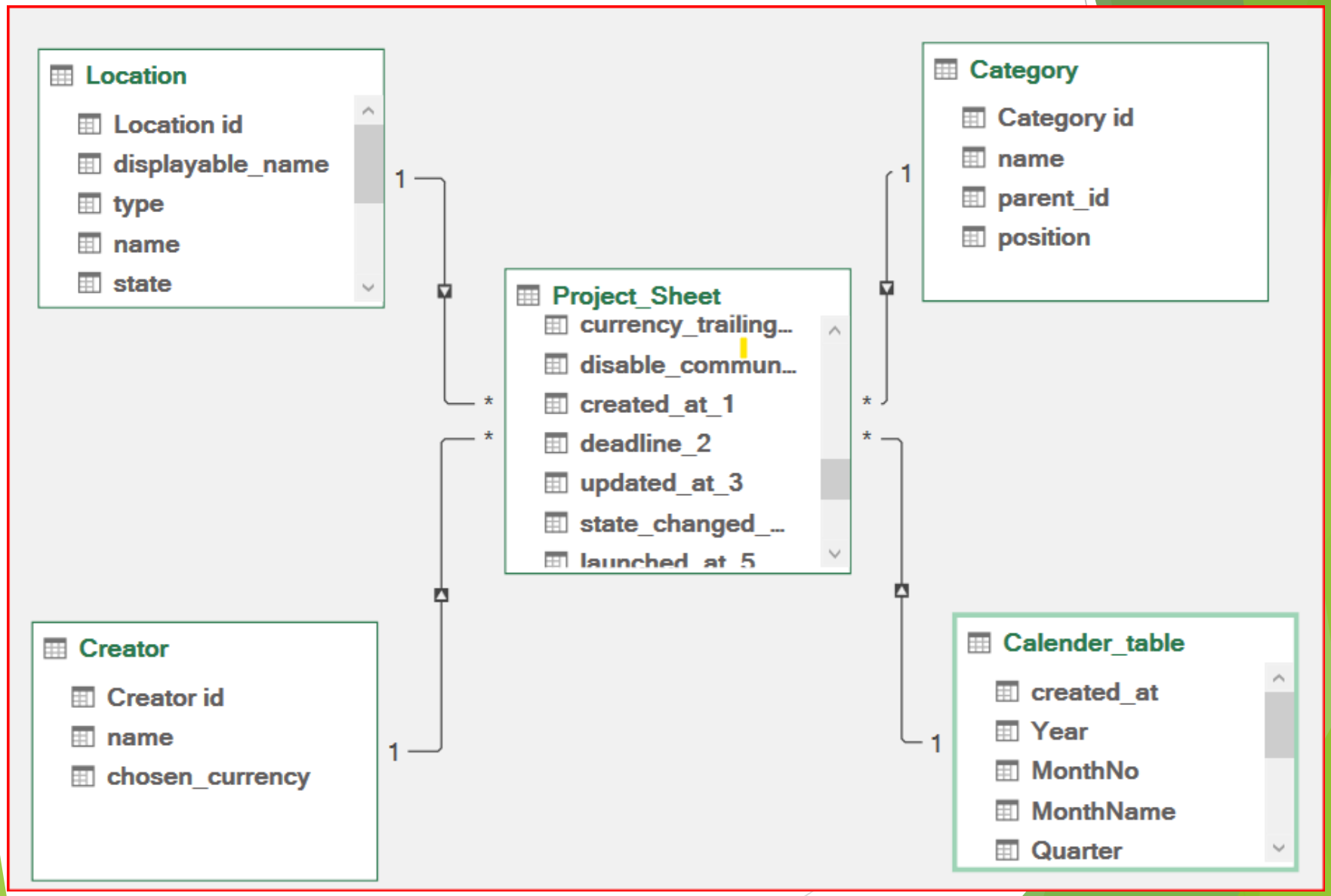
→

Created_at	Deadline	Updated_at	State_changed_at
2/1/2017	3/3/2017	3/3/2017	3/3/2017
4/1/2015	5/1/2015	5/1/2015	5/1/2015
3/8/2016	4/8/2016	4/8/2016	4/8/2016
7/25/2012	8/30/2012	4/18/2014	8/30/2012
3/31/2015	4/10/2015	4/10/2015	4/10/2015
2/17/2017	4/7/2017	4/7/2017	4/7/2017
10/14/2016	12/18/2016	12/18/2016	12/18/2016
11/20/2014	12/24/2014	12/24/2014	12/24/2014
12/5/2010	1/17/2011	4/17/2014	1/17/2011
2/28/2015	3/31/2015	3/31/2015	3/31/2015
9/8/2011	10/31/2011	5/19/2016	10/31/2011
11/16/2012	4/21/2013	4/18/2014	4/21/2013

