Sourcing volunteers to participate in a research project about analysis of narratives in crowdfunding campaigns

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Research brief

1 Introduction to the research context and hypothesis

Sarasvathy's effectuation theory (Sarasvathy and Dew, 2008; Sarasvathy, 2001) is rooted in the necessity to understand how entrepreneurs make decisions in the presence of uncertainty and risk when launching and developing new ventures (Andersson, 2011; Kerr and Coviello, 2019). According to effectuation theory, entrepreneurs employ two distinct approaches when making decisions: causation and effectuation. A strand of research has examined the impacts of effectuation and causation on the performance of the business (Brettel et al., 2012; Cai et al., 2017; Shirokova et al., 2021), however, most of it has focused on the impact of the decisions made by entrepreneurs on the performance of their respective businesses measured in terms of sales, profits, and innovation outcomes (Muleta et al., 2017; Szambelan et al., 2019). Few studies have so far analysed the extent to which the adoption of causation or effectuation narratives by entrepreneurs impacts decisions made by third parties with regards to their business, such as investors and other funders of entrepreneurial projects (Arroteia and Hafeez, 2021; Braun and Sieger, 2020; Busenitz et al., 2005; Woike et al., 2015; Zhao et al., 2017).

The objective of this study is to examine whether the adoption of effectuation and causation in the narratives used by entrepreneurs to describe their campaigns in a crowdfunding website impacts the likelihood of third parties committing funds to their entrepreneurial projects. The campaigns to be analysed belong to a ten-year data set of 76,447 crowdfunding campaigns from kickstarter.com (2009 to 2019). Kickstarter is a rewards-based crowdfunding platform that is widely used by entrepreneurs to raise funds in exchange for a reward.

Upon reviewing key literature about effectuation, causation, their impacts on performance, and the literature about signalling in crowdfunding and performance (Anglin et al, 2018;

Courtney et al., 2017; Galak et al., 2019; Kuppuswamy and Bayus, 2017; Lukkarinen et al., 2016; Mollick, 2014; Herrero et al., 2020), we have put forward an initial list of research hypotheses which we briefly introduce.

Effectual orientation occurs when there is uncertainty on the best way to achieve goals, leading to experimentation and flexibility, and not sacrificing more than what the entrepreneurs can afford to lose (i.e. means orientation) (Alsos et al., 2016; Wiltbank et al., 2006). In this regard, an effectual orientation is consistent with entrepreneurs trying to control what they know and make the best of the means available to them. Pre-commitments with third parties are part of an effectual orientation, whereby the entrepreneurs seek to diversify risks among multiple stakeholders without having to own all resources (Dew et al., 2009; Sarasvathy and Venkataraman, 2011) and thus, minimising costs of experimentation (Chandler et al., 2011). Effectuators explore opportunities through strategic alliances and pre-commitments with partners (Galkina and Chetty, 2015), and, in this sense, effectual networking is flexible to change and directed at generating unexpected contingencies (Engel et al., 2017). In effectual networks, coordination takes the form of co-creation, mutual opportunity discovery and risk-sharing between allies (Dew et al., 2009).

- **H1 - A narrative evidencing a means orientation (consistent with effectuation) positively impacts the likelihood of achieving the funding target.**
- **H2 – A narrative evidencing affordable loss (consistent with effectuation) positively impacts the likelihood of achieving the funding target.**
- **H3 – A narrative evidencing experimentation (consistent with effectuation) reduces the likelihood of achieving the funding target.**
- **H4 – A narrative evidencing flexibility (consistent with effectuation) reduces the likelihood of achieving the funding target.**

- **H5 – A narrative evidencing pre-commitments/effectual networking (consistent with effectuation) has a positive impact on the likelihood of achieving the funding target.**

On the other hand, causal orientation is consistent with a predictable future, and the goals determine the actions and resources to be acquired (i.e. goals orientation) (Chandler et al., 2011). In this sense, a causal decision involves a precise goal (goal orientation), a set of alternative means (which may not be available at a given time), and the definition of criteria for selecting between means (Sarasvathy, 2001). Causal-oriented entrepreneurs avoid contingencies by predicting the future through research, market analysis and business planning (Brettel et al., 2012). Causation is also consistent with networking, in which case it encompasses instrumental, specific, and predetermined development of new relationships that can be used to develop essential resources (Chandler et al., 2011). In this case, networks are determined by a competitive attitude and limit the dilution of ownership (Dew et al., 2009).

- **H6 – A narrative evidencing a goals orientation (consistent with causation) positively impacts the likelihood of achieving the funding target.**
- **H7 – A narrative evidencing market and competitor analysis (consistent with causation) have a positive impact on the likelihood of achieving the funding target.**
- **H8 – A narrative evidencing causal networking (consistent with causation) positively impacts the likelihood of achieving the funding target.**

The main challenge faced by the research team is to create a dictionary of effectual and causal words that can be subsequently used by a computer to count the frequency of the words in the data set. The following section introduces the approach undertaken so far.

