

*Social determinants of success: The role of LinkedIn, and Twitter in the operating revenue*

**To Editor**

Valencia, June 29th 2019

Dear editor,

Let us thank you for giving us the opportunity to resubmit a revised version of our paper entitled '*Social determinants of success: The role of LinkedIn, and Twitter in the operating revenue*' to the Special Issue on "Sustainable Development in Small and Medium-sized Enterprises" of Sustainability.

My co-authors and I greatly appreciate the constructive reports from the referees. Their arguments and suggestions have led to a revision, which we hope has improved our manuscript. Herewith, we include a file with the revised version of the paper in addition to separate notes for reviewers #1, #2, and #3, explaining how the comments and suggestions have been addressed.

We hope this new version of the paper meets your concerns and the points raised by the reviewers.

I look forward to hearing from you.

Yours faithfully,

Juan Sapena

---

Author details:

Corresponding Author: Juan Sapena, Catholic University of Valencia  
([juan.sapena@ucv.es](mailto:juan.sapena@ucv.es))

Author: Jordi Paniagua, University of Valencia ([jordi.paniagua@uv.es](mailto:jordi.paniagua@uv.es))

Author: Rafael Rivelles, Catholic University of Valencia ([iam@rafaelrivelles.com](mailto:iam@rafaelrivelles.com))

*Social determinants of success: The role of LinkedIn, and Twitter in the operating revenue*

Submitted to Sustainability (550139)

**Answer to Reviewer #1**

We would like to thank you for your new detailed comments. All the main changes introduced in the new version of the manuscript are in *blue* in order to facilitate an accurate assessment by the reviewer.

General Comments.

It is an interesting work that highlights the importance of social media in operating revenues.

The presentation of the paper is quite technical, which is why the presentation of the results is sometimes difficult to follow.

*Even though the work is not totally in my field, I think the work can be published.*

COMMENTS TO THE AUTHORS

*Reviewer #1. The rich bibliography of this research is appreciated, but this is not always used in accordance with the subject under consideration. The results studies on social network involvement in overall organizational and financial performance is particularly deficient.*

Thank you very much for all your comments. According to them, we have revised the entire document to meet your concerns.

*Reviewer #1 I also believe that excessive bibliographic references that are not in line with the study's objectives could be removed. For example, the 17 references relating to earthquakes [13, 14, 15, 16, 17, 2, 18, 19, 20, 21, 22, 23, 12, 24, 25, 26, 27].*

We agree with the referee, we have eliminated the excessive references. However, not all references were from earthquakes. The sentence now reads:

Notable research topics on social media and social capital include the following: the reasons for using the Internet and participating in online social networking sites [12], linkages between social capital and opportunities in foreign markets and exports [13, 14, 15], the way that social networks can provide tacit knowledge about international business practices [16, 17, 18], the linkages between social media and business performance [9, 19, 20, 21, 22], the way that social networks can help address financial crises [23], the use of social media to predict stock movements in financial markets [24, 25, 26], employee creativity and even the ability of social networks to help predict real world outcomes [27].

*Reviewer #1: It is not very clear the bibliographic reference and the authors from which the operational effects of the social networks on the financial performance was used.*

Thank you again, we have added in section 2.2 a detail discussion with relevant references on the impact of corporate governance (specifically board size), which was missing in the previous version.

*Reviewer #1: I suggest reformulating the hypothesis 1 and I need a explanation to understand the differences between hypothesis 2,3 & 4 (a) and 2,3 & 4 (b).*

*Hypothesis 2a. The number of Twitter tweets positively affects operating revenue.*

*Hypothesis 3a. The number of Twitter tweets positively affects operating revenue.*

*Hypothesis 4a. The number of Twitter tweets positively affects operating revenue.*

Thank you again, we have re-formulated our hypotheses into two:

**Hypothesis 1.** *Board members' social media presence (measured as the percentage of board members with Twitter or LinkedIn accounts) mediates the relationship between board size and operating revenue.*

**Hypothesis 2.** *Board members' social media presence (measured as the percentage of board members with Twitter or LinkedIn accounts) moderates the relationship between board size and operating revenue.*

*Reviewer #1: Justification of hypotheses needs to be improved and must be related to the references used as theoretical support.*

Thank you again, reformulating the hypothesis gave us breathing space to develop and motivate the hypothesis in a better way.

*Reviewer #1: In the Materials and Methods section, the characteristics of the sample taken, and the variables used are not clear presented. Also, it is not clear where the data comes from. Is needed a little presentation of the Orbis database. And what about manual data collection?*

Thank you again, we have focused our study just on the NASDAQ firms, so we tried to present the data in a more comprehensible way,

*Reviewer #1: Presenting the results should be made in agreement with the hypothesis of the research and be said to what extent they have been proven or not. The work needs to be restored in the above-mentioned aspects.*

Thank you again, this point was also raised by R2 and the discussions presented answers directly the hypotheses of the study.

*Social determinants of success: The role of LinkedIn, and Twitter in the operating revenue*

Submitted to Sustainability (550139)

**Answer to Reviewer #2**

We would like to thank you for your new detailed comments. All the main changes introduced in the new version of the manuscript are in *blue* in order to facilitate an accurate assessment by the reviewer.