Calendar Table Example

Created_at	Year	Month	Month_	Quarter	Year_Month	Day_Number	Day_Name	Financial_Quarter	Financial_Month
2/1/2017	2017	2	February	Q1	2017-Feb	4	Wednesday	FQ4	FM11
4/1/2015	2015	4	April	Q2	2015-Apr	4	Wednesday	FQ1	FM1
3/8/2016	2016	3	March	Q1	2016-Mar	3	Tuesday	FQ4	FM12
7/25/2012	2012	7	July	Q3	2012-Jul	4	Wednesday	FQ2	FM4
3/31/2015	2015	3	March	Q1	2015-Mar	3	Tuesday	FQ4	FM12
2/17/2017	2017	2	February	Q1	2017-Feb	6	Friday	FQ4	FM11
10/14/2016	2016	10	October	Q4	2016-Oct	6	Friday	FQ3	FM7
11/20/2014	2014	11	November	Q4	2014-Nov	5	Thursday	FQ3	FM8
12/5/2010	2010	12	December	Q4	2010-Dec	1	Sunday	FQ3	FM9
2/28/2015	2015	2	February	Q1	2015-Feb	7	Saturday	FQ4	FM11
9/8/2011	2011	9	Septembe	Q3	2011-Sep	5	Thursday	FQ2	FM6
11/16/2012	2012	11	November	Q4	2012-Nov	6	Friday	FQ3	FM8
6/2/2016	2016	6	June	Q2	2016-Jun	5	Thursday	FQ1	FM3
1/5/2016	2016	1	January	Q1	2016-Jan	3	Tuesday	FQ4	FM10
2/14/2015	2015	2	February	Q1	2015-Feb	7	Saturday	FQ4	FM11
9/17/2013	2013	9	Septembe	Q3	2013-Sep	3	Tuesday	FQ2	FM6
8/14/2015	2015	8	August	Q3	2015-Aug	6	Friday	FQ2	FM5
1/13/2015	2015	1	January	Q1	2015-Jan	3	Tuesday	FQ4	FM10
12/16/2015	2015	12	December	Q4	2015-Dec	4	Wednesday	FQ3	FM9
10/2/2014	2014	10	October	Q4	2014-Oct	5	Thursday	FQ3	FM7
8/13/2014	2014	8	August	Q3	2014-Aug	4	Wednesday	FQ2	FM5
7/30/2015	2015	7	July	Q3	2015-Jul	5	Thursday	FQ2	FM4
9/1/2014	2014	9	Septembe	Q3	2014-Sep	2	Monday	FQ2	FM6
5/26/2016	2016	5	May	Q2	2016-May	5	Thursday	FQ1	FM2
9/8/2011	2011	9	Septembe	Q3	2011-Sep	5	Thursday	FQ2	FM6

Data Model


Location
Location id
displayable_name
type
name
state
Category
Category id
name
parent_id
position
Project_Sheet
currency_trailing...
disable_commun...
created_at_1
deadline_2
updated_at_3
state_changed_...
launched_at_5
Creator
Creator id
name
chosen_currency
Calender_table
created_at
Year
MonthNo
MonthName
Quarter
1
*
1
*
1
*
1
*

