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Challenge 1 Written Report

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Part 1): Conclusions About Crowdfunding Campaigns

1. Analysis based on campaign’s Parent Category:
   1. Three most popular campaigns, in order of decreasing popularity:
      1. Theater
         1. Success Rate: 54% | Failure Rate: 38%
      2. Film & Video
         1. Success Rate: 57% | Failure Rate: 34%
      3. Music
         1. Success Rate: 57% | Failure Rate: 38%
   2. Three most successful campaigns:
      1. Technology
         1. Success Rate: 67% | Failure Rate: 29%
         2. Fourth in popularity
      2. Photography
         1. Success Rate: 62% | Failure Rate: 26%
         2. Eighth in popularity
      3. Publishing
         1. Success Rate: 60% | Failure Rate: 36%
         2. Fifth in popularity
   3. Insights:
      1. Success rate ranging from 67% - 44% (assuming Grand Total >10)
         1. Success not predicted by popularity of Parent Category
      2. Theatre Parent Category is popular worldwide
         1. Almost twice the popularity of second place Film & Video
         2. 34% of all campaigns belong in this category
      3. Total campaign success is 57%
         1. More campaigns are successful than failures
         2. Suggests that crowdfunding can be an effective strategy
2. Analysis based on campaign’s Sub-Category
   1. Five most popular campaigns, in order of decreasing popularity:
      1. Plays
         1. Parent Category is Theater
         2. Success Rate: 54% | Failure Rate: 38%
      2. Rock
         1. Parent Category is Music
         2. Success Rate: 58% | Failure Rate: 35%
      3. Documentary
         1. Parent Category is Film & Video
         2. Success Rate: 57% | Failure Rate: 35%
      4. Web
         1. Parent Category is Technology
         2. Success Rate: 71% | Failure Rate: 24%
      5. Food Trucks
         1. Parent Category is Food
         2. Success Rate: 48% | Failure Rate: 43%
   2. 5 most successful crowdfunding campaigns:
      1. Qualified based on an Outcome Grand Total >10
         1. Web
            1. Parent Category is Technology
            2. Success Rate: 71% | Failure Rate: 24%
         2. Translations
            1. Parent Category is Publishing
            2. Success Rate: 67% | Failure Rate: 33%
            3. Eleventh in popularity
         3. Television
            1. Parent Category is Film & Video
            2. Success Rate: 65% | Failure Rate: 18%
            3. Thirteenth in popularity
         4. Four-Way Tie: in order of decreasing popularity
            1. Wearables

Parent Category is Technology

Success Rate: 62% | Failure Rate: 36%

Sixth in popularity

* + - * 1. Photography Books

Parent Category is Photography

Success Rate: 62% | Failure Rate: 26%

Seventh in popularity

* + - * 1. Animation

Parent Category is Film & Video

Success Rate: 62% | Failure Rate: 29%

Tenth in popularity

* + - * 1. Nonfiction

Parent Category is Publishing

Success Rate: 62% | Failure Rate: 29%

Eleventh in popularity

* 1. Insights:
     1. Sub-category offers more in-depth analysis
        1. Majority of most successful campaigns were lower in popularity
           1. Popularity is not predictive of success
           2. Focusing on sub-categories lower in popularity shows greater success levels

Particularly in the Publishing and Film & Video Parent Categories

These industries may not be commonly utilizing crowdfunding, this could be a potential advantage

* + 1. Technology has stronger success rate even though it is relatively popular
       1. Successful for both Wearables and Web

1. Analysis of Outcomes Based on Goal
   1. 5 most popular campaigns:
      1. By goal and in order of decreasing popularity:
         1. 5000 to 9999
            1. Success Rate: 52% | Failure Rate: 40%
         2. Greater Than or Equal to 50000
            1. Success Rate: 37% | Failure Rate: 53%
         3. 1000 to 4999
            1. Success Rate: 83% | Failure Rate: 16%
         4. Less than 1000
            1. Success Rate: 59% | Failure Rate: 39%
         5. Two-Way Tie
            1. 25000 to 29999

Success Rate: 79% | Failure Rate: 21%

* + - * 1. 40000 to 44999

Success Rate: 79% | Failure Rate: 21%

* 1. 5 most successful crowdfunding campaigns:
     1. Assuming Total Projects >10
        1. 1000 to 4999
           1. Success Rate: 83% | Failure Rate: 16%
        2. Two-Way Tie
           1. 40000 to 44999

Success Rate: 79% | Failure Rate: 21%

* + - * 1. 25000 to 29999

Success Rate: 79% | Failure Rate: 21%

* + - 1. 45000 to 49999
         1. Success Rate: 73% | Failure Rate: 27%
      2. 35000 to 39999
         1. Success Rate: 67% | Failure Rate: 25%
  1. Insights:
     1. Considering the entire goal range between 0 to 50000+
        1. Success exists across this entire range
        2. Goal range should not be a deciding factor when assessing the likelihood of crowdfunding success
        3. Increased popularity of a particular goal range does not necessarily correlate with success
           1. Two of the three most popular goal ranges have the lowest rates of success
        4. Goal ranges greater than or equal to 50000 have the lowest success rate
           1. Non-crowdfunding options should be considered in these situations

Part 2) Limitations of this Data Set

* Data in terms of Parent Category, Sub-Category, and Goal-Analysis:
  + Several categories have much smaller sample sizes than others
  + Not useful to make conclusions from small amounts of data
* Assumption that all projects in a particular Parent Category, Sub-Category, or Goal Category are similar
  + May not be all starting from the same place in terms of their purpose/plan for crowdfunding
  + This can also be a significant influence on campaign success
* No consideration of socioeconomic status of backers
  + Calculation of average donation can be misleading
    - Several people can have donated much more or much less than this average
  + The use of different currencies can make comparisons difficult without standardization

Part 3) Other possible tables/graphs

* Pivot Chart & Table analysis by Parent Category and Sub-Category:
  + Take this data one step further and create a percent successful table based on Parent Category and Sub-Category
    - Helps determine most popular and most successful for both analyses
    - Easier to read this way than toggling this information in the chart
* Bar Graph:
  + Compare average donation amount by country
    - First use conversion to standardize the different currency amounts
    - The average can be a benchmark utilized in campaign planning
* Line Graph:
  + Compare percent funded to number of backers
    - Does trend exist between increasing number of backers and increasing/decreasing amounts of percent funded

Part 4) Statistical Analysis

1. Median will be better used to summarize the data
   * Variance for number of backers for both successful and unsuccessful campaigns is high
   * Both situations involve a large range of values and large amount of data points
     + Mean will be dominated by outliers
       - Data is skewed or non-normally distributed
     + Median will less affected and more representative of typical values
2. Variance for the number of backers for successful campaigns has more variability
   * Successful campaigns
     + Include more data points
     + Have larger difference between the maximum and minimum number of backers (spread out over a wider range)