

Entrepreneurial leadership in online freelancing: bricolage and project success

Bricolage and
project success

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105

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Abstract

Purpose – The research study provides empirical insights on the relationship between entrepreneurial leadership (EL), entrepreneurial passion for founding (EPF), entrepreneurial bricolage (EB) and project success (PS), in the case of freelancers. The study aims to get a better understanding of whether freelancers, who behave like entrepreneurial leaders, can successfully complete projects through EB.

Design/methodology/approach – The study collected data from 209 freelancers through snowball sampling, in two waves, with a time-lag of fourteen days, to better examine the causality of variables. Data were analyzed by Model No. 4 and 7 (i.e. mediation and moderation, respectively) of Process macro.

Findings – Drawing on the effectuation theory, the results show that EB mediates the relationship between EL and PS and EPF moderates this relationship.

Practical implications – The freelancers can formally establish businesses later, after knowing whether they can complete these new types of projects. These online freelancing platforms can provide special services to freelancers who first want to test their skills on unrelated projects. In sum, the paper suggests that freelancers can be successful entrepreneurial leaders.

Originality/value – The EL, EPF, EB and PS are studied in the context of the informal sector, i.e. freelancing, which is the emerging working style in the world. It provides an in-depth understanding of phenomena in freelancers that lacks background literature.

Keywords Entrepreneurial leadership, Entrepreneurial bricolage, Freelancer, Project success

Paper type Research paper

1. Introduction

Entrepreneurial leadership (EL) is an emerging domain combining the entrepreneurship and leadership literature (Harrison *et al.*, 2018). According to Al Mamun *et al.* (2018) and Strobl *et al.* (2020), EL is a leadership style that promotes risk-taking behavior in the teams and hence takes on opportunities in a turbulent environment. Bagheri and Harrison (2020) argue that it is a relatively new leadership style and emerging to overcome the businesses' continuously changing and dynamic environment. This changing and uncertain environment forced leaders to be not only transformational but innovative and risk-taking (Tarabishy *et al.*, 2005). However, entrepreneurial leaders may also lack the features of inspiring and charisma that are typical features of transformational leaders but take more risk comparatively (Megheirkouni *et al.*, 2020; Renko *et al.*, 2015). Therefore, when leaders take more risks and opt for more opportunities, this also comes with chances of failure. In order to address this challenge, they initially assess their capabilities by leveraging temporary and combined resources, known as entrepreneurial bricolage (EB), to know whether they can complete the project successfully.



Project is defined as a task that is not recurrent, has a specified budget, time and a clearly defined scope (Latif *et al.*, 2020). According to Jugdev *et al.* (2013), project success (PS) is the judgment(s) concerned about the outcomes of any particular project. Moreover, Shenhar *et al.* (2001) argued that PS comprises four dimensions that make up any project successful, i.e. project efficiency, impact on the customer, direct business and organizational success, and preparation for the future. The first dimension focuses on the project's delivery, ensuring its successful execution. The second dimension prioritizes the customer, recognizing their significance as the primary stakeholder. Moving on, the third dimension encompasses the project's outcome, which contributes to business growth. This dimension applies not only to the client but also to the freelancers who form the project management delivery organization in our case. Lastly, the fourth dimension encompasses the relationship between clients and the project delivery team, among other aspects (Shenhar *et al.*, 2001). As projects' success is dependent upon the skills of the entrepreneurial leader, therefore when they accept projects that are not according to their main skill-set to explore more entrepreneurial opportunities, they accomplish these projects through employing bricolage techniques.

Lévi-Strauss first coined the EB as "someone who works with his or her hand" and completes the tasks with whatever resources and collection of tools available (Lévi-Strauss, 1966). In other words, Gundry *et al.* (2011) explain EB as exploiting and managing the existing social, human and financial resources to complete current tasks or create new opportunities. Moreover, some researchers define EB in such a way that its true potential can only be exploited by entrepreneurial leaders (Gundry *et al.*, 2011). Therefore, Baker (2007) and Baker and Nelson (2005) argued that EB also means creating opportunities from resources, which were originally not meant to create the same opportunity and product, which can later be converted into a new venture. Hence, EB plays a mediating role between EL and PS, starting from accepting projects and completing them successfully. We argue that it is the passion of freelancer entrepreneurs, which moderates this relationship and behind this conversion into new ventures also, for which they first tested their chances of success through EB.

Passion is the primary driver in starting new ventures. The uncertainty of success in launching new products and services with limited resources, the passion play an essential role in taking steps for launching new ventures (Cardon *et al.*, 2013). Passion also plays a vital role in hiring and motivating critical employees as team members to make them accomplish the tasks successfully (Mitteneess *et al.*, 2012). Additionally, Cardon *et al.* (2013) argue that the entrepreneur's passion can take three different roles, i.e. investing in new products and services, founding new organizations and developing these organizations beyond their success. We are here taking an entrepreneur's passion for founding (EPF) only into our investigation, as we believe it is the main ingredient in an entrepreneur's passion, which makes them accept unrelated projects like -projects that are not matched with the entrepreneur's regular skill-set. After completing these unrelated projects successfully through EB, they later formally use the online platform(s) i.e. [Upwork.com](https://www.upwork.com), [Fiver.com](https://www.fiver.com), etc. to regularly accept these types of projects (i.e. establishing an organization). Here, it is essential to mention that entrepreneurial passion for founding (EPF) means starting a new business (like accepting a new type of project that was previously completed through EB). The researchers Cardon *et al.* (2009) even recognized the EPF as a primary component of entrepreneurial efforts made by any entrepreneur. Therefore, we argue that the more the entrepreneur has EPF, the more freelancer entrepreneur successfully uses EB and converts projects into successful ones.

