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Chekfoung Tan

University of West London, chekfoung.tan@uwl.ac.uk

Emma Mani Bakhtiari

University of West London, maniboustani@live.com

Muna M. Alhammad

King Saud University, malhammad@ksu.edu.sa

Izzal Asnira Zolkepli

Universiti Sains Malaysia, izzalasnira@usm.my

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An Exploratory Study of Creating Persuasive and Effective Blurbs in Reward-Based Crowdfunding (RBCF)

Chekfoung Tan

*School of Computing and Engineering, University of West London,
Chekfoung.Tan@uwl.ac.uk, St Mary's Road, Ealing, London W5 5RF, UK.*

Mani Bakhtiari

*School of Computing and Engineering, University of West London,
maniboustani@live.com, St Mary's Road, Ealing, London W5 5RF, UK.*

Muna M. Alhammad

*College of Business Administration, King Saud University, malhammad@ksu.edu.sa,
Riyadh 11451, Saudi Arabia.*

Izzal Asnira Zolkepli

*School of Communication, Universiti Sains Malaysia, izzalasnira@usm.my, 11800
Minden, Penang, Malaysia.*

Abstract

Crowdfunding is an alternative financing for funding innovative businesses. Research shows that reward-based crowdfunding (RBCF) is increasingly pivotal for raising project capital, given the current Covid-19 climate where conventional funding is scarce. The project blurbs are essential to attract funds. However, little has been done in studying the project blurb and how it impacts the campaign's outcomes. Therefore, this paper aims to explore unique words for creating persuasive and effective blurbs that increase RBCF project success by studying their sentiments. This research collects Kickstarter data from June 2019 to June 2020. Descriptive, sentiment and word analyses are incorporated. This triangulation contributes to a practical guideline in creating effective project blurbs. The descriptive analysis offers contexts such as length and time. Sentiment analysis informs positive sentiments spread across successful and failed projects, requiring word analysis to determine the unique words used in writing persuasive and effective blurb to increase project success.

Keywords: Reward-Based Crowdfunding, Kickstarter, Sentiment Analysis, Python, Fintech, Project Blurb

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1.0 Introduction

Crowdfunding plays a vital role for individuals seeking to acquire financial backing from multiple investors considering to back state-of-the-art projects proposed by individual creators, charities, or small businesses. Crowdfunding is an innovative financial technology (Fintech) (Troise et al., 2018). Contrary to conventional fundraising methods, such as soliciting monetary funds from banks or organisations, this form of entrepreneurial financing enables project creators to acquire financial funding directly via online platforms.

Historically, crowdfunding started back in 18th century, involving the renowned publisher Joseph Pulitzer setting up a fundraising campaign for constructing the statue of liberty in New York (Dehner & Kong, 2014). The American government at the time had a limited budget. Therefore, the onus was placed on business people, working public, and politicians to raise \$100,000 in a span of six months to steamroll the project. Furthermore, the first ever online crowdfunded campaign is believed to have occurred in the latter part of 1990's, with the British rock band Marillion raising £39,000 through their fans to enable them to tour the United States.

Reward-based crowdfunding (RBCF) is a way for pledgers or fund-seekers to raise funds from the backers. Backers could back or contribute financially for a project or product pledged by the fund-seekers, and in return, they will get benefits such as discounted products or services (Alhammad et al., 2020), Particularly during the Covid-19, RBCF offers a way for fund-seekers, such as the small businesses to stay afloat, seek extra financial support, and continue producing innovative products or services in combating the pandemic (Elmer et al., 2020).

Alhammad et al. (2020) suggest that user-generated content such as good language and quality information when presenting project details impacting backers' behaviour in RBCF. The sentimental element of written persuasive and creative blurbs could influence the backers' investment decision on the project (Wang et al., 2017). However, there is a lack of research in analysing the blurb sentiments concerning the project success in RBCF. Ineffective blurbs will leave fund-seekers to futile financing options, and backers are left uninformed with risks or decisive factors that impact their investment decision.

Therefore, this paper aims to analyse the blurb sentiments and study the different sentiment aspects impacting the RBCF campaign success by exploring the Kickstarter

datasets. Descriptive analysis and word analysis are adopted, offers a fundamental understanding of the Kickstarter datasets, and the word analysis suggests words that could increase the project success probability.

The paper is structured as follows: Section 2 discusses the related work about sentiment analysis in RBCF, Section 3 explains the research methodology, Section 4 illustrates the descriptive and sentiment analysis results, and Section 5 concludes the paper with the principles of writing effective blurbs.

2.0 Related Work

2.1 Reward-Based Crowdfunding (RBCF)

Financing in the reward form is a protrusive method for obtaining fundraised support in RBCF. Backers are receiving non-monetary incentives in exchange for the financial offering (Shneor & Munim, 2019). Reward motivated backers contribute with the hope of acquiring exclusionary worthwhile rewards (Gerber et al., 2012). Lin et al (2016) express that rewards are an imperative component for determining if a project eventually succeeds. There are two RBCF models: *all-of-nothing (AON)* and *keep-it-all (KIA)* (Miglo, 2020). *AON* demands the need to establish a pledge goal. The funding is reinstated to the backers if the fund-seekers do not raise the specific goal amount. As for *KIA*, the fund-seekers has the right to possess the entire sum gathered regardless of whether the goal target is achieved or not.

Indiegogo and Kickstarter are the two most dominant crowdfunding platforms. Kickstarter adheres to *AON* model, and since its launch in 2008, it has introduced over 510,997 campaigns. Out of that proportion, a staggering 195,097 projects are successfully funded, with a total sum accumulated, surpassing \$5 billion (Kickstarter, 2021). The fund-seekers on Kickstarter can retain intellectual property, including copyrights, trademarks, and patents. Freedman & Nutting (2015) point out Kickstarter is not a creator, retailer, or publisher, but a refined emissary that introduces fund-seekers with backers and allows them to engage between themselves with the motive of assessing the merits and aspects of the project. Furthermore, Kickstarter does not act as a mediator when backed ventures fail to hold their end of the bargain.

Smith (2020) states that after Kickstarter, Indiegogo is the second leading crowdfunding platform in the domain. It has advocated more than 800,000 campaigns, with 9% of those campaigns raised an amount that amasses \$1.6 billion. In contrast to Kickstarter,

Indiegogo fund-seekers can opt to select either *AON* or *KIA* model for the campaign duration (Miglo, 2020). Compared to Kickstarter, Indiegogo is more unconstrained in allowing any organisation or product posted on its platform. The principal advantage of Indiegogo is that it enables a venture to be set up from any global location and offers the opportunity to keep hold of the finances raised from campaigns that do not attain their goal (Steinberg & DeMaria, 2012).

