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Expository Writing Class
July 6th 2021

Online Shopping Plus Fundraising Equals a Better Future

Who doesn't love a perfectly cooked piece of red wine braised beef short-rib served on a plate of mashed potatoes and vegetables? Such a dish can cost anywhere from $40 to $80 at a fancy restaurant, and those who enjoy fine dining and cooking know that a pound of beef short ribs cost only about $7 at Whole Foods. So why is it so expensive? Why not pull out the apron and make this treat at home?

As it turns out, it's not so feasible for the average homecook to make this dish as a fine french cuisine would. He would need a slow cooker to braise the short ribs, a sous vide for the perfectly tender asparagus, a mixer for the creamiest mashed potatoes, and a cooking thermometer to make sure the pan is hot enough to sear the ribs in. All this equipment can take a toll on a home cook's cabinet space and bank account, which is why entrepreneur Nick Orme created "Njori Tempo - The Smart Cooker for Adventurous Chefs." It has "built in scales, pan temperature control, probe temperature control, water circulation, space saving design" and has modes like "sous vide, deep frying, slow cooking, probe cooking, reduce by weight", all the while being the size of a large encyclopedia book (Orme).

Nick, like countless other entrepreneurs, posted his product on the site Kickstarter. Kickstarter is the most popular crowdfunding website, allowing entrepreneurs to raise funds directly from their customers in a process called "reward-based crowdfunding" - essentially a crossover between online shopping and fundraising. This crowdfunding method gives entrepreneurs the money to build their companies, and gives fans of the project the chance to be the first ones to experience the product. In Nick's case, fans of his smart cooker only need to pledge $319 to receive the first Njori Tempo by February of 2022 (Orme).

In recent years, crowdfunding has grown in popularity for hardtech startups as a means of "bootstrapping" - building and growing one's company without venture capital investments. Researchers Jermain Kaminski, Christian Hopp, and Tereza Tykvová at Aachen University in Germany, however, believe that crowdfunding has even more benefits for entrepreneurs, customers, investors, and even the future wellbeing of human society. Kaminski and company conducted a study to find out the relationship between crowdfunding and venture capital investments. For those unfamiliar, venture capital is a form of investment that focuses on earlier stage startups. A major problem in the world of venture capital, says Kaminski, is that "predicting the success of hitherto unseen products and technologies is fraught with ambiguity and uncertainty." (Kaminski). This is true, as "about three-quarters of venture-backed firms in the US don't return the investors' capital", Deborah Gage writes in The Wall Street Journal. Because of this high risk, any predictor of success in the world of venture capital are highly valuable. Kaminski believes that crowdfunding is one such predictor.

Kaminksi has a deep understanding of the field, being the founder of Aachen Machine Learning Meetup and the co-founder of Moviegalaxies. He also received a PhD in Economics at Witten University, and was a visiting PhD student at MIT. In their study, Kaminski and company found 77,654 successfully funded projects on Kickstarter and overlaid the data with 3260 VC investments from the site CrunchBase in the US between 2012 and 2017 (Kaminski). The researchers then conducted several statistical tests, including the Toda-Yamamoto Granger Causality Test, to find the "Granger causality" between crowdfunding and VC investments. The time series are cointegrated and separately analyzed by region and industry. Ultimately, the researchers found that successful crowdfunding is positively related to future VC financing (Kaminski). This means that the amount in dollars raised via crowdfunding is an effective predictor of the amount raised in venture capital rounds, which is a new insight compared to past studies in the same category. Furthermore, the researchers found that this is especially true in "states with high levels of economic freedom", the "early/growth segment" of venture capital funding, and in the industries of "hardware, media and fashion" (Kaminski).

These results present a solution that solves a big problem in VC. Eric Migicovsky, a partner at Y Combinator and a teacher at its Startup School, says in a lecture: "If you are making something that people really want, they're basically throwing their money at you." (Cheung). This is a common phenomenon in VC - there is too much money and not enough companies. Venture capitalists are always looking for the "next big thing", whether that was Facebook in the 2000s, Uber in the 2010s, or DoorDash in the late 2010s. Finding emerging industries and the leaders in that industry is a major part of a venture capitalist's job. Kaminski found that crowdfunding is one tool to do this, and he believes that it is due to the very nature of reward-based crowdfunding.

First, crowdfunding "provide[s] entrepreneurs with a direct interaction with potential end users" (Kaminski). When going on a crowdfunding campaign page on Kickstarter, the lines "creators must regularly update backers" is painted in big fonts and positioned at the center of the page. The campaign websites all have five tabs, one of which is the description of the company and the product, the other four are FAQ, Updates, Comments, and Community. It's clear that communication between the user and the producer is embedded in the nature of crowdfunding. Kaminski believes that this "prove[s] useful in reshaping and improving the product", and allows for a down-to-earth path of company building (Kaminski). Therefore, those who excel in crowdfunding also excel in talking to their customers, a vital element of any industry-leading company.

