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Use of Social Media Tools within Project Management Teams:

Benefits, Drawbacks and Effective Implementation

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08th May 2023

Abstract

Social media tools have emerged as a popular communication tool for team collaboration, task management, and knowledge sharing within project management teams. However, the benefits and drawbacks of using social media tools in project management teams are not yet fully understood. This research project explores the use of social media tools within project management teams, its impact on team performance, and the factors that influence its effective implementation. Results of a survey of 57 project managers and team members suggest that the role of social media has evolved significantly, from being a simple means of socialising to becoming a crucial instrument for team collaboration and productivity. This discovery corresponds with the increasing prevalence of digital transformation in workplaces, emphasising the significance of utilising technology to enhance team performance.

Declaration

I, Maria Camila Maldonado Baracaldo, hereby declare that the work presented in this dissertation is entirely my own work and that all sources consulted and materials used in the research process have been properly and accurately acknowledged.

I confirm that any assistance received in the preparation of this dissertation is clearly acknowledged, and that this work has not been previously submitted for any other academic award at any other institution.

I certify that the content of this dissertation represents my own personal views and research findings, and that it does not infringe upon the intellectual property rights of any third party.

Signature: Maria Camila Maldonado Baracaldo

Date: 08th May 2023

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1. Introduction

Project management refers to the "identification and application of best practices" (Daemi et al., 2020) to successfully accomplish projects within the predetermined criteria, while effectively managing available resources such as money, time, quality standards, clients' expectations and production details. It is a complex and multifaceted process that requires a combination of technical skills, interpersonal communication, and effective collaboration to ensure success. The process of project management involves a number of key steps, including planning, organising, executing, controlling, and closing the project. The project manager is responsible for overseeing the project team, throughout the project, ensuring that all tasks are completed within budget and on time while managing the overall project timeline.

Project managers aim to control, oversee and ensure that projects are running on time and within the established budget. They are responsible for overseeing the project from inception to completion and ensuring that all stakeholders' requirements are met, in fact, one of the key challenges faced by project management teams is the need to balance the competing demands of time, cost, and quality while ensuring that the project's objectives are achieved.

In order to achieve this balance, project managers must have a strategic mindset and the ability to carefully prioritise tasks and allocate resources in the most efficient and effective way possible. This requires careful planning, constant monitoring, and timely interventions to ensure the project's progress remains on schedule. Additionally, project managers must possess excellent communication skills to guarantee that all stakeholders are informed of the project's status and any potential problems that may arise.

The advancement of technology has drastically transformed the way project management is conducted. In the past, project managers relied on traditional methods such as spreadsheets, emails, and meetings to manage projects. However, in recent years, project management has undergone a technological revolution, resulting in the emergence of a range of innovative tools designed to enhance project outcomes and team performance. One such tool is social media, which has become a game-changer in the field of project management.

When thinking of social media, the first thing that comes to mind are sites like Twitter, Instagram and Facebook which do not initially seem to make much sense for project management since they are mainly used for brand promotion and public sharing. However, social media encompasses way more than that, it refers to any platform that enables users to create and share content as well as network and connect with each other.

When we hear the term "social media", our minds often jump to popular platforms such as Twitter, Instagram, and Facebook, which are primarily utilised for brand marketing and public sharing. At first glance, these platforms may not appear to be ideal for project management purposes. However, social media is much more than just these platforms. In essence, it encompasses any platform that enables users to create and share content, as well as connect and network with others. Thus, while traditional social media platforms may not be tailored to the needs of project management, other social media tools with features such as team collaboration and project tracking can prove to be powerful tools for managing and executing projects.

Social media tools, such as Slack, Miro and Microsoft Teams, have revolutionised the way in which people interact, communicate and collaborate. They provide a powerful platform for project teams to share information, communicate, and coordinate their efforts. With the use of social media tools, project managers can easily connect with team members regardless of their location or time zone. This is particularly useful for global teams working on projects across different geographical regions.

Furthermore, social media also has the potential to serve as a tool for knowledge management. Project managers can make use of social media tools and platforms to share best practices, lessons learned, and other useful information that can help improve project outcomes. This can be particularly useful for organisations that run multiple projects, as it allows project teams to learn from each other and leverage their collective knowledge. As Silvius (2016) notes, project teams and project management can greatly benefit from utilising social media tools, which present numerous opportunities for implementation, and it is likely that its use will only continue to grow in the future.

