

An Analysis of Crowdfunding Data

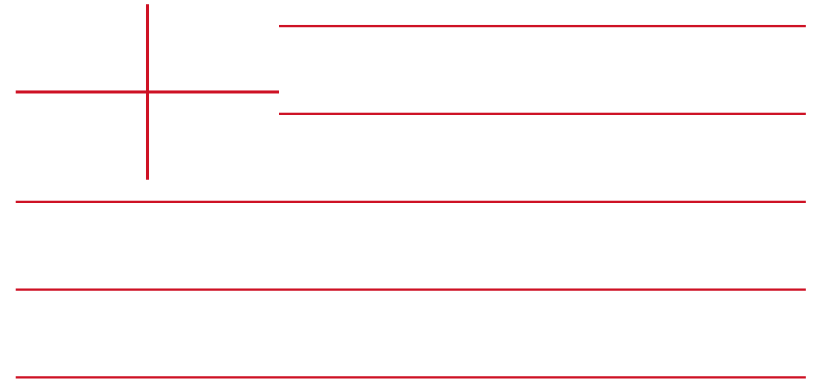
Ian McDougall

What is Crowdfunding?

- Crowdsourcing
 - Ex: Wikipedia



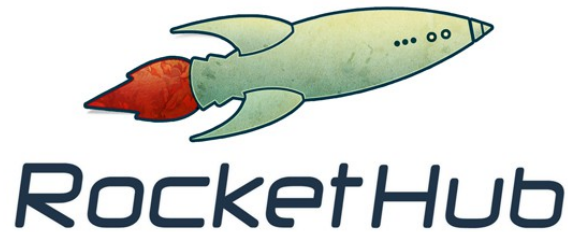
- Investment
 - Ex: Joint Stock Companies



- “Web 2.0”
 - Ex: Social networking



Crowdfunding Services



KICKSTARTER

PETRIDISH
.org

 iM scientist

 **indiegogo**

 **microryza**

SELLABAND
YOU ARE THE RECORD COMPANY

**BRICK
STARTER**

artistShare®
.....

Glowing Plants: Natural Lighting with no Electricity

by Antony Evans

Anatomy of a Kickstarter

Home Updates 4 Backers 2,010 Comments 196

San Francisco, CA Technology



2,010 backers
\$118,202 pledged of \$65,000 goal
39 days to go

This project is still ongoing.

Back This Project
\$1 minimum pledge

Minimum pledge ≠ Minimum pledge level.



Project by
Antony Evans
San Francisco, CA
[Contact me](#)

Extended description is not always full of endorsements.

First created · 3 backed

Antony Evans 1038 friends
Website: glowingplant.com
[See full bio](#)

Pledge \$5 or more
117 backers

Reward levels may continue on to higher amounts.

You'll get a 2"x3" sticker showing the world's first glowing plant to put on your phone or laptop! And if that's not enough, your name will be added to our website and book as a supporter.
Estimated delivery: Jul 2013
Add \$2 to ship outside the US

Pledge \$25 or more
52 backers

SUPPORTER - inspire others by showing off this snazzy t-shirt
Estimated delivery: Jul 2013
Add \$10 to ship outside the US

Create GLOWING PLANTS using synthetic biology and Genome Compiler's software - the first step in creating sustainable natural lighting

Launched: Apr 23, 2013
Funding ends: Jun 7, 2013
[Remind me](#)

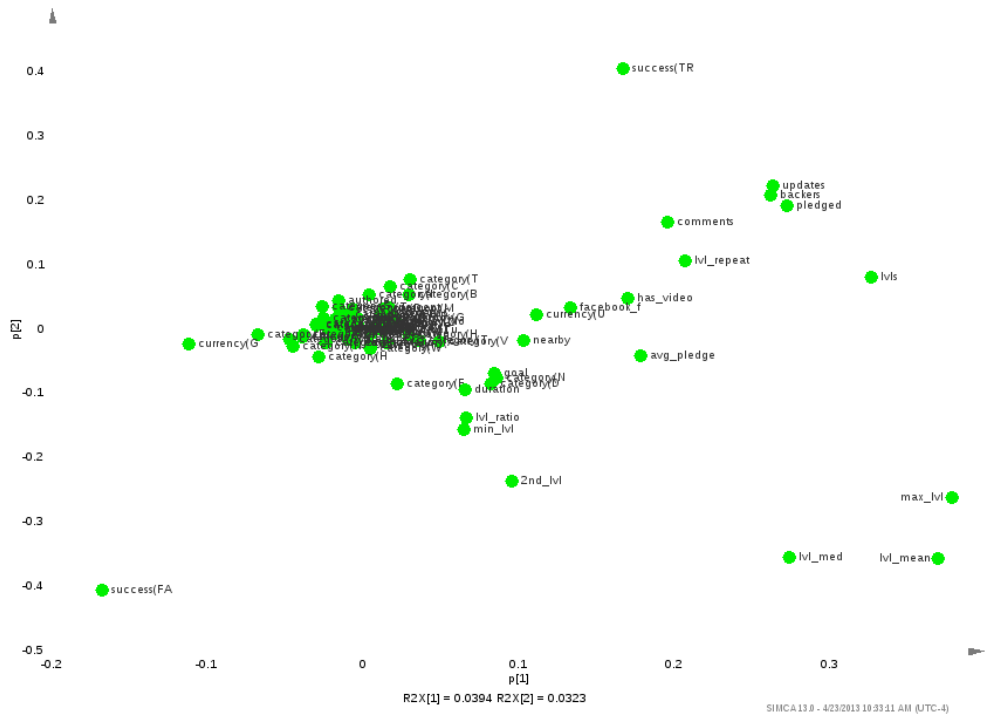
Initial Goal - \$65,000
Glowing Arabidopsis plants
Seeds to \$40+ reward backers
Completed