2   Overview of the research methodology

In this research we adopt a quantitative content analysis technique (Krippendorff, 2004; Neuendorf, 2020) counting the occurrences of words in texts and measuring their frequency. The texts to be investigated - the units of analysis - are the web pages of crowdfunding campaigns on Kickstarter. We used computer-aided content analysis tools to count the frequency of words present in the web pages of crowdfunding campaigns (Duriau et al., 2007; McKenny et al, 2013).

As noted, a crucial part of this research was to develop an initial list of deductive words for each of the subconstructs of effectuation and causation to be analysed, as per the different hypotheses put forward. Specifically, the subconstructs of effectuation to be investigated are means orientation, affordable loss, experimentation, flexibility, and pre-commitments/effectual networking; and the subconstructs of causation are market and competitor analysis, goals orientation and causal networking.

To derive the initial list of words to be searched for in the dataset, we have started with a deductive approach by identifying the words frequently referred to either of the subconstructs, by reading the literature, adopting a partially grounded approach (Sunduramurthy et al., 2016). First, the members of the team read the literature and took notes about the theoretically pre-identified subconstructs of effectual and causal orientation. After developing the initial word lists, each author individually verified the alignment of each word with the definition of the subconstruct which it represents. The individual notes were discussed between the research team, and an initial set of agreed words was derived for each of the three subconstructs of effectual orientation and the causal orientation.

To finalize the word list, we generated a list of the most frequently used words from the sampled texts, creating the basis for an inductive analysis of the words (Short et al., 2010). The

list of words was subsequently analysed by the research theme following a similar procedure, to identify those words that could be related to either of t subconstructs under scrutiny. At this stage, one external expert was also invited to take part in the process, to ensure face validity of the final measure. This verification ensured minimizing the element of subjectivity and ensuring content validity. The final list of words derived so far from the approaches includes 55 words related to the subconstructs of causal orientation and 178 are related to the subconstructs of effectual orientation.

However, the deductive and inductive approaches used are still – according to the critical and welcome view of peers who have reviewed the initial version of our working paper, insufficient to derive a robust dictionary of words that can be used in the dataset to test the hypothesis. A way to overcome it would be asking an independent panel of scholars in international entrepreneurship, as well as individuals who have experience funding rewards-based crowdfunding campaigns, to identify the words that in their opinion would be related to the different subconstructs under scrutiny (effectuation and causation). Subsequently, the second-word list will be used to test the hypothesis.

3 Deriving a word list based on the inputs of an independent panel

We are therefore inviting researchers in international entrepreneurship to take part in this research, by identifying in the dataset and according to their perceptions the words that are related with either subconstructs of effectuation or causation under scrutiny. To be able to generalize the findings to the population of 76,447 campaigns in the data set, with a 5% margin of error and 95% confidence interval, the total number of campaigns to be used to derive the new word list is 383. These campaigns have now been extracted randomly from the dataset.

The steps to follow in the process are as follows:

1- We are now inviting volunteers to read and identify a set of 10 crowdfunding campaigns each (each campaign has about one A4 page of words) and identify according to their perceptions, the words that are related to either of the subconstructs under scrutiny.

2- An initial 60-minute brief to all volunteers will be conducted online by mid-February, to inform about the different subconstructs of effectuation and causation under scrutiny, and to lead them through the process that we recommend searching for and reporting the words in the campaigns.

3- The volunteers will be given about two weeks to complete the task and return to us a sheet with the words identified in each of the campaigns (See Appendix). We estimate that each campaign will take between 10-15 minutes to read and report the words, therefore a maximum of 2 hours for each volunteer in the process.

4- The results will be subsequently processed by us using RQDA software (similar to NVivo) (Musteen et al., 2018) for quantitative text analysis, to derive the new word list to be used to test the hypothesis. An opportunity will be given to participating volunteers if they wish to be involved with the tasks around RQDA and gain practical experience in text analysis research if they wish.

5- Acknowledgement to the volunteers will be given in the paper that will be published following the conclusion of the research process.

If you are interested in being involved in this study (Steps 1 to 3 at least), please send an email to Nuno Arroteia at nuno.paulinoarroteia@dmu.ac.uk by the 31st of January 2022. We are very much looking forward to welcoming your contribution to this study.

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Appendix

The table to be used to report the results is below.

- Copy and paste in the table below the words that you think reflect each of the constructs that are found on the campaign's main page and campaign's risk section (text only not images nor videos).

- Please do not copy and paste expressions, just single or maximum double word expressions.

- Use one table for each campaign named upon the name on the website and save all the 8 tables in the same word document. Name the word document with your first and surname and send it by mail to nuno.paulinoarroteia@dmu.ac.uk.

Campaign's name	
Means orientation	
Affordable loss	
Experimentation	
Flexibility	
Pre-commitments/effectual networking	
Goals orientation	
Market and competitor analysis	
Causal networking	