

Mining of crowdfunding success: evidence from fashion projects on Kickstarter

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Introduction

Crowdfunding emerged as an original way for entrepreneurs to utilize “the crowd” to bolster creative projects and introduce novel goods to a market where access to funds may have been restricted to agents (Dalla Chiesa and Handke, 2020). The importance of crowdfunding has been increased; it is promptly expanding in many countries and seen as a hope and chance for people to support innovative projects that would not be carried out otherwise (Belleflamme., et al 2015). Also, many entrepreneurs participate in crowdfunding because it helps them to test audience’s perceptions in advance, which can let entrepreneurs adjust the products based on the expected demand. Fashion industry is one of the most creative and innovative industries. However, it is also related with high uncertainties and risks. Crowdfunding, in this situation, can act as a strategy to fashion for following reasons: testing the acceptance and perceptions of fashion products and helping entrepreneurs to mitigate the risks with unpredictable demand (Dalla Chiesa et al., 2022). However, not all projects success in collecting funds. Therefore, this aims to use big data analysis methods to analyze to find out factors that can make fashion projects successful in order to provide insight to fashion business entrepreneurs.

Literature Review

Crowdfunding is a process where entrepreneurs strive for funding from a crowd of investors, usually through Internet platforms (Geiger & Oranburg, 2018). For example, kickstarter is an internet platform that popularized crowdfunding; kickstarter, the largest crowdfunding site, is the first introduced pre-purchases crowdfunding system (Barbi & Bigelli, 2017; The Startups Team, 2018). Since 2006, crowdfunding has become a helpful business model to resolve chronic inventory challenges and lessen marketing costs for new brands (Ko & Ko, 2021). Even though many projects and campaigns are uploaded on kickstarter, successful projects that made their funding complete are less than 40% of entire projects. Especially, in case of fashion category, successful projects remained only 30% of entire projects, showing less successful rates that other categories (Kickstarter Stats, 2022). Although there are some studies and manuals of how to succeed in funding, but fashion still struggles to reach 100% funding goal. Existing studies suggests the most appropriate months or day of the week or points out some important factors such as being sustainable or innovative (Dalla Chiesa et al., 2022). However, studies that focus on fashion in depth rather the platform or suggests details that are more specific than big factors

are insufficient. Therefore, it is important to focus on keywords that successful entrepreneurs share in order to see the details and overall flow.

Methods

To assess the successful fashion projects, project's title and introduction texts from crowdfunding site kickstarter were collected. In this study, apparel brands from fashion category were selected. Successful projects were defined as brands that earned 100% or more funding from crowds. In this way, data from 2334 worldwide brands, apparel brands from fashion category that succeeded in collecting 100% or more funds, were used for the analysis. Python programming language was used to collect the data from kickstarter. Keyword analysis was used to reveal the dominant properties of successful fashion apparel projects in kickstarter. Prior to analysis, text data was cleaned using basic text processing (i.e., tokenization, stop words removal, and lemmatization) to eliminate insignificant words, symbols, or characters. Then, the text documents were combined to create the corpus (i.e., the body of text used for further statistical analysis). Python programming language (Version 3) was used for algorithm development. Social network theory has become influential, and centrality measure is underlying this theory. Social network regards individuals and organizations as nodes in the network, and centrality represents nodes' power and communication convenience. In this way, social actors and relations can be revealed through social network analysis (Zhang & Luo, 2017). This study analyzed the keywords that were shared by successful projects based on centrality.

Results & Discussion

Centrality is an important index because it shows which node takes up significant position in one whole network. Most typically chosen centrality measures are degree centrality, betweenness centrality, and closeness centrality (Zhang & Luo, 2017). Centrality analysis showed that successful projects shared attributes such as 'design,' 'shirt,' 'sign,' 'women,' 'comfortable,' 'textile,' 'sustainability,' 'performance,' and 'high-quality,' Design was the keyword that showed the highest degree centrality, and it was connected with other various important keywords too. Successful brands tended to highlight or explain their design's detail points to crowds. For example, specific descriptions about design was provided such as street design, high-quality design, or contemporary design. Interestingly, there were several designs that were related to anime such as Xiao from Genshin. Also, some design descriptions were addressed to particular groups like women and runners in order to catch attention or create a bond, making people to pay attention and support. Secondly, successful projects highlighted 'sustainability.' To be specific, they used eco-friendly textiles, changed discarded materials into clothing, pursued circular-economy, used organic-cotton, or ensured women's rights. All-gendered design also came together with sustainability keyword. Furthermore, entrepreneurs focused on 'comfort,' and comfort was frequently linked with 'performance.' Some descriptions were mentioned with particular career such as nurses. Fourth, entrepreneurs highlighted their own unique 'inspiration.' For instance, traditional culture and clothing, especially Japanese, such as Kimono helped

entrepreneurs to get an inspiration. Also, Japanese anime or Disney inspired them. Entrepreneurs were inspired from social issues like World War in order to support veterans. Finally, frequently mentioned clothing categories were 'shirt,' 't-shirt,' and 'jacket.' There were some keywords that had relatively higher closeness centrality or betweenness centrality compared to degree centrality. Keyword 'fit' had higher betweenness centrality and closeness centrality compared to degree centrality, which means it had high centrality both in direct way and indirect way and high mediating effect. Programs that used 'fit' as a keyword were related with customize clothing, which gives a perfect fit to all sizes. They ensure and respect unique body and weights. Also, technique such as 3D scanning was also related to fit because people can scan their body by using 3D scanner in order to get a perfect fit clothing. To achieve success in kickstarter, entrepreneurs had to ensure their specialties compared to other projects by highlighting their own design or inspiration. Also, highlighting the sustainability and social issues was important. This study has important contributions to entrepreneurs or pre-entrepreneurs by analyzing keywords that not only suggests successful crowdfunding factors, but also shows overall trend and flow in crowdfunding market.

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