

Emotional Crowdfunding Blurbs Lead to Success (of the campaign, at least)

Dr Preet Deep Singh

09/09/2021

Abstract

Using a dataset of 150,011 projects from Kickstarter, we analyse factors that influence the success of a campaign. Projects launched in March, on a Sunday mentioning positive words are most likely to get funded. Results show that goal amount, day of launch, category of project, and duration of the project are statistically significant. We find the use of certain words is correlated ($p < 0.1$) with the success and overachievement of the project. Invoking positive words such as ‘please’, ‘thanks’, ‘father’, ‘together’, ‘ease’, ‘new’ has a positive effect.

1 Introduction

Data from Kickstarter shows that over half of the projects listed are not successful. This makes the study of factors that contribute to success very relevant. Crowdfunding platforms are used for a host of reasons. On Kickstarter, as per our data, there are over 15 categories ranging from Dance to Technology under which projects can raise funds. A number of small initiatives and startups raise money through this route.

While traditional finance theories such as pecking order theory, predict that firms would raise debt before equity ¹, the new era of companies based on new market segments and product offerings that cannot be compared to existing ones, has led to a new paradigm of looking at risk and its distribution. While many startups fail, crowd-funding is changing the way risky enterprises are being financed. Through this study we set out to examine a few basic questions:

- Summary of Projects: how many successful, how many over, how many rising
- Factors that influence success:

¹Cite

- Impact of Readability on Total funds raised
- Impact of certain words on the total funds raised

We use success of the campaign to measure the impact of our variables of interest. We follow @singh2021perception1, @singh2021perception3 and @singh2021perception2 to see how perception of certain traits about the founders matters. Following those we look at the perception of the audience to the project based on the use of certain words. The data in this study pertains to multiple currencies.

In this paper we look at 150,011 projects on Kickstarter from April, 2009 to November, 2015. Our sample includes failed, cancelled, suspended and successful projects. Crowdfunding does not have any equity component and follows a donation or a reward based model.

Results show a bias towards certain months and days which are consistent across many currencies. The presence of a few words in the blurb also contributes to the success of the campaign. Positive words such as “please”, “father”, and “help” have a positive effect that is statistically significant.

1.1 Types of Crowdfunding

There are four types of crowd funding - Reward, Debt, Equity, Donation. Under the reward based model, the investor is promised the product. This method works as a pre-order facility. While the company is assured of a minimum sale and gets cash to keep it going, the investor gets a right to get his/her hands on a product before it hits the market. Debt based model is difficult to execute on a platform only mode and therefore requires more interaction between the organisation and the the creditor. However debt is an important part of funding and risk disbursement. There are a number of Peer to Peer (P2P) lending platforms that are facilitating this. Equity model allows people to own some shares of the company. Crowdfunding model, without sufficient safeguards, is not suitable to equity ownership because of public issue regulations in every economy. Donations, if made to registered/eligible entities are exempt from income tax. Therefore if the organisation raising funds is an entity covered under the relevant provisions, then the investor (donor in this case) can get a tax exemption on the money so donated.

1.2 About Kickstarter

TO BE ADDED

2 Literature

Mollick (2014) look at the dynamics underlying the success of crowdfunding projects. They show that personal effects, project quality and geography are related to the success of the project. They also find that most projects (75%) deliver projects later than the promised date.

Inbar and Basrzilay (2014) find evidence of reciprocity. They use data from Kickstarter to show that entrepreneurs who have backed projects earlier are more likely to get funded. Using network theory they advise that backing projects is a good strategy that contributes to success of your own project. It is possible that they find this relation due to learning. If someone backs multiple projects, he/she is likely to have learnt what works and what not. If those learnings are incorporated in his/her own projects then the success of that project would reflect confounding effects of network theory and learning by being in the system.

Bellaframme, Lambert and Schewienbacher (2014) find that crowdfunding initiatives that are presented as non-profit organisations tend to be more successful at raising funds after controlling for other factors. They say that this is in line with contract failure literature that purports that due to reduced focused on projects, NPOs can raise money easily for initiatives in which the general public is interested. We extend this literature by looking at the level to which a project can connect with the people.

Ahlers et al(2012) examine signals that induce providers of finance to commit to crowdfunding projects. They find that financial roadmaps, risk factors and internal governance are key factors that determine the success of a crowdfunding project.

Similar but not same is an analysis of Lui (2013) on microloans where he finds that on Prosper.com ² there is herding but it is not irrational herding. Lender make informed decisions after looking at the past record of borrowers and borrowers traits-favorable or not- are amplified.

3 Data and Analyses

3.1 Summary

Our sample includes 171,436 observations. After removing projects for which we do not have complete data, we are left with 150,011 observations. Table ?? gives a summary of the data.

Our data spans 80 months ranging from April, 2009 to November, 2015. We have data from 16 categories viz. Theatre, Design, Fashion, Technology, Film

²a microloan website

Table 1: This tables shows the summary of various columns in our dataset

Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Pctl(75)	Max
Goal	150,011	42,263.860	1,054,937.000	0	2,000	15,000	100,000,000
Pledged	150,011	8,075.116	56,487.430	1	142	5,690	10,266,846
Percentage_Funded	150,011	332.041	20,970.050	0.000	2.770	111.900	5,526,657.000
Backers_Count	150,011	109.435	712.377	1	4	77	91,585

and Video Games, Publishing, Crafts, Arts, Music, Comics, Food, Photography, Others, Journalism and Dance. The projects have one of four states: cancelled, suspended, failed or successful. Successful and failed are the two dominant categories. The projects on Kickstarter can be from any nation and therefore can pertain to different currencies. Projects in our sample span 10 currencies GBP, USD, CAD, AUD, NZD, NOK, EUR, CHF, DKK and SEK. Currency data for some projects is not mentioned and is represented as NULL.

3.2 Timing

In Figure ?? we see that while the number of new projects launched everyday varies to a large extent, it has increased since launch. In Figure 2 we see the ratio of successful projects. It seems to drop after the number of projects increased. This would make sense because as more projects come in, not all will be successful.

We look at month wise success ratios by dividing the total number of successful projects by the total number of projects launched in a particular month. In fig ?? we look at the ratio of successful projects for each month. We see that the overall ratio for all months is less than 0.5. This study gains importance in light of this information. We see that October has the lowest ratio of successful projects. We filter the data by currency and replicate the results for each currency and see a very similar pattern for USD nd other currencies. October is the lowest for a number of currencies. The number of bars might not be 12 in some currencies because of the distribution of data.