2.2 The Role of Blurbs and Sentiment Analysis in RBCF

Project information contributes to the success of RBCF campaigns (Burtch et al., 2013). The use of a specific phrase could impact backers' decision whether to contribute (Mudambi & Schuff, 2010). Backers use the information available to justify their backing decision (Koch & Siering, 2015). The blurbs are short promotional information that attracts backers' attention quickly in RBCF (Wang et al., 2020). Therefore, the fund-seekers should highlight the project uniqueness in the blurbs. The blurbs are vital for backers to understand the project (Yao et al., 2019). Mitra & Gilbert (2014) suggest the blurb sentiments affecting the RBCF campaign success. The more persuasive terms or phrases in a blurb will increase the success chances of RBCF campaigns.

Sentiment analysis is a computational process focusing on perception, emotions, and feedback extracted from textual material. It is widely adopted in data mining, web mining, and social networking analytics as sentimental statements possessing are essential for judging human behaviour (Chakraborty et al., 2018). It is broadly adopted to study crowd opinions, sentiments, and attitudes towards products or services (Jiang et al., 2020). The techniques used in conducting sentiment analysis are lexicon-based or machine learning-based (Wang et al., 2017). Lexicon-based sentiment analysis extracts opinion words and classifies them into positive, neutral or negative. Algorithms such as support vector machines, maximum entropy classification and Naïve Bayes classification are the three main algorithms applied via machine learning-based sentiment analysis (Tan & Zhang, 2008).

Lexicon-based sentiment analysis is widely employed in crowdfunding research (Lai et al., 2017). In RBCF, sentiment analysis determines the overall contextual polarity (positive, neutral, negative) of project information. For instance, Courtney et al. (2016) apply sentiment analysis in studying how Kickstarter's crowd opinions affect campaign success. While most research focuses on performing sentiment analysis in the project

information, crowd reviews, or opinions, there is a gap in analysing the project blurbs' sentiments.

3.0 Research Methodology

This research aims to identify the sentiments associated with RBCF project blurbs and how the blurb sentiments impact the campaigns' success. Hence, this research adopts the exploratory study principles from Saunders et al. (2016), where a sentiment analysis model informs its research design.

Figure 1 illustrates the research design guided by the lexicon-based sentiment analysis model from the Cross-Industry Standard Process for Data Mining (CRISP-DM methodology)(Wirth & Hipp, 2000). In this model, Kickstarter dataset was employed, and the data was pre-processed and then processed before initiating the lexicon-based sentiment analysis. This research also applies descriptive analysis for providing additional insights into the Kickstarter datasets about effective and persuasive blurb writing. Heuristics processing is commonly applied in sentiment analysis related research (Zhu et al., 2020). It offers a problem-solving approach based on the researchers' best knowledge. In this research, heuristics informs the process of conducting descriptive, lexicon-based sentiment analysis and word analysis in this research and provides a methodological guide for a research programme (Litchfield & Baloch, 2011; Tzioumis, 2019).

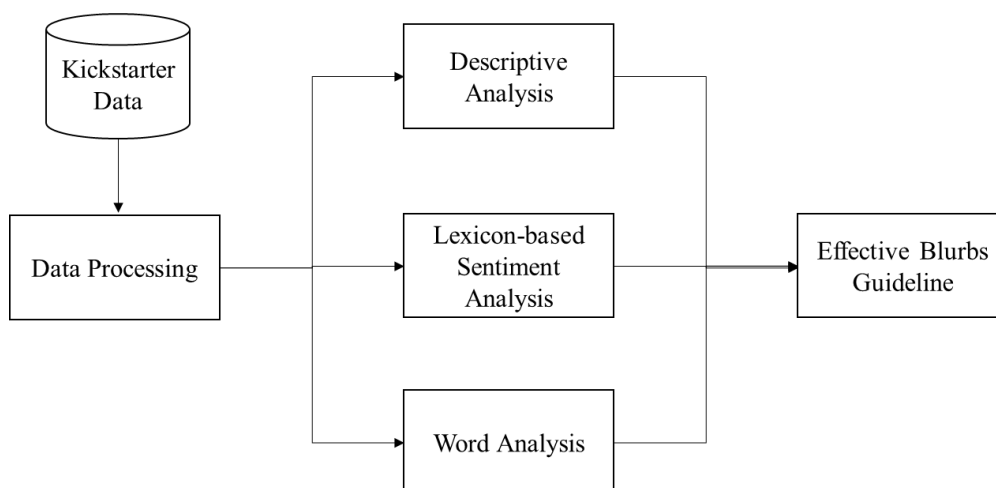


Figure 1 Research Design

Data Collection – Kickstarter Datasets

This research extracts data from Kickstarter. Kickstarter is one of the US popular RBCF platforms supporting entrepreneurs and small businesses in funding their innovations, ideas, or products. Fund-seekers publish or launch RBCF campaigns to attract potential backers to finance the project (Bukane, 2019).

This research covers one year worth of Kickstarter datasets from June 2019 to June 2020. The data was collected from the Web Robot website and stored in 78 separate CSV files. The files were all stored in the same directory. A function on Python can read them all simultaneously instead of analysing each one separately, which would have been impractical. This research selects Kickstarter datasets as the datasets are reliable. The raw data is automatically updated minimum once a day (Kickstarter, 2021). According to Global Alexa Ranking, Kickstarter is the top crowdfunding website fund-seekers visit to raise funds for their projects (Gedda et al., 2016). Since its launch, Kickstarter has notably contributed to over 195,000 successful projects.

The dataset metrics cover the rate of blurbs, success, median amount pledged, median backers, and how the successful and unsuccessful backed projects performed with the project blurbs. The dataset contains 15 unique project categories comprising art, crafts, comics, dance, design, fashion, film & video, food, games, journalism, music, photography, publishing, technology, and theatre. Besides, the dataset also contains 147 unique sub-categories in the dataset. In total, the data frame contains 287,135 Kickstarter projects launched from 23 different countries. There are 143,212 projects within the one-year period. The sentiment scores are later generated from the Kickstarter dataset, which compares two columns consisting of state and blurbs.