Freelancer is a person who works freely and is not employed by any employer at least permanently (Akhmetshin *et al.*, 2018). They usually work on a project basis and undertake projects like mobile applications development, websites development, graphic designing, financial analysis for small businesses, virtual assistants and many others. As far we are informed, the research on freelancers and the so-called informal teams made by them is

scarce, despite the fact that online freelancing is growing rapidly, which according to (Storey *et al.*, 2018), who are researchers at E&Y Global, one out of every five workers in the United States of America (USA) will be freelancer by 2020 and if part-time working is included then it leads to the 40–50% of the workforce in the USA. It suggests that the freelancers as part of a bigger informal economy are an ideal setting for our research. Furthermore, as per the report of the World Bank, it represents approximately 3% of the global workforce of 3.5 billion, which makes it more deserving to be studied (World Bank, 2019). Furthermore, the study by Akhmetshin *et al.* (2018) shows that 54% of freelancers are worried about irregular income due to uncertainty, which means freelancers, will undertake more and more projects even out of their normal skill-set and then make them accomplish from their teams composed of various professionals through EB. We know that uncertainty affects all types of businesses especially small and informal businesses. Therefore, the freelancer accepts the projects which are not matched with their primary skill-set to have a regular stream of income, i.e. showing his EL by taking more risk and being open to new projects.

The point where the freelancers accept the projects which are out of their core skill-set is the junction where EB can play its role in the success or failure of the project. They use the resources whatever is available at hand and even if they re-outsource parts of it to professionals they know, EB takes place called network bricolage, i.e. using pre-existing contacts to provide various services to complete the project (Baker, 2007). Here, as the entrepreneur has a passion for founding, if they see that these specific projects can be undertaken to accomplish successfully, the entrepreneur later starts formally accepting these types of projects. Therefore, given that many freelancers undertake projects, for which they don't have the technical and other resources available (Akhmetshin *et al.*, 2018); they first try to complete it by engaging resources at hand, for instance, the skills of current team members and then outsource or resell the projects also. The freelancers try to complete these new types of projects for more income/profits and aim to get more similar projects in the future if they get success initially by employing EB. Here comes the EB concept, which means freelancers create something from almost nothing (Baker and Nelson, 2005), as explained by “materials” in the Toy Store(y) research study by Baker (2007). It is just one type of example, how these freelancers who act like entrepreneurial leaders use their EB skills.

The research study is encouraged by the “practice theory” in entrepreneurship, which tells that every entrepreneur's actions are different and hence needs to be studied, that what type of activities and strategies they are adopting, rather than studying people and their phenomenon on a collective level (Thompson *et al.*, 2020). The literature on EL and PS is also not mature and deserves to be investigated more under different dimensions. Generally, the literature argues that the more the entrepreneurs have entrepreneurial features and mindset, the more they perform better (Rauch *et al.*, 2009). However, we do not know much about features that lead to projects' success in the informal economy, specifically freelancers who earn thousands of dollars from online platforms like Fiver.com, Upwork.com, etc. Hence, we aim to study the EL and PS relationship by implanting EB as a mediating variable and EPF as a moderating variable to learn more about freelancers and hence contribute to the fields.

2. Background and hypotheses development

2.1 Entrepreneurial leadership (EL), entrepreneurial bricolage (EB) and project success (PS)

Cunningham and Lischeron (1991) explained EL, as the style of leadership in which leaders emphasize clear goal settings, motivating people to take risks and take chances to perform better and hence leading the organization to success. According to Renko *et al.* (2015), it includes management of people or employees in such a way that directs them towards attaining the vision of the organization, by exploiting entrepreneurial opportunities. Furthermore, it is argued by Fontana and Musa (2017) that this leadership style manages

heterogeneous human resources more creatively and innovatively to tackle the challenges in any current business environment. While researching Nigerian small and medium enterprises (SMEs), [Pulka et al. \(2021\)](#) found that SMEs with higher entrepreneurial orientation perform better (EL is one part of entrepreneurial orientation). Moreover, [Lyndon and Pandey \(2021\)](#) argue that founding members in entrepreneurial teams can exhibit leadership at different times and in different situations, as required by the problem. Therefore, organizations need this type of leadership to survive in uncertain environments by utilizing whatever resources at hand ([Fontana and Musa, 2017](#)).

EB, in essence, refers to the skillful utilization of available resources in hand by combining them in innovative ways. There are two types of EB, the first is external EB, which includes resources available to the leader in the external environment, such as physical assets, social assets, etc. The second is internal EB, which includes prior life and professional experiences, education, technical certifications, etc. that can be deployed/improvised in current work settings to be able to do new tasks that are out of their scope currently ([Vanevenhoven et al., 2011](#)). Furthermore, [Michaelis et al. \(2020\)](#) found the direct relationship of frugality to higher levels of EB and effectuation behaviors. EB plays a crucial role in driving organizational innovation, particularly for emerging entities. It empowers such organizations to overcome skill and resource limitations, encouraging them to embrace new types of projects instead of using constraints as excuses. By leveraging EB, organizations can foster a proactive mindset and explore innovative avenues for growth and success ([Senyard et al., 2014](#)). According to [Garud and Karnøe \(2003\)](#), bricolage provides a lot of micro-processes learning opportunities, which misses in breakthrough approach. Moreover, bricolage offers abundant opportunities for micro-process learning, which is often absent in a breakthrough approach. Informal channels of entrepreneurial learning have demonstrated considerable benefits for artisan entrepreneurs. Similarly, we contend that EB serves a similar purpose for freelancers, enabling them to acquire valuable knowledge and skills through nonformal means. By leveraging the principles of bricolage, freelancers can tap into their resourcefulness and adaptability, propelling their entrepreneurial journey and fostering their professional development ([Rashid and Ratten, 2020](#)). Hence, it deserves to investigate whether EB mediates the relationship between EL and PS in context of freelancers, who are always starving to take projects out of their regular skills to compensate for the irregular income.