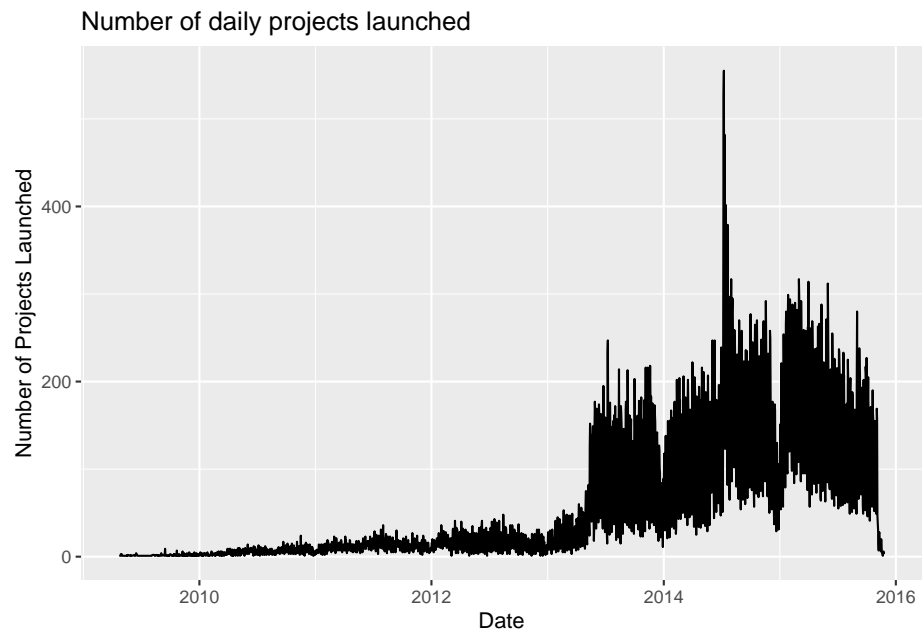


Figure 1: Number of projects launched by date

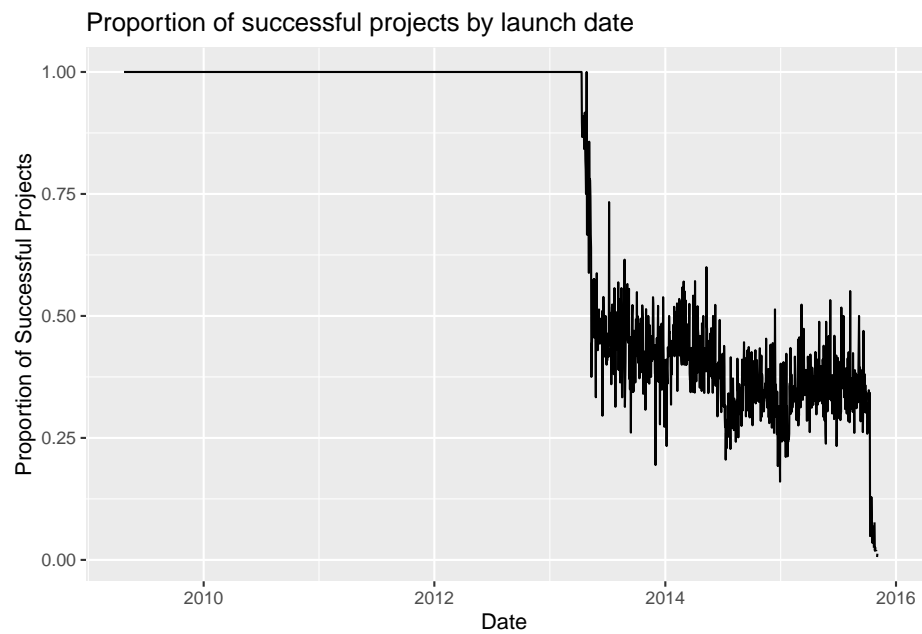


Figure 2: Proportion of successful projects by date

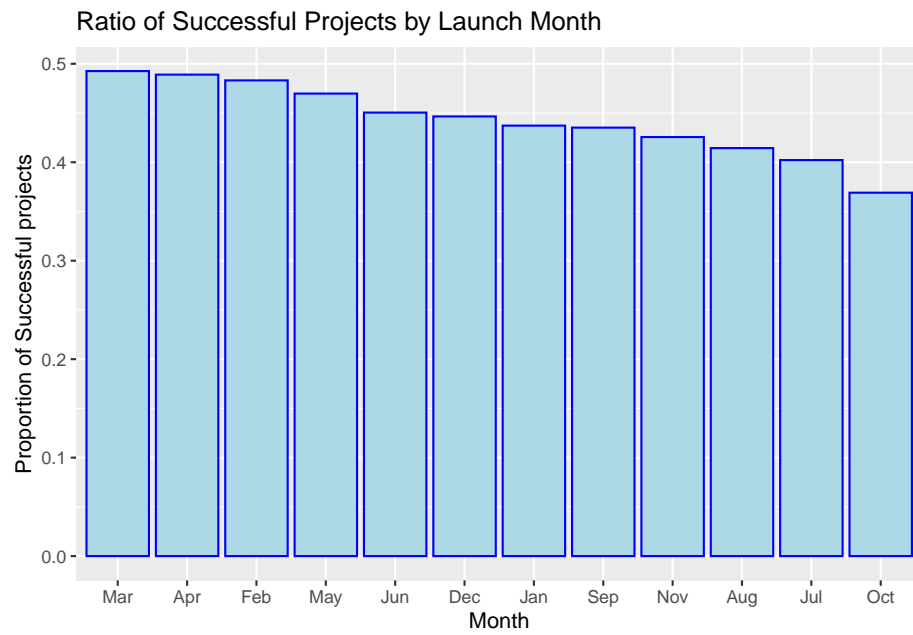
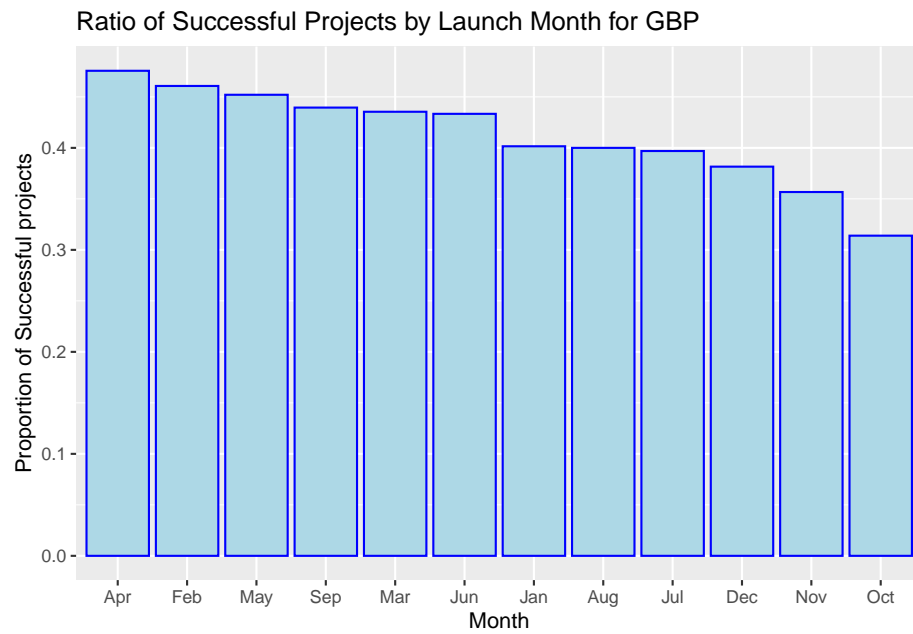
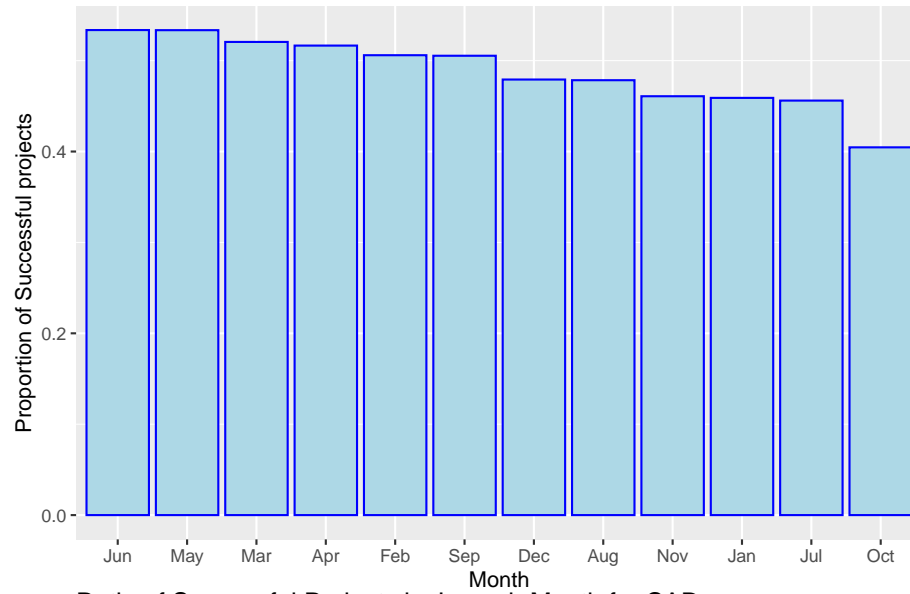


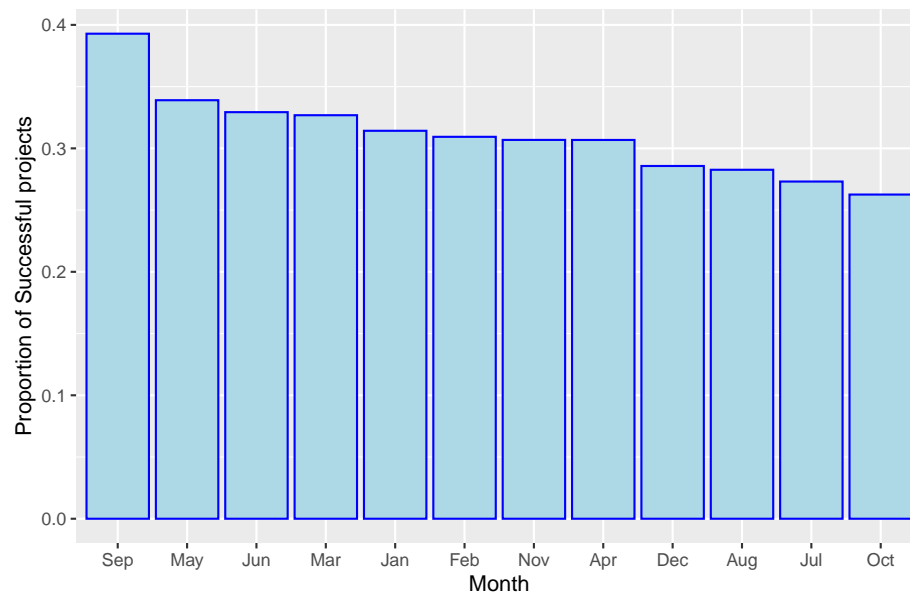
Figure 3: Proportion of Successful Projects by Month