Stretch Goal #1 - \$400,000
Glowing Rose plants
Sent to \$150 reward backers
In progress

As seen on:



TKBM_05.M5 (PCA-X&Y)
Colored according to model terms



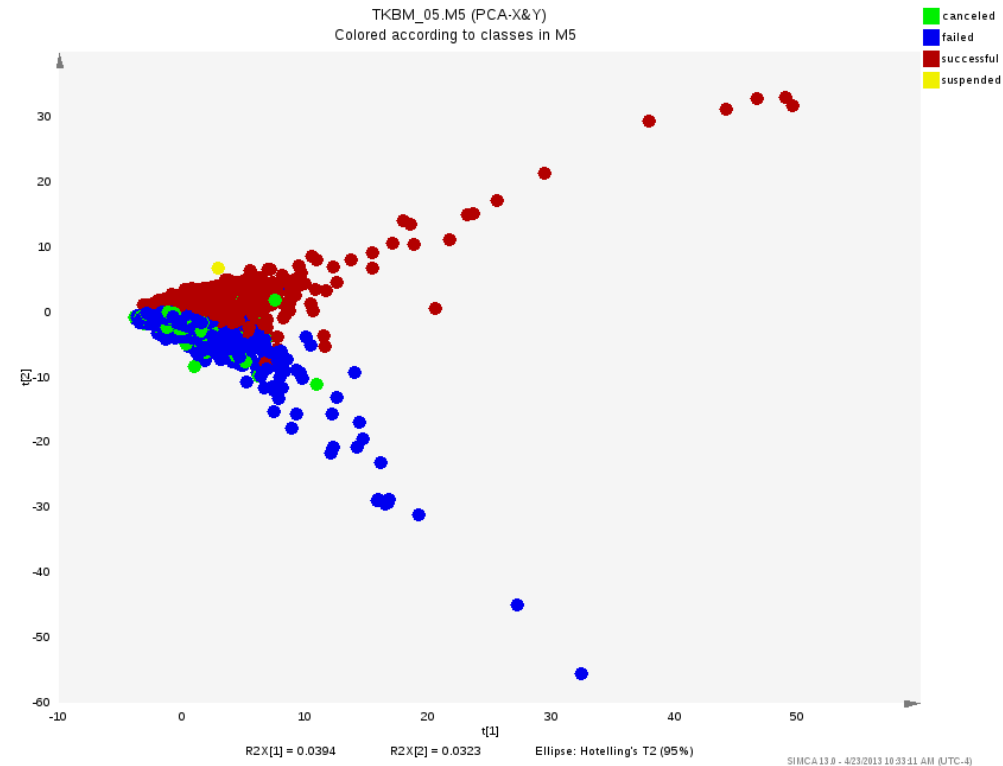
PCA Model

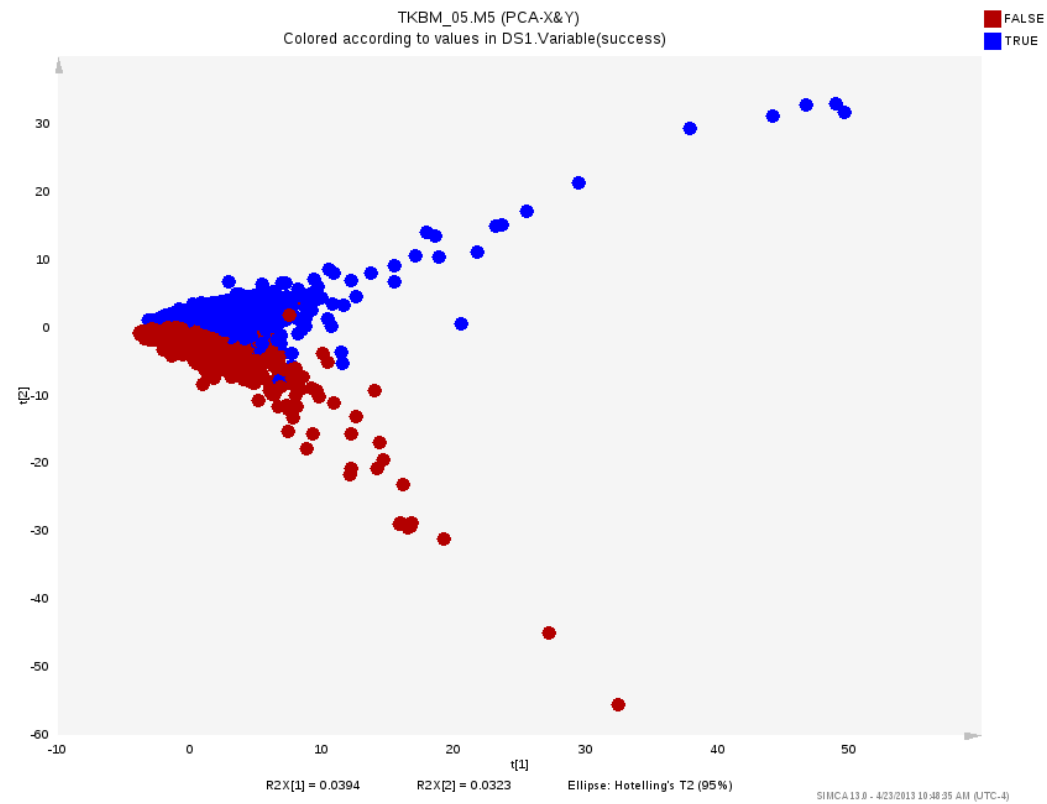