The significance of the informal economy in entrepreneurship research is often underestimated, as highlighted by [Hällgren et al. \(2018\)](#) and [Ram et al. \(2017\)](#). However, this sector holds paramount importance in developing countries, constituting over 50% of the gross domestic product in numerous instances. Existing literature indicates a notable lack of focus on the freelancing segment of the informal economy, as highlighted by [Den Besten and Nakara \(2016\)](#). Despite being prominent entrepreneurs in contemporary society, freelancers make significant contributions to the informal economy, particularly in developing countries where they operate without formal business registrations. Furthermore, with the advent of online platforms, freelancers not only undertake tasks within their skill set but also strive to accept projects that lie beyond their usual expertise, aiming to augment their income. Here come the EL skills of freelancers, who try their best to complete the accepted project from their current team by utilizing whatever skills and resources at hand (i.e. role of EB). Furthermore, the practice theory also pushes us to study this behavior of entrepreneurs-freelancers, who engage in similar phenomena and are still not discussed in the literature ([Thompson et al., 2020](#)); our hypotheses are also in the light of this theory, as we are studying the practical approach of these freelancers. Therefore, the research question of our study is what is the relationship of EL, EB and PS, in the case of projects undertaken by freelancers, which are not related to their main skill-set?

In the information technology industry, the EL also plays an important role in the success of the projects undertaken by the firm by managing knowledge management

processes in an effective way (Latif *et al.*, 2020). Amidst the challenges of the present competitive landscape, leaders possess the freedom to swiftly respond and navigate through the volatile environment (Tuan Luu, 2017). They adeptly leverage the resources at their disposal, creatively combining them in innovative ways to ensure the success of their projects. Furthermore, generally, freelancers and similar types of firms closely tie their performance with the projects they develop, so we can say that as they are more entrepreneurial in nature, the EL plays an essential role in the success of these firms (Aga *et al.*, 2016; Khan *et al.*, 2019). In one other study, Ahmed *et al.* (2014) argued that team members with entrepreneurial skills on project teams increase the projects' success probability. Therefore, we can conclude that exiting literature on leadership discusses various styles of leadership and their positive effects on the project-based working (Aga *et al.*, 2016; Raziq *et al.*, 2018), however, the EL in the project-based settings of an informal economy where freelancers use EB extensively, is not given deserved consideration for research. Therefore, we proposed the following hypothesis:

H1. There is a significant positive association between EL and EB.

PS encompasses two fundamental components. The first pertains to the project elements directly tied to its accomplishment. The second component encompasses PS standards, which encompass measurable criteria that establish whether a project is deemed successful or unsuccessful (Jugdev *et al.*, 2013). The project can be influenced by various factors and hence an organization should deal with adjustments effectively through recombining resources at hand, so that it does not convert the success of the project into a failure (Shenhar *et al.*, 2002). In project-based informal firms, effective leadership develops a positive attitude and overall culture of the firm, which leads to the success of the project (Aga *et al.*, 2016). Further, leadership is one of the techniques used by the management of the firms that affect the project's success (Nixon *et al.*, 2012). However, as mentioned earlier, no literature is found that discusses EB and PS in the case of the informal economy, more specifically freelance working, which is the main contribution of this study. Hence, we propose our [second hypothesis](#):

H2. There is a significant positive association between EB and PS.

Hooi *et al.* (2016) have shown that EB mediates the relationship between entrepreneurial orientation (EL is one of the characteristics of entrepreneurial orientation) and sustainable entrepreneurship. In the new firms, the EB plays a mediating role between EL and their sustainable performance and the leaders of firms plays a significant role in the sustainable performance of their firms (Nor-Aishah *et al.*, 2020). The EB also plays a strong mediating role and is an agent of innovation in firms lacking resources, especially organizational support (Gundry *et al.*, 2011). Moreover, despite resource constraints, the very new firms innovate their work and compete in the market, with the help of bricolage, by combing various resources at hand (Senyard *et al.*, 2014).

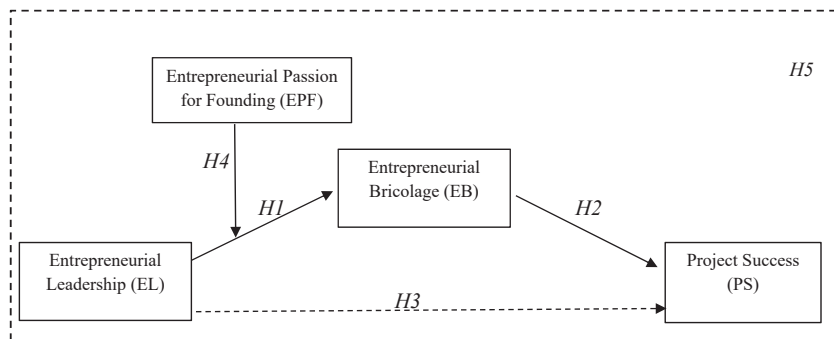
The other reason for very new firms engaging in EB is actively pursuing new opportunities, which we argue that freelancers actively engage in undertaking the projects that are not matched to their regular skill-set (Senyard *et al.*, 2014). Furthermore, Lyndon and Pandey (2021) argue that to handle complex tasks, teams need diverse skills, which we believe is EB in itself, as they will surely employ the skills, whatever at their hands. Thus, all the literature we explored on the EB shows that it is studied as an independent variable, dependent variable, moderating variable and mediating variable in various contexts (Nor-Aishah *et al.*, 2020), but not studied in the context of the informal economy, more specifically the freelancer entrepreneurs, where the projects are their main products. Therefore, our third proposed hypothesis is:

H3. EB mediates the positive association between EL and PS.