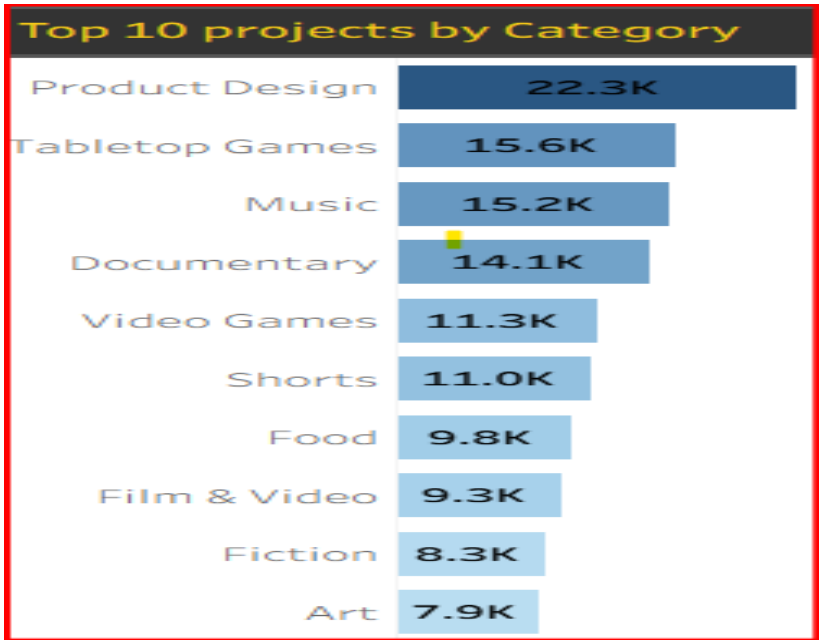
KPIs & Insights

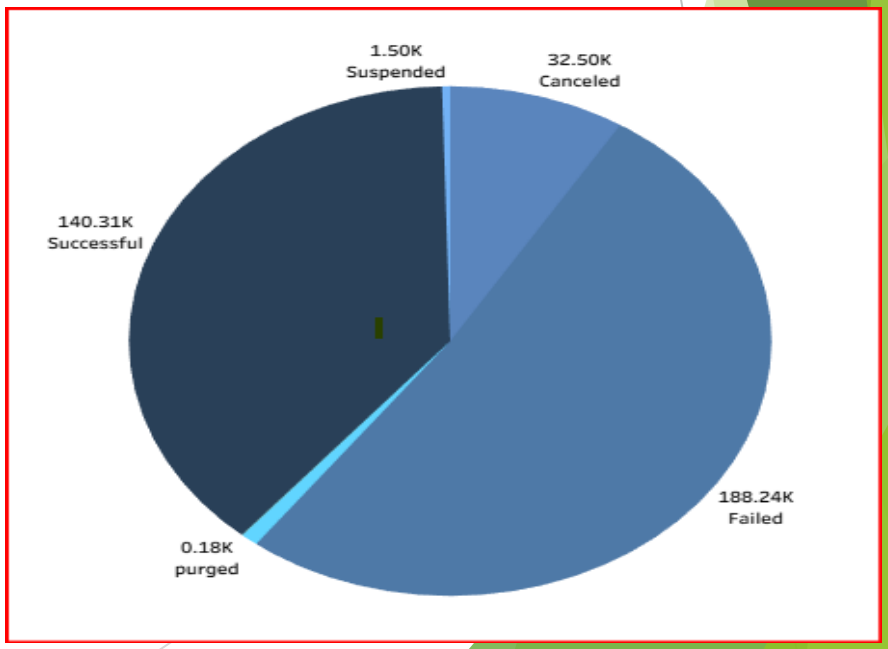
KPIs

Average number of days for projects	Backers	Amount Raised in USD	Total Projects
79	44.52M	3,856.12M	366K

