Conference Paper

Key Indicators Influencing Team Effectiveness in Project-Based Team

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Abstract

Teamwork is essential for any organizations to undertake particular purposes. Team members work together as a group combining their knowledge and skill to attain higher productivity and performance. An effective team is considered desired to achieve optimal performance. However, there are only a few studies of effectiveness in teams which are operated based on projects. This paper identifies and classifies the critical indicators of effectiveness in project-based teams to garner invaluable insights into how they influence team outcomes. We conduct a systematic literature review to categorize a set of indicators that affect team effectiveness based on human resource and project management literature. We follow the review method and reveal eighteen indicators of effectiveness from thirty-five publications as the basis for transforming project-based teams into effective teams. The result provides deeper insights into the importance of exercising and improving teamwork. Additionally, this paper recognizes a complex system of interdependence among indicators and identifies potential issues in adopting a strategy for the project-based team in organizations. The paper contributes to the current knowledge by providing the necessary groundwork for further research and development in this area.

Keywords: effectiveness, teamwork, project-based, teams, key indicators

1. Introduction

Teams from different types of organizations must be able to coordinate and cooperate to fully utilize their knowledge and experience to ensure that timely information can be shared and transferred effectively throughout the project life cycle [1]. Project teams are commonly used in organizations and have been widely studied [2]. The objective of this study is to identify and classify the critical indicators of effectiveness in project-based teams acquiring insights into how they influence team outcomes. Moreover, researchers in the area of organization and management have started to utilize Systematic Literature Review (SLR) into their research design [3] to acquire novel insights within the area; we

conduct an SLR to delve into recent high-quality publications to achieve the objective. This study thus provides overview of contemporary theoretical in this sector [4].

2. Methods and Equipment

2.1. Methods

2.1.1. Study Literature Review (SLR)

In this study, we opt to carry out SLR focusing on the leading academic journal that publish research in project management and human resource management. Performing a systematic literature review comprises ten actions within three phases: planning, conducting, and reporting the review [5]. We use nine academic journals as references for this review. We search for full-text articles published from 2012 to 2018 using the terms ``project'' and ``team effectiveness'' within our targeted journals via Google Scholar; the search generates a total of 176 publications. Table 1 shows the initial search of the combined journals from both project and human resources management. The identified publications are then examined based on their titles and abstracts and analyzed based on their content. Figure 1 shows the process utilized to obtain the data for the systematic literature review in this study.

TABLE 1: Keywords, time frame, and targeted journals.

Keywords	Time Frame	Journal	Result
``team effectiveness'' ``project''	2012-2018	International Journal of Project Management	46
		Project Management Journal	13
		International Journal of Managing Projects in Business	14
		Construction Management and Economics	8
		Journal of Cleaner Production	4
		Human Resource Management Review	32
		Organization Science	30
		Management Science	20
		Organization Studies	10
Total			**176**

The 35 articles have gone to further detailed review. We synthesize the identified indicators and consolidate them based on the similarity of their definitions. The identified
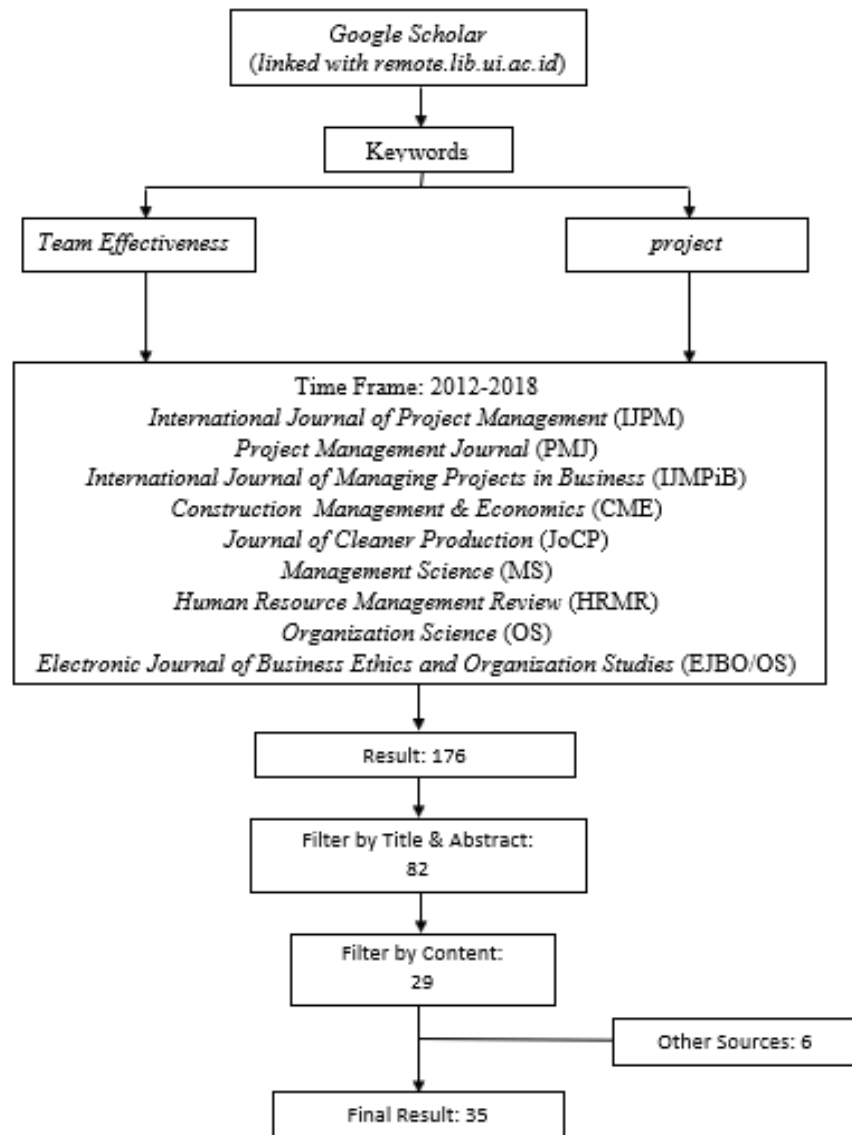
Figure 1: Systematic literature review process.