2.2 Moderating effect of entrepreneurial passion for founding (EPF)

SMEs try to be proactive, innovative and risk-taking (i.e. main characteristics of EL); and improvise and adapt the current resources to create new solutions to achieve organizational goals (Hooi *et al.*, 2016). The prior research on EPF suggests that passion is the main driver that drives the actions of an entrepreneur and motivates the entrepreneur (Chen *et al.*, 2009). According to Cardon *et al.* (2009), there is agreement that EPF plays an important role in the entrepreneurial features of any entrepreneur, but it lacks theoretical and empirical evidence. Furthermore, the researchers Eide *et al.* (2021) found that all the managers of SMEs do not have a similar type of aspirations of growth, which we can say founding in our case; in fact, they have different mindsets through which they believe that they can achieve growth. Tsilika *et al.* (2020), found that a resource-constrained environment and financial crisis in Greece moderated the emergence of EB techniques in SMEs. Furthermore, the practice theory also recommends studying the re-outsourcing of some tasks' strategy, along with completing some tasks from current team members, adopted by freelancers and factors contributing to their projects' success. Furthermore, the effectuation theory explains this relationship, as freelancers who are entrepreneurs accept projects that are not matched with their skill-set, but still try with EB to complete it into a successful project and learn new skills by doing, i.e. using whatever resources at hand and combining them in new ways. More specifically, it is due to the uncertain environment in which main freelancers accepts the projects that are not matched with their regular skills of his or her team and aim to build proper business/gig later, i.e. EPF, if delivers successful projects to various clients (Matalamäki, 2017); and the uncertainty is the main driver that makes this theory workable in the whole scenario (Smolka *et al.*, 2018). Therefore, the freelancers have EL and try to complete projects that are unrelated to their regular skills with current resources at hand, i.e. using EB and ultimately completing a project as successful. Hence we proposed our fourth and fifth hypotheses and framework, i.e. Figure 1 as follows:

H4. The positive association between EL and EB is moderated by the EPF, such that the relationship is stronger when the entrepreneur has a passion for founding.



Note(s):
 —→ Direct effect
 - - - - -→ Indirect effect

□ □ □ Overall indirect moderating effect

Source(s): Created by authors

Figure 1.
Proposed framework

H5. The indirect association between EL and PS is moderated by the EPF, such that this indirect relationship is stronger when the entrepreneur has a passion for founding, through increased EB.

3 Method

3.1 Sample and data collection

The survey questionnaire was floated through social media platforms, such as Facebook freelancing groups, where the freelancers actively pursue for new projects to undertake (other than online platforms like [Upwork.com](#), [Fiver.com](#), etc.). We also tried to reach or gather questionnaires through convenience and snowball sampling technique, which is commonly used in survey-based researches ([Clercq et al., 2020](#)). It was mentioned at the questionnaires that only those freelancers should fill the questionnaires, who have some experience ever in working or knowledge about working, in these types of teams.

To limit the adverse effects of common method variance by improving the procedural design, we followed the time-lagged research design and collected data in two time-lagged waves ([Reio, 2010](#)). We interviewed a few freelancers to cross-validate our measurement timing of keeping 2 weeks as lag time ([Erhart et al., 2017](#)). The time lag of two weeks is reasonable, as if projects completed by employing EB, can be said successful or unsuccessful in this period, because most of the projects are returned/negative feedback is provided within this time frame, according to interviewees. Therefore, if freelancers have completed recent projects, they can recall them and answer accordingly in this time frame. Furthermore, as stated by [Ployhart and Vandenberg \(2010\)](#) that time lags should neither be too long nor short; therefore, we believe two weeks' time lag is fine for our study, as used by [Clercq et al. \(2020\)](#) in their research study also, despite some interviewed freelancers suggested very short time lags. We also mentioned in the survey that there is no right or wrong answers, so respondents do not show any biasness ([Clercq et al., 2020](#); [Reio, 2010](#)). In this way, many types of social biasness, etc. could be reduced to an acceptable level ([Spector, 2006](#)). Hence, in this way, we have controlled these methodological problems to a great extent.

To ensure that the same respondent filled in the questionnaires in the second wave, we requested their email addresses in the first wave and then we sent the link of the survey through email during the second wave. In the first wave (T1), the data on freelancers' gender, age, education level, experience and types of projects involved, EL, EPF and EB is collected and in the second wave at (T2), the data for PS is collected. The data for EL, EPF and EB is collected during the first wave because all these three variables are linked, as the freelancer aims to take the risk and accepts unrelated projects, has an EPF and hence successfully completes projects through EB, before accepting projects formally. In the second wave, only data for PS is collected as a freelancer can get to know in this period whether they have completed the project(s) successfully. We have tested the model by Model No. 4 and 7 of Process macro ([Hayes et al., 2017](#)) through statistical software named Statistical Package for the Social Sciences (SPSS). This particular approach enables the generation of estimations for individual paths while also facilitating a comprehensive evaluation of mediation and moderated mediation effects. It has gained increasing reliance in studies focused on theorizing and testing conceptual frameworks involving moderated mediation (e.g. [Skiba and Wildman, 2019](#); [Wang et al., 2018](#)). An advantageous aspect of this method, when compared to the conventional Sobel test, is its ability to circumvent assumptions regarding the normal distribution of theorized (conditional) indirect effects. Through the utilization of a bootstrapping procedure, the Process macro formally accommodates the potential asymmetry and non-normality of the effects' distributions ([MacKinnon et al., 2004](#)).

