

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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February 21-22, 2019 / Bilbao (Spain)

- 1. Introduction
- 2. Methodology
- 3. Dataset
- 4. Conceptual Analysis
- 5. Conclusions

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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.

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#### 2. METHODOLOGY

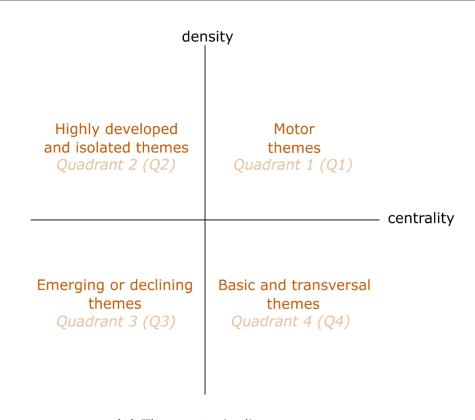
#### SOFTWARE TOOL

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

#### **METHODOLOGY STAGES**

- 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 developedisolated, 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))

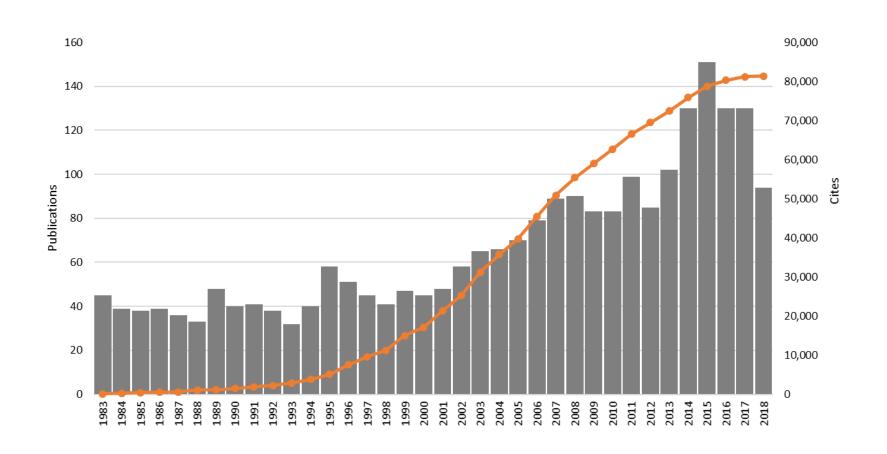
#### **TIME PERIOD**

1983-2018

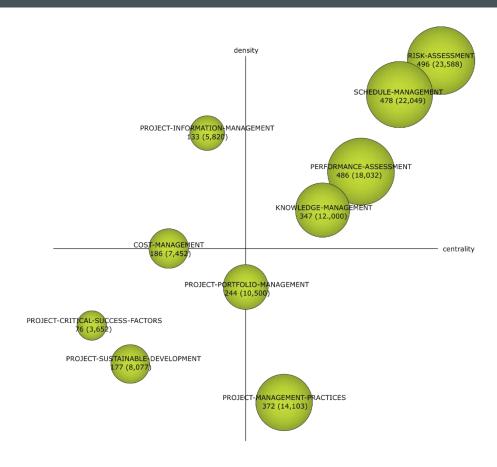
#### **CORPUS SIZE**

- 2,408 documents (articles, proceedings, reviews...) and 30,406 keywords.
- Citations count up to 17th January 2019.

### DOCUMENTS AND CITATIONS BY YEAR

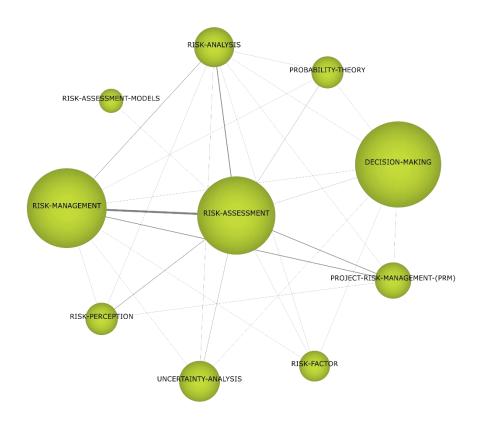


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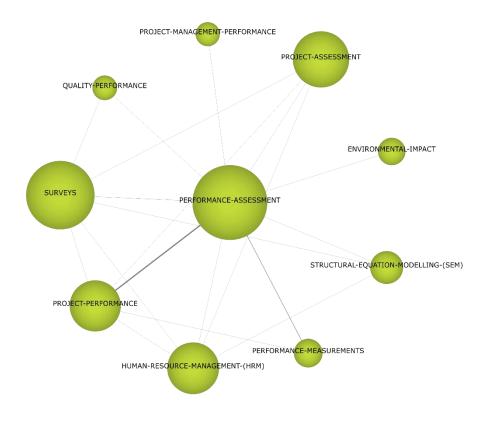


Themes (Research Areas)	Quadrant	Documents	Citations	H-index
RISK-ASSESSMENT	Motor themes (Q1)	496	23,588	79
PERFORMANCE-ASSESSMENT		486	18,032	70
SCHEDULE-MANAGEMENT		478	22,049	79
KNOWLEDGE-MANAGEMENT		347	12,000	58
COST-MANAGEMENT	Highly developed and isolated themes (Q2)	186	7,452	48
PROJECT-INFORMATION-MANAGEMENT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