Social media can be described as online platforms and websites that enable users to create, share, and interact with content and other users. McFarland and Ployhart (2015) define social media as digital Web 2.0 platforms that enable users to interact and connect with each other, share content and build communities, through different applications that exist completely on the Internet (web-based) or through portals that can access the Internet (mobile-based). It is worth noting that the usage of social media extends far beyond personal communication and networking and new social media applications and types are continuously being created and what they all have in common is they are all built on the technology of Web 2.0, which means it allows a large numbers of users to create, share and obtain content, this is what differences them from older forms of Web 1.0 communication such as email and text messaging which are more linear when it comes to content distribution and don't support large and highly interactive networks. In modern

communication, social media has become an essential part, changing the way people engage and interact with one another, conduct businesses and consume information.

In today's fast-paced and technology-driven world, project management teams face new challenges in managing projects efficiently and effectively, and with technology playing an increasingly important role in the way we approach and execute projects, it has become increasingly common for project management teams to make use of a range of tools that are available to them in order to be able to manage projects and to increase efficiency and effectiveness. These tools can range from dedicated and specialised project management software to the use of common and widely used platforms, and one of the emerging trends in project management is the use of social media tools for team communication, coordination and collaboration.

The use of social media tools within project management teams offers a number of significant benefits. First and foremost, social media tools provide a user-friendly and interactive platform that enables team members to share information, coordinate tasks, and collaborate together on projects in real time, irrespective of their geographic location or time zone. The use of social media tools such as Yammer, Hive, Teams or Trello can help to reduce delays and improve overall project efficiency, as team members can work together more seamlessly and with greater flexibility. Social media tools can also help to improve communication and collaboration between team members, particularly in complex or large-scale projects where communication can often be a challenge. By providing a central hub for team communication, social media tools can help to guarantee that all team members are in sync and working towards the same goals and objectives.

Overall, the use of social media tools within project management teams represents an exciting development in the field of project management. By harnessing the power of these tools, project managers can improve collaboration, communication, and overall project outcomes, while also reducing the administrative burden associated with traditional project management practices. As such, there is a growing need for research that explores the intersection of social media tools and project management, and how teams and projects can use social media tools effectively to achieve their goals.

However, as with any new technology, there are challenges and risks associated with the use of social media tools, these include concerns around privacy, security issues, and information overload. In order to mitigate these risks, project managers must take care to implement appropriate security measures and ensure that team members are using social media tools in a responsible and effective way.

This research project aims to investigate the use of social media tools within project management teams, its benefits and drawbacks, and the factors that influence its effective implementation. The study will explore how project managers and team members use social media tools for communication, coordination, and collaboration, and how it impacts team performance, productivity, and satisfaction.

By providing insights into the use of social media tools within project management teams, this research project will contribute to the development of best practices for virtual team collaboration and effective project management. The findings of this study will be of interest to project managers, team members, and organisations that seek to leverage social media tools for improved project outcomes and enhanced team performance. Ultimately, the study will contribute to the development of best practices for virtual team collaboration and effective project management.

2. Literature review

The purpose of this literature review is to bring together and synthesise the available information regarding the research question *'What are the benefits and drawbacks of using social media tools for team collaboration within project management teams, and what factors influence its effective implementation and impact on team performance, productivity, and satisfaction?'*.

To ensure a rigorous and focused search, the literature review was conducted based on specific criteria regarding the extent of the search. The scope of the search was limited to the use of social media tools within project management; the use of social media tools in all other areas was excluded from the search. The research for literature was done in English, from 2010 onwards and included only peer reviewed articles and publications. The literature research was done using various reputable and reliable databases , including the National College of Ireland Library's database, Google Scholar and Academia. The filters and parameters used to conduct the research are summarised in *Table 1*.

Once the search was conducted based on the predetermined parameters, the articles were thoroughly read and validated against the research question to ensure that only the most relevant information was extracted and discard the irrelevant literature, in doing so, a rigorous and systematic approach was taken to ensure that the information gathered was credible, reliable, and met the research objectives.

Table 1. Literature research criteria

Criteria	Inclusion
Subject matter	Social media within project management teams
Language	English
Type of publication	Peer reviewed articles and publications
Dates	2010 - 2023
Search engine	National College of Ireland Library database Google Scholar Academia

After identifying articles that were relevant to the research, the works it cited in those articles were reviewed to identify additional information and expand the scope of the search. Through these methods a comprehensive list of 36 articles was selected and utilised for the research. These articles were carefully scrutinised to ensure that they met the research objectives and provided the necessary insights into the topic at hand.