Data Processing

The data processing stage aims to scrub the data and drop columns that are not relevant to the research scope. Firstly, the Kickstarter datasets, which contain all CSV files were saved into a document directory and integrated into one dataframe, as shown in Figure 2. Some columns such as *'friends'*, *'is_backing'*, *'is_starred'*, and *'permissions'* had a lack of values (null entries) therefore they were dropped. Other columns such as *'converted_pledged_amount'*, *'creator'*, *'currency'*, *'currency_symbol'*, *'currency_trailing_code'*, *'current_currency'*, *'fx_rate'*, *'photo'*, *'pledged'*, *'profile'*, *'slug'*, *'source_url'*, *'spotlight'*, *'state_changed_at'*, *'urls'*, *'usd_type'*, *'last_update_published_at'*, *'unread_messages_count'*, *'unseen_activity_count'*, and

'country_displayable_name' were dropped as they were not relevant to the purposes of this project.

```
df = pd.concat([pd.read_csv(f) for f in glob.glob('Kickstarter*.csv')], ignore_index = True)
```

```
df.head(3)
```

| | backers_count | blurb | category | converted_pledged_amount | country | country_displayable_name | created_at |
|---|---------------|--|---|--------------------------|---------|--------------------------|------------|
| 0 | 76 | Dave-Man: A game about getting Dave his coffee. | {'id':35,'name':'Video Games','slug':'games/vi... | 697 | US | the United States | 1541608918 |
| 1 | 6 | My Vision "Shanghai Dreaming Podcast" this seri... | {'id':41,'name':'Jazz','slug':'music/jazz','po... | 440 | US | the United States | 1377505616 |
| 2 | 2 | I have always loved cookies and have a great r... | {'id':313,'name':'Small Batch','slug':'food/sm... | 40 | US | the United States | 1424288631 |

The resulting dataframe contains 290905 projects

Figure 2 Kickstarter data frame

Secondly, certain columns that contain very few non-null entries or were not relevant to the purposes of this project were also dropped. A null value indicates a lack of a value and that a data value does not exist in the dataset. The unwanted columns such as currency, converted pledge amount and currency symbols did not contribute to the research scope. The currency was converted into USD later to establish how much each backer gave per project.

The sub-categories were narrowed down to only categories for eradicating unnecessary words attached to categories such as id and discover. Additional features such as deadline, time, month calculated from the existing features were added for predicting whether a campaign will be funded successfully based on these measures. A new data frame was created toward the end of this process which includes information such as project ID, blurbs, category, and amounts pledged or contributed by the backers.

Descriptive Analysis

Descriptive analysis is a method for narrating a phenomenon and explain various perspectives of the collected data (Robson & McCartan, 2016). In this research, descriptive analysis was adopted to draw the fundamental understanding of the Kickstarter datasets, such as the number of successful or failed projects, amount contributed by backers, and the number of successful projects funded. The results

provide contextual information about writing effective blurbs on top of the lexicon-based sentiment analysis results. Section 4.1 discusses the results further.

Lexicon-Based Sentiment Analysis

The lexicon-based sentiment analysis aims to examine the blurb sentiments and classify them into positive, neutral, or negative. This analysis also examines the blurb sentiments against the project states such as failed or successful. This analysis was conducted by Natural Language Toolkit (NLTK) Vader sentiment package on Python. NLTK is a leading platform for building Python programs to work with human language data. This tool was used to conduct sentiment analysis through sentiment analyser and word usage tokeniser tool. Pandas was also applied in this research. It is a Python data analysis package which provides swift, flexible, and meaningful data structures. In this research, Pandas was applied in transforming the CSV file into Python data frame, which contains respective rows and columns.

The NLTK's Vader Sentiment Analyser was employed to analyse the blurbs on positive, neutral, or negative sentiment with a compound score for the overall sentiment. The blurbs were tokenised using NLTK's Tokenizer tool. The blurb of texts was seen as a character sequence and a defined document unit. Hence, tokenisation was employed to dissect the blurbs into pieces, called tokens, simultaneously removing certain characters or words, such as punctuation. Therefore, stop words, punctuation and numbers were all removed.

Word Analysis

A word analysis in project blurbs was computed and compared for successful and failed projects. This analysis seeks to determine the most used common words in successful and failed projects. This analysis computes the totals and differences accounted for ascertaining words with the largest usage ration. Figure 3 shows a word frequency data frame with feature differences (*diff*) and *ratio* (*success-failure*).

| | freq_success | freq_fail | diff | ratio |
|---------|--------------|-----------|-------|----------|
| dave | 45 | -11.0 | 34.0 | 4.090909 |
| man | 501 | -234.0 | 267.0 | 2.141026 |
| game | 1177 | -769.0 | 408.0 | 1.530559 |
| getting | 167 | -103.0 | 64.0 | 1.621359 |
| coffee | 369 | -348.0 | 21.0 | 1.060345 |

Figure 3 Ratio of words from the successful and failed blurbs

The top common 50 words were tokenised with a frequency illustrating how many times they appeared in the data to determine the word frequency distribution of the project blurbs in the successful and failed projects. Moreover, this analysis showed that the same words were overlapping in the blurbs for successful and failed projects. Therefore, this analysis calculated the net differences in the word frequency. The outcomes determined whether a particular word is leaning to either a successful or a failed project.

Furthermore, the length of the blurbs written by fund-seekers was investigated for determining whether backers prefer reading shorter or longer blurbs when choosing projects to fund. Besides, the top five blurbs associated with project success and failure for each category were examined by applying Term Frequency Inverse Document Frequency (TFIDF). The purpose of conducting sentiment analysis is to determine the best blurbs behind a series of phrases that can increase the chances of Kickstarter campaign success. Section 4.2 and 4.3 presents the full results of the lexicon-based sentiment analysis and word analysis.

4.0 Results

4.1 Descriptive Analysis

Figure 4 demonstrates the key information about projects, amount pledged or contributed by backers. Firstly, it shows the total projects and the median project goal (targeted fund) in Kickstarter from June 2019 to June 2020. *Film & video* and *music* projects top the project categories which cumulate to 38,000 projects. Following Driscoll et al. (2000), as the project categories are not normally distributed, the median was conducted so a central tendency of the project goal could be obtained. *Technology* and *food* projects have the highest median goals with *technology* projects setting a target

close to \$14,000 and *food*, aiming to raise \$10,000. Interestingly, these results are similar to Mollick (2014) exploratory study of crowdfunding projects where *technology* projects have the highest project goal compared to other categories. *Art* and *crafts* demand the least median project goals.