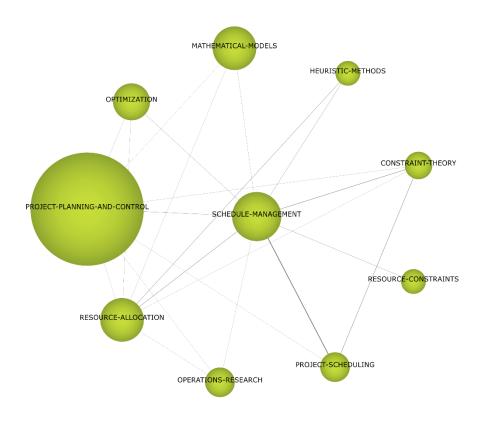
We could identify ten themes related to the Project Management research field. In this regard, we could highlight six key themes (motor theme and basic and transversal themes) of the knowledge field: RISK-ASSESSMENT, PERFORMANCE-ASSESSMENT, SCHEDULE-MANAGEMENT, KNOWLEDGE-MANAGEMENT, PROJECT-MANAGEMENT,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



Q1: Risk assesment



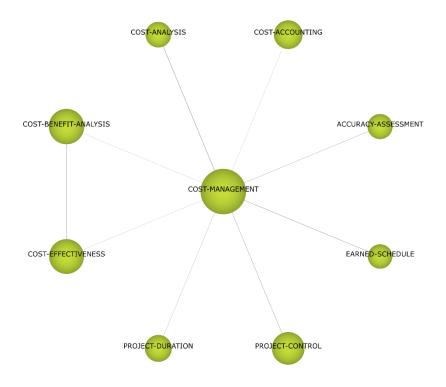
Q1: Performance Assessment



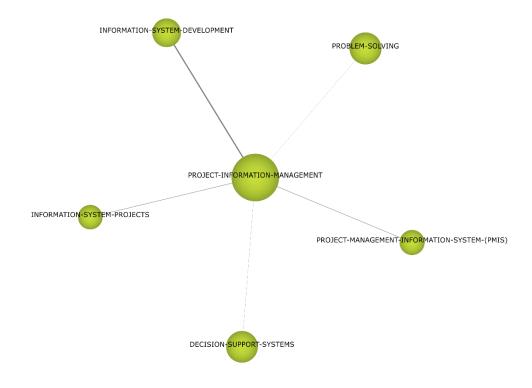
Q1: Schedule Management



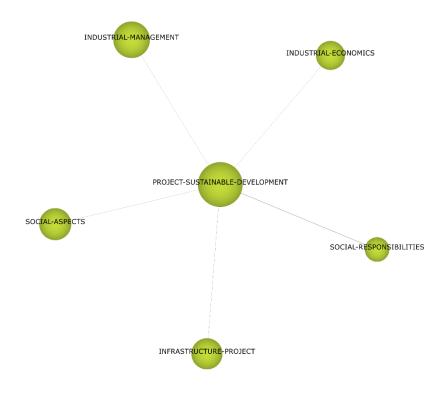
Q1: Knowledge Management



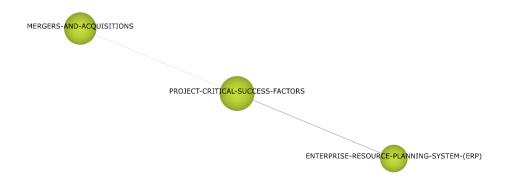
Q2: Cost Management



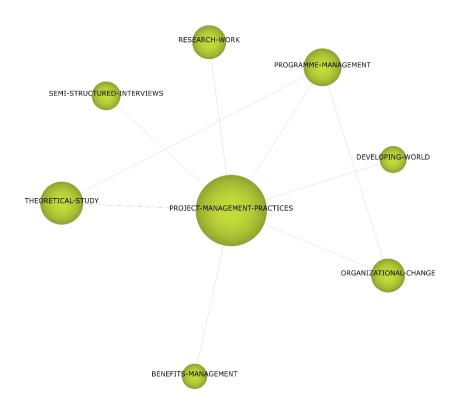
**Q2: Project Information Management** 



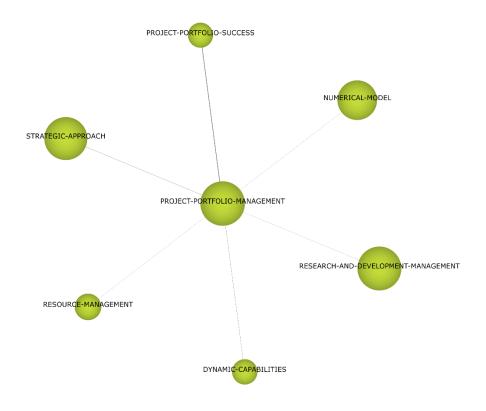
Q3: Project Sustainable Development



Q3: Project Critical Success Factors



**Q4: Project Management Practices** 



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.

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# THANK YOU

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**Acknowledgments:** The authors acknowledges the support by the CONACYT-Consejo Nacional de Ciencia y Tecnología (Mexico) and DGRI-Dirección General de Relaciones Exteriores (México) to carry out this study.