This literature review will be divided into four main sections: social media tools, advantages and challenges of social media tools in project management teams, effective implementation of social media tools and general conclusions. The social media tools section will provide an overview of the different social media tools used in project management teams. This section will explore the features, functionalities, and benefits of each tool and their applicability to project management.

The advantages and challenges of social media tools in project management teams section will examine the impact of social media tools on team communication, collaboration, and productivity. Additionally, it will explore the challenges that may arise when implementing the use of social media tools in project management teams, such as data privacy and security concerns.

The effective implementation of social media tools section will focus on the factors that influence the successful implementation of social media tools in project management teams. This section will analyse the best practices for introducing social media tools into a team's workflow and how to overcome potential challenges that may arise during implementation.

Finally, the general conclusions section will provide a summary of the key findings and highlight the major takeaways from the literature review. It will also identify any gaps in the research and offer recommendations for future studies in this field.

2.1. Social media tools

Over the past decade, the emergence of social media has revolutionised the way people connect and interact with each other online. Despite its widespread usage, there has been a significant lack of research on the subject, some studies have delved into specific platforms like Facebook, LinkedIn or Instagram (Treem and Leonardi, 2012), and while there is value to this research, it most likely will result in a fragmented and insufficient understanding of social media tools, it is also essential to recognise that social media encompasses much more than just these individual platforms. In light of this, there is an urgent need to conduct research that explores the full range of social media tools available today. To that end, this article will discuss the use of *social media tools* which will refer to any software, applications or services that function through the Internet and through devices with access to it.

Social media tools are software applications or platforms that allow users to create and share content, as well as interact with each other through the Internet or through portals that have access to the Internet (McFarland and Ployhart 2015; Kaplan and Haenlein 2010) such as phones or tablets. These tools can help individuals and organisations manage their work more efficiently and effectively and can be organised in different categories like instant messaging tools, document sharing tools, task management tools, virtual meeting tools or team building tools, among others. In fact, according to Wang et al. (2020), social media are web based platforms that are designed to support socialisation and information exchange fostering interactive dialogue between employees. Whether used by individuals or teams, social media tools are a valuable resource.

However, McFarland and Ployhart (2015) argue that social media is not just a technology but can also provide a distinct context that varies from the traditional face-to-face and other digital ways of communication and interaction such as email in a number of significant ways, one of which is, these traditional ways of communication do not allow multiple users to manipulate and change the posted content, social media tools on the other hand are much more "open, interactive, fluid and dynamic" (McFarland and Ployhart, 2015).

In recent years, social media has become more prevalent in workplaces and businesses (Hysa et al., 2019) for different purposes and serving various functions, and although less common in project managementn(Daemi, Chugh and Kanagarajoo, 2020), it has been implemented in this area as well (Ngai, Tao and Moon 2015; Ngai et al. 2015). In fact, according to Rosa et al. (2016) 54.5 percent of companies employ some form of social media tool in their project management process, and businesses will only continue to invest in enterprise social media (Young et al. 2008, cited in Treem and Leonardi 2012). Similarly, a

survey conducted by Safko (2012) discovered that 99.1 percent of respondents "knew social media was going to have a significant impact on them personally and their businesses" (p.4).

Social media tools can be very helpful in project management, especially when it comes to communication and collaboration among team members. An overview of some of the most commonly used social media tools within project management teams is presented next:

