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SYSTEMATIC LITERATURE REVIEW: FACTORS AFFECTING PROJECT MANAGEMENT SUCCESS

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ABSTRACT

Project management is the main thing that affects the success of projects in various industries. This research aims to analyse the factors that influence the success of project management, the application of influencing factors in project management practices, the impact of the application of information technology, and the adaptation of project management methodologies. The research method applied to overcome this problem is the systematic literature review method. The research results show that factors including communication, leadership, planning, risk management, teamwork, adaptation of project management methodology, and the influence of information technology affect project success. Then the application of information technology and appropriate project management methodologies, such as Agile and Lean, can have a positive impact on project management success. This research is expected to provide guidance and recommendations for practitioners and researchers in the field of project management to achieve greater project success.

Keywords: ***literature review, project management, influencing factors***

1. INTRODUCTION

Effective project management stands as a pivotal factor in the success of projects across various industries (Wolniak, 2022). When executed proficiently, these projects drive organizational success by attaining strategic objectives, cutting costs, enhancing efficiency, and impacting overall organizational performance (Takagi & Varajão, 2019). Key determinants impacting the success of project management encompass communication (Podgórska & Pichlak, 2019), leadership (Ahmadabadi & Heravi, 2019), planning (Al-Baik & Miller, 2019), risk management (Joslin & Müller, 2015), teamwork, adaptation of project management methodologies (Shastri et al., 2021), and the influence of information technology (Turner, 2022). Nonetheless, there remains a necessity to conduct a more comprehensive literature review to furnish more comprehensive guidance for professionals and researchers in this domain. Despite numerous studies on the critical success factors in project management, further exploration is necessary to understand how these elements interplay and significantly impact project success. Moreover, there's a need to delve deeper into how practitioners in project management can leverage this understanding in their projects.

This research is framed around several questions: What are the most influential key factors in project management success, and how do they interrelate? How can project management practitioners apply these key factors' understanding to enhance project success rates? What is the impact of integrating information technology and adopting project management methodologies like Agile and Lean on improving the efficiency and effectiveness of project management?. With consideration of the background and problem formulation provided, this study aims to identify and analyze the primary influential factors contributing to project management success and explore their interrelationships. Additionally, it intends to discuss how project management practitioners can apply their understanding of these key factors to heighten the likelihood of project success. Moreover, the study seeks to elucidate the effects of implementing information technology and adjusting project management methodologies like Agile and Lean on enhancing the efficiency and effectiveness of project management. In order to maintain research focus and prevent over-

extension, this study operates within certain limitations. Its primary concentration lies in a comprehensive review of literature, primarily sourced from journal articles. However, it refrains from engaging in empirical research or specific case studies. The review centers on broad factors influencing project management success rather than delving into industry- or project-type-specific components. While it encompasses information technology and adjustments in project management methodologies like Agile and Lean, it does not extensively explore technical details or conduct detailed comparisons among various project management methodologies. This research, merging background, problem identification, formulation, objectives, and boundaries, aims to offer heightened insights into the pivotal factors impacting project management success. It aspires to furnish practical guidance and recommendations for both practitioners and researchers in this domain.

2. IMPLEMENTATION METHOD

This research aims to understand the factors that influence the success of project management and how the impact of its implementation. The research method used is the systematic literature review (SLR) method using relevant previous research results. This article search uses a database from Google Scholar. On the basis of the research objectives, in searching for relevant articles using the keywords "project management" and "impact of project management implementation".

The systematic stages carried out in analysing the articles obtained are:

a. Stage 1: article search: searching for articles using the keywords "project management" and "the impact of the implementation of project management, which then obtained articles that are relevant and can be reviewed for this study.
b. Stage 2: filtering articles: articles that are not relevant to the research theme are deleted.
c. Stage 3: summarising articles: summarising all articles related to the research theme,
d. Stage 4: analysing articles: carrying out impact analysis of project management implementation.