Figure 4 also signifies that per backer, more funding was raised for *design* and *games* projects. *Design* ventures cumulate just under £4,000 per project and games acquired \$3,500 from backers. The lowest amount pledged or contributed by backers per project is *journalism*, with *craft* being the second lowest. Moreover, among all the categories *comics* has the highest success rate of 90%. *Dance* projects have the second highest success rate of 80%. Contrarily, the number of successful *technology* projects are not the lowest, and they have the highest project goals. However, *technology* projects have the lowest success rate of 40% amidst all the categories.

Moreover, Figure 4 illustrates the sum of median backers per project and median pledged or contributed per backer. The number of backers per project involving the highest number of individual investors applies to the games and comics categories with more than 80 backers. On the contrary, backers are reluctant to invest in *journalism* and *crafts* projects. Per backer, the contribution to *dance* and *film & video* projects contribute to the highest amount (\$70) equally with *journalism* being committed to financially the least by per backer (approximately \$30). The results suggest that the greater the number of backers, the higher possibility of project success. For instance, *comics* projects have the highest backers and have the most successful projects.

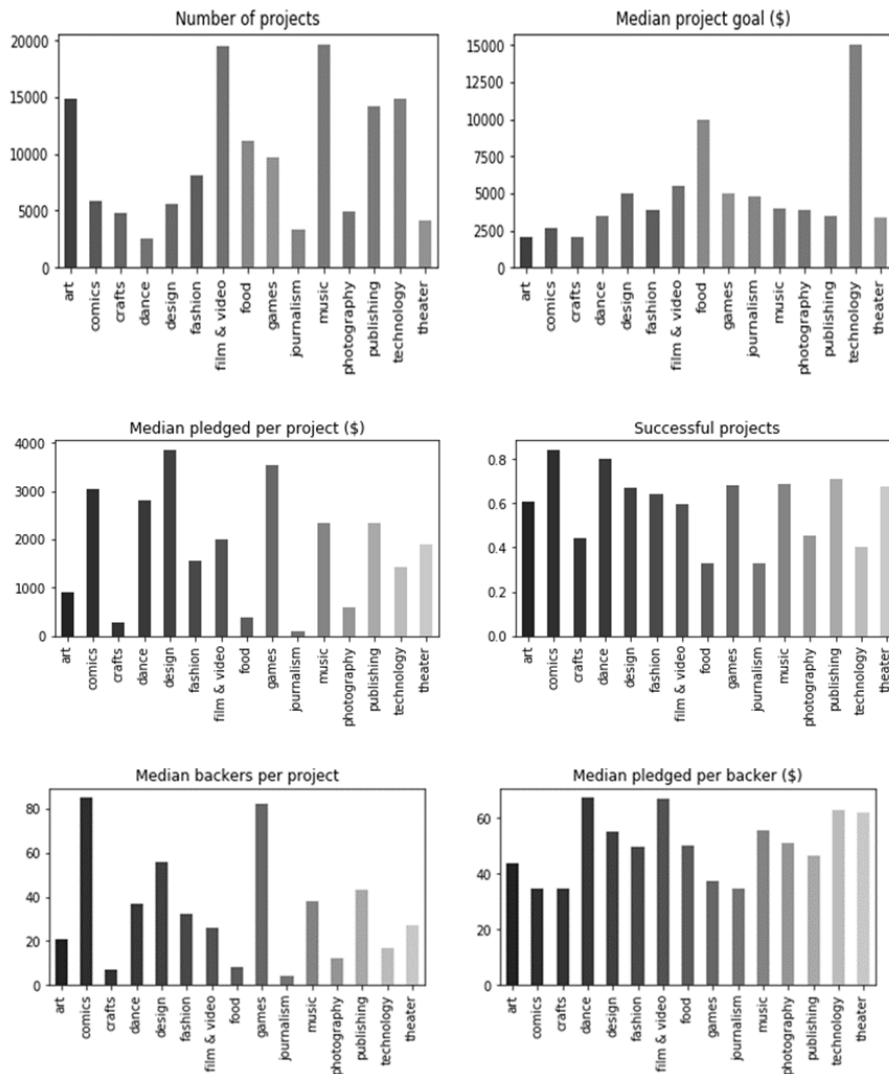


Figure 4 Key information about the Kickstarter projects

Additionally, projects that are launched on Tuesday thrive better than the other days in the week as their success rate exceeds 60% with a higher median pledged per backer amount of approximately \$2,500. From the month perspective between June 2019 to May 2020, projects launched in March succeed better than projects in the other eleven months of the year. However, the percentage difference between March and October is marginal. Interestingly, backers contribute more towards the project in October (\$2,000) comparing to the remaining months. Instead of computing from June 2019 to June 2020, for visualisation and prevision purpose, the figure shows the projects launched from June 2019 to May 2020. Moreover, 65% of the successful projects are established between 12 pm to 2 pm. The most significant amount backed per project also occurs simultaneously. Similarly, the median backers per project hit its peak at 12

pm-2 pm too. Moreover, the period between 12 pm to 4 pm harbours the largest funding contributions, encompassing \$55 per backer.

In short, projects with higher project goals or targeting funding are more prone to fail. The project goals in between \$3,000 to \$4,000 are more likely to succeed. For a successful project, the median backers per project are around 70. Furthermore, the project that has the highest pledged amount seems to attract more backers.

4.2 Lexicon-based Sentiment Analysis

This section illustrates the lexicon-based sentiment analysis results. The results explain the sentiment polarity scores, followed by the top 50 most common words in blurbs for failed and successful projects. This section further demonstrates the top five words associated with different project categories for failed and successful projects and the net difference of the overlapping words between the failed successful blurbs. Figure 5 describes the overall sentiments of the project blurbs from the successful and failed projects in Kickstarter. In general, there are 61.1% blurbs with positive sentiments, 13.4% with negative sentiments, and 25.6% with neutral sentiments.