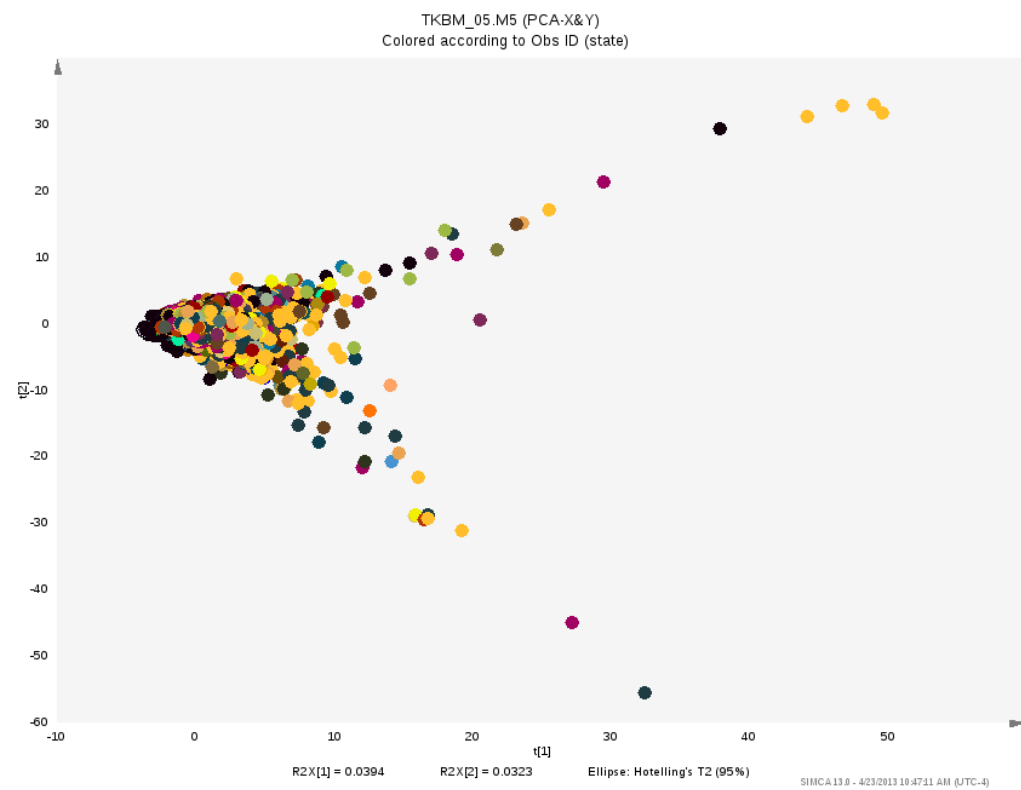
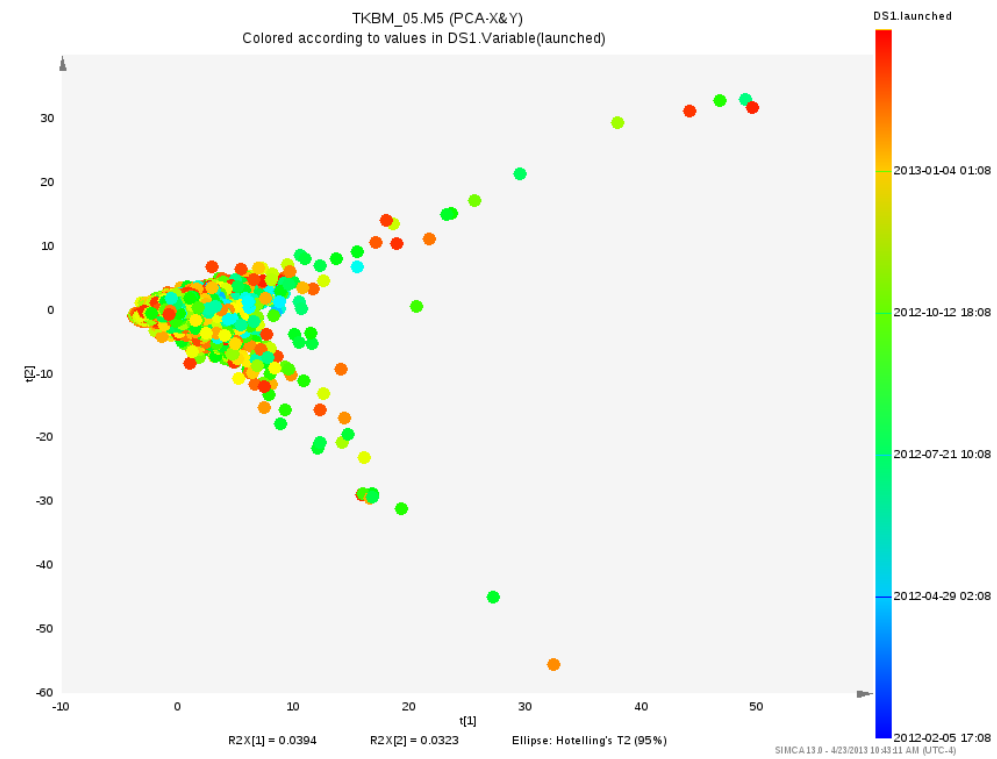
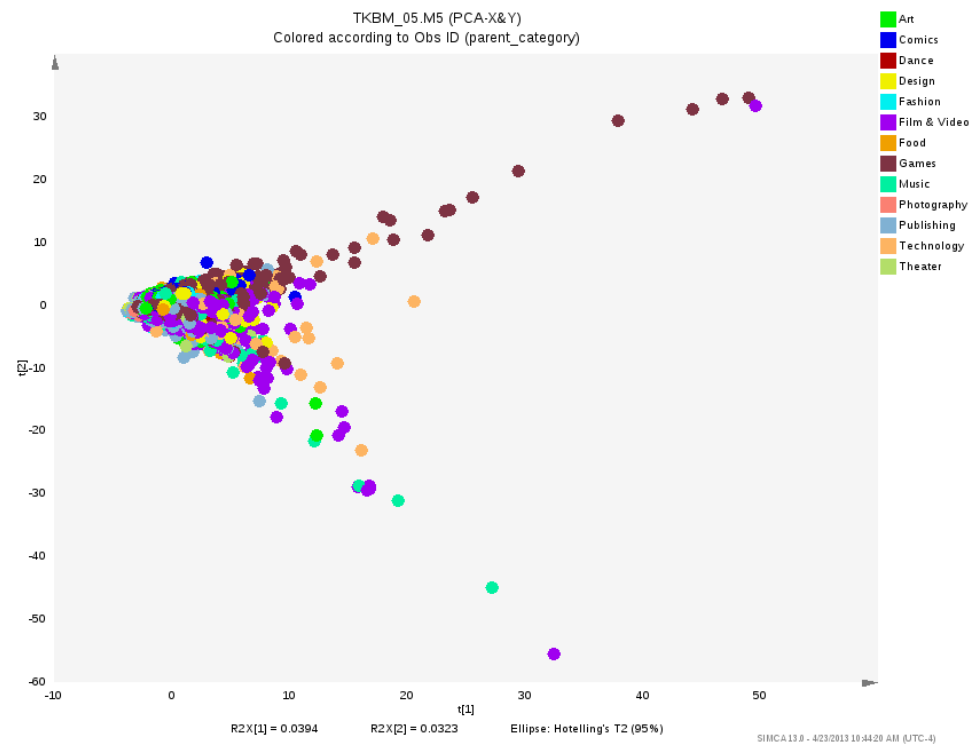
1) $R^2 < 0.1$, $Q^2 < 0$