3. RESULTS AND DISCUSSION

Factors Affecting Project Management Success

Based on a systematic and comprehensive literature review on factors affecting project management success, the researcher was able to identify several key interrelated themes. In this section, the researcher will discuss the results of the analysis and synthesis of the identified literature sources, focusing on the factors that influence project management success, the application of influencing factors in project management practices, the impact of the application of information technology, and the adaptation of project management methodologies. Some of the factors identified from the literature review that influence project management success include communication, leadership, planning, risk management, teamwork, adaptation of project management methodologies, and the influence of information technology (Podgórska & Pichlak, 2019; (Ahmadabadi & Heravi, 2019; Al-Baik & Miller, 2019; Joslin & Müller, 2015; Shastri et al., 2021; Turner, 2022). The following is a discussion of how these factors interact with each other:

1) Communication

Communication is a key foundation in successful project management, playing a crucial role in ensuring clear understanding among all stakeholders (Podgórska & Pichlak, 2019). The following aspects demonstrate its complexity and significance in the context of project management:

a) Open and efficient communication
Open communication is key to preventing misunderstandings among project team members. By communicating efficiently, teams can ensure that vital information is exchanged quickly and in a timely manner, preventing potential roadblocks.

b) Accuracy of Information in Project Communication
The importance of information accuracy in any communication interaction cannot be ignored. Clear and accurate information helps in informational and strategic decision-making, avoiding misinterpretations that can affect the course of the project.

c) Commitment to Team Communication
Team members' commitment to the communication process is an important factor. Through active engagement in the exchange of ideas, questions, and concerns, the team can build a deep understanding of the project and prevent ambiguity from arising.

d) Conflict Management Through Communication
Effective communication can be used as a tool to handle conflict. By opening up open channels of dialogue, team members can address differences of opinion in a constructive way, minimising the negative impact on the project.

e) Technology Integration in Project Communication
The use of modern information technology such as online collaborative platforms and project management software enables more efficient communication (Turner, 2022). The integration of these technologies facilitates real-time information exchange, speeds up the decision-making process, and increases team responsiveness.

f) The communication factor in project management is at the heart of project success. By integrating open communication, information accuracy, team commitment, conflict management, and information technology, project teams can ensure that all stakeholders have a common and deep understanding of the project objectives. Therefore, project management practitioners should prioritise developing communication skills and utilising modern technology tools to achieve optimal project success (Podgórska & Pichlak, 2019; Turner, 2022).

2) Leadership

Leadership plays a crucial role in steering project teams towards success (Ahmadabadi & Heravi, 2019). The following factors discuss in detail the impact of leadership in the context of project management:

a) Visionary Leadership
Visionary leadership creates clear direction and goals for the project team. With a strong vision, the leader is able to inspire and motivate team members, guiding them towards achieving project goals together.

b) Conflict management by leaders Effective leadership involves the ability to manage conflict within the team. Leaders who are able to understand and resolve conflicts in a

constructive way can prevent project disruption and maintain balance among team members.

c) Providing support and motivation
Leaders who are able to provide emotional support and motivation to team members increase their morale and engagement in the project. This creates a positive work environment, increases productivity, and reduces team burnout rates.

d) Adaptability and Flexibility
Leaders who can adapt to change and have flexibility in dealing with project challenges improve the team's ability to overcome obstacles. This adaptability is important given the complexity and dynamics of projects that can change suddenly.

e) Decision-Making Ability
The ability to make decisions quickly and appropriately is an important attribute of leadership in project management. Leaders who are able to evaluate options quickly and make good decisions can minimise delays and optimise the course of the project.

f) Involvement in Team Development
Leaders who are actively involved in the development of team members can improve their skills and competencies.