- Slack: Slack is a cloud-based messaging and collaboration platform that is designed to make team communication more efficient and organised. It allows team members to communicate in real-time through channels, direct messages, and voice or video calls. It has features such as group chats, file sharing, and integrations with other tools, such as Trello, Google Drive, and Zoom, for easier collaboration. Slack has become a popular tool for remote and distributed teams as it allows for easy and efficient communication and collaboration regardless of location. (Slack, 2019)
- Trello: Trello is a web-based project management and collaboration tool that uses boards, lists, and cards to help both people and teams in the organisation and prioritisation of tasks and projects. Trello's boards are like virtual whiteboards where users can create lists, which reflect the different stages of a project or workflow, and then add cards to each list. Cards can contain information such as task descriptions, due dates, attachments, comments, and labels. It also allows integrations with other tools such as Slack, Google Drive, and Jira, allowing teams to seamlessly incorporate Trello into their existing workflows. (Trello, 2019)
- Asana: Asana is a cloud-based project management tool that allows teams to organise, track, and manage tasks and projects in real-time. It allows users to create and assign tasks, set due dates, and track progress on each task, users can also create projects to group related tasks together, track progress on a larger scale, and collaborate with team members. Asana integrates with a wide range of other tools and services and is designed to be flexible and scalable with an intuitive interface. (Asana, 2019)
- Basecamp: Basecamp is an all-in-one project management and team communication tool designed to help teams collaborate and stay organised. Its key features include project management, team communication, task management, file sharing, scheduling, and time tracking. With Basecamp, teams can create to-do lists, share files and documents, chat with team members, schedule meetings and deadlines, and track time spent on tasks. Basecamp's intuitive interface and centralised platform make it easy for teams to manage projects and collaborate on tasks, and its flexibility allows it to be used for a wide range of projects and team sizes. (Basecamp, 2019)
- Microsoft Teams: Microsoft Teams is a collaboration platform that offers a range of features to help teams work together and communicate effectively. Its key features

include chat and instant messaging, video and audio conferencing, file sharing and collaboration, app integration, and project management tools. With Teams, users can create channels for different projects or topics, share files and collaborate on documents in real-time, and integrate with other Microsoft and third-party tools such as Outlook, OneNote, and Trello. Teams also allows for customisable notifications and security settings to ensure teams are always up-to-date and secure. (Microsoft, 2021)

- Miro: Miro is a cloud-based collaboration and white-boarding tool that allows teams to collaborate visually in real-time. Its key features include digital whiteboards, sticky notes, diagrams, mind maps, wireframes, and more. With Miro, teams can create and collaborate on visual diagrams, brainstorm ideas, organise information, and create user flows. Miro also offers a variety of templates and integrations with other tools such as Slack, Trello, and Google Drive. With its flexible and customisable interface, Miro is suitable for a wide range of projects and teams, and can help teams work more efficiently by visualising and streamlining their workflows. (Miro, 2023)

- Zoom: Zoom is a video conferencing and online meeting platform that offers a range of features to facilitate virtual collaboration and communication. Its key features include video and audio conferencing, screen sharing, virtual backgrounds, recording and transcripts, and the ability to schedule and host webinars. Zoom also offers a range of collaboration tools, such as virtual whiteboards and breakout rooms, which allow teams to collaborate and work together in real-time. With Zoom, users can join meetings from anywhere, on any device, and the platform offers high-quality audio and video, as well as security features such as waiting rooms and password protection. Overall, Zoom is a comprehensive tool for virtual collaboration and communication that can help teams work together effectively and efficiently, regardless of their location. (Zoom Video Communications, 2018)

2.2. Advantages and challenges of social media tools in project management teams

While the use of social media tools in project management is still a relatively new concept, there is already an interesting, although limited, body of research suggesting that these tools can have a positive impact on project outcomes. For example, studies have shown that social media tools can improve team communication, enhance knowledge sharing, and increase project visibility (McFarland and Ployhart 2015; Treem and Leonardi 2012, Paul et al. 2016), all of which are crucial components of successful project management. A shared aspect among all of the articles was that, even though the introduction of social media tools within a project management setting is relatively new (Hysa et al., 2019), all authors concurred that using such tools in project management was beneficial for the managers and for the organisations.

Multiple studies have found that the use of social media tools improved the communication and collaboration among team members (Gignac 2012; Ngai Tao and Moon, 2015; Ngai, Moon, Lam, Chin and Tao 2015). Such is the case of a study by McFarland and Ployhart (2015), which found social media tools to be relevant in building leadership, teamwork and organisational culture since they are "fundamentally about connecting people and information through relationships" (p.1671), these tools were useful for building trust among team members and improving their coordination as well as enabling virtual teams. Social media tools were also recognised as having the potential to improve the team's synergy, whether it be virtual or on site, and to foster trust and rapid communication and response times (Kanagarajoo et al., 2020), "when multinational teams are managed effectively, project managers can obtain competitive advantages in various ways." (Zwikael et al., 2022). In their study, Kanagarajoo et al. (2020) also concluded that social media tools can expedite the completion of less complex tasks, while more complex tasks still require face-to-face communication but could still benefit from the use of social media tools like video conferencing and screen sharing.