The descriptive characteristics of our data are presented in [Table 1](#). We received 264 responses in the first wave and found 209 valid responses in the second wave, as many responses were not properly filled, i.e. the major shortcoming was invalid email addresses provided by respondents. The response was too slow in the second wave; therefore, we have sent reminder emails to the participants also after every three days. In total, 209 full responses are considered valid, because some participants did not provide valid email addresses in either wave, making it impossible to match the data of both waves of these participants.

The descriptive profiles of survey participants show that more than 73.2% are male respondents; most respondents belong to the age group of 23–27, i.e. 41.15%. Furthermore, most of the respondents possess a bachelor’s degree, i.e. 101 respondents (48.3%), followed by 60 respondents (28.7%) who possess a regular master’s degree. Moreover, most of the

Characteristics	Frequency	Percentage	Cumulative percentage
<i>Age (years)</i>			
12–17	6	2.87	2.87
18–22	47	22.49	25.36
23–27	86	41.15	66.51
28–32	56	26.79	93.30
33+	14	6.70	100.00
<i>Gender</i>			
Male	153	73.2	73.2
Female	53	25.4	98.6
Prefer not to say	3	1.4	100
<i>Education</i>			
High school	16	7.7	7.7
Bachelor	101	48.3	56
Regular master	60	28.7	84.7
Advance master	26	12.4	97.1
Above	6	2.9	100
<i>Types of projects involved</i>			
CV making, photo and video editing, logo designing and other related works	90	43.1	43.1
IT Support related projects (freelance IT Support Engineer)	14	6.7	49.8
Social media management and search engine optimization	16	7.7	57.4
Websites and mobile applications development, WordPress etc.	5	2.4	59.8
Blogs writing and content provider	10	4.8	64.6
Data entry and related projects	44	21.1	85.6
Other	30	14.4	100
<i>Period of time involved in freelancing (years)</i>			
less than one year	28	13.4	13.4
1	71	34	47.4
2	49	23.4	70.8
3	34	16.3	87.1
4	7	3.3	90.4
5	16	7.7	98.1
6	4	1.9	100

Table 1. Sample characteristics **Source(s):** Created by authors

respondents do work related to our category made, “curriculum vitae (CV) making, photo and video editing, logo designing and other related works”, i.e. 43.1% and most of them have less than 3 years’ experience in freelance working, i.e. 154 respondents (makes 73.6% of the sample).

3.2 Measures

The data is collected through the survey method and previous studies’ adapted scales are used. The items of scales are measured through a seven-point Likert scale. We dropped some items, which are not adequately loaded. Table 2 below presents the details of items included in each variable’s scale.

Dependent variable. The scale for PS of fourteen items is adapted from (Aga *et al.*, 2016). We have used this scale because the projects on these platforms also work similarly to construction projects. For example, in case of content writing project, the same conventional criteria could be applied. The clients give time duration for the project, budget (price) is already agreed and then quality, in which freelancer and client agrees to the number of words and other quality aspects of the writing. The data for the dependent variable is collected in the second wave (T2).

Independent variable. The EL is measured using the adapted scale developed by (Renko *et al.*, 2015), which has eight items. The data for EL is collected at T1.

Mediating and moderating variable. The nine items EB scale is adapted from (Davidsson *et al.*, 2017), EPF’s three items scale is adapted from (Cardon *et al.*, 2013) and the scale for PS of fourteen items is adapted from (Aga *et al.*, 2016). The data for both variables were collected during the first wave (T1).

Control variables. We have added age, gender, educational qualification, the types of projects freelancers are involved and the number of years they are doing freelancing, as controlling variables (Clercq *et al.*, 2020). These controlling variables will help us in understanding our variables’ relationships in depth. The data for these control variables are collected at T1.

3.3 Data analysis and scale consideration

The measurement model shows the required relationship between constructs and variables. The confirmatory factor analysis (CFA) was performed first to check the validity of our constructs. It revealed us that our model is all fit: $\chi^2 = 2447$, confirmatory fit index = 0.80, $df = 378$. The factor loadings which are less than 0.60 are removed (Gefen and Detmar, 2005) and are only found in variable PS. In the reliability analysis, the first composite reliability (CR) is performed. The cut-off value for the CR is 0.70 (Ringle *et al.*, 2017). All the variables EL, EPF, EB and PS possess the CR, with values of 0.894, 0.833, 0.920 and 0.888, respectively.

For the convergent validity average variance extracted (AVE) is calculated for all the variables and is above the recommended level of 0.50 except PS (Ringle *et al.*, 2017). The AVE values for all the variables EL, EPF, EB and PS are 0.518, 0.625, 0.565 and 0.445, respectively. It is pertinent to mention that the AVE for PS is acceptable, because according to Fornell and Larcker (1981), the AVE may be a more conservative estimate of the measurement model, so the researcher can conclude alone on the basis of CR (explained on p.46) (Lam, 2012) (See Table 2).