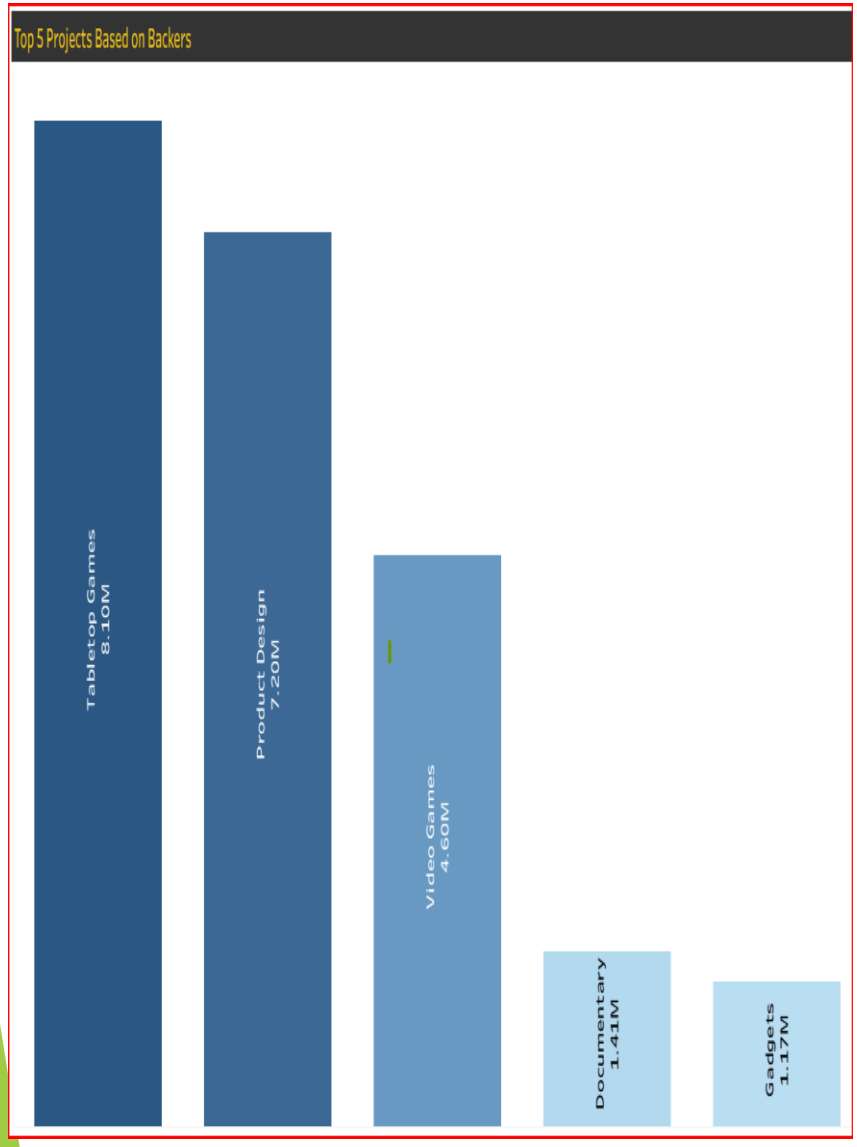
Successful Projects Overview

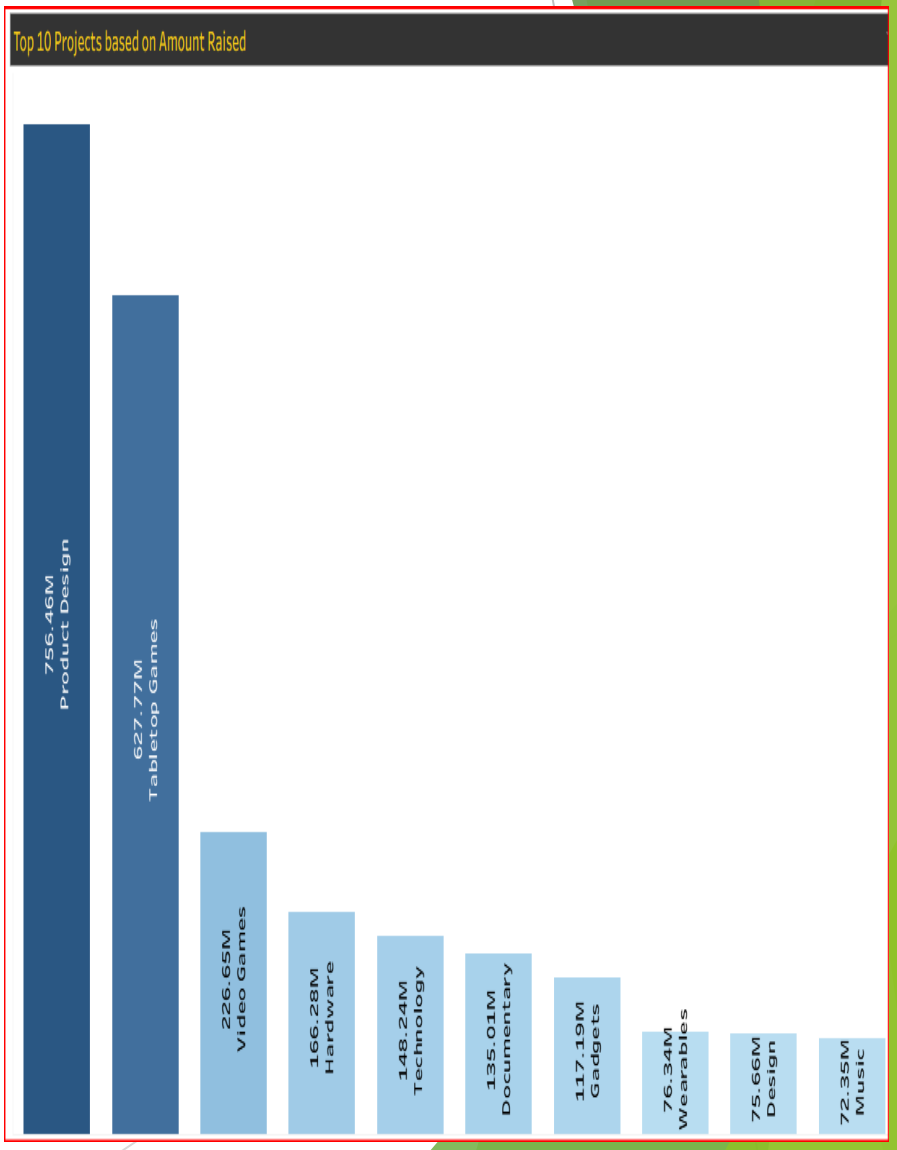
140K	80.43	39.97M	3bn
Total Project	Avg Days	Backers	Amount Raised