2) Remove irrelevant variables and small classes

3) $R^2 > 0.2$, $Q^2 < 0$, but visually unchanged

TKBM_05.M5 (PCA-X&Y)
Colored according to classes in M5



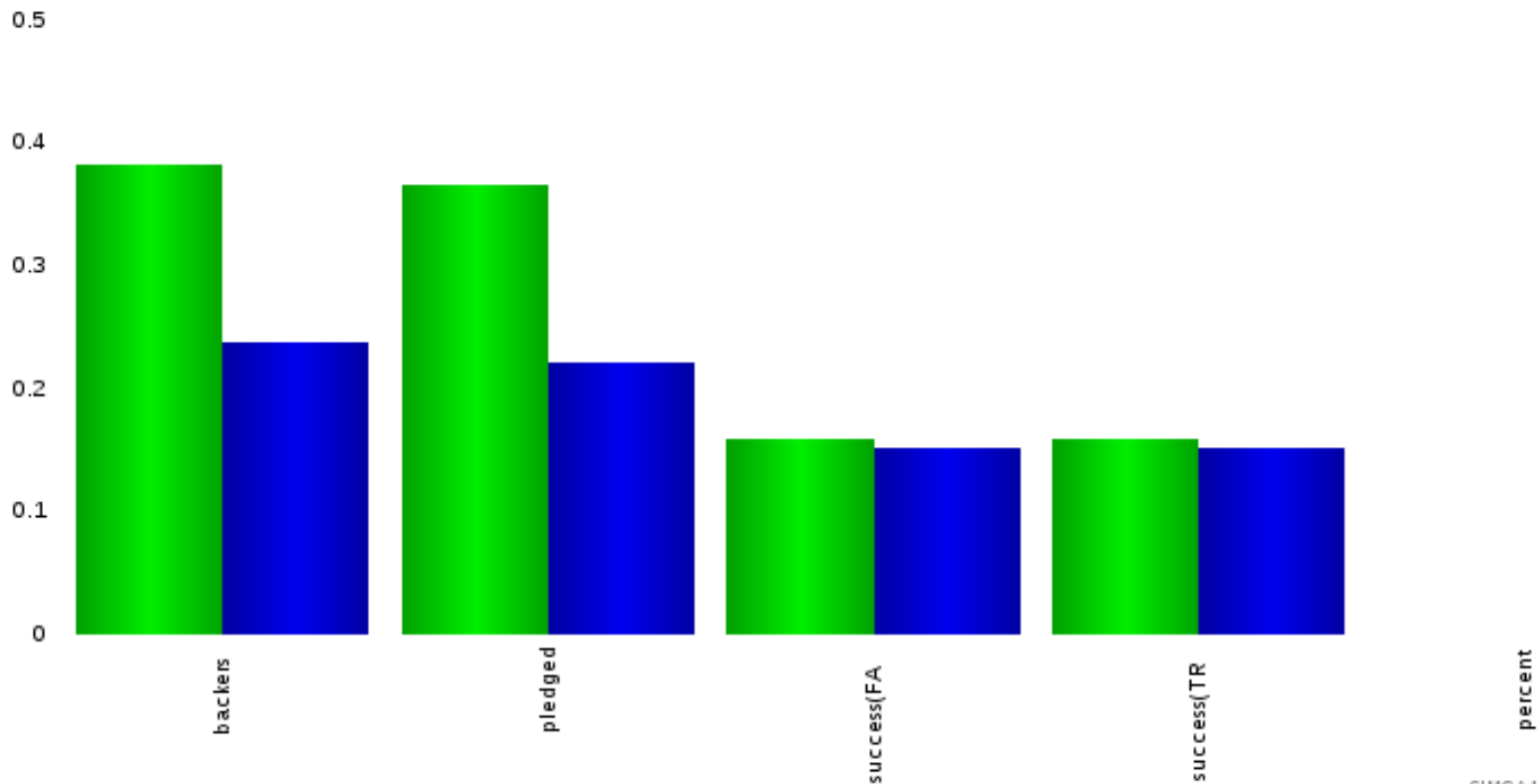


PLS Model

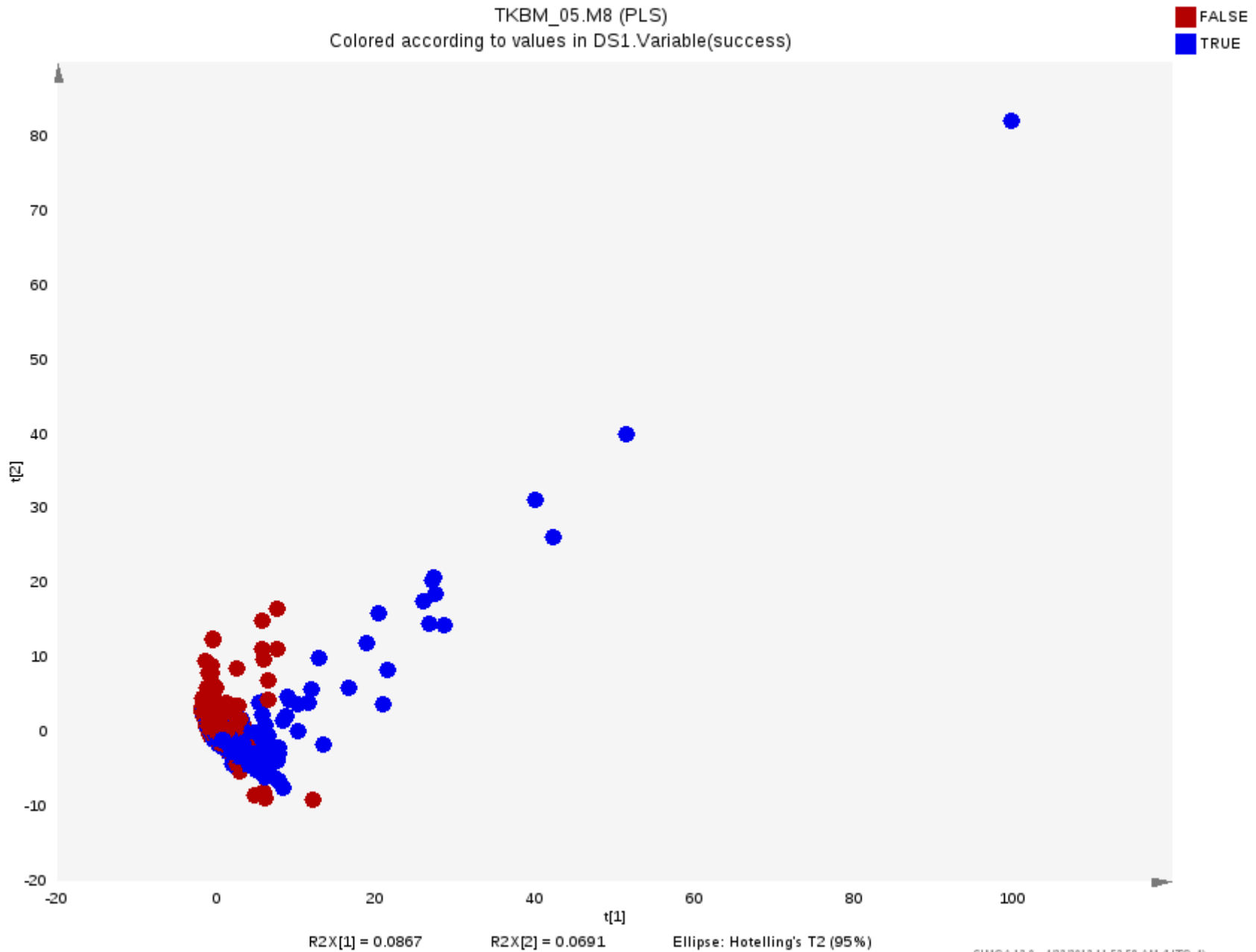
1) $R^2 \approx 0.2$, $Q^2 > 0.1$

2) Remove percent as y-variable

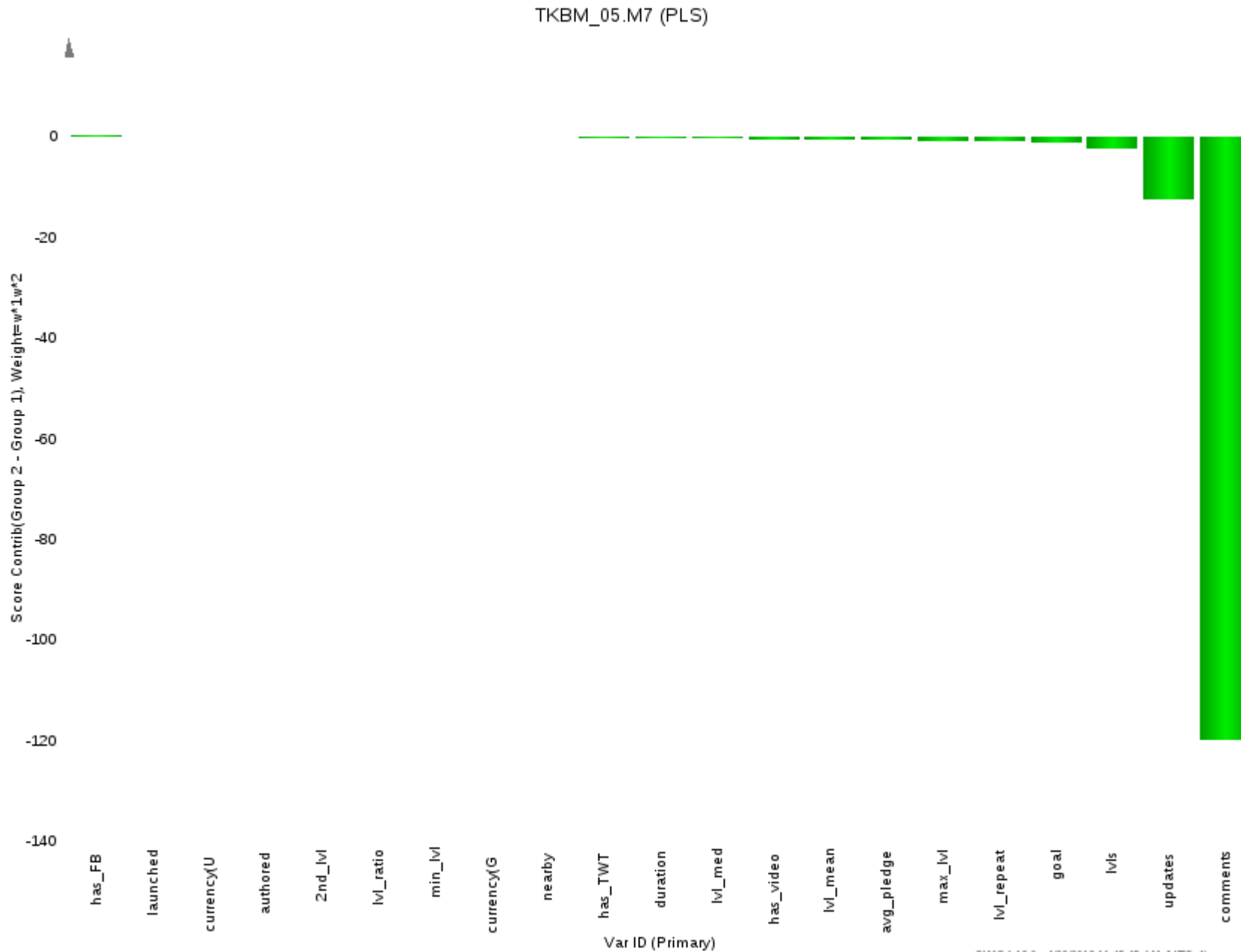
3) $R^2 > 0.2$, $Q^2 \approx 0.2$



PLS Model - Scores



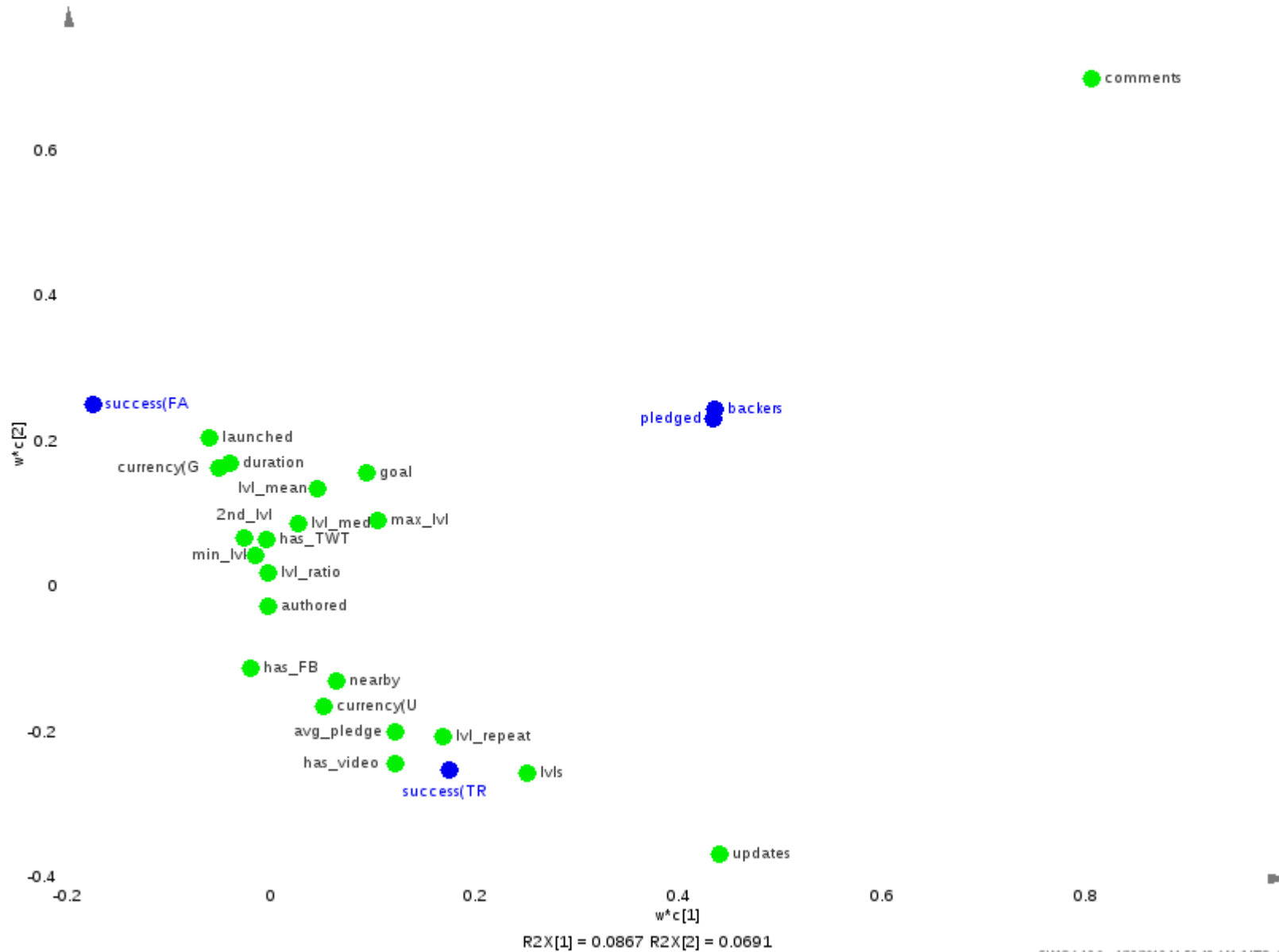
PLS Model – Contribution to Tail



PLS Model - Loadings