COMMENTS TO THE AUTHORS

*Reviewer #2: The article Social determinants of success: The role of LinkedIn and Twitter in the operating revenue is up to date, in the introduction the aim of the article should be added.*

We have re-written the introduction and added specifically the aim of the paper:

“According to Felix et al. (2017) social media dimensions include culture, scope, structure, and governance. They define social media marketing governance as the way “the company establishes rules and guidelines and how social media marketing responsibilities are controlled in the company.” (p. 120). In their study, they discovered that paradox of social media marketing governance in which the number of employees with authority to execute social media communication is inversely related to the number of senior management guidelines. The aim of this paper is to go one step further to analyze the embeddedness of social media in corporate governance affects financial performance. “

*Reviewer #2: The hypothesis should be defined in measurable level.*

Thanks for pointing these issues. The hypotheses now read:

**Hypothesis 1.** *Board members' social media presence (measured as the percentage of board members with Twitter or LinkedIn accounts) mediates the relationship between board size and operating revenue.*

**Hypothesis 2.** *Board members' social media presence (measured as the percentage of board members with Twitter or LinkedIn accounts) moderates the relationship between board size and operating revenue.*

*Reviewer #2: The answers to hypothesis should be formulated in the text.*

We have answered the hypothesis in the discussion.

*Reviewer #2: The discussion about relevant topics and ideas should be added.*

This point was also raised by R3 and we have improved the discussions.

*Reviewer #2: In the conclusion authors talk about some hotel - there is no other connection to the hotel- so authors should focus on this part.*

This was a mistake and now it is corrected.

*Reviewer #2: And add recommendation based on the results.*

Now that we have better results, we have added the recommendation of using general-based platforms (like Twitter) to help alleviate agency problems in firms with large boards.

We have modified the text in the new version following the reviewer's suggestions.

*Social determinants of success: The role of LinkedIn, and Twitter in the operating revenue*

Submitted to Sustainability (550139)

**Answer to Reviewer #3**

We would like to thank you for your new detailed comments. All the main changes introduced in the new version of the manuscript are in *blue* in order to facilitate an accurate assessment by the reviewer.

COMMENTS TO THE AUTHORS

*Reviewer #3: The topic is interesting, but the study is not very well conducted and written. For example: "The fact that board members have Twitter accounts mediates the relationship between board size and operating revenue." - so what? Surely, a board with 5 members is limited to 5 social media accounts, and a board with 100 to 100. That's not very theoretically interesting. You should use percentage values and show if it holds. Larger board => higher percentage?*

Thanks for pointing out this issue. We have taken action to determine whether this is in fact the case. The results can be seen in Table 4, where we have divided the sample according to the first and third quartiles of board size. Now we can appreciate that Twitter presence is in fact mediating the relationship between board size and revenue, but only for the third quartile, for companies with more than 18 board members. The mediation cancels out the expected negative effect of board size on financial performance. This is now one of the key results of the paper and we are extremely thankful to you for it.

The whole paper has been re-focused due to this finding. Now we have stronger managerial implications that point directly on which type of platform is better suited to help alleviate coordination and agency costs of large boards. As a result, we had to change the abstract, introduction and conclusions.

*Reviewer #3: The literature review is weak. There is not social media framework or SMM definition (see, for example, Felix et al 2016 Elements, or Hennig*

*Thurau's work). Likewise, there are many other papers that look at the link between social media and firm performance. I would like to see a systematic review.*

As a response to your comment, we have systematized better our literature review, including a new section (2.1). We have realized that the important reference of Felix et al. was missing. We think it is very relevant to our study and we included it in the introduction, as one of the leading references to motivate our study:

“According to Felix et al. (2017) social media dimensions include culture, scope, structure, and governance. They define social media marketing governance as the way “the company establishes rules and guidelines and how social media marketing responsibilities are controlled in the company.” (p. 120). In their study, they discovered that paradox of social media marketing governance in which the number of employees with authority to execute social media communication is inversely related to the number of senior management guidelines. The aim of this paper is to go one step further to analyze the embeddedness of social media in corporate governance affects financial performance. “

Reviewer #3: Justification of the hypotheses is weak, and the positioning is weak, too. Therefore, it is not surprising that also the discussion is not very helpful.

We have done two things to increase the hypothesis development (this point was also raised by other reviewers). In first place, we have reduced the hypotheses to two:

**Hypothesis 1.** *Board members' social media presence (measured as the percentage of board members with Twitter or LinkedIn accounts) mediates the relationship between board size and operating revenue.*

**Hypothesis 2.** *Board members' social media presence (measured as the percentage of board members with Twitter or LinkedIn accounts) moderates the relationship between board size and operating revenue.*

This gave us breathing space to develop and motivate the hypothesis in a better way.

In second place, we have added in section 2.2 a detail discussion with relevant references on the impact of corporate governance (specifically board size), which was missing in the previous version.



The interquartile test and the better development of the hypotheses have led to a more dense and precise discussion of the results. We believe that paper has profited from this revision and hope to have addressed fully all your concerns.

Reviewer #3: Paper needs copy editing.
--

We have modified the text in the new version following the reviewer's suggestions.