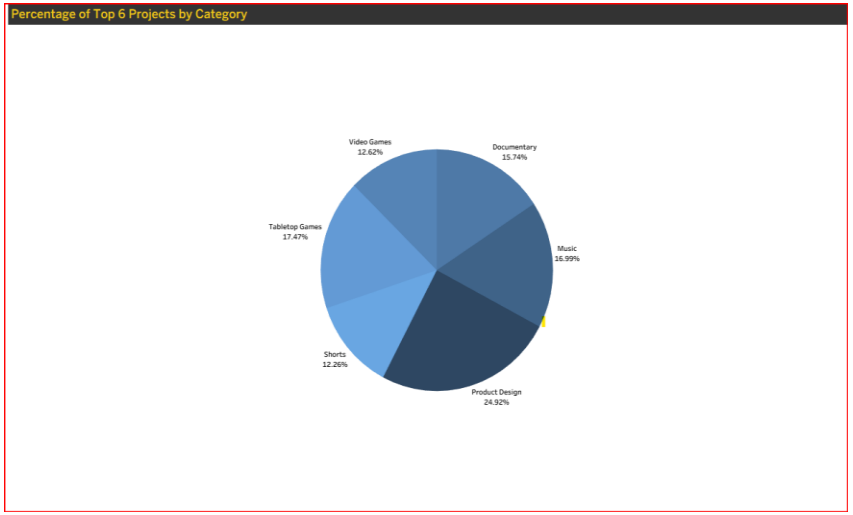


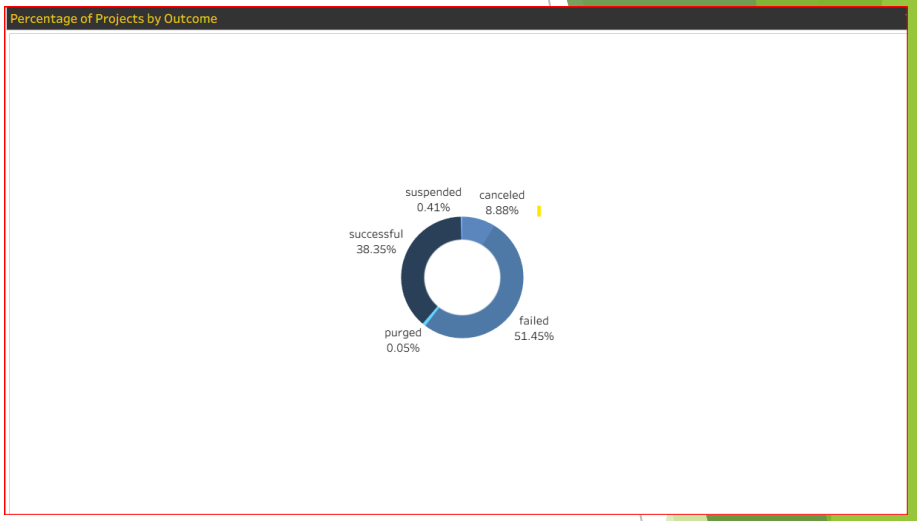
Top Performing Projects





Success Percentage Analysis





SQL & DAX Highlights

```
273 •    SELECT state, COUNT(*) AS projects FROM projects_dup GROUP BY state;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

state	projects
failed	188210
canceled	32487
suspended	1500
purged	178
live	3163
successful	140282