By providing training and direction, leaders ensure that the team has the necessary resources to achieve project goals.Effective leadership in project management is not just about providing direction but also about creating a work environment that supports, motivates, and develops team members (Ahmadabadi & Heravi, 2019). Leaders who blend strong vision, thoughtful conflict management, emotional support, adaptability, decision-making ability, and involvement in team development can lead projects to success. Therefore, project management practitioners need to develop holistic leadership skills to positively impact the smooth running of the project (Ahmadabadi & Heravi, 2019).

3) Planning

Careful project planning is the cornerstone for successful project implementation and completion (Al-Baik & Miller, 2019). Key factors in project planning can form a solid foundation for effectively achieving project goals:

a) Risk Identification and Risk Management
Thorough project planning involves the proactive identification of potential risks that may affect the course of the project. Effective risk management measures include risk assessment, the development of mitigation strategies, and structured response planning.

b) Efficient Resource Allocation
The project planning process includes efficient resource allocation to ensure that the project can run on schedule and on budget. With a careful determination of human, financial, and material resource requirements, the project team can optimise the use of resources.

c) Setting a realistic time limit
Thorough project planning involves setting realistic time limits for each stage and activity of the project. Setting realistic time limits helps in setting reasonable expectations and minimising the risk of delays.

d) Development of a Structured Project Schedule

The development of a structured project schedule is an important step in project planning. By establishing a logical sequence of project activities, the team can identify the critical path and optimise time allocation.

e) Setting clear and measurable objectives

Project planning includes setting clear and measurable project objectives. These objectives provide clear guidelines for the team members and enable accurate evaluation of project achievements. Thorough project planning is a vital foundation for mitigating risks, managing resources efficiently, and achieving project goals successfully (Al-Baik & Miller, 2019).

By detailing risk identification, efficient resource allocation, setting realistic time limits, developing a structured project schedule, and establishing clear objectives, the project team can increase the chances of overall project success. Therefore, project management practitioners should pay special attention to the planning process to optimise the course of the project (Al-Baik & Miller, 2019).

4) Risk management

Risk management is a critical aspect of ensuring project success and reducing potential negative impacts (Joslin & Müller, 2015). Important factors in effective risk management include:

a) Proactive risk identification

Effective risk management starts with proactive risk identification. The project team needs to identify and analyze potential risks that may arise, including technical risks, environmental risks, and managerial risks.

b) Comprehensive Risk Assessment

After identification, a comprehensive risk assessment is required to quantify the impact and probability of risk occurrence. This involves determining the level of risk and prioritizing it to establish a focus on the most significant risks.

c) Risk Mitigation Strategy Development

At this stage, the project team needs to develop a risk mitigation strategy. This includes determining preventive measures to reduce the likelihood of the risk, as well as response planning to manage negative impacts should the risk occur.

d) Structured Risk Response Planning

Effective risk management involves structured risk response planning. In situations where risks materialise, the project team should have a clear response plan to mitigate the impact and minimise disruption to the project.

e) Continuous monitoring and evaluation

The risk management process should be iterative with continuous monitoring and evaluation. The project team needs to actively monitor the progress of mitigation strategy implementation, evaluate its effectiveness, and make adjustments as necessary.

f) Effective communication about risk

Effective communication about risks among all stakeholders is a key element of successful risk management. Timely and transparent information allows stakeholders to better understand and respond to risks.

Effective risk management is not just about recognizing and avoiding risks; it is also about designing effective response plans and constantly monitoring changes in the project environment (Joslin & Müller, 2015). As such, project management practitioners need to integrate this risk

management cycle into overall project planning and execution. Through a holistic approach to risk management, project teams can increase the chances of project success and reduce the potential negative impacts that may occur (Joslin & Müller, 2015).