One of the primary benefits of using social media tools within project management teams is that they provide a platform for real-time communication and make information available seamlessly (Ray 2014; Kane 2017). According to a study by Kwak, et al. (2010), social media tools, such as Microsoft Teams, allow project managers to quickly disseminate information to team members, more so than email, this can help in the timely resolution of issues and the avoidance of delays.

Another benefit of using social media tools within project management teams is that they provide a platform for collaboration that allows for persistent information and communications (De Souza Santana and Dai Prá Martens, 2021). Kanagarajoo et al. (2020) highlight that social media tools provide quicker and simpler means of obtaining information whether through individual or group communication, as noted by Ray (2014), they "facilitate effective knowledge management" (Kanagarajoo et al., 2020), and result in more efficient decision-making and enhanced team communication (Steen at al., 2022; Kanagarajoo et al. 2020; Daemi et al. 2020; Hysa et al. 2019). Moreover, papers by Lee and Kim (2010) and Treem and Leonardi (2012) emphasise that social media tools can create a shared repository of knowledge and best practices, and having this information be easily located and accessed by other team members, allows them to learn from each other and avoid making the same mistakes.

"When information and communications are persistent, content can be reused and reanalysed over time," (Treem and Leonardi, 2012) making it more useful and robust. This is particularly beneficial for project management teams as it allows them to continuously

improve their processes and outcomes. Additionally, because social media tools are accessible to more users from all over the world in real-time, the posted content will still be searchable in the future, offering great potential for leadership and team building (McFarland and Ployhart, 2015). As noted in a study interview with Microsoft employees, "ideas that were previously unarticulated or hidden in personal archives become visible, interlinked, and searchable" (Efimova and Grunion 2008, cited in Treem and Leonardi 2012). Thus, social media tools may be more effective and useful than conventional methods, enabling project management teams to leverage the power of persistent content to achieve their goals.

In a similar way, a study conducted by Zhang, Qu, Cody, and Wu in 2010 explored the use of Yammer, a microblogging tool, by employees within a Fortune 500 company. Through manual coding of 300 Yammer messages, the findings suggest that Yammer provided a platform for employees to publish local news at the corporate level, which was previously difficult to do. The researchers noted that the communal nature of the tool facilitated this exchange of information and allowed for greater transparency within the organisation. Overall, the study highlights the potential benefits of social media tools for enhancing communication and collaboration within companies, particularly for disseminating internal news and updates.

The benefits of social media tools within project management teams go beyond just enhancing communication and collaboration, as highlighted in a study conducted by Daemi et al. (2020). According to the authors, incorporating social media tools into project management activities can lead to significant improvements in productivity, increasing it by 25 percent, while generating up to $1.3 trillion globally as annual value. Other studies have highlighted additional advantages of using social media tools in project management, including leveraging collective intelligence for decision-making, reducing costs, modeling processes, and enhancing the effectiveness of virtual communication and group dynamics (Daemi et al. 2020; De Souza et al. 2021; Kanagarajoo et al. 2020). In addition, the ease of adoption of social media tools, as pointed out by Whited (2016), is another factor contributing to their increasing use, their availability on various devices and low cost of adoption also make them an attractive option for businesses looking to improve their operations (Kanagarajoo et al., 2020).

Moreover, it facilitates the project by enabling multicultural teams that foster and stimulate new ideas within the project (Hysa et al., 2019), it also allows to employ "highly skilled and competent workers" (Kanagarajoo et al., 2020) regardless of their geographical location (McFarland and Ployhart, 2015), this offers a better chance at having a better balance of competencies that are needed to successfully complete projects.

However, the use of social media tools within project management teams also has some challenges. One of the primary challenges is the need to ensure data security and privacy. According to Daemi et al., (2020) the biggest threats social media tools bring are decreased employee productivity, reduced privacy of information (Hysa et al., 2019), and potential harm to reputation. One reason for decreased productivity can be the significant amount of data generated when using social media tools which can overwhelm users (Harrin 2010; Hysa et al. 2019), another consequence of this is that the content and information integrated into social media tools can eventually become unwieldy and redundant and make it more difficult to search and find relevant information in a timely manner (Treem and Leonardi 2012; McFarland and Ployhart 2015).

In terms of privacy concerns, there are worries about the safe and secure implