EPFL (http://www.epfl.ch) > News (/)
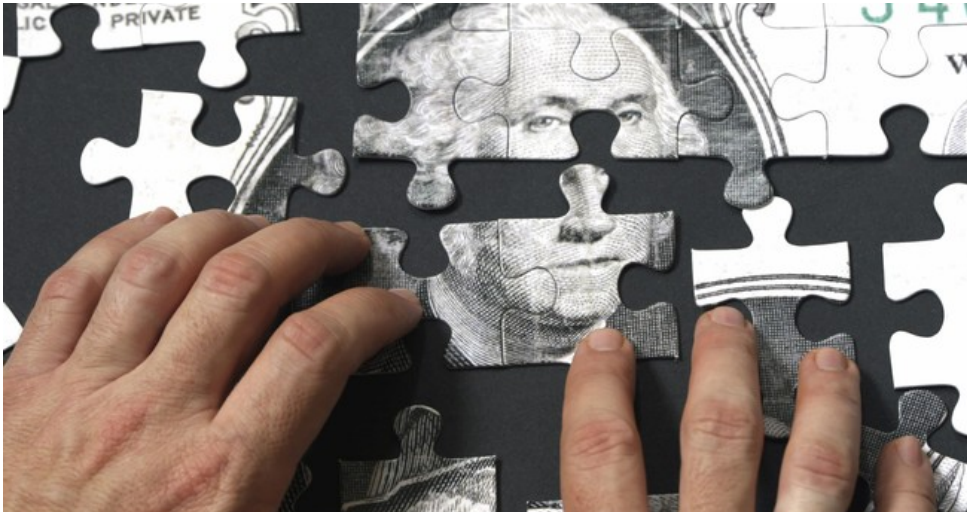
NEWS (NEWS EPFL) (/) MEDIACOM

Using mathematics for predicting the chances of a Kickstarter project

© photos.com

18.10.13 - **Vincent Etter, doctoral student in communication systems, has developed an analysis tool for projects seeking for funding in the Kickstarter website. After a few hours, it is capable of predicting with amazing accuracy whether the submitted project will succeed or fail.**

Think of a good business or artistic idea; submit it on Kickstarter and cross your fingers ... during one to two months. This is what thousands of creative people are doing every year, relying on the persuasiveness of their project and the "buzz" it could generate, all of it in order to obtain enough micro-donations to make it come to life. Launched in 2009 in the United States, the "crowdfunding" site is already available in other countries and has brought together more than 800 million dollars for nearly 50'000 projects.

Vincent Etter, PhD student at the Laboratory for Communications and Applications (LCA) at EPFL, has been paying close attention to this phenomenon. He is a specialist in predictive mathematical models, and found enough material in Kickstarter projects to develop a particularly effective simulation model. "There are several possible approaches in order to make these predictions, he explained. I could simply observe the speed at which the project receives funding for the first days and compare this curve with other parameters that I got from the data stemming from 16'000 projects. I could also focus on the percentage of funding obtained at a given time, for example halfway. But all these methods only deliver moderately reliable predictions. "

To improve the accuracy of such estimates, Vincent Etter went looking for more clues. "I noticed that there were about 700'000 mentions on Twitter regarding the 16'000 projects I studied, and that the tweets raised by each project could give a good hint about its potential for going viral. I also became interested in each of the investors' history as some of them have already been involved in several successful projects, which may mean that they themselves exert an influence over other donors or simply that they have a good intuition. "

75 % rate of reliability - after only a few hours
So, he only required to find a way to bring together all such indicators in order to increase the predictions' reliability. Which is exactly what he did - with unexpected success. "By combining these predictive models in a single tool, I managed to establish a forecast with reliability above 75% - three to four hours after the start of the project," he says. After 36 hours, his forecasts have nearly achieved 84% accuracy! "For candidates, a rapid assessment of their chance of success is crucial, he resumed. The quicker they realize that their project has started badly, the more time they have to review their promotional strategy, change a few words in the title or setup a campaign in the social networks."

Recently presented at the Conference on Online Social Networks (COSN'13) in Boston Vincent Etter's model runs continuously on a dedicated website: sidekick.epfl.ch (http://sidekick.epfl.ch) .

Author: *Emmanuel Barraud (http://people.epfl.ch/209197)*　　　　　　　　　　　　*Source:* *Mediacom*

LINKS

"Launch hard or go home!", Vincent Etter's Conference paper (http://dx.doi.org/10.1145/2512938.2512957)

Real-time predictions (http://sidekick.epfl.ch/)