```
1  Goal_Range =
2  SWITCH(
3      TRUE(),
4      projects[goal_usd] < 10000, "<10K",
5      projects[goal_usd] < 50000, "10K-50K",
6      projects[goal_usd] < 100000, "50K-100K",
7      projects[goal_usd] < 500000, "100K-500K",
8      projects[goal_usd] >= 500000, ">500K"
9  )
10
```

Goal_usd	Goal_Range
5000	<10K
5000	<10K
5000	<10K
5000	<10K
5000	<10K
5000	<10K
5000	<10K
5000	<10K
5000	<10K
5000	<10K
5000	<10K
5000	<10K
5000	<10K
5000	<10K

Key Findings

- Top Project categories: Product Design, Tabletop Games, Video Games, Hardware, Technology, Shorts, Documentary, Gadgets, Music
- Higher rates for projects with goals under $10K
- Lower rates for projects with goals above or equal to $500K
- Highest number of projects observed in the United States
- Lowest number of projects observed in the Togo, Seychelles, São Tomé and Príncipe
- Seasonal trend: Most projects Created in Q3 (July-September)
- Highest number of successful projects observed in Q1 (January-March)
- Lowest project success rate recorded in Q4 (October-December)

Conclusion & Next Steps

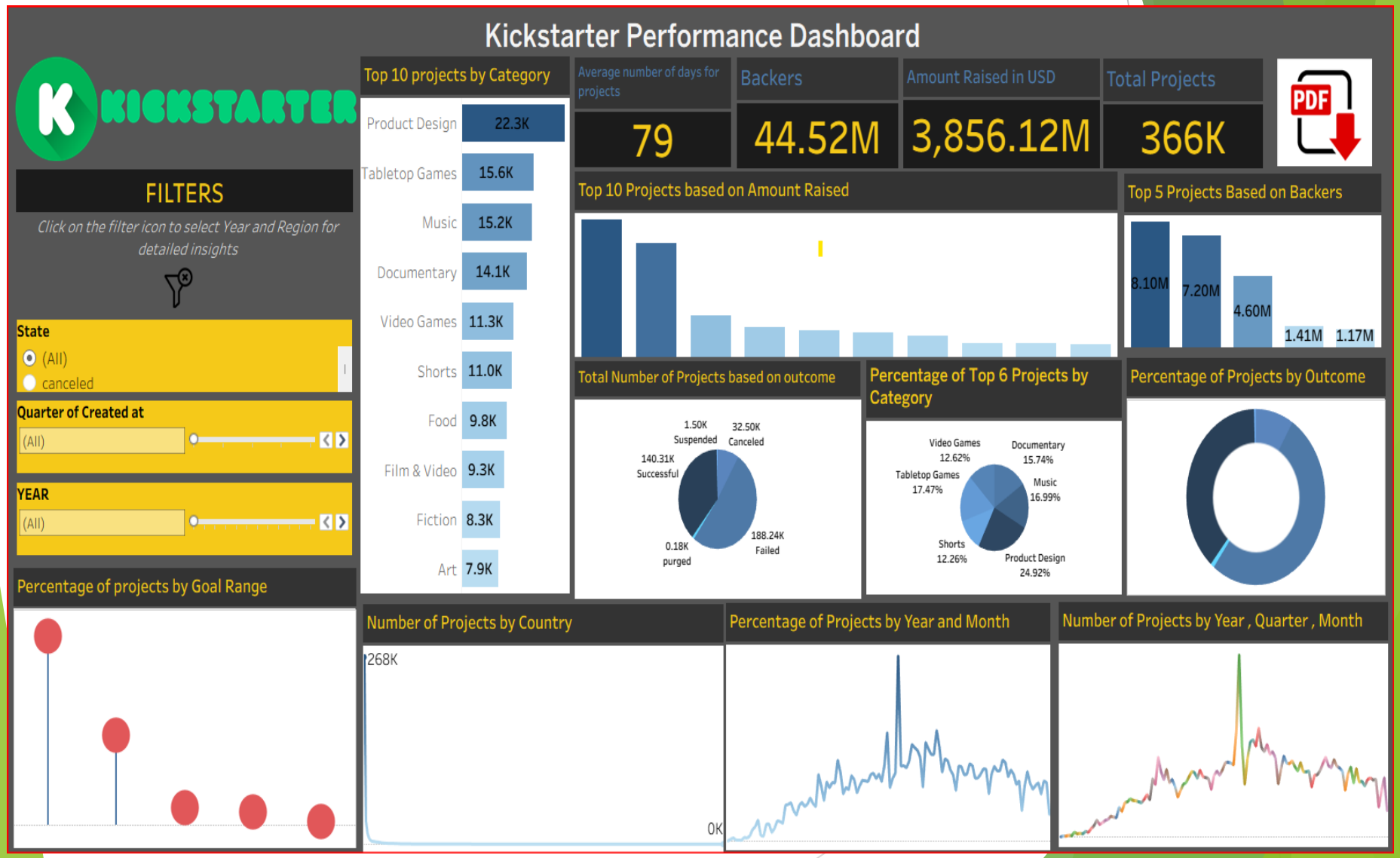
Conclusion:

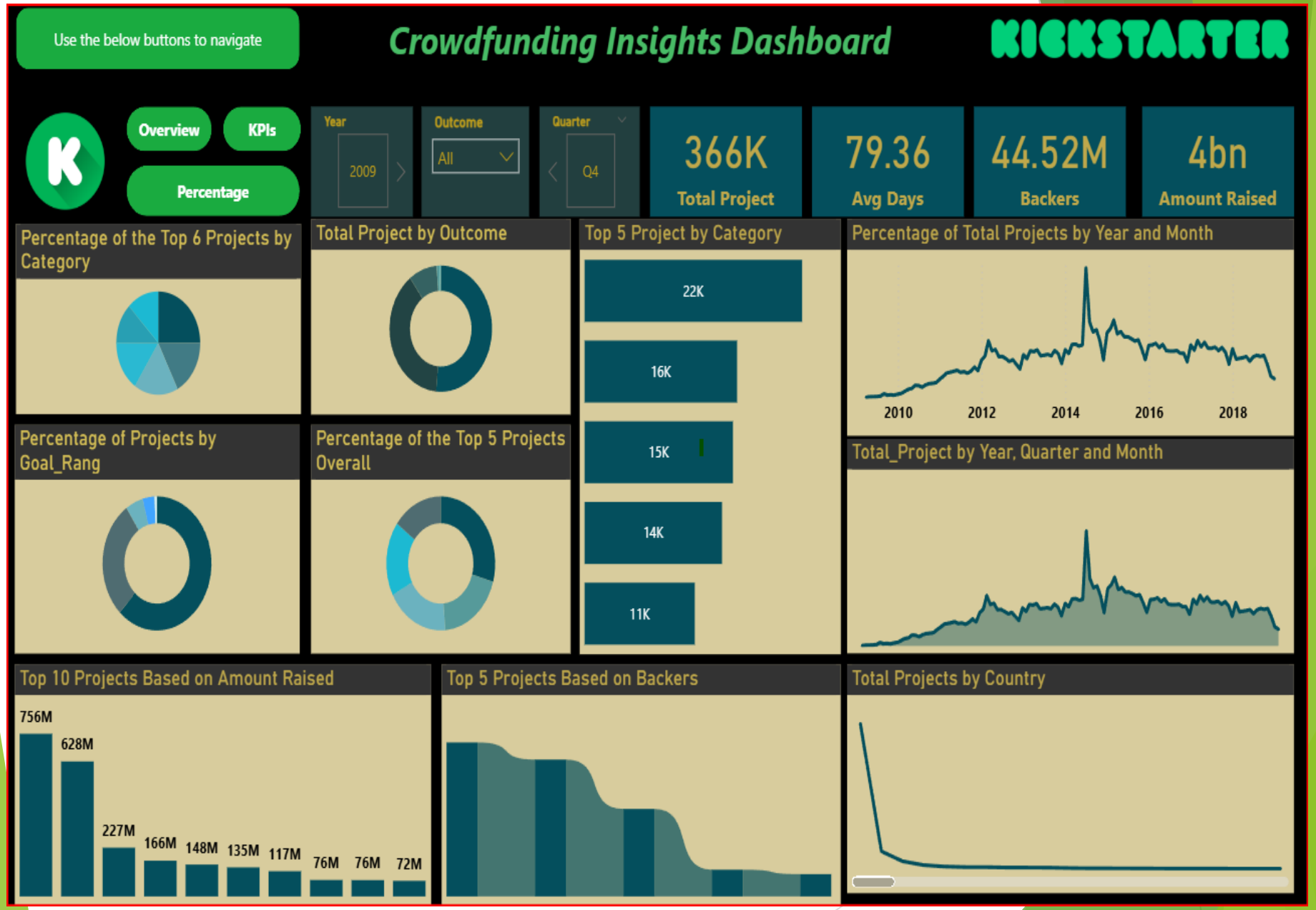
- Data reveals key drivers of crowdfunding success