The Cronbach’s alpha values for all the variables EL, EPF, EB and PS are 0.846, 0.823, 0.904 and 0.790, respectively. The discriminant validity is checked by the Fornell and Larcker (1981) criterion and the values of the square root of AVE of EL, EPF, EB and PS are 0.720, 0.790, 0.751 and 0.668, respectively, which are higher than the correlation values in their respective columns, hence it holds the discriminant validity (correlation table specifically for the heterotrait-monotrait ratio of correlations (HTMT) is presented in the appendix).

Construct	Sources of measure	Alpha	CR	AVE	HTMT	Measurement items
Entrepreneurial leadership (EL)	Renko <i>et al.</i> (2015)	0.85	0.89	0.52	0.72	The team leader always comes up with radical improvement ideas for the projects/services we are offering The team leader often comes up with ideas of completely new projects/services that we could accept/offer The team leader takes risks in accepting and completing new projects The team leader has creative solutions to the projects offered on freelancing platforms The team leader demonstrates passion for my work The team leader has a vision of the future of our freelancing business The team leader challenges and pushes me to act in a more innovative way The team leader wants me to challenge the current ways we do to complete our projects
Entrepreneurial passion for founding (EPF)	Davidsson <i>et al.</i> (2017)	0.82	0.83	0.63	0.79	Establishing a new freelancing business excite freelancers Owning own freelancing business energize freelancers Nurturing a new freelancing business through its emerging success is enjoyable to freelancers
Entrepreneurial bricolage (EB)	Cardon <i>et al.</i> (2013)	0.90	0.92	0.57	0.75	We are confident of our ability to find workable solutions to new projects which we accept, by using our existing resources We gladly take on a broader range of projects than others with our resources would be able to We use any existing resource that seems useful to responding to a new problem or new project opportunity We deal with new projects by applying a combination of our existing resources and other resources inexpensively available to us When dealing with new problems or new projects opportunities we take action by assuming that we will find a workable solution By combining our existing resources, we take on a surprising variety of new projects When we face new challenges in accomplishing new projects we put together workable solutions from our existing resources We combine resources to accomplish new projects that the resources were not originally intended to accomplish To deal with new challenges in new projects we acquire resources at low or no cost and combine them with what we already have

Table 2.
Model measurement

(continued)

Construct	Sources of measure	Alpha	CR	AVE	HTMT	Measurement items
Project success (PS)	Aga et al. (2016)	0.79	0.89	0.45	0.67	<p>The project was completed on time</p> <p>The project was completed according to the budget allocated</p> <p>The outcomes of the project are used by its intended end users</p> <p>The outcomes of the project are likely to be sustained</p> <p>The outcomes of the project have directly benefited the intended end users, either through increasing efficiency or effectiveness</p> <p>Given the problem/reason for which it was completed, the project seems to do the best job of solving that problem/reason</p> <p>I was satisfied with the process by which the project was implemented</p> <p>Project team members were satisfied with the process by which the project was implemented</p> <p>The project had no or minimal start-up problems because it was readily accepted by its end users</p> <p>The project has directly led to improved performance for the end users/target beneficiaries</p> <p>The project has made a visible positive impact on the target beneficiaries</p> <p>Project specifications were met by the time of handover to the target beneficiaries</p> <p>The target beneficiaries were satisfied with the outcomes of the project</p> <p>Our client was satisfied with the outcomes of the project implementation</p>

Source(s): Created by authors

Table 2.

4. Results

Table 3 presents the descriptive statistics of the variables used. It includes mean, standard deviation (SD) and correlation between variables. The average age of freelancers who participated in the study is 25.47 years. The average experience of freelancers of our sample is 1.93 years, but with a high SD of 1.47, which shows that our sample is composed of diverse age groups. We have also used a box-plot test to identify outliers, which were very few and hence removed. We also used bootstrapping technique in SPSS, which eases the normality requirements, however, we checked for data's skewness and kurtosis.

Table 4 and Table 5 below respectively present the mediation and moderation results, performed through Model No. 4 and Model No. 7, respectively in SPSS (Hayes et al., 2017). The results show that EL has a significant positive relationship with EB ($\beta = 0.495, p < 0.05$, Hypothesis 1); hence, H1 is supported.

Further, there is a significant positive relationship between EB and PS also, which provides evidence that H2 is accepted, as the results are ($\beta = 0.127, p < 0.05$, Hypothesis 2). H3 is also supported, as we have observed that the mediation test results show an indirect effect size of 0.062, between EL and PS, along with a confidence interval (CI) of [0.019, 0.116]. Therefore, H3 is also supported.

Furthermore, the results of Process macro Model No. 7 reveal that H4 is accepted. The EL \times EPF has significant effect on predicting EB ($\beta = 0.080, p < 0.05$, Hypothesis 4). The

Table 3.
Correlation and
descriptives of
variables

	1	2	3	4	5	6	7	8	9
1. Entrepreneurial leadership	1.00								
2. Entrepreneurial passion for founding	0.39**	1.00							
3. Entrepreneurial bricolage	0.58**	0.50**	1.00						
4. Project success	0.26**	0.06	0.31**	1.00					
5. Age	0.00	0.04	-0.04	0.03	1.00				
6. Education	-0.07	0.02	-0.09	-0.06	0.35**	1.00			
7. Gender	-0.04	0.05	-0.04	-0.18**	-0.01	-0.01	1.00		
8. Type of projects involved	-0.01	0.06	0.02	-0.04	0.15*	0.07	-0.02	1.00	
9. Period of time involved in freelancing	-0.08	0.00	0.01	0.02	0.12	-0.04	-0.08	0.04	1
Mean	6.02	6.07	6.09	6.31	25.47	0.28	2.55	3.75	1.93
SD	0.75	0.89	0.64	0.34	4.58	0.48	0.91	2.91	1.47

