

13th International Conference on Industrial

Engineering and Industrial Management

XXIII Congreso de Ingeniería de Organización



BOOK OF ABSTRACTS

Gijón, 11th-12th July 2019

Book of Abstracts

"13th International Conference on Industrial Engineering and Industrial Management" and "XXIII Congreso de Ingeniería de Organización (CIO2019)"

Book of Abstracts

"13th International Conference on Industrial Engineering and Industrial Management" and "XXIII Congreso de Ingeniería de Organización (CIO2019)"

COORDINADORES

DAVID DE LA FUENTE GARCÍA
RAÚL PINO DIEZ
PAOLO PRIORE
FCO. JAVIER PUENTE GARCÍA
ALBERTO GÓMEZ GÓMEZ
JOSÉ PARREÑO FERNANDEZ
ISABEL FERNÁNDEZ QUESADA
NAZARIO GARCÍA FERNÁNDEZ
RAFAEL ROSILLO CAMBLOR
BORJA PONTE BLANCO

© 2019 Universidad de Oviedo © Los autores

Servicio de Publicaciones de la Universidad de Oviedo Campus de Humanidades. Edificio de Servicios. 33011 Oviedo (Asturias) Tel. 985 10 95 03 Fax 985 10 95 07 http: www.uniovi.es/publicaciones servipub@uniovi.es

I.S.B.N.: 978-84-17445-38-6 DL AS 1875-2019

Imprime: Servicio de Publicaciones. Universidad de Oviedo

Todos los derechos reservados. De conformidad con lo dispuesto en la legislación vigente, podrán ser castigados con penas de multa y privación de libertad quienes reproduzcan o plagien, en todo o en parte, una obra literaria, artística o científica, fijada en cualquier tipo y soporte, sin la preceptiva autorización.

The importance for a Start-up to trust in Open Innovation: a systematic literature review

Mastrostefano K¹⁸⁵., Morales-Alonso G.¹⁸⁶, Greco M.¹⁸⁷, Grimaldi M.¹⁸⁸, Blanco-Serrano J.A.¹⁸⁹

Abstract: It has long been known that new firms are fundamental for economic growth. Starting new companies is one of the best ways to fight unemployment and to generate well-being. Therefore, attention is paid by the scientific community to start-ups, with particular emphasis at how they generate, acquire and manage innovation. In their starting phase, start-ups need to identify the resources necessary for innovation and later they will decide whether to develop them internally or acquire them externally. Being open to external sources is a crucial point for the success of an entrepreneurial venture, that is, adopting open innovation processes allows start-ups to overcome their initial challenges and shortcomings. The goal of the present research is to understand the status of the literature related to Open Innovation adoption by start-ups. Through the literature search and analysis, the most relevant articles have been identified and analyzed.

Keywords: Entrepreneur; successful collaboration; knowledge acquisition; new technology based firms; new ventures

1 Introduction

As stated by many studies, entrepreneurs have to face different challenges such as: newness and smallness of the firm, market entry barriers, limited resources, lack of market knowledge and the financial means (de Jong & Freel 2010; Eftekhari & Bogers 2015; Gruber & Henkel 2006; Radas & Božić 2009). These challenges could be faced with the use of Open Innovation (OI) techniques. Spender et al. (2017) highlighted that a strong correlation between start-up phenomenon and OI exists; moreover, they found that the shortage of studies on this topic has a negative effect on it.

Dpt. of Civil and Mechanical Engineering, University of Cassino and Southern Lazio. Via G. Di Biasio 43, 03043 Cassino (Italy).

Dpto. de Ingeniería de Organización, ADE y Estadística. ETSI Industriales. Universidad Politécnica de Madrid. C/ José Gutiérrez Abascal, 2 28006 Madrid (Spain).

188 Michele Grimaldi (e-mail: m.grimaldi@unicas.it)

¹⁸⁵Katia Mastrostefano (e-mail: katiamastrostefano@gmail.com) ⊠

¹⁸⁶Gustavo Morales-Alonso (e-mail: gustavo.morales@upm.es)

¹⁸⁷Marco Greco (e-mail: m.greco@unicas.it)

¹⁸⁹José Antonio Blanco-Serrano (e-mail: joseantonio.blanco@upm.es)

2 Objectives

The main objective of this study is to shed light on the existing literature related to the phenomenon of start-ups and OI. Then, through the selection of the most relevant articles, authors aim to understand the most promising streams of research on this topic, highlighting proposals for future research endeavours.

3 Methods

To carry out the systematic literature review, the steps defined by Johnsen et al. (2017) were followed. From an original amount of 105 papers, research was narrowed down to 34 relevant articles. Information was collected for each paper regarding the main topics dealt with; the results obtained from the study and suggestions for future researches. These results were summarized on a matrix, which allowed classifying the articles, with the aim of identifying three fundamental aspects: the main topics, the side from which the study was made, subjects studied, and on which side it would be appropriate to extend the studies.

4 Results

Through the analysis of the articles it was possible to underline several aspects. First, it was noted that the studies conducted are mainly focused on analyzing other actors who interact with start-ups, such as large companies or universities, rather than have the start-ups as the main object of study. The second relevant observation deals with the topics that are most studied, which have been enclosed in four main categories: entrepreneur, firm performance, knowledge and ties. Moreover, most of the articles support that it is necessary to expand the studies on the topic from the side of other actors rather than on the start-up side.

5 Conclusions

When a start-up adopts OI processes the advantages are multiple, in fact they can overcome their shortcomings by interacting with external actors. It is opportune to develop other researches by placing the start-ups at the centre, possibly involving the entrepreneurs on it. In fact, it would be of the greatest importance to study, for example, how the initial shortcomings of start-ups influence the processes of OI, verify how the definition of the business characteristics affect the choice of partners and analyze the factors that influence the performance of collaborations. These and other aspects should be studied in several industrial sectors in order to be able to generalize the results. Indeed, many researchers argue that it is necessary to deepen the knowledge about this phenomenon to strengthen the understanding of the dynamics and circumstances that characterize the start-ups when they adopt OI processes. Reporting more evidence will make it possible to raise awareness of both the entrepreneurs and the public administration regarding this phenomenon.