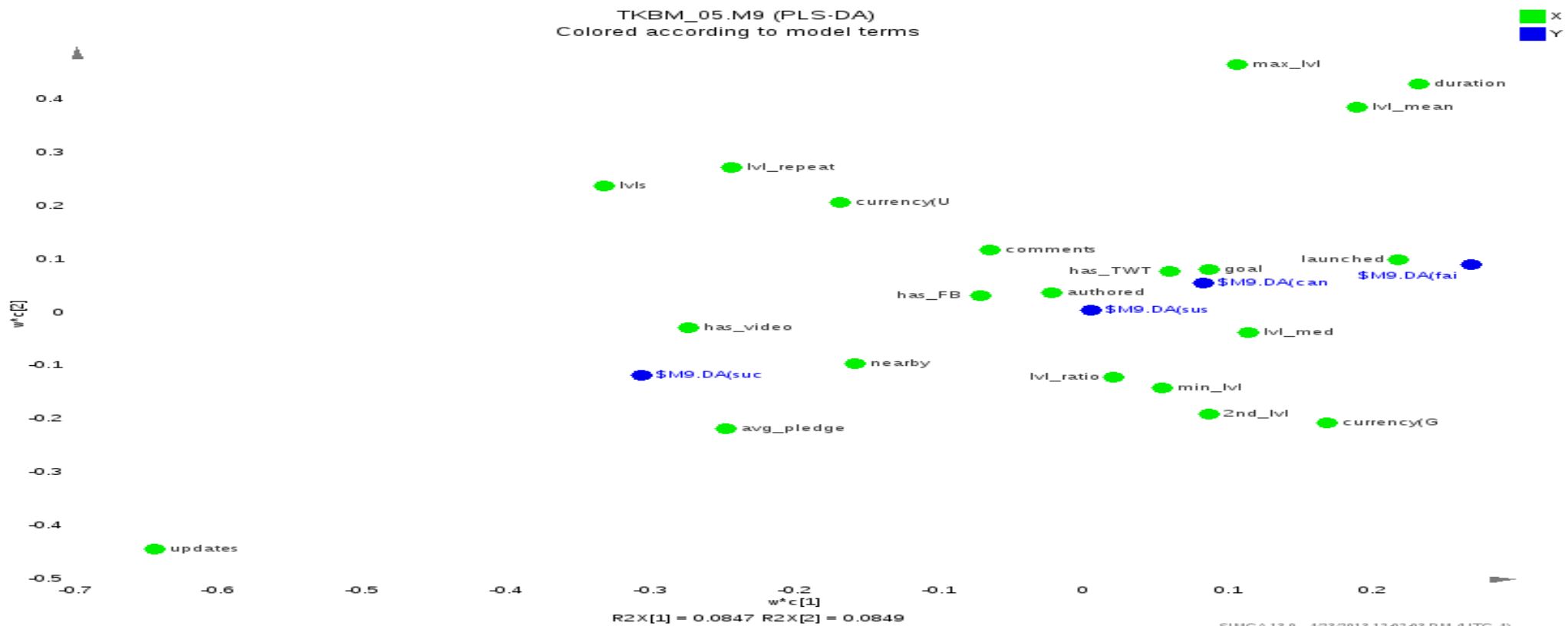
TKBM_05.M8 (PLS)
Colored according to model terms

X
Y



PLS-DA Model

- Not a great model (R^2 & $Q^2 < 0.1$)
- Suspended and Canceled classes too small
- But, allows ranking of correlations with success:



Conclusions

- The best indicator of “runaway” success is comments, but the best indicator of success at all is updates.
- The independence of these two factors may imply a consumerist mindset in backers, despite an effort on Kickstarter’s part to avoid this.