5) Teamwork

Teamwork and collaboration are essential elements in achieving project goals (Shastri et al., 2021). Key factors in building effective teamwork include:

a) Open and effective communication
   Teamwork starts with open and effective communication among team members. Teams need to establish communication channels that allow for a smooth exchange of ideas, feedback, and information.
b) Understanding the Roles and Responsibilities of Each Team Member
   Each team member needs to have a clear understanding of their roles and responsibilities. This avoids ambiguity in tasks, prevents overlap, and increases individual accountability.
c) Understanding the Common Goal
   The team needs to have a shared vision of the project goals to ensure that every step taken supports the achievement of the end goal.
d) Synergy in Decision-Making
   Synergy in decision-making creates better and more supportive decisions from the whole team. Promoting the active participation of each team member results in more creative and acceptable solutions for all parties.
e) Wisely Managed Conflict
   In teamwork, conflicts may arise. However, it is important to manage conflict wisely, identify the root cause, and find a solution that satisfies all parties.
f) Trust and Trust Building
   Trust and confidence between team members are the foundations of effective cooperation. Teams need to form strong relationships, understand each other's strengths and weaknesses, and believe that each team member contributes maximally.

Effective teamwork and collaboration are key to achieving high performance in project management (Shastri et al., 2021). Through open communication, clear understanding of roles, shared goals, synergy in decision-making, thoughtful conflict management, and trust building, teams can maximize their potential and overcome project challenges more effectively. Therefore, project management practitioners should focus on building strong teamwork to achieve optimal project success (Shastri et al., 2021).

6) Adaptation of project management methodology

Project management methodology adaptation is a critical step in customizing the project approach to the unique needs and dynamics of a particular project (Shastri et al., 2021) & Setiawan, 2014). Key factors in methodology adaptation include:

a) Analysis of Project Characteristics
   The first step in methodology adaptation is to conduct an in-depth analysis of the project characteristics. Factors such as the scale of the project, complexity, and nature of change can influence the selection of the most suitable methodology.
b) Methodological Flexibility

A successful project management methodology must be flexible and adaptable to project dynamics. This flexibility allows the project team to adjust processes and practices according to the changing needs and environment of the project.

c) Selection of the Right Management Model
Methodology adaptation involves selecting a management model that suits the nature and objectives of the project. Models such as Agile, Lean, or Waterfall can be selected based on the specific needs of the project.

d) Team Commitment to Change
Team commitment to change is key to successful methodology adaptation. All team members need to be actively involved in the adaptation process, realize the benefits of the change, and be willing to implement it.

e) Performance monitoring and continuous learning
After implementation, performance monitoring and continuous learning are required to evaluate the effectiveness of the methodology adaptation. Feedback from the team and stakeholders can be used to make the necessary adjustments.

f) Supporting technology integration
Methodology adaptation also involves the integration of supporting technologies, such as appropriate project management software. The use of technology can improve efficiency, communication, and overall project tracking.

Adapting project management methodologies is a smart approach to addressing the unique challenges and changes that may occur within a project (Shastri et al., 2021). By conducting thorough analyses, selecting the right management model, ensuring team commitment, monitoring performance, and integrating technology, project teams can increase flexibility, responsiveness, and overall project success. Therefore, project management practitioners need to understand the importance of methodology adaptation and implement it as an integral part of their project management strategy (Shastri et al., 2021).

7) The influence of information technology

The influence of information technology in project management cannot be ignored, bringing significant changes in the way projects are planned, executed, and evaluated (Turner, 2022). Some important aspects that reflect the impact of information technology in project management include:

a) Accelerating communication and collaboration
The use of information technology accelerates communication and collaboration among project team members, regardless of their physical location. Online collaborative platforms, email, and other communication tools facilitate real-time information exchange, increasing team responsiveness.

b) Real-time project monitoring
Technology-based project management systems enable real-time project monitoring. This monitoring allows project teams to track progress, identify potential problems, and take corrective action quickly.

c) Data and Information Integration

d) Information technology enables the integration of data and information from various sources into a single platform. This results in better and more accurate decision-making as stakeholders have access to consistent and up-to-date data.

e) Project Management and Process Automation

The application of information technology brings automation to many aspects of project management. From scheduling to reporting, automation speeds up processes and reduces the risk of human error.

f) Use of Project Management Tools

Project management software provides powerful tools for project planning, tracking, and reporting. The use of these tools makes it easier to manage tasks, resources, and risks, increasing overall efficiency.

g) Adopt the latest project management methodology.