indicators are associated with project-based teams and considered as the determinant of project success.

3. Results

Our analysis uncovers eighteen critical indicators that can be used to assess team effectiveness as shown in Table 2.

TABLE 2: Key indicators influencing team effectiveness.

Key Indicators	Definition	References
Team Composition and Staffing	The optimal combination of all team members with the right composition	[7], [8], [9], [10], [2], [11], [12], [13], [14], [15]
Information & Communication Technology Systems	Use of the latest technology as a system for team needs in daily work	[8], [9], [16], [17], [11], [16], [17]
Leadership	The ability of leaders to influence their members to achieve goals	[18], [8], [19], [20], [10], [21], [2], [14], [22], [23], [24]
Management Support	Full support and commitment from top management to help the team	[18], [25], [2], [11], [26], [13]
Creativity, Innovation, and Improvement	Encourage innovative thinking that can contribute to improving contribution for teams	[27], [11], [26], [28], [29], [15], [23]
Trust and Respect	All members need to trust each other and be treated equally	[16], [11], [26], [28], [29]
Encouraging Initiative	Motivate all team members to come up with a good and doable idea that can make a positive contribution to the team	[8], [19], [11], [26], [29], [22], [30]
Teamwork	Responsive to changes and uncertainties well during the project	[16], [11], [26], [12], [13], [14], [29], [10]
Security	Ensure the health and safety of members working there (Physiological and psychological safety)	[16], [18], [19], [11], [30]
Information Sharing	Information should be accessible and available to all team members	[7], [11], [26], [12], [31], [29], [22], [23]
Close Monitoring	Ability to record all existing activities, compare with targets and analyze errors and take corrective action	[32], [19], [26], [15], [29]
Common Goals	All members work together and focus on achieving the goals of the project	[2], [11], [26], [29]
Clear Standard and Roles	There are clear standards for doing things and their respective roles are well defined in project activities	[7], [19], [26], [13], [14]
Decision Making and Problem Solving	Empower members with greater responsibilities and more access to resources	[16], [11], [12], [14], [29]
Reward Systems	Compensation, promotion, or bonus is given by the organization in return for good performance.	[8], [2], [12], [10], [30]

Key Indicators	Definition	References
Training	A formal program provided by the organization to develop knowledge, skills, or attitude	[8], [10]
No Organizational Defined Boundaries	Working without an organization's identity will ensure everyone realizes they are part of the team	[9], [29]
``No Blame'' Culture	Problem-solving with collective identification and acceptance of collective responsibility	[16], [11], [29]

4. Discussion

Organizations typically employ project teams to deal with the increasing global competition in the marketplace and the current rapid change in information technology. A project-based team is a temporary entity that executes specific time-constrained tasks and then disbands [6]. The result of the systematic literature review shows that eighteen key indicators are influencing team effectiveness. It is suggested to consider the indicators independently since each one represents a critical element of team effectiveness despite the possibility of interdependence among indicators [1].

5. Conclusion

The consolidated set of key indicators in this review is the first step in the development of team effectiveness in project-based teams. The subsequent step is to validate this set against the views of experienced practitioners.

Furthermore, the question arises whether eighteen indicators are all required in fostering effectivity in a project-based team, or whether a subset of this dominate. Having determined which key indicators to proceed with, further research is required to determine the variables which influence each indicator and suitable measures, preferably objective measures, for their assessment. Researchers can then use a combination of research methods in the form of qualitative methods as well as quantitative methods for each indicator that can help the team development more effectively. Further research may add other potential indicators by extending the time range of the study in order to capture more literature.

Acknowledgement

Conflict of Interest

The authors have no conflict of interest to declare.

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