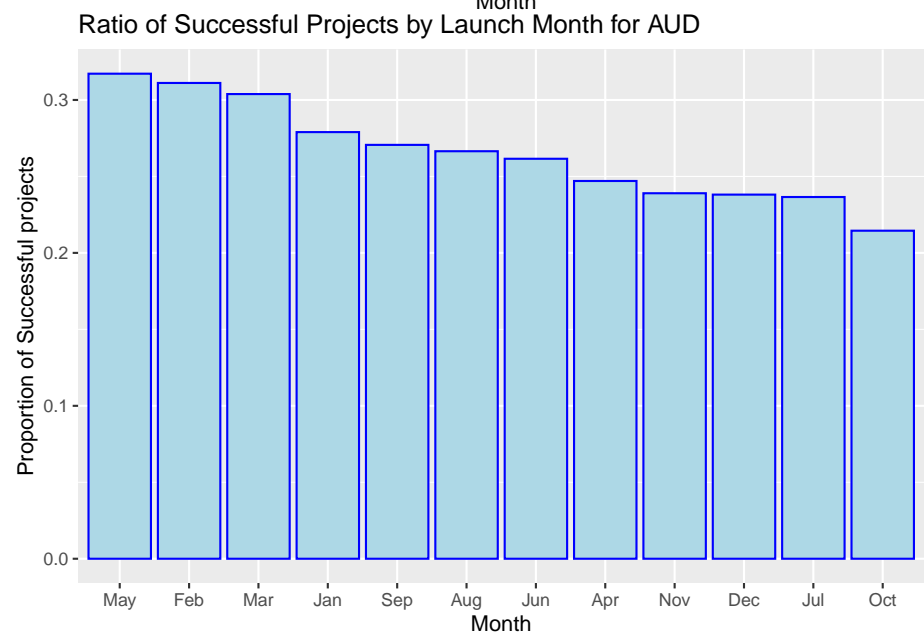
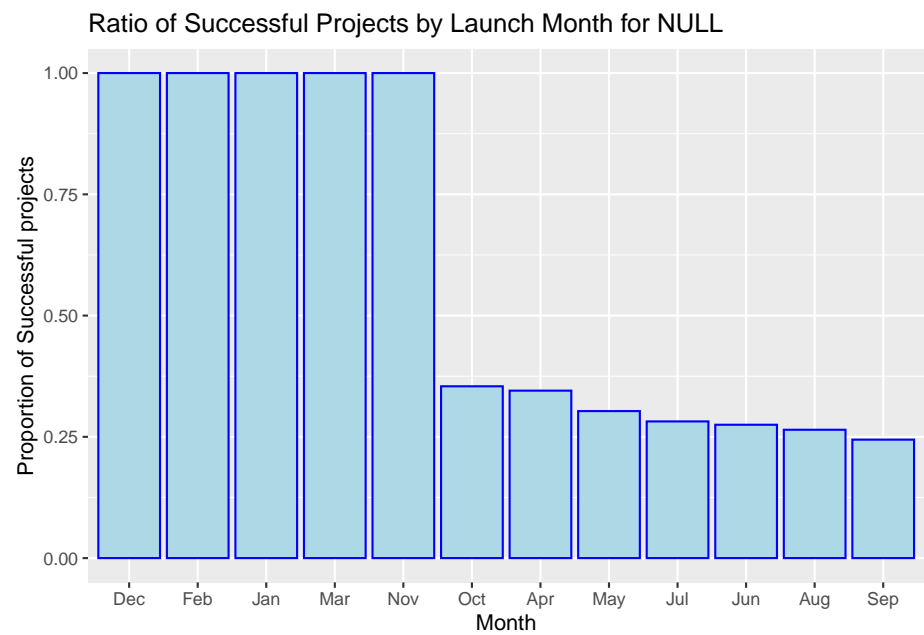


Ratio of Successful Projects by Launch Month for USD

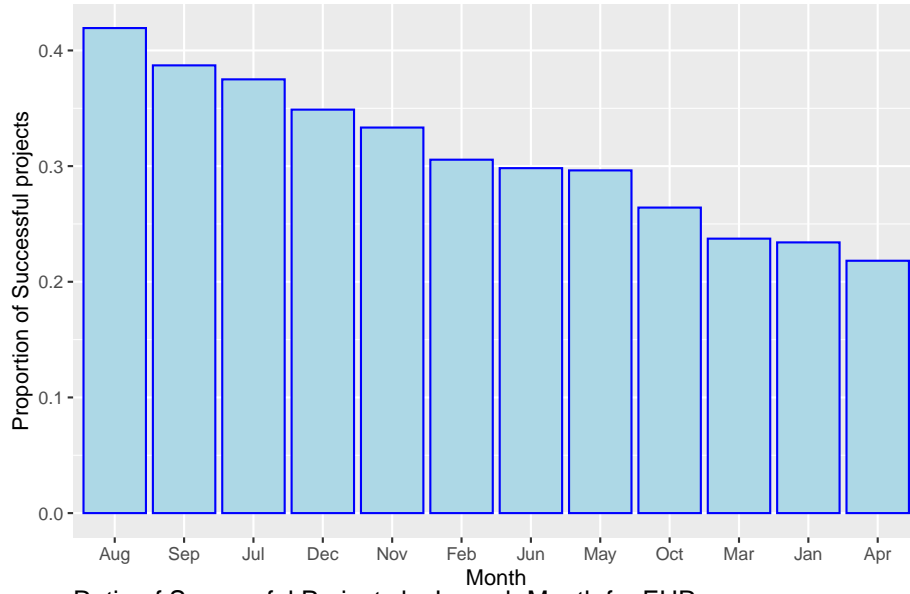


Ratio of Successful Projects by Launch Month for CAD

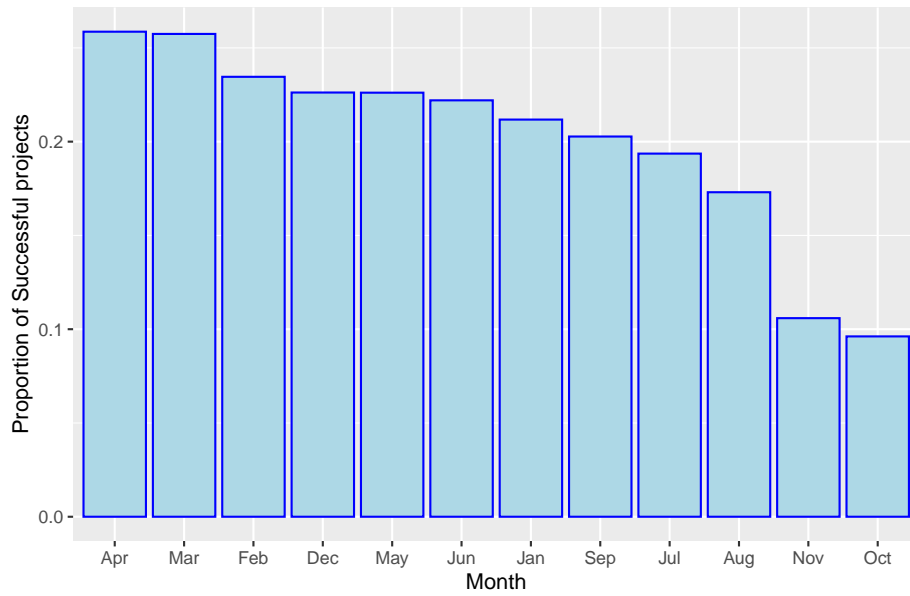




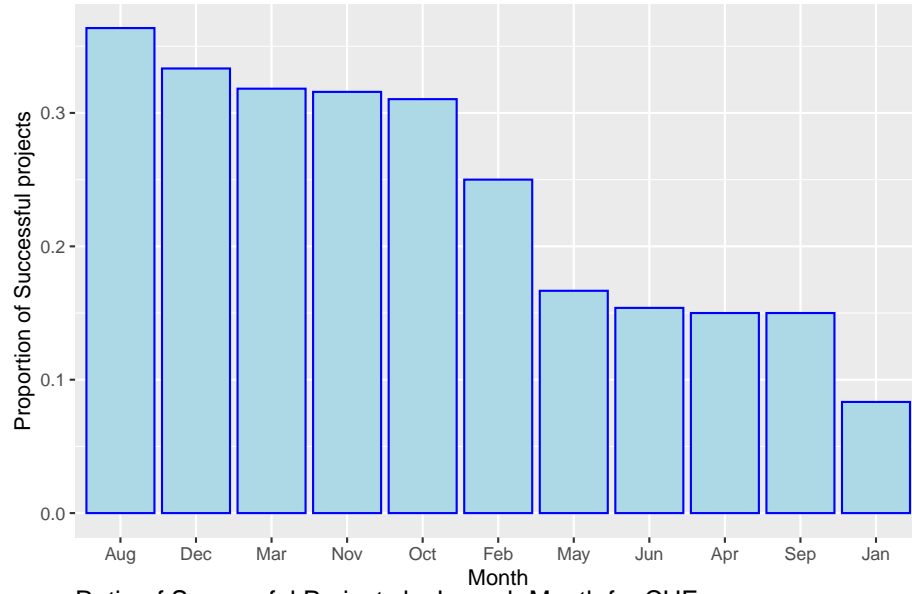
Ratio of Successful Projects by Launch Month for NZD