Note(s): $N = 209$, ** $p < 0.01$ level (2-tailed), * $p < 0.05$ level (2-tailed). SD=Standard deviation
Source(s): Created by authors

Table 4.
Mediation results
(process macro), model
no. 4

	Entrepreneurial bricolage (EB)		Project success (PS)	
EL		0.495*		0.06
EB				0.127*
R ²		0.337		0.111

	Effect size	Bootstrap SE	LLCI	ULCI
Indirect effect	0.062	0.024	0.019	0.116

Note(s): $n = 209$; SE = standard error; LLCI = lower limit confidence interval; ULCI = upper limit confidence interval * $p < 0.05$
Source(s): Created by authors

results show that the relationship between EL and EB was stronger when EPF was high and vice versa, i.e. 0.316 at a SD of one below the mean, 0.397 at the mean, and 0.477 at a SD of one above the mean.

Further, the presence of moderated mediation shows the positive indirect relationship between EL and PS, at levels of EPF through EB, i.e. 0.040 at a SD of one below the mean, 0.050 at the mean and 0.060 at a SD of one above the mean. The index of moderated mediation is 0.0102 with a CI of [0.000, 0.029], which proves our H5 and overall theoretical framework. Taken all together, the model overall (i.e. Figure 2) shows that EB mediates the relationship between EL and PS, at high values of EPF.

5. Discussion and conclusion

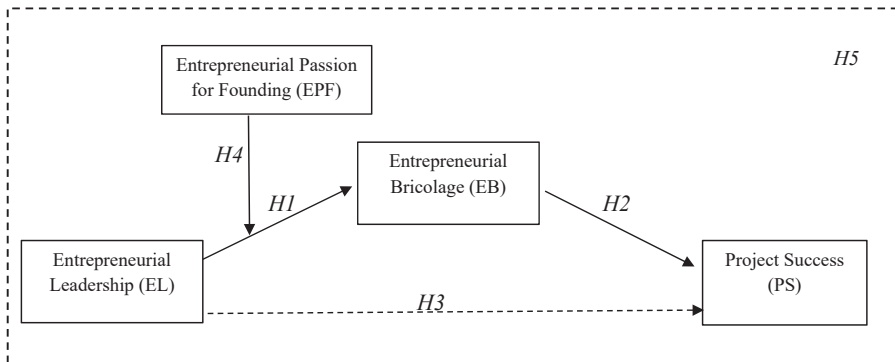
This section discusses the study's theoretical contributions, contributions towards the management practice, limitations, future research directions and a detailed conclusion.

	Entrepreneurial bricolage (EB)	Project success (PS)
EL X EPF	0.080*	0.426
R ²	0.434	0.111

	Effect size	Bootstrap SE	LLCI	ULCI
<i>Conditional direct effect of entrepreneurial leadership on entrepreneurial bricolage</i>				
-1 SD	0.316	0.06	0.197	0.435
Mean	0.397	0.049	0.3	0.494
+1 SD	0.477	0.067	0.344	0.611
<i>Conditional indirect effect of perceived organizational injustice on counterproductive work behavior</i>				
-1 SD	0.040	0.021	0.008	0.089
Mean	0.05	0.022	0.014	0.102
+1 SD	0.060	0.026	0.017	0.12
Index of moderated mediation	0.01	0.008	0	0.029

Note(s): $n = 209$; SE = standard error; LLCI = lower limit confidence interval; ULCI = upper limit confidence interval * $p < 0.05$
Source(s): Created by authors

Table 5. Moderated mediation results (process macro), model no. 7



Note(s):
 —→ Direct effect
 - - - - → Indirect effect
 [---] Overall indirect moderating effect
 EL > EB $\beta = 0.495, p < 0.05^*$
 EB > PS $\beta = 0.127, p < 0.05^*$
 EL > EPF > EB $\beta = 0.080, p < 0.05^*$

Source(s): Created by authors

Figure 2. Proposed framework with results

5.1 Theoretical and practical contributions

The study contributes to the previous researches conducted by showing that EL has a positive relationship with PS through EB, more specifically, it has a positive relationship in case of freelancers, who undertake projects which are out of their skill-set through online

platforms and then complete through EB; if successful then they can formally start accepting these type of projects in future and hence establish a new gig (business) (Abubakar *et al.*, 2018; Renko *et al.*, 2015). The results show that freelancers, who possess leadership features as defined above, i.e. take risks, accept new challenges in undertaking new projects that they have not ever accepted previously, can complete these projects successfully, before establishing the new gig(s) on these platforms (Gupta *et al.*, 2004). This is all improvised through EB, in which team leader creates an environment for, to be open to new ideas, finding solutions, using whatever resources at hand, searching new team members for his or her newly started freelancing business, who can contribute to the newly accepted projects (Senyard *et al.*, 2014).