Next Steps:

- Deploy dashboards online
- Automate currency updates
- Integrate live data APIs

Dashboard


Kickstarter Performance Dashboard
KICKSTARTER
FILTERS
Click on the filter icon to select Year and Region for detailed insights
State
(All)
canceled
Quarter of Created at
(All)
YEAR
(All)
Top 10 projects by Category
Product Design 22.3K
Tabletop Games 15.6K
Music 15.2K
Documentary 14.1K
Video Games 11.3K
Shorts 11.0K
Food 9.8K
Film & Video 9.3K
Fiction 8.3K
Art 7.9K
Average number of days for projects
79
Backers
44.52M
Amount Raised in USD
3,856.12M
Total Projects
366K
PDF
Top 10 Projects based on Amount Raised
Top 5 Projects Based on Backers
8.10M
7.20M
4.60M
1.41M
1.17M
Total Number of Projects based on outcome
1.50K Suspended
32.50K Canceled
140.31K Successful
0.18K purged
188.24K Failed
Percentage of Top 6 Projects by Category
Video Games 12.62%
Documentary 15.74%
Tabletop Games 17.47%
Music 16.99%
Shorts 12.26%
Product Design 24.92%
Percentage of Projects by Outcome
Percentage of projects by Goal Range
Number of Projects by Country
268K
0K
Percentage of Projects by Year and Month
Number of Projects by Year , Quarter , Month


Use the below buttons to navigate
Crowdfunding Insights Dashboard