Information technology supports the adoption of the latest project management methodologies such as Agile and Lean. It enables greater flexibility and responsiveness to change, ensuring projects can adapt quickly to market dynamics and customer needs.

The influence of information technology has fundamentally changed the project management landscape, bringing positive changes in efficiency, communication, and responsiveness (Turner, 2022). Therefore, project management practitioners need to continue to capitalize on developments in information technology and integrate them into their project management strategies to increase the chances of project success (Turner, 2022).

Application of Influencing Factors in Project Management Practice

The implementation of these influencing factors in project management practice is a crucial step to achieving project success and maximizing its outcomes. The following is a detailed description of how these factors are implemented in project management practice:

1. Communication

   Implementing effective communication involves building open and transparent communication channels among project team members (Podgórska & Pichlak, 2019). This includes regular meetings, the use of online collaboration tools, and communication approaches that are accessible to the entire team. By doing so, information can be conveyed clearly, reducing the risk of misunderstandings and ensuring that all team members have a uniform vision of the project.

2. Leadership

   Leadership implementation involves developing leaders who are visionary, adaptive, and able to motivate the team (Ahmadabadi & Heravi, 2019). Leaders must ensure that each team member understands the project goals, has a clear role, and feels supported in overcoming challenges. By leading by example, providing emotional support, and managing conflict wisely, leaders can create a productive work environment.

3. Planning

   The implementation of sound project planning involves proactive identification of risks, efficient allocation of resources, and setting realistic deadlines (Al-Baik & Miller, 2019). Project teams need to develop a structured schedule, set clear and measurable goals, and ensure that each team member understands their roles and responsibilities. Through careful planning, the team can reduce uncertainty and increase the chances of project success.

4. Risk Management

   Effective risk management implementation involves comprehensive risk identification, mitigation strategy development, and structured response planning (Joslin & Müller, 2015). Project teams need to continuously monitor and evaluate risks and effectively

communicate risk management strategies to all stakeholders. By doing so, the team can overcome potential obstacles and respond quickly to changes in the project environment.

5. Teamwork and collaboration
   The implementation of teamwork and collaboration involves open communication, a clear understanding of roles, and an understanding of common goals (Shastri et al., 2021). Teams need to build trust, manage conflict wisely, and create a work environment that supports innovation. By promoting synergy in decision-making and empowering each team member, collaboration can increase team productivity and creativity.
6. Adaptation of Project Management Methodology
   The implementation of project management methodology adaptation involves analyzing project characteristics, selecting an appropriate management model, and integrating supporting technology (Shastri et al., 2021). Project teams need to be willing to adapt to change, select management methods that are most relevant to project needs, and integrate information technology to improve efficiency and responsiveness.
7. Influence of Information Technology
   The application of information technology influences includes accelerated communication, real-time project monitoring, data integration, and automation of project management processes (Turner, 2022). Teams need to adopt appropriate project management software, ensure access to up-to-date information, and utilize tools and technology to improve productivity and accuracy.

Through the holistic application of these factors, project management practitioners can more effectively achieve project success and improve overall team performance. Therefore, careful integration and application of each factor are key to successfully achieving project goals.

Impact of Information Technology Implementation and Adaptation of Project Management Methodology

The application of information technology and the adaptation of project management methodologies have a significant impact on the efficiency and effectiveness of project implementation. The following is a detailed description of the positive impact of implementing these two aspects in project management practices:

1. Improved Operational Efficiency (Turner, 2022)
   The implementation of information technology brings about changes in the way projects are managed and executed, resulting in improved overall operational efficiency (Turner, 2022). Technology-based project management systems allow teams to automate routine tasks, such as scheduling, tracking, and reporting, reducing manual workload and increasing productivity.
2. More Accurate and Real-time Project Monitoring (Turner, 2022)
   The application of information technology enables real-time project monitoring, giving stakeholders instant access to current data (Turner, 2022). This helps project teams identify changes or issues quickly, enabling faster and more responsive decision-making.
3. Consistent data integration (Turner, 2022)
   Information technology supports the consistent integration of data from multiple sources on a single platform (Turner, 2022). This eliminates the potential for human error in data management and ensures that all stakeholders have access to accurate and uniform information.