The research study has shown that EL has a positive significant relationship with EB (H1), which implies that it can bring innovation to the team, problems solving approach, along micro-processes learning opportunities (Garud and Karnoe, 2003; Senyard *et al.*, 2014). It also shows that this relationship will bring innovation to the teams, especially where it lacks organizational support, as in the case of freelancers, it always lacks, due to its informal organizational setting (Gundry *et al.*, 2011). Hence, freelancers who act like entrepreneurial leaders, accept new types of projects and then complete these projects through EB can deliver successful projects. It is also important to mention that most of the freelancers who participated in our survey and resulted that unrelated projects can be successfully completed through EB belong to the first category, i.e. CV making, photo and video editing, logo designing and other related works. Therefore, future research can explore whether this phenomenon prevails in other more complex projects' categories also or not, by reaching out to more diverse sample of freelancers.

The significant moderating role of EPF reveals that freelancers can establish successful businesses after completing various projects through EB and making sure that they can deliver these specific types of projects successfully (Cardon *et al.*, 2013). Drawing on the effectuation theory, passion plays an important role in team building also, which later helps in establishing the new types of freelancing businesses formally (Mittensness *et al.*, 2012). Overall, the results favor accepting the new types of projects by freelancers, who take the risk, have the passion to establish new freelance businesses (gigs), after undertaking a few unrelated projects, which they completed by employing EB.

The results also provide many insights for managers of freelancing businesses, which in most cases are the freelancers themselves. They should not fear exploring new opportunities, as they can see whether they can successfully complete newly accepted unrelated projects. In the online freelance world, new business means a new gig, but it is very good to first test the waters and then establish a new gig on these online platforms. Furthermore, the government and policymakers should also provide incentives in the tax system, if any freelancer is operating in a team, as this will encourage freelancers to work in these types of teams and will create more employment opportunities; this will also bring foreign exchange to the country, which if they do not work in these types of teams, projects can be accepted by freelancers of other countries, hence loss to the country. There is also a significant implication for the online freelancing platforms like [Upwork.com](https://www.upwork.com), [Fiver.com](https://www.fiverr.com), etc. to provide different services on their websites, where the main freelancers can find team members who can provide various services that can help complete the project successfully.

5.2 Limitations and future research

First, the study has a limited sample size, which we believe could be increased if ample time was provided to convince participants that providing email in the survey will not harm their privacy rights etc. Second, the sample is composed of freelancers who have some experience in working in freelancing teams, but not as it should be, if it was dyad analysis. Future studies

should employ this research design, in which data is collected from team leaders and members of the same team. Furthermore, third, as the data is collected through convenience sampling which increases the sample size, but also at the same time risks the collection of data from participants, which are not desired. We suggest that researchers in the future can personally contact the freelancers and make sure that data is collected from desired participants. Fourth, we do not consider it as a limitation of this study, but future research studies could employ a three-wave research design or increase the time lag between waves to better see the causality effects (Antonakis *et al.*, 2010). Apart from limitations, future studies could test other emerging leadership styles with a little amendment in the model, such as servant leadership, smart leadership etc. Future studies could also employ other moderating and mediating variables that can add to the knowledge on the topic. The mediating variables that we believe are worth to be studied could be creativity and its related sub-variables, clients' feedback while the projects are continued, and how it affects the PS.

5.3 Conclusion

Overall the study shows a positive relationship between EL, EB and PS, along with the positive moderating effect of EPF. The study provides the main contribution to the informal sector, which is one of the neglected sectors in the research (Ram *et al.*, 2017). Moreover, as our focus of the study is freelancers and it is one of the emerging working styles according to (Storey *et al.*, 2018), in which they predicted that one out of every five workers would be a freelancer(s) in 2020, it further increases its significance and contribution. Other contributions are to the literature on the variables, especially PS, which is very less studied by the research community and more notably the projects' dynamics in the case of the informal sector.

The study further provides evidence to the new start-ups in the freelancing or complex sectors to take risks and accept projects they believe can complete through EB. It also further suggests policymakers to encourage working environments in which start-ups could find and hire people with different skills on a project basis. It also provides evidence to the managers, which freelancers are themselves in most of the cases, can take risks by accepting the unrelated projects and hence then complete by EB and establish a formal business later, as the effectuation theory explains this phenomenon. It is also important to mention that this research study's findings can also be generalized to other project-based settings and industries. Furthermore, our findings can be valid in all the countries' settings, as the freelancing world is global and not restricted to any country.

There are a few limitations of the study also, but neither is affecting the significance of the study. First, the study has a limited sample size of survey due to the limitations of time and finding freelancers who have experience in working in this type of team setting. Further studies with bigger and more diverse sample size and freelancers who have working experience in team settings, could be a deserving research avenue. Second, methodologically this study could be very strong if the research design was based on dyad analysis, where team leader and members both answer the related parts of the same survey. We strongly suggest to researchers apply this research design while extending our study. Third, the researchers could also try the same model with other emerging leadership styles, such as servant leadership, smart leadership, etc.

In sum, the study extends the literature on EL, EPF, EB and PS; more specifically, these variables in the context of the informal sector, i.e. freelancing, is the major contribution of the study. We believe by dissecting the literature that these variables are given less consideration in this informal sector and deserve to be studied. The freelancing world, which is growing day by day, due to its flexible working nature, regulator services (i.e. services provided by online platforms to protect the rights of both buyers and sellers), etc., this is one of the initial studies in this industry and can be a stepping stone for further investigations.

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(The Appendix follows overleaf)

Table A1.
Correlation table for
discriminant validity
(HTMT) only

	1	2	3	4
1. Entrepreneurial leadership	<i>0.72</i>			
2. Entrepreneurial passion for founding	0.391**	<i>0.79</i>		
3. Entrepreneurial bricolage	0.582**	0.508**	<i>0.751</i>	
4. Project success	0.268**	0.055	0.315**	<i>0.668</i>

Source(s): Created by authors

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