VISUALIZING AND MAPPING THE PROJECT MANAGEMENT RESEARCH AREAS WITHIN THE INTERNATIONAL JOURNAL OF PROJECT MANAGEMENT A BIBLIOMETRIC ANALYSIS FROM 1983 TO 2018

RESEARCH AND EDUCATION IN PROJECT MANAGEMENT


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1. INTRODUCTION

CONTEXT
Project Management has evolved from being an emerging topic to a growing research area in business, science and education fields. The Project Management concept has a multidimensional approach, and it can be defined as the practice of initiating, planning, executing, controlling, and closing the work of a team to achieve specific goals and meet specific success criteria at the specified time. The professionals involved in this area of knowledge are seeking to uncover the conceptual structure of a research area of interest are worth and necessary.

OBJECTIVE
The main aim of this contribution is to develop a bibliometric analysis to evaluate the performance and conceptual evolution of the Project Management research themes from 1983 to 2018.

The analysis is developed using SciMAT.
2. METHODOLOGY

SOFTWARE TOOL
SciMAT was employed to develop a longitudinal conceptual science mapping analysis based on co-words bibliographic networks.

METHODOLOGY STAGES
1. Detection of the research themes. Co-word analysis, followed by a clustering of keywords to topics/themes. The similarity between the keywords is assessed using the equivalence index.

2. Visualizing research themes and thematic network. Strategic diagram and thematic network (centrality and density). Research themes mapped in a two-dimensional strategic diagram and classified into four groups (Figure 1): i) motor, ii) basic/transversal, iii) highly developed-isolated, and iv) emerging/declining

3. Performance analysis. Relative contribution of the research themes to the whole research field: number of published documents, number of citations, and different types of bibliometric indices (h-index).
2. METHODOLOGY

(a) The strategic diagram
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3. DATASET

CORPUS AND DATABASE
Project Management research documents published in the Scopus.

QUERY
ISSN (0263-7863) AND (EXCLUDE (PUBYEAR, 2019))

TIME PERIOD
1983-2018

CORPUS SIZE
- 2,408 documents (articles, proceedings, reviews…) and 30,406 keywords.
- Citations count up to 17th January 2019.
DOCUMENTS AND CITATIONS BY YEAR
1. Introduction
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4. CONCEPTUAL ANALYSIS

Strategic diagram 1983-2018
4. CONCEPTUAL ANALYSIS

<table>
<thead>
<tr>
<th>Themes (Research Areas)</th>
<th>Quadrant</th>
<th>Documents</th>
<th>Citations</th>
<th>H-index</th>
</tr>
</thead>
<tbody>
<tr>
<td>RISK-ASSESSMENT</td>
<td>Motor themes (Q1)</td>
<td>496</td>
<td>23,588</td>
<td>79</td>
</tr>
<tr>
<td>PERFORMANCE-ASSESSMENT</td>
<td></td>
<td>486</td>
<td>18,032</td>
<td>70</td>
</tr>
<tr>
<td>SCHEDULE-MANAGEMENT</td>
<td></td>
<td>478</td>
<td>22,049</td>
<td>79</td>
</tr>
<tr>
<td>KNOWLEDGE-MANAGEMENT</td>
<td></td>
<td>347</td>
<td>12,000</td>
<td>58</td>
</tr>
<tr>
<td>COST-MANAGEMENT</td>
<td>Highly developed and isolated themes (Q2)</td>
<td>186</td>
<td>7,452</td>
<td>48</td>
</tr>
<tr>
<td>PROJECT-INFORMATION-MANAGEMENT</td>
<td></td>
<td>133</td>
<td>5,820</td>
<td>43</td>
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<tr>
<td>PROJECT-SUSTAINABLE-DEVELOPMENT</td>
<td>Emerging or declining themes (Q3)</td>
<td>177</td>
<td>8,077</td>
<td>50</td>
</tr>
<tr>
<td>PROJECT-CRITICAL-SUCCESS-FACTORS</td>
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<td>76</td>
<td>3,652</td>
<td>35</td>
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<tr>
<td>PROJECT-MANAGEMENT-PRACTICES</td>
<td>Basic and transversal themes (Q4)</td>
<td>372</td>
<td>14,103</td>
<td>63</td>
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<tr>
<td>PROJECT-PORTFOLIO-MANAGEMENT</td>
<td></td>
<td>244</td>
<td>10,500</td>
<td>61</td>
</tr>
</tbody>
</table>

We could identify ten themes related to the Project Management research field. In this regard, we could highlight six key themes (motor theme and basic and transversal themes) of the knowledge field: *RISK-ASSESSMENT, PERFORMANCE-ASSESSMENT, SCHEDULE-MANAGEMENT, KNOWLEDGE-MANAGEMENT, PROJECT-MANAGEMENT-PRACTICES* and *PROJECT-PORTFOLIO-MANAGEMENT*.
4. CONCEPTUAL ANALYSIS

Q1: Risk assessment
4. CONCEPTUAL ANALYSIS

Q1: Performance Assessment
Q1: Schedule Management
4. CONCEPTUAL ANALYSIS

Q1: Knowledge Management
4. CONCEPTUAL ANALYSIS

Q2: Cost Management
4. CONCEPTUAL ANALYSIS

Q2: Project Information Management
Q3: Project Sustainable Development
Q3: Project Critical Success Factors
Q4: Project Management Practices
4. CONCEPTUAL ANALYSIS

Q4: Project Portfolio Management
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CONCLUSIONS

MAIN CONCLUSION
- The size of literature related to Project Management within IJPM research field showed a noticeable increase in the last years (2007-2018). Given the large volume of publications and citations received in this field, it is expected that the use of these will be seen as part of other knowledge fields.
- The main themes used in the Project Management literature within IJPM are: RISK-ASSESSMENT, PERFORMANCE-ASSESSMENT, SCHEDULE-MANAGEMENT, PROJECT-MANAGEMENT-PRACTICES and KNOWLEDGE-MANAGEMENT.

FUTURE WORKS
- Evaluate the evolution of the research themes across the consecutive time periods (year by year).
- Compare the main results with others Project Management Journals
- Study the relationship to other disciplines as: Strategic Intelligence, Information Management and Training.
THANK YOU

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REFERENCES