4. Fleksibilitas dan Responsivitas Lebih Tinggi (Shastri et al., 2021)
   Adaptasi metodologi manajemen proyek, terutama dengan menerapkan metodologi Agile dan Lean, memberikan fleksibilitas dan responsivitas yang lebih tinggi terhadap perubahan kebutuhan proyek (Shastri et al., 2021). Tim dapat lebih mudah menyesuaikan diri dengan perubahan dalam persyaratan proyek atau lingkungan bisnis, memastikan proyek tetap relevan dan sukses.
5. Increased Collaboration (Shastri et al., 2021)
   The application of information technology supports better collaboration among project team members, regardless of their physical location (Shastri et al., 2021). Online collaboration tools enable the real-time exchange of ideas and information, increase team engagement, and promote synergy in decision-making.
6. Improved Informed Decision Making (Turner, 2022)
   With the adoption of information technology, decision-making in project management is supported by richer and more informative data (Turner, 2022). In-depth data analysis can help project teams make smarter decisions, identify trends, and optimize project strategies.
7. Adapt to Change Quickly (Shastri et al., 2021)
   Adaptable project management methodologies, such as Agile, allow teams to respond more quickly to changing customer or market needs (Shastri et al., 2021). This ensures that projects remain relevant and add value even in a dynamic business environment.
8. Cost and Time Savings (Turner, 2022)
   The efficiencies resulting from the application of information technology and the adaptation of project management methodologies can lead to cost and time savings (Turner, 2022). By automating processes, reducing human error, and increasing productivity, projects can be completed more efficiently and economically.

Through the application of information technology and the adaptation of project management methodologies, project management practitioners can enhance team capabilities, optimize project management, and increase the chances of overall project success. By continuously utilizing the latest technological developments and methodologies, practitioners can ensure that their projects remain competitive and relevant in an ever-changing marketplace.

4. CONCLUSION

Based on the problem formulation and research objectives, as well as the results and discussions that have been carried out, the conclusions that can be drawn are as follows:

1. Influencing Factors in Successful Project Management
   The key factors that are most influential in successful project management, such as communication, leadership, planning, risk management, teamwork, adaptation of project management methodologies, and the influence of information technology, have a central role in achieving an organization's strategic goals. The interaction between these factors not only affects individual project outcomes but also becomes a critical element in achieving overall project success.
2. Application of Influencing Factors in Project Management Practice
   In implementing the key factors in project management practices, practitioners are expected to devise a comprehensive strategy. This includes ensuring effective collaboration between team members and utilizing information technology as a tool to improve the efficiency and effectiveness of project management. The importance of an in-depth

understanding of the interactions between the key factors is also emphasized, emphasizing that project success relies on a holistic understanding of these factors.

3. Positive Impact of Information Technology Implementation and Project Management Methodology Adaptation

   The application of information technology and the adaptation of project management methodologies, such as Agile and Lean, have a positive impact on project management success. However, this success depends not only on the adoption of certain technologies and methodologies but also on the extent to which the key factors that have been identified in this research are applied in the project context. Therefore, practitioners and researchers in the field of project management are encouraged to continue to develop knowledge of these factors in order to achieve greater project success.

Overall, this research provides important insights into the key factors that influence project management success and how the interaction between these factors can affect project outcomes. Hopefully, the results of this study can provide valuable guidance and recommendations for practitioners and researchers in the field of project management to achieve greater project success.

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