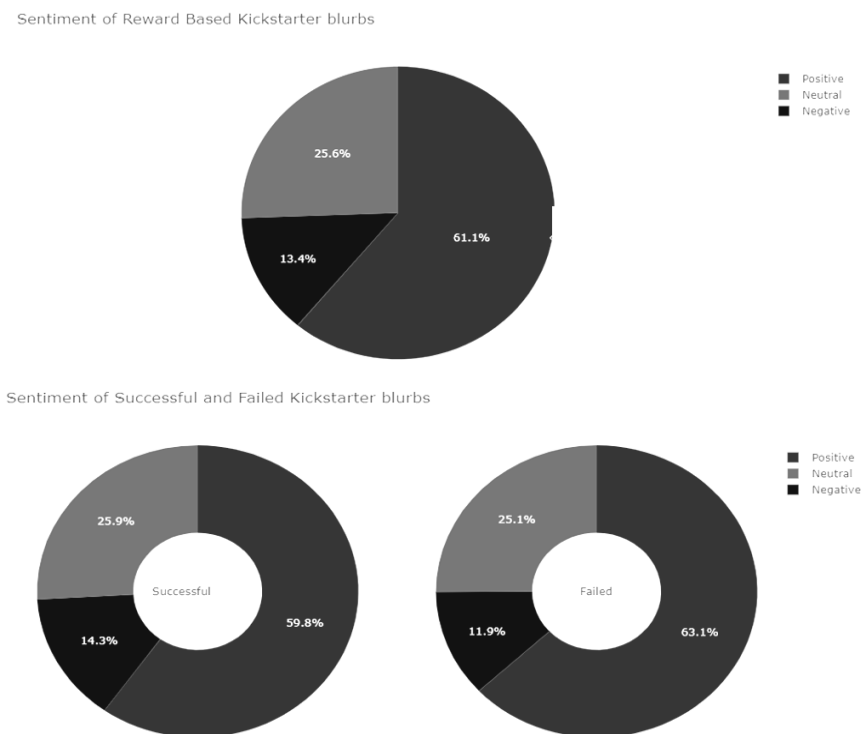


Figure 5 Overall sentiments of the project blurbs

Interestingly, the blurbs length has an impact on project success. As in Figure 6, the analysis discovers that slightly shorter project blurbs are more likely to succeed. Blurbs that are too short or too long are more prone to failure. The successful projects are greater than the failed projects. Considering the successful projects, the blurb's length that succeeded is 22 words. The blurbs consist of more than 22 words have a lower success rate. The data shows that very often these lengthy blurbs were overlooked at the preliminary stage.

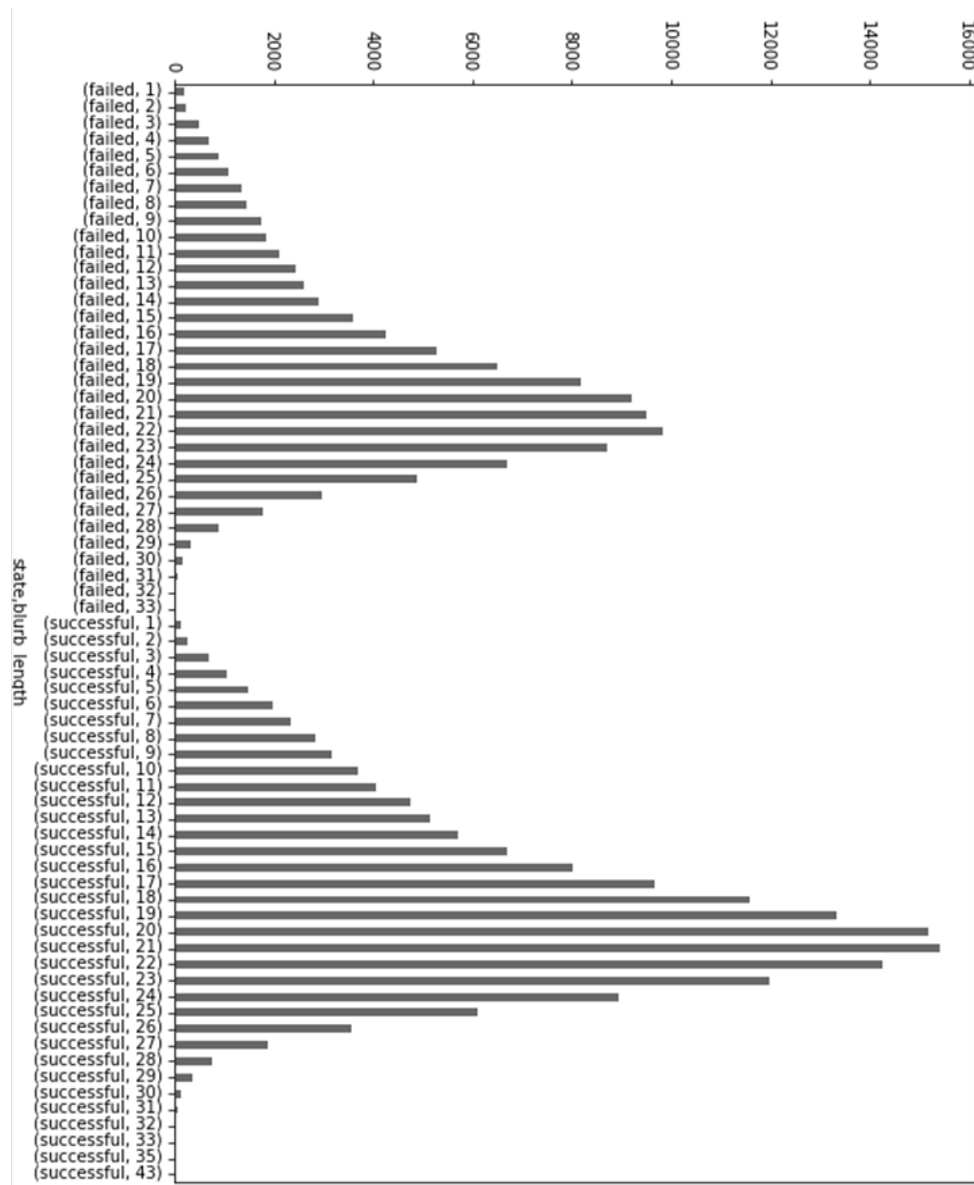


Figure 6 Length of project blurbs

Figure 7 demonstrates the sentiment distribution for blurbs of failed and successful projects. The spiked point aligns with 0 conceives the neutral compound scored blurbs where neither positive nor negative sentiment is detected. The blurb sentiments of failed and successful Kickstarter projects operate the complete in the positivity or negativity range. A statistical histogram analysis about compound scores for successful vs failed blurbs reveals the two contrasting blurbs have identical distribution in terms of compound sentiment. The histogram analysis identifies the overall sentiments of the failed and successful blurbs. In overall, there is a higher proposition of positive sentiments.