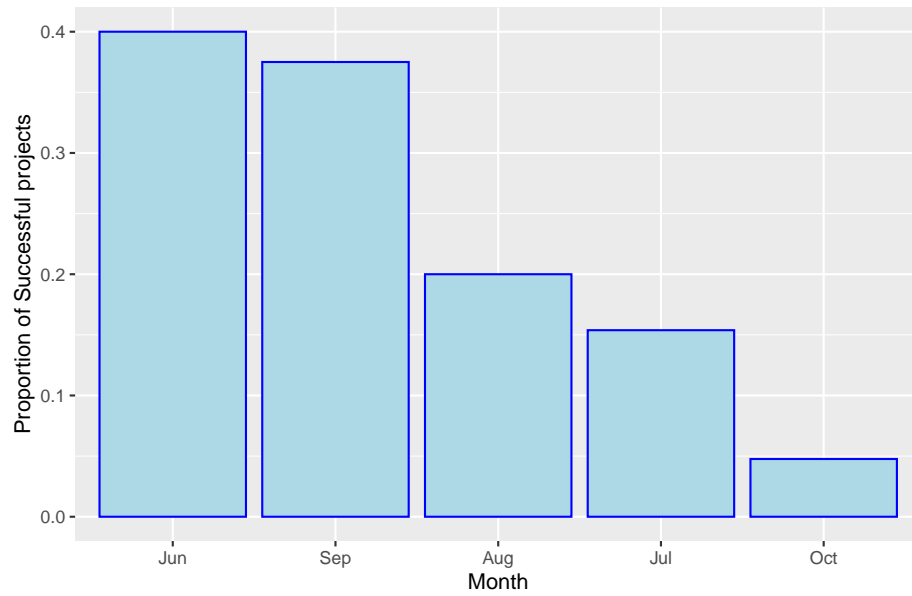
Ratio of Successful Projects by Launch Month for EUR

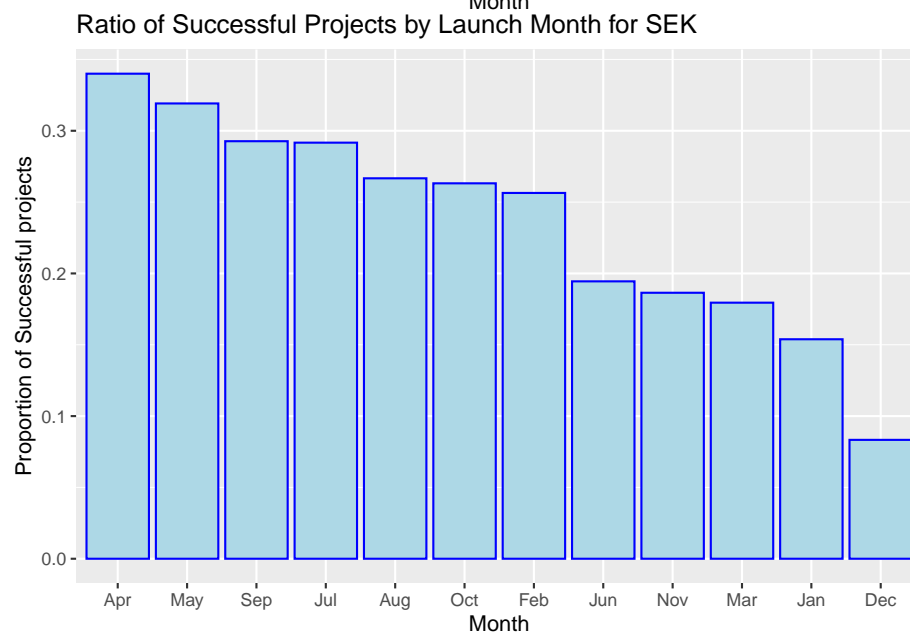
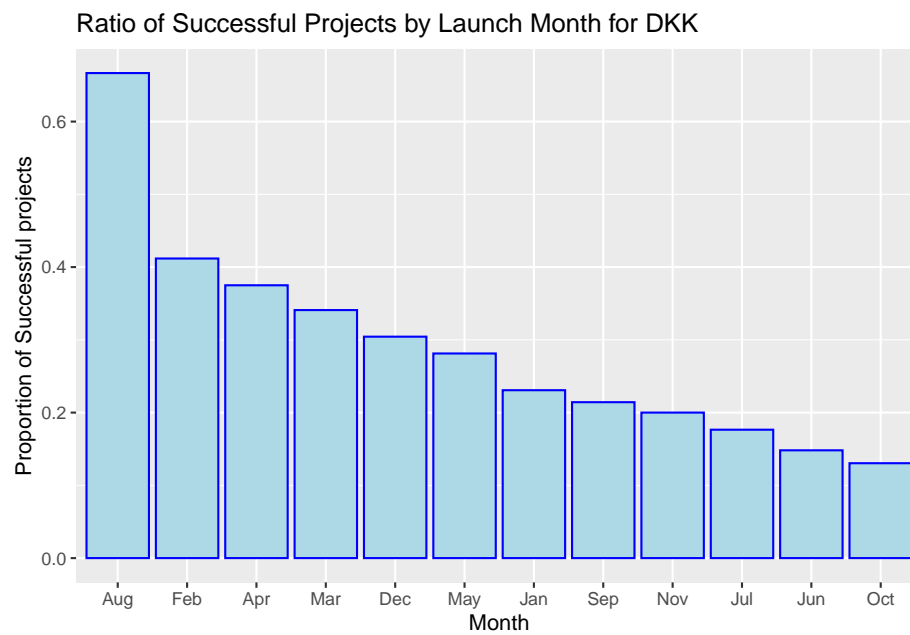


Ratio of Successful Projects by Launch Month for NOK



Ratio of Successful Projects by Launch Month for CHF





Similar to months, we do this exercise for days. ³.