Second, crowdfunding campaigns are a good way to gain media attention. "The visible large-scale involvement of the online brand community may present a strong signal of a project's viability and market validity," writes Kaminski, "which in turn may influence the perception of other investors that have not invested yet." (Kaminski). The word "crowd" in "crowdfunding" is perhaps more important than the "funding" part - a successful crowdfunding campaign means that it is well perceived by the crowd, and a decent sized crowd usually leads to press coverage, which leads to a bigger crowd, et cetera. This cycle is in a way a version of today's "viral content marketing", which requires little to no capital investment and yields great exposure of the product. Since startups who crowdfund are usually developing never-before seen technology, this media coverage allows investors to easily find new and emerging industries and test its popularity with the consumers.

In the current state of Venture Capital, founders often feel pressured to move to Silicon Valley and software startups generally raise capital a lot more easily than more traditional industries due to their scalability and low overhang costs. Kaminski and researchers hope that this newfound relationship between crowdfunding and VC success will not only draw investors to give more attention to crowdfunding campaigns, but also relocate VC resources to states with lower economic freedom and the less-favored industries of hardware, media and fashion. With further research that expands on Kaminski's findings regarding geographic and industrial correlations to VC success, crowdfunding can even potentially be an economic tool to bridge the wealth gap and more evenly distribute income across states and industries one day.

Most people don't think of venture capital on a daily basis, even more don't know what venture capital is. However, VC has been quietly pushing the boundaries of society for decades. Venture capital, by nature, is an industry-building form of investment. It improves people's lives in ways that they don't know can be improved. Eric Migicovsky is one of the venture capitalists taking part in this mission today, but he is better known as the founder of Pebble, the first digital smartwatch. Pebble's 2012 campaign is still the most successful crowdfunding campaign on Kickstarter today, having had 78,471 backers and raised over $20 million dollars (Migicovsky). Eventually, due to difficulties with suppliers and finances, Pebble was forced to sell to Fitbit for $40 million dollars. This was also due to the intense competition from big corporations like Apple, Google, and Samsung in the space, namely the release of the Apple Watch in 2015 (Kovach). Although Pebble's story doesn't have a good ending, as most of its employees were laid off in a fire sale of an acquisition, it shows the power of crowdfunding. Crowdfunding made Pebble a hit, its success drew venture capitalists to the space, and created the brand new Smart Watch industry in under a decade. As of January 2020, 21% of all Americans own a smartwatch or fitness tracker (Vogels).

The world has never seen technology advance at a greater rate than today's rapidly changing society. Looking back at the past few decades, America went through the dot com era, the rise of smartphones, the resource allocation revolution, and countless other inventions that changed the way Americans live forever. Who's to say what to come next? Self-driving cars, artificial intelligence, genetic engineering, and commercial aerospace are just a few highlights of the type of future people once thought only possible in science fiction movies. Through the work of researchers like Kaminski, entrepreneurs and venture capitalists now enjoy a win-win-win method in fundraising through crowdfunding. Entrepreneurs win through finding success in the product market fit of their technology; Venture capitalists win by having more insight into emerging industries and companies; Everyday citizens win by having more cutting edge technology in their lives. Crowdfunding brings these parties together, and together a future of unimaginable potential is built.

Work Cited

Jermain Kaminski, Christian Hopp, Tereza Tykvová, New technology assessment in entrepreneurial financing – Does crowdfunding predict venture capital investments?, Technological Forecasting and Social Change, Volume 139, 2019, Pages 287-302, ISSN 0040-1625, https://doi.org/10.1016/j.techfore.2018.11.015.

Orme, Nick. "Njori Tempo - The Smart Cooker for Adventurous Chefs." *Kickstarter*, 2021, www.kickstarter.com/projects/njori/njori-tempo-the-smart-cooker-for-adventurous-chefs?ref=discovery_category.

Migicovsky, Eric. "Pebble Time - Awesome Smartwatch, No Compromises." *Kickstarter*, 7 Dec. 2016, www.kickstarter.com/projects/getpebble/pebble-time-awesome-smartwatch-no-compromises?ref=discovery_most_funded.

Cheung, Adora. "A Conversation on Hard Tech with Eric Migicovsky". *YouTube*, uploaded by Y Combinator, 12 Oct. 2018, https://www.youtube.com/watch?v=7atClUTkR3A.

Gage, Deborah. "The Venture Capital Secret: 3 Out of 4 Start-Ups Fail." *The Wall Street Journal*, Dow Jones & Company, 20 Sept. 2012, www.wsj.com/articles/SB10000872396390443720204578004980476429190.

Kovach, Steve. "How the Hot Startup That Stole Apple's Thunder Wound up in Silicon Valley's Graveyard." *Business Insider*, Business Insider, 17 Dec. 2016, www.businessinsider.com/how-smartwatch-pioneer-pebble-lost-everything-2016-12.

Vogels, Emily A. “About One-in-Five Americans Use a Smart Watch or Fitness Tracker.” *Pew Research Center*, Pew Research Center, 14 Aug. 2020, www.pewresearch.org/fact-tank/2020/01/09/about-one-in-five-americans-use-a-smart-watch-or-fitness-tracker/.