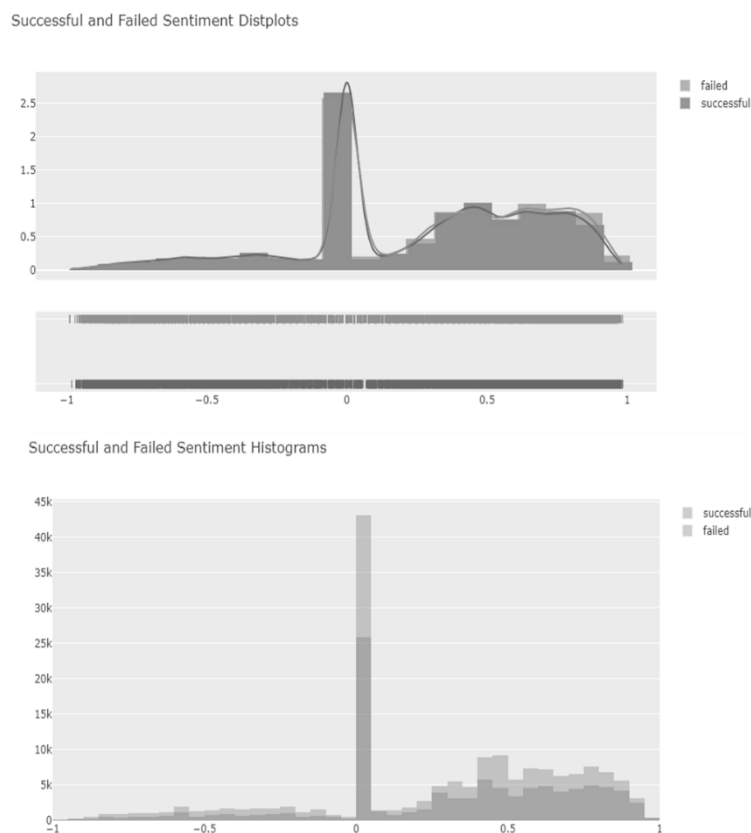


Figure 7 Blurbs sentiment plots and histogram

4.3 Word Analysis

The sentiment analysis shows positive, neutral, and negative sentiments spreading across successful and failed projects. Therefore, the sentiment analysis results are not conclusive in terms of writing persuasive and effective blurbs. Hence, a word analysis was conducted via NLTK Tokeniser. Figure 8 illustrates the top 50 words used in blurbs for successful and failed projects in Kickstarter. As mentioned in Section 3.2.5, it is

expected that there will be overlapping of words in the successful and failed project blurbs. Still, the analysis demonstrates the unique words for both blurb categories. The words are in the form of adjectives, verb and noun. For instance, the unique adjectives for blurbs in successful projects are *short*, *inspired*, and *original*. In contrast, the unique words for failed project blurbs are *free*, *fun*, and *best*.

Figure 9 reveals the top five words that appeared most in the project blurbs for successful and unsuccessful Kickstarter projects, generated from the vectorisation analysis. Similar to Figure 8, some of the words are overlapping. Hence, this research will focus on the unique words. Heuristically, for the *art* projects, *enamel pins*, *pins* and *enamel* related projects are likely to succeed, whereas *sculpture* related projects are likely not. *Music* projects are within the top five successful project categories. The results show that *recording* related projects such as *ep* and *songs* are likely to succeed, whereas *Hip Hop* is not. The phenomenon could relate to the genre, reflecting a negative stigma. There was an instance where the backers were frustrated with hip hop rapper Elzhi as he failed to deliver a hip hop album after raising \$37,000 from over 700 backers (Hurst, 2016). As a result, backers could be sceptical about investing in such genre. Furthermore, in the *film & video* category, *short film* related projects are likely to succeed. The backers are not keen with animated series as most of the backers are above 18 years old. It is less likely that they would invest in *animated series*. Interestingly, for *journalism* projects, the blurbs with *podcast about* are linked to success whereas simply *podcast* harbours failure. It seems like the podcast topic or context dictates the backers' decision to invest rather than a mere or generic podcast. Furthermore, incorrect spelling will not attract funding, such as *theater* in the *theatre* project category.

Due to words overlapping in successful and failed project blurbs, it is essential to compare net differences of these words for suggesting words that contribute to effective project blurbs. Firstly, this research compares the top 20 words from successful blurbs with failed blurbs (see Figure 10). The word *new* has the highest net difference of +9763, and this word is very likely to contribute to a project's success. The word *project* has the lowest net difference of +1146, which has lower significance in project success.