³Friday Effect

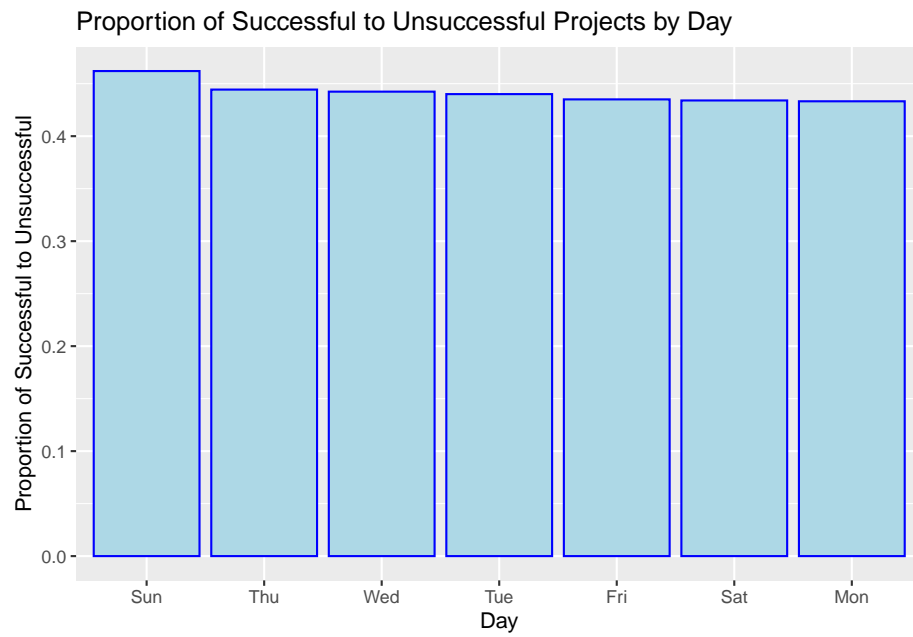
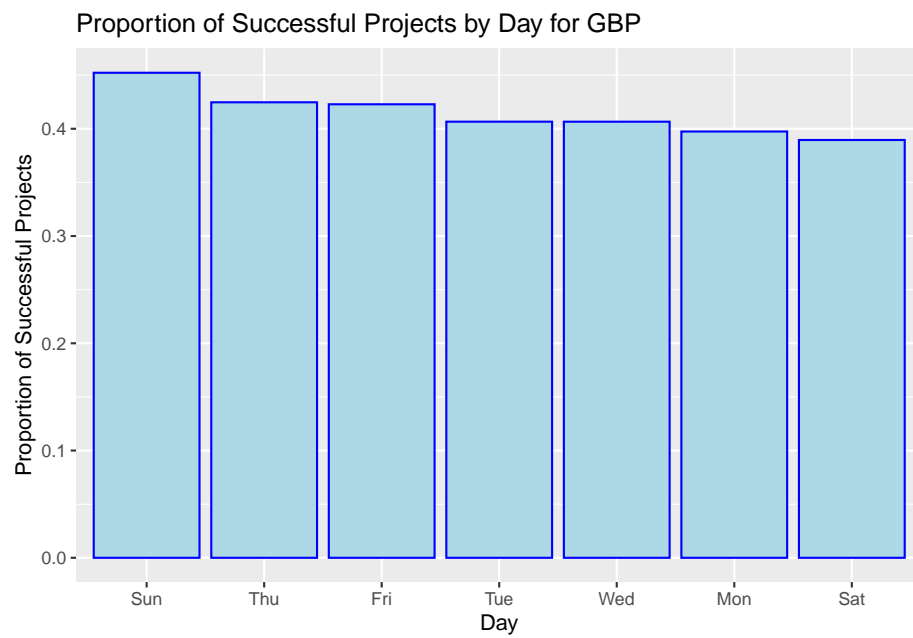
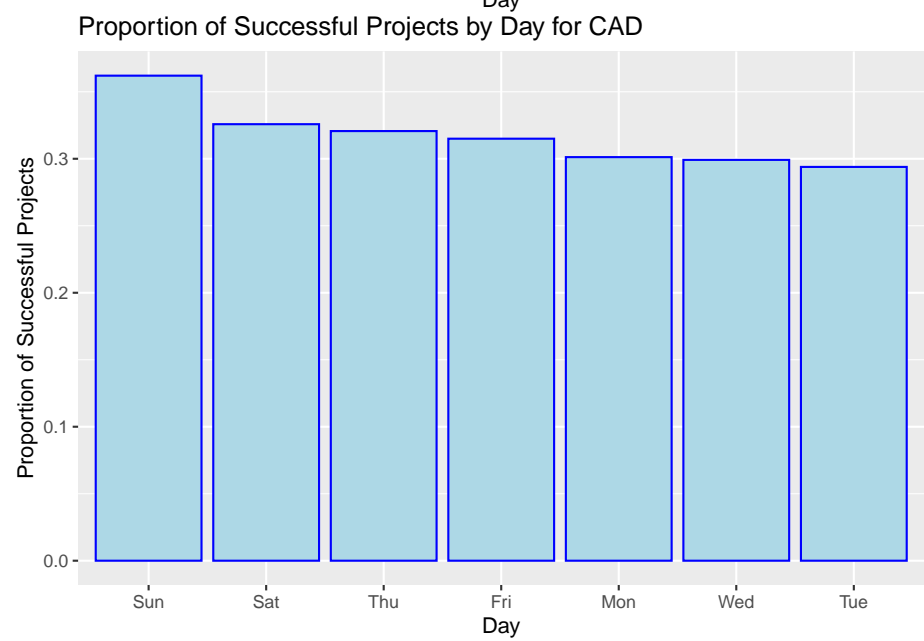
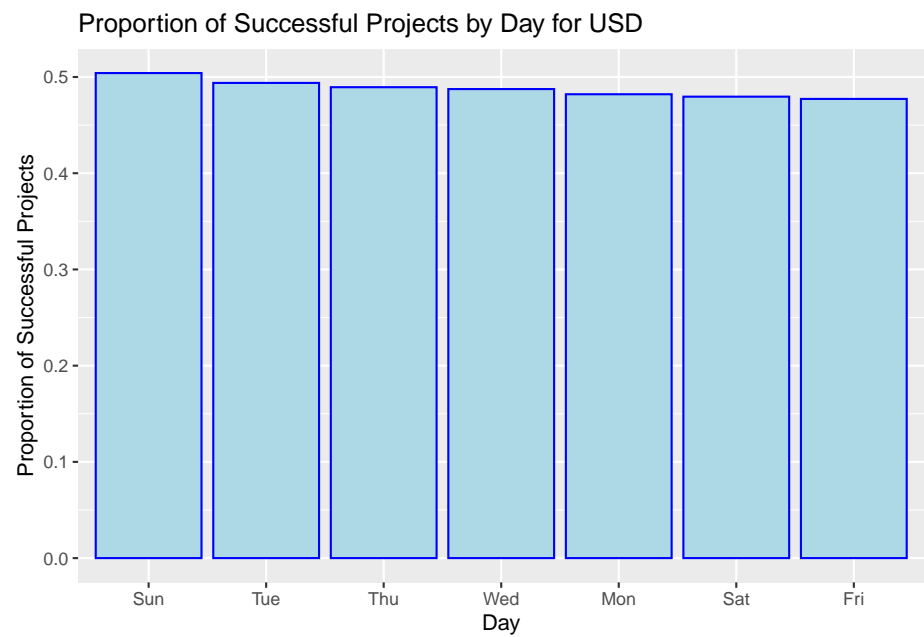
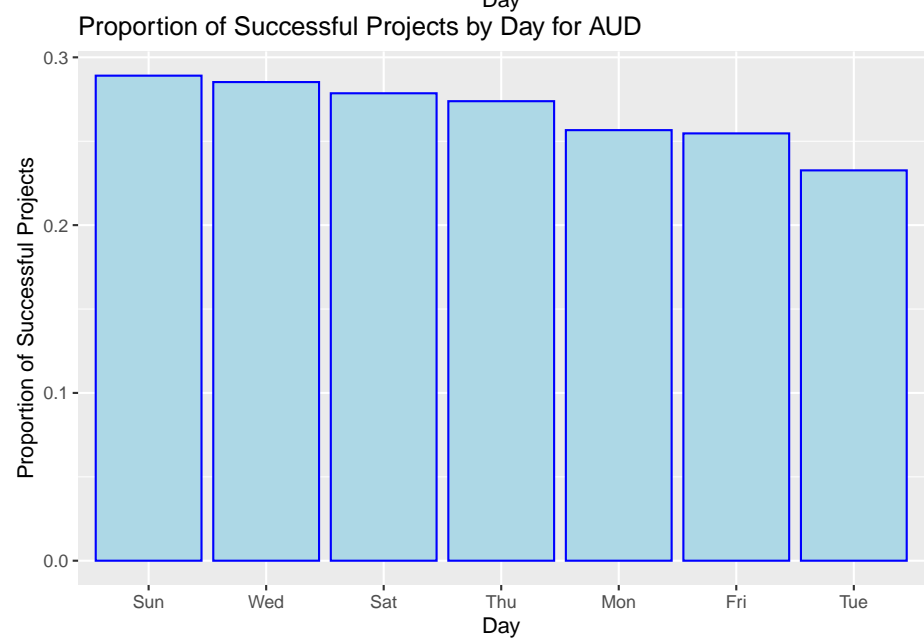
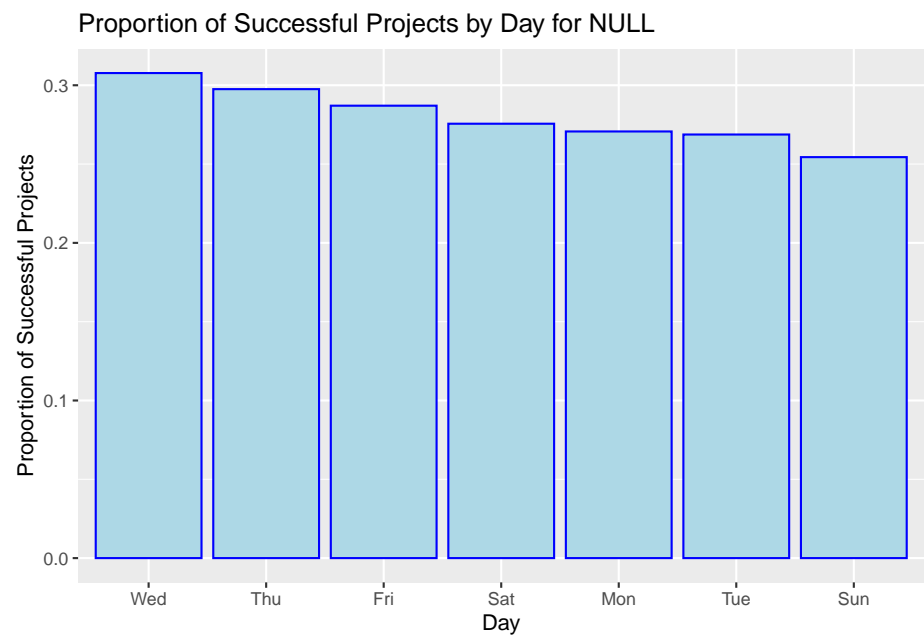
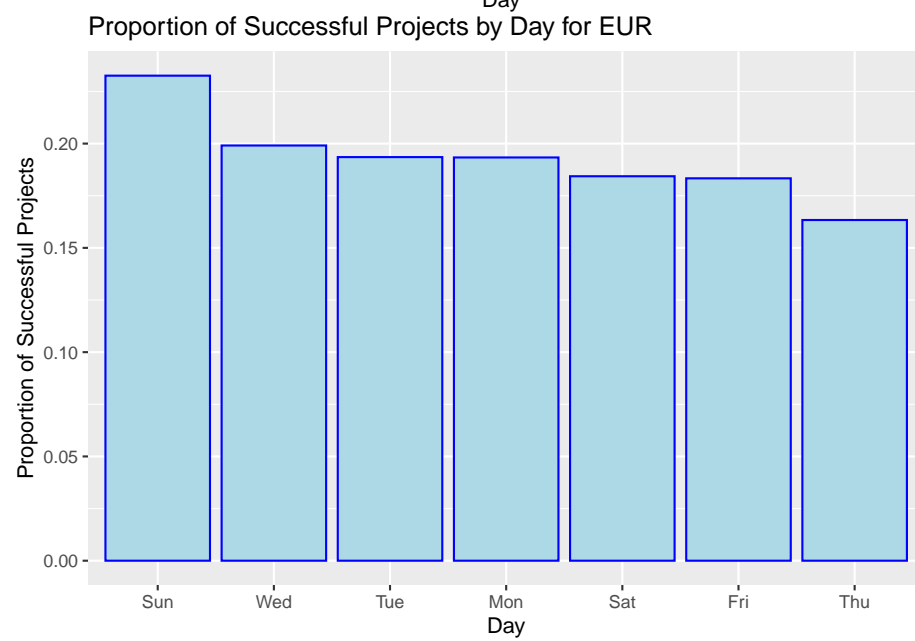
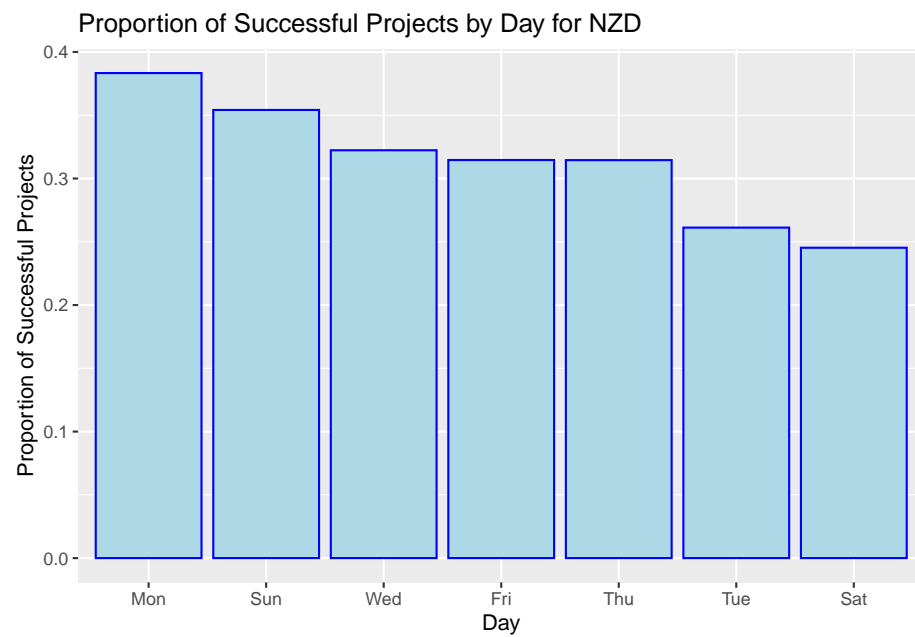