KICKSTARTER
Overview
KPIs
Percentage
Year
2009
Outcome
All
Quarter
Q4
366K
Total Project
79.36
Avg Days
44.52M
Backers
4bn
Amount Raised
Percentage of the Top 6 Projects by Category
Total Project by Outcome
Top 5 Project by Category
22K
16K
15K
14K
11K
Percentage of Total Projects by Year and Month
2010
2012
2014
2016
2018
Percentage of Projects by Goal_Rang
Percentage of the Top 5 Projects Overall
Total_Project by Year, Quarter and Month
Top 10 Projects Based on Amount Raised
756M
628M
227M
166M
148M
135M
117M
76M
76M
72M
Top 5 Projects Based on Backers
Total Projects by Country

CROWDFUNDING

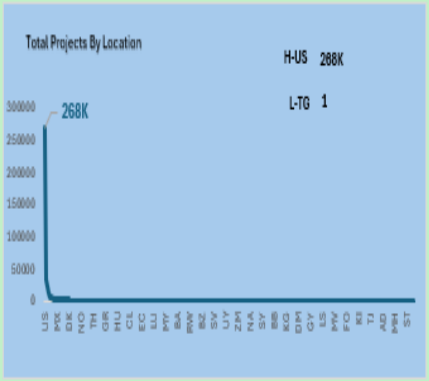
KICKSTARTER

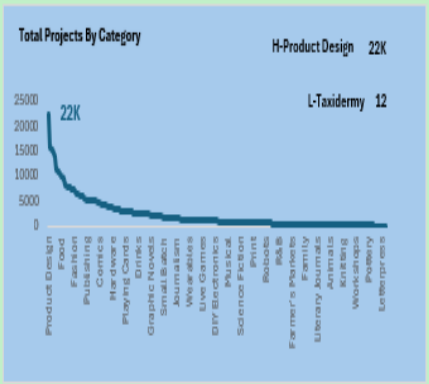
Year: 2016, 2017, 2018, 2019

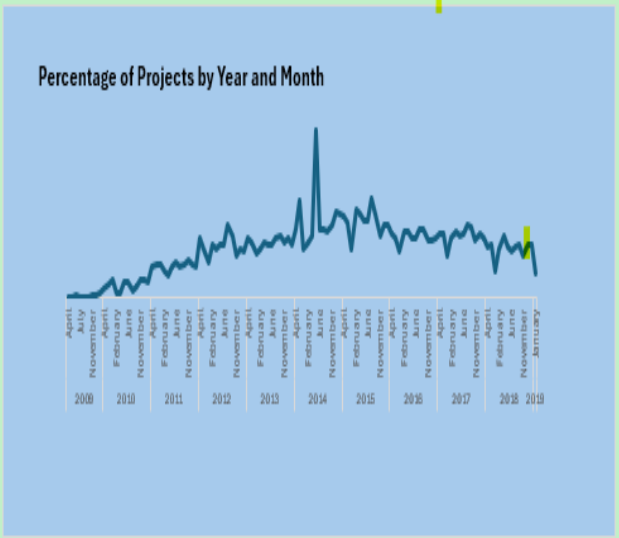
Quarter: Q1, Q2, Q3

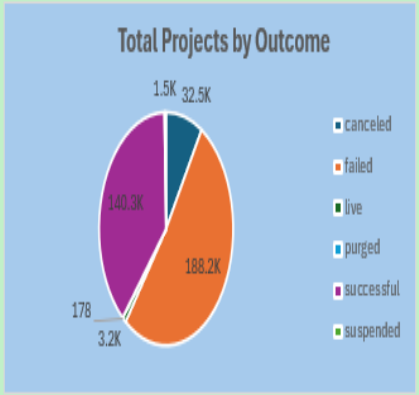
state: successful, suspended

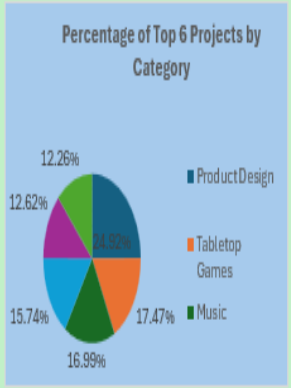
Number of backers	Successful Projects	Avg days of successful projects	Amount Raised in USD
44.52M	140K	80	3,856.12M

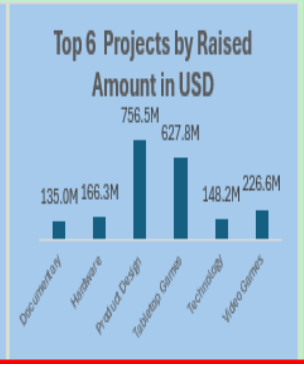


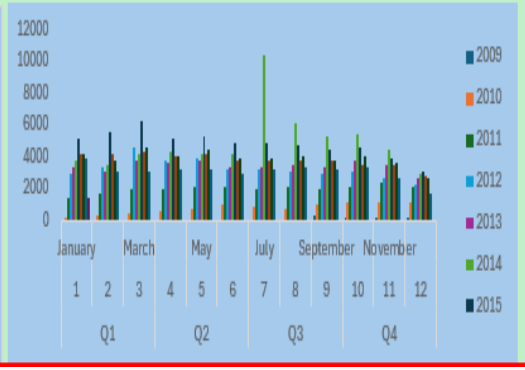


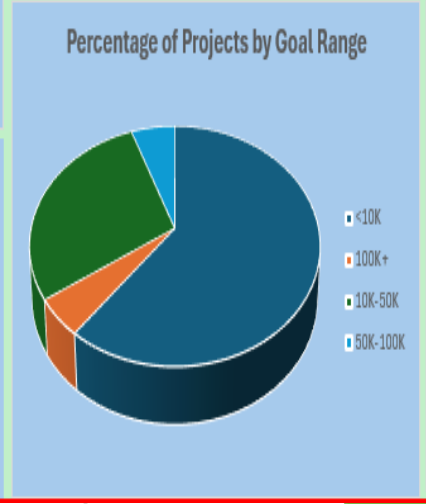


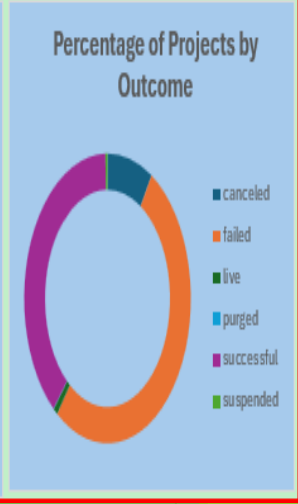












Thank you!