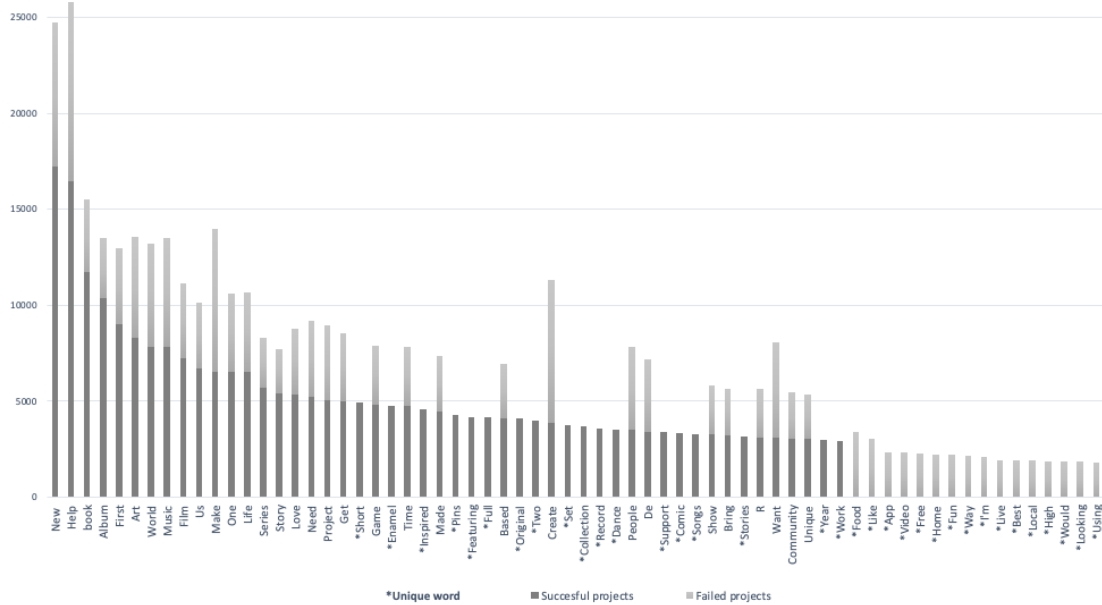


Figure 8 Top 50 words from the successful and failed project blurbs

| Unique words | | Project category | | Project category | | Project category | | Project category | |
|------------------|---|---------------------------------------|------------------|---|---------------------------------------|------------------|---|---------------------------------------|--|
| Project category | Top five keywords for successful projects | Top five keywords for failed projects | Project category | Top five keywords for successful projects | Top five keywords for failed projects | Project category | Top five keywords for successful projects | Top five keywords for failed projects | |
| Art | Pairings | Paintings | Fashion | Pin | Wear | Music | Recording | Hip | |
| | Enamel pins | Sculptures | | Hard enamel | Clothing | | Ep | Hop | |
| | Art | Art | | Enamel pins | Shoes | | Songs | Hip hop | |
| | Pins | Sculpture | | Plus | Fashion | | Record | Music | |
| | Enamel | Painting | | Enamel | Jewellery | | Album | Album | |
| Comics | Graphic | Graphic | Film & Video | Documentary | Animated series | Photography | Fine art | Photographer | |
| | Comics | Webcomic | | Film about | Animation | | Photobook | Photos | |
| | Comic book | Manga | | Short | Movie | | Photo book | Photo book | |
| | Graphic novel | Graphic novel | | Short film | Animated | | Photo | Photo | |
| | Comic | Comic | | Film | Film | | Photography | Photography | |
| Crafts | Wooden bowls | Wood | Games | Cards | Mobile | Publishing | Illustrated | Publish | |
| | Pens made | Candles | | Rpg | Android | | Book about | Poems | |
| | Knitting | Scented | | Playing | Ios | | Book | Poetry | |
| | Yarn | Soy | | Playing cards | Mobile game | | Children | Of poetry | |
| | Pens | Candles | | Game | Game | | Children book | Magazine | |
| Dance | Contemporary dance | De danse | Food | Delicious | Food truck | Technology | Wireless | An app | |
| | Dance company | Dance Academy | | Food | Food | | Raspberry | App | |
| | Ballet | Ballet | | Beer | Truck | | Raspberry pi | App that | |
| | Dancers | Danse | | Coffee | Restaurant | | Pi | Software | |
| | Dance | Dance | | Brewery | Organic | | Arduino | Platform | |
| Design | Backpack | Typefaces | Journalism | Small stage | News and | Theatre | Edinburgh fringe | On seminar | |
| | Bag | Posters | | Podcast about | News | | New play | Theater | |
| | Automatic | Hostel | | Magazine | Blog | | Edinburgh | Musical | |
| | Knife | Tiny house | | Podcast | Podcast | | Fringe | Stage play | |
| | Titanium | Poster | | Journalism | Journalism | | Theatre | Theatre | |

Figure 9 Top five words for successful and failed project blurbs per project category

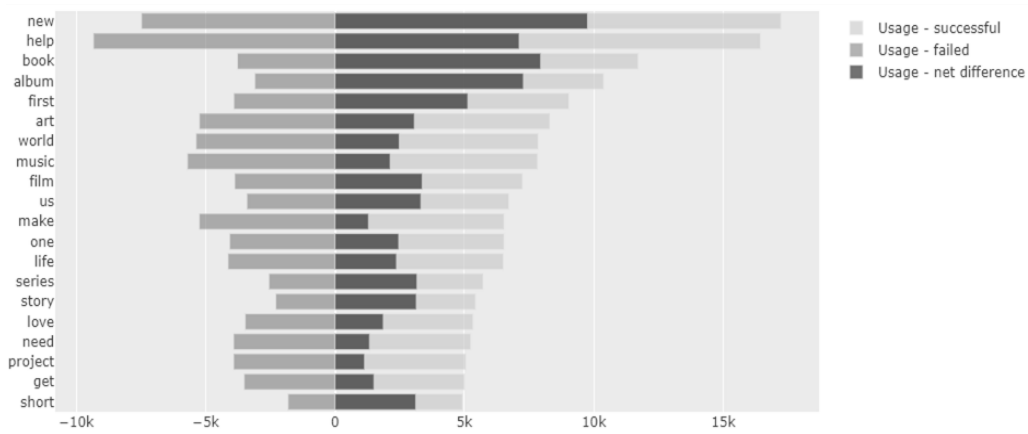


Figure 10 Net difference of words usage from top 20 successful words with failed blurbs

Secondly, this research examines the largest word usage difference between the successful and failed blurbs (see Figure 11). The words extracted are all part of the top 50 words as in Figure 8 from the successful blurbs. The results provide another perspective of writing effective blurbs holistically. By all means, project blurbs with such words are likely to be successful.

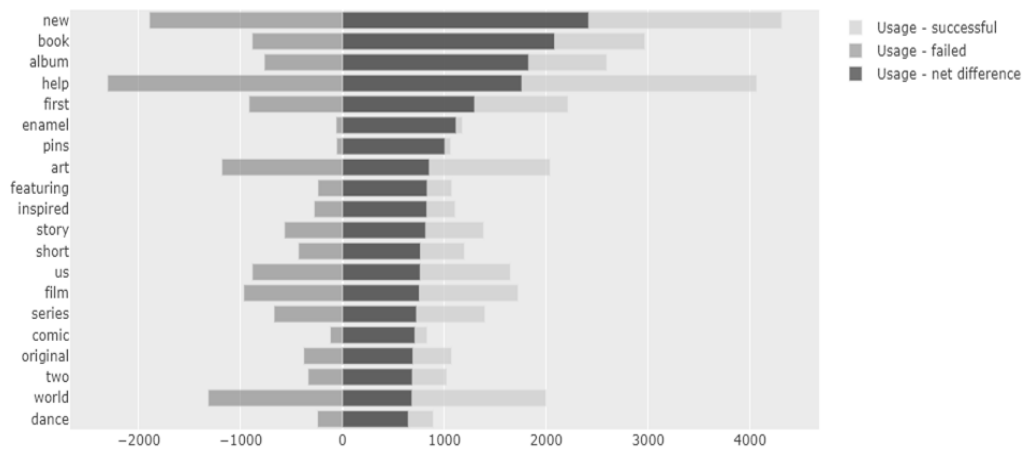


Figure 11 Words with largest usage difference between successful and failed project blurbs

Thirdly, similar to the second analysis, this research sets a threshold for words with a minimum of 500 usages and attempts to study the words with the largest usage ratio between successful and failed blurbs (see Figure 12). Words such as *edition*, *length*, *hard*, *novel*, *recording*, *debut*, *fantasy*, *th*, *release* and *adventure* are not the top 50 words in the successful blurbs. Hence, these are the words that could also contribute to project success. It is worth noted that the word *th* is most likely the remains of a number.