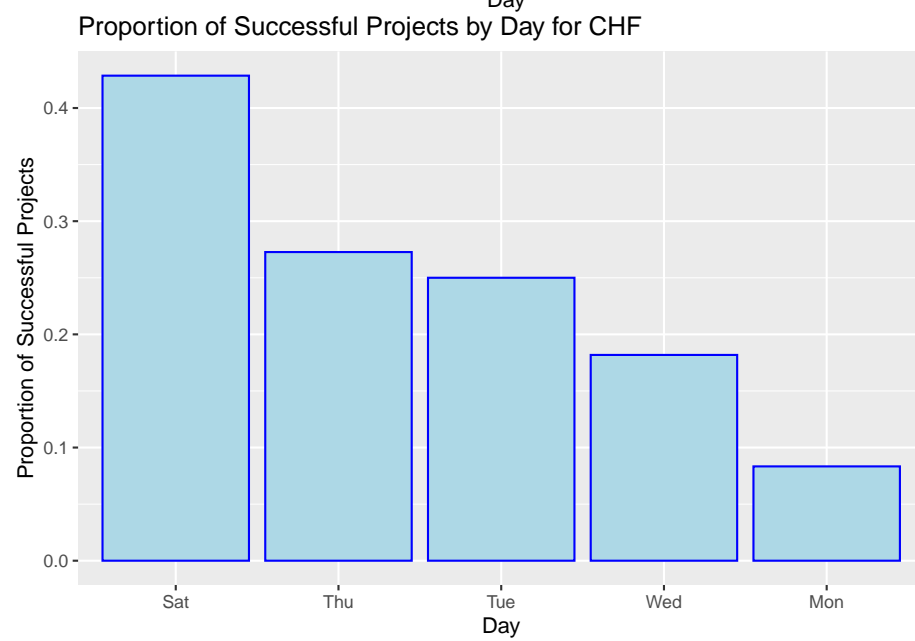
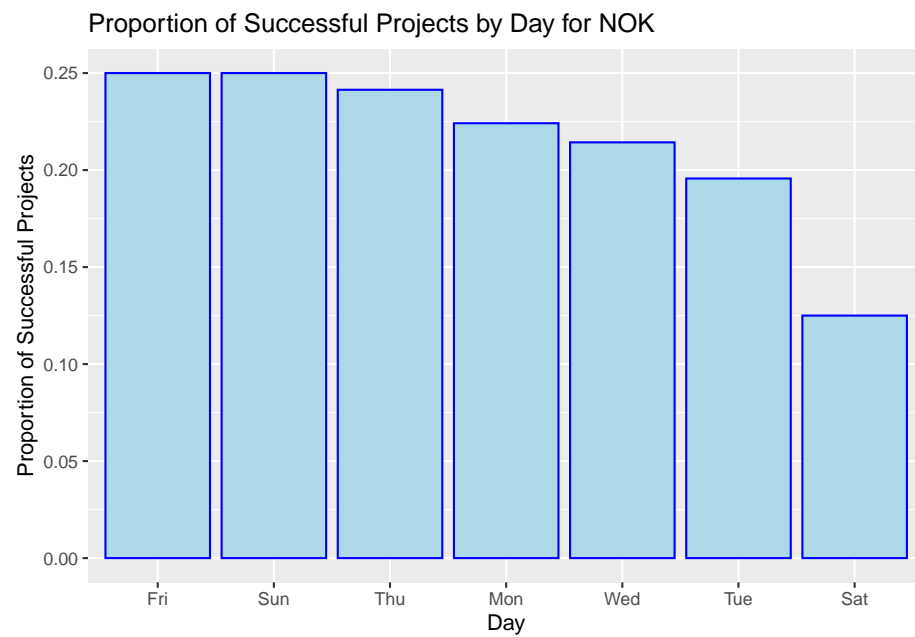
Figure 4: Proportion of Successful to Unsuccessful Projects by Day

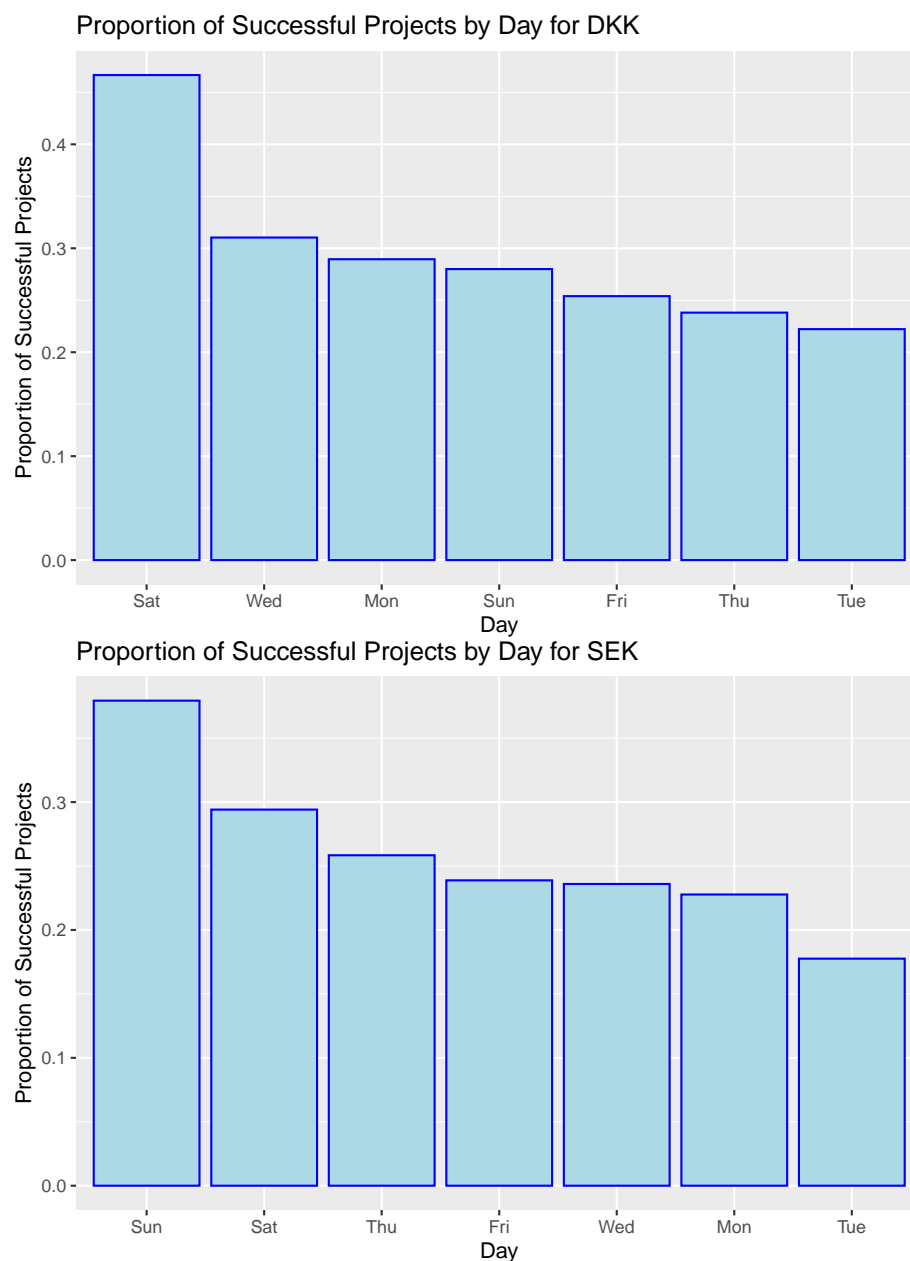












In Figure 4 we plot the proportion of successful projects. We see that Sundays are especially better. We replicate this chart for different currencies and find that except DKK (Danish Kroner) and NOK (Norwegian Krone), Sunday is the best day to launch a project across jurisdictions. In Netherlands, Saturdays seem to be the best.