For instance, 8th, therefore 8th is transformed into *th*. Therefore, it could indicate that backers support successive campaigns after fund-seekers have returned with a new project after a few times. Therefore, repetitiveness and new ideas could be perceived as positive project characteristics by backers.

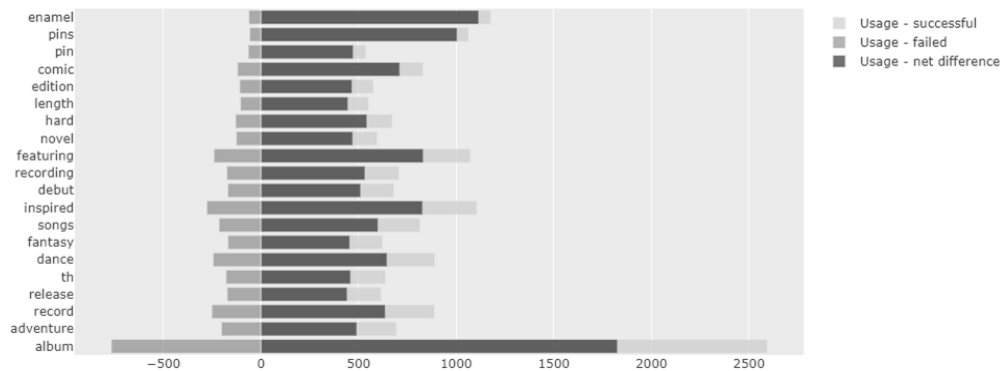


Figure 12 Words with the largest usage ratio between successful ad failed blurbs (minimum 500 usages)

5.0 Discussions and Conclusion

5.1 Principles of Creating Persuasive and Effective Project Blurbs

This research applies various analyses using the Kickstarter dataset, aiming to derive a way to create a persuasive and effective blurb that increases project success. The descriptive analysis provides the main factors contributing to project success such as project category, amount pledged, and the timing that attracts most backers. The sentiment analysis results show that most of the project blurbs are having positive sentiments. However, the successful project blurbs have a lower percentage of positive sentiments and higher neutral and negative sentiments than the failed project blurbs. Therefore, a word analysis is conducted to discover the potential words in blurbs writing, which could contribute to project success. Heuristically, the principles of creating effective blurbs in general are:

- Words that indicate *innovativeness* and *duration* of a project such as *short*, *inspired*, *original* are likely to be successful. This scenario indicates that backers prefer projects that demonstrate the novelty with a realistic timeline.
- Words that show *specific project scope* or *context* are likely to succeed, such as *enamel* and *pin* (see Figure 9). There are also words to avoid for specific project categories. This finding provides an idea to fund-seekers which keywords for each project category are likely to succeed.

- Words that demonstrate the *project highlight* or a *strong cause* such as *inspired*, *featuring* and *support* are likely to attract funding. This finding shows that backers do have altruistic characteristics.
- Words that relate to project categories that likely to be funded such as *comics*, *dance*, and *publishing* (see Figure 4). This scenario demonstrates that backers would like to see a relevance of keywords with the project nature.
- *Quality* and the *use of language* is vital. For instance, if the target backers are reading British English language, the words used should be in British English rather than American English. For example, the word *theatre* (British English) vs *theater* (American English). The insensitive use of English may discourage some backers. Similarly, the use of French word *danse* instead of the English word *dance* may deter backers from contributing. This finding reveals that the proper use of language is vital for attracting fundings.
- Most of the successful projects have a *blurb length* of around 22 words. Longer blurbs may discourage backers from contributing to the project. This finding shows that fund-seekers must keep their project blurbs succinct and yet meaningful.
- *Project launch time* in the afternoon (between 12 – 4 pm) and *project launch day* on Tuesday is likely to increase the project success. This scenario is interesting and random at the same time. Hence, further research is required for explaining this scenario.

5.2 Research Contributions

This research posits theoretical and empirical contributions. From the theoretical perspective, this research contributes to the sentiment analysis research in RBCF context by examining the project blurbs, which is currently lacking. Moreover, this research develops a robust method for creating effective blurbs that increase project success chances by integrating descriptive analysis, lexicon-based sentiment analysis and word analysis. This study extends the existing scope from Bukane (2019) and Mitra & Gilbert (2014) by looking into the blurb sentiments and words from the successful projects and the failed projects. Therefore, a word comparison is drawn, which opens many future research opportunities.

Moreover, this research suggests a practical guideline for Kickstarter fund-seekers about writing an effective project blurb from the empirical perspective. The principles are focusing on the words to use in general and show the words to use based on different project categories. Furthermore, this research provides the timing and length perspective of when and how to write the project blurb. The practical guideline could increase the project success for the Kickstarter fund-seekers.

5.3 Research Limitations and Future Work

The key limitation of this research is there is only comparing the words in successful and failed project blurbs with all sentiments. As part of the future research, another granularity of analysis will be conducted in examining the successful and failed project blurbs with their sentiments. As this is an exploratory study, the research design

integrates a generic sentiment analysis model with other methods and applies heuristics in analysing data. This research design could lead to a methodological framework for creating an effective blurb for future study. The methodological framework could incorporate persuasive technology (Alhammad & Gulliver, 2014) and value co-creation (Cheah & Zolkepli, 2018; Tan et al., 2020) elements. The persuasive technology elements such as credibility and trustworthiness could be integrated as part of the project blurbs, for instance, words such as *validated* and *certified*. RBCF is a platform where *backers* and *fund-seekers* to co-create values. Backers could demonstrate their altruism of a course they are familiar with or something innovative, where fund-seekers could get the requested fund to pursuing a project. Hence, words suggested in Figure 9 could play a significant role in future research in developing this framework. Furthermore, this framework could be extended by applying machine learning based sentiment analysis. Lastly, this research has studied on Kickstarter data. The future study could also incorporate data from key RBCF platforms such as Indiegogo.

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