We do not see any ‘Friday Effect’ in this.

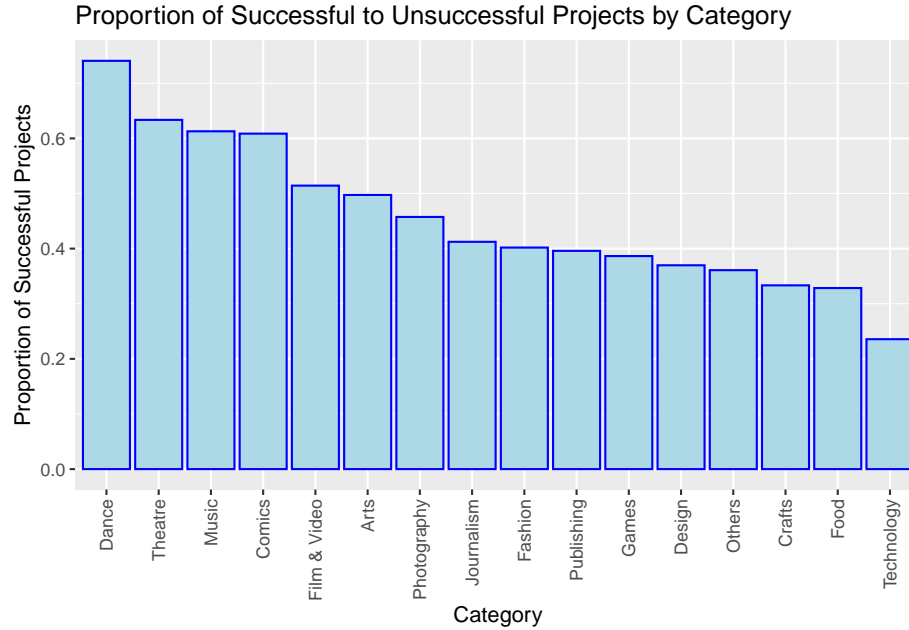


Figure 5: Proportion of Successful to Unsuccessful Projects by Category

3.3 Words

Below is a list of words that appear at least 10000 times in the blurbs across projects.

“game” “help” “make” “new” “will”

Below is a list of words that appear at least 5000 times in the blurbs across projects. “album” “art” “book” “bring” “can” “creat” “design” “film” “first” “game” “get” “help” “life” “love” “make” “music” “need” “new”

“one” “project” “record” “stori” “time” “use” “want” “will” “world” “year”

findFreqTerms(course_dtm,2000) [1] “adventur” “album” “app” “around” “art” “artist” “back” “band” “base” “beauti” “best” “book”

[13] “bring” “build” “can” “card” “chang” “children” “citi” “collect” “come” “comic” “communiti” “creat”

[25] “custom” “day” “design” “documentari” “dream” “experi” “explor” “famili” “featur” “film” “find” “first”

[37] “food” “free” “friend” “full” “fun” “fund” “game” “get” “give” “great” “hand” “help”

[49] “high” “home” “inspir” “journey” “just” “kid” “learn” “let” “life” “like”

“live” “local”
 [61] “look” “love” “made” “make” “man” “music” “need” “new” “now” “old”
 “one” “open”
 [73] “origin” “part” “peopl” “perform” “play” “power” “print” “produc” “product”
 “project” “qualiti” “rais”
 [85] “record” “releas” “seri” “set” “share” “short” “show” “song” “space” “start”
 “stori” “studio”
 [97] “style” “support” “take” “time” “togeth” “travel” “tri” “two” “uniqu” “use”
 “video” “want”
 [109] “way” “will” “work” “world” “year” “young”

We look at words that are most likely to appeal to emotion or pity. In case a particular word is present we assign a dummy of 1 to that particular project. In case more than one such word is present in the project blurb, we add the two. Thus the coefficient on the SumOfWords variable is indicative of the effect of using both the words over and above the effect of any one of those words. We use words such as mother, baby, kids, environment, dream, amputee, accident, death, friend, love etc.⁴. The dependent variable is coded as 1, in case the project is successful and 0 in case the project is not successful. Because of the binary nature of the variable, we use the following logit model:

We use a definition of 125% for over-achievement.

~~~~~
 ## Fun Bit — ## ~~~~~

We look at the regression coefficients of selected words while controlling for project amount, day, month and total duration of the project.

```
$ Success = \alpha + \beta_{1} Word1 + \beta_{2} LnGoal + \beta_{3} Month + \beta_{4} Day
```

In Table ?? we list the effect of each word based on a regression run on the success of the project while controlling for the day of week, month of the year, project duration and the total amount to be raised filtered by statistical significance. In Table ?? we list the effect of each word based on a regression run on the over achievement of the project while controlling for the day of week, month of the year, project duration and the total amount to be raised filtered by statistical significance.

3.4 Herding

We use a relatively simple method to detect herding. We segregate the data based on categories and summarise it by month of the project deadline. As a robustness check we use month of project launch date but our results remain similar. Once summarised, we use a rolling window regression to look at the effect of number of backers in a month on the number of backers in the previous

⁴For a complete list of words that we ran, please refer Annexure <Refer>

Table 2: This tables shows the coefficient of correlation and p value, between projects that used the particular word and their success.

	Coefficient of Correlation	pValue of Correlation
success	1	
lngoal	-0.250	0
more	0.950	0
over	0.490	0
baby	-0.010	0
mother	0	0.770
poor	-0.010	0.050
love	0.010	0
enviro	-0.010	0
student	0.010	0
amputee	0	0.420
dream	-0.010	0
lost	0.010	0.010
child	-0.020	0
kids	-0.020	0
disease	0	0.210
together	0.010	0.010
every	-0.030	0
story	0.020	0
mom	0	0.110
ma	0.010	0
save	-0.010	0
sum1	0.020	0
sum2	-0.020	0
sum3	-0.030	0
cancer	-0.010	0.030
fear	0.010	0
overcome	0	0.610
support	0.020	0
shit	0	0.230
therapy	0	0.080
always	-0.010	0
never	-0.010	0
forgive	0	0.490
please	0.010	0.020
thank	0.010	0
father	0.010	0
dad	0	0.270
papa	0	0.320
children	-0.020	0
dear	0	0.590
est	0.010	0
worst	0	0.120
best	-0.010	0.010
prevent	-0.010	0
technology	-0.020	0
comfort	-0.010	0
new	0.060	0
smart	-0.030	0
ease	0.030	0
simple	-0.020	0
accessible	0	0.800

Table 3: This table shows the results for regression of the words on Success and their p-values for words that have a statistically significant effect.

	Word	Coefficient	Pvalue
1	new	0.294	0
2	us	0.371	0
3	every	-0.296	0
4	our	0.185	0
5	story	0.190	0
6	give	-0.300	0
7	son	0.124	0.00000
8	support	0.189	0.00000
9	adventur	0.193	0.00000
10	gay	0.624	0.00000
11	child	-0.178	0.00000
12	smart	0.260	0.00001
13	share	-0.186	0.00003
14	share	-0.186	0.00003
15	parent	-0.289	0.001
16	est	0.082	0.001
17	suffer	-0.455	0.001
18	please	-0.169	0.003
19	get	-0.065	0.005
20	baby	-0.259	0.007
21	take	-0.091	0.008
22	beauti	0.105	0.014
23	save	-0.141	0.015
24	most	0.088	0.019
25	fear	0.235	0.022
26	dad	-0.252	0.035
27	ease	0.072	0.036
28	never	-0.117	0.039
29	convenience	-0.510	0.041
30	happy	-0.225	0.043
31	sister	0.239	0.043
32	mine	-0.158	0.047
33	best	-0.082	0.050
34	live	-0.056	0.063
35	homosexual	-1.106	0.064
36	father	0.138	0.072
37	ma	0.099	0.090

Table 4: This table shows the results for regression of the words on Success and their p-values for words that do not have a statistically significant effect.

	Word	Coefficient	Pvalue
1	accessible	0.233	0.103
2	prevent	-0.240	0.108
3	infect	-0.361	0.113
4	dead	0.114	0.115
5	grandchild	-1.030	0.121
6	cancer	-0.161	0.150
7	techn	0.078	0.172
8	die	0.092	0.173
9	grandparent	-0.660	0.176
10	love	-0.035	0.185
11	mom	-0.242	0.190
12	pa	-0.198	0.206
13	pain	-0.056	0.255
14	worst	0.222	0.271
15	world	-0.024	0.275
16	disease	-0.140	0.395
17	brother	-0.070	0.416
18	we	0.011	0.418
19	enviro	-0.062	0.419
20	mother	-0.056	0.461
21	togeth	0.028	0.556
22	hunger	0.134	0.624
23	thank	-0.034	0.654
24	daughter	-0.047	0.655
25	papa	0.192	0.664
26	close	-0.045	0.762
27	amputee	-0.143	0.771
28	friend	0.008	0.802
29	friend	0.008	0.802
30	overcome	-0.026	0.858
31	sibling	0.023	0.916
32	dear	-0.020	0.924

Table 5: This table shows the results for regression of the words on Over-achievement and their p-values for words that have a statistically significant effect.

	Word	Coefficient	Pvalue
1	new	0.294	0
2	us	0.371	0
3	every	-0.296	0
4	our	0.185	0
5	story	0.190	0
6	give	-0.300	0
7	son	0.124	0.00000
8	support	0.189	0.00000
9	adventur	0.193	0.00000
10	gay	0.624	0.00000
11	child	-0.178	0.00000
12	smart	0.260	0.00001
13	share	-0.186	0.00003
14	share	-0.186	0.00003
15	parent	-0.289	0.001
16	est	0.082	0.001
17	suffer	-0.455	0.001
18	please	-0.169	0.003
19	get	-0.065	0.005
20	baby	-0.259	0.007
21	take	-0.091	0.008
22	beauti	0.105	0.014
23	save	-0.141	0.015
24	most	0.088	0.019
25	fear	0.235	0.022
26	dad	-0.252	0.035
27	ease	0.072	0.036
28	never	-0.117	0.039
29	convenience	-0.510	0.041
30	happy	-0.225	0.043
31	sister	0.239	0.043
32	mine	-0.158	0.047
33	best	-0.082	0.050
34	live	-0.056	0.063
35	homosexual	-1.106	0.064
36	father	0.138	0.072
37	ma	0.099	0.090

Table 6: This table shows the results for regression of the words on Overachievement and their p-values for words that do not have a statistically significant effect.

	Word	Coefficient	Pvalue
1	accessible	0.233	0.103
2	prevent	-0.240	0.108
3	infect	-0.361	0.113
4	dead	0.114	0.115
5	grandchild	-1.030	0.121
6	cancer	-0.161	0.150
7	techn	0.078	0.172
8	die	0.092	0.173
9	grandparent	-0.660	0.176
10	love	-0.035	0.185
11	mom	-0.242	0.190
12	pa	-0.198	0.206
13	pain	-0.056	0.255
14	worst	0.222	0.271
15	world	-0.024	0.275
16	disease	-0.140	0.395
17	brother	-0.070	0.416
18	we	0.011	0.418
19	enviro	-0.062	0.419
20	mother	-0.056	0.461
21	togeth	0.028	0.556
22	hunger	0.134	0.624
23	thank	-0.034	0.654
24	daughter	-0.047	0.655
25	papa	0.192	0.664
26	close	-0.045	0.762
27	amputee	-0.143	0.771
28	friend	0.008	0.802
29	friend	0.008	0.802
30	overcome	-0.026	0.858
31	sibling	0.023	0.916
32	dear	-0.020	0.924

Table 7: Regression results for use of particular words and over-funding.

	<i>Dependent variable:</i>		
	over		
	(1)	(2)	(3)
ease	−0.119*** (0.043)		
father		−0.324*** (0.109)	
please			−0.401*** (0.079)
lngoal	−0.365*** (0.004)	−0.365*** (0.004)	−0.365*** (0.004)
totalduration	−0.008*** (0.001)	−0.008*** (0.001)	−0.008*** (0.001)
Constant	1.824*** (0.048)	1.820*** (0.048)	1.826*** (0.048)
Month	Yes	Yes	Yes
Day	Yes	Yes	Yes
Super Category	No	No	No
Observations	150,011	150,011	150,011
Log Likelihood	−65,686.190	−65,685.450	−65,676.080
Akaike Inf. Crit.	131,414.400	131,412.900	131,394.200
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01			

Table 8: Regression results for use of particular words and over-funding.

	<i>Dependent variable:</i>		
	over		
	(1)	(2)	(3)
thank	−0.086 (0.098)		
every		−0.039 (0.039)	
never			0.038 (0.071)
lngoal	−0.365*** (0.004)	−0.365*** (0.004)	−0.365*** (0.004)
totalduration	−0.008*** (0.001)	−0.008*** (0.001)	−0.008*** (0.001)
Constant	1.819*** (0.048)	1.820*** (0.048)	1.818*** (0.048)
Month	Yes	Yes	Yes
Day	Yes	Yes	Yes
Super Category	No	No	No
Observations	150,011	150,011	150,011
Log Likelihood	−65,689.800	−65,689.690	−65,690.050
Akaike Inf. Crit.	131,421.600	131,421.400	131,422.100
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01			

Table 9: Regression results for use of particular words and over-funding.

	<i>Dependent variable:</i>		
	over		
	(1)	(2)	(3)
best	0.040 (0.056)		
est		0.121*** (0.030)	
child			-0.528*** (0.055)
lngoal	-0.365*** (0.004)	-0.365*** (0.004)	-0.364*** (0.004)
totalduration	-0.008*** (0.001)	-0.008*** (0.001)	-0.007*** (0.001)
Constant	1.818*** (0.048)	1.813*** (0.048)	1.822*** (0.048)
Month	Yes	Yes	Yes
Day	Yes	Yes	Yes
Super Category	No	No	No
Observations	150,011	150,011	150,011
Log Likelihood	-65,689.930	-65,682.210	-65,638.230
Akaike Inf. Crit.	131,421.900	131,406.400	131,318.500
<i>Note:</i>		*p<0.1; **p<0.05; ***p<0.01	

Table 10: Regression results for use of particular words and over-funding.

	<i>Dependent variable:</i>		
	over		
	(1)	(2)	(3)
dream	−0.503*** (0.059)		
ma		−0.210*** (0.078)	
dad			−0.839*** (0.311)
lngoal	−0.365*** (0.004)	−0.365*** (0.004)	−0.365*** (0.004)
totalduration	−0.007*** (0.001)	−0.008*** (0.001)	−0.008*** (0.001)
Constant	1.827*** (0.048)	1.821*** (0.048)	1.820*** (0.048)
Month	Yes	Yes	Yes
Day	Yes	Yes	Yes
Super Category	No	No	No
Observations	150,011	150,011	150,011
Log Likelihood	−65,649.580	−65,686.450	−65,685.710
Akaike Inf. Crit.	131,341.200	131,414.900	131,413.400
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01			

Table 11: Regression results for use of particular words and over-funding.

	<i>Dependent variable:</i>		
	over		
	(1)	(2)	(3)
poor	−0.634** (0.255)		
support		−0.146*** (0.048)	
forgive			−0.635* (0.361)
lngoal	−0.365*** (0.004)	−0.365*** (0.004)	−0.365*** (0.004)
totalduration	−0.008*** (0.001)	−0.008*** (0.001)	−0.008*** (0.001)
Constant	1.820*** (0.048)	1.823*** (0.048)	1.819*** (0.048)
Month	Yes	Yes	Yes
Day	Yes	Yes	Yes
Super Category	No	No	No
Observations	150,011	150,011	150,011
Log Likelihood	−65,686.630	−65,685.350	−65,688.390
Akaike Inf. Crit.	131,415.300	131,412.700	131,418.800
<i>Note:</i> *p<0.1; **p<0.05; ***p<0.01			

12 months. We also regress the amount of money pledged in a month on the amount of money pledged in the previous twelve months. There are 68 cases for regression in each category. We report aggregate results for all the categories. We use the following regressions:

$$\begin{aligned} Backers_{13} &= \alpha + \beta_1 Backers_{1-12} + \beta_2 Control + \epsilon \\ Sum_{13} &= \alpha + \beta_1 Sum_{1-12} + \beta_2 Control + \epsilon \end{aligned}$$

TO BE DONE.

3.4.1 Readability

TO BE ADDED.

4 Results and Discussion

Our hypotheses regarding emotion appeal is vindicated even after controlling for multiple factors. Since crowdfunding is in line with donations and appeals to the benevolence rather than to greed. A different lens is needed to look at the motivation of those who pledge money, beyond reciprocity.

- Difference between March and October is very high, in terms of proportion of projects successful to unsuccessful.
- Sunday is very high as compared to Monday across projects.

4.0.1 Correlation

- Mother/Mom: no, Ma: yes, but Ma has a mildly positive effect
- Dad/Pap: no, Father: yes but mildly positive
- Thank/Please: Positive
- Baby/Poor/Dream/Child/Kids/every/save/cancer: negative
- Love/student/together/story/fear/support: positive - Superlatives (est) help (Positive)
- Best and Prevent: Negative
- Worst: not significant
- Technology/Smart/Simple: no
- Ease/new: yes

5 Limitations

- Words are being using without context. It is possible that there is a negative used in the same sentence.

- The study does not account for videos, graphics, wit, or humour. While it is unlikely that either of those would be correlated with the presence of certain words as well as the success, these might prove interesting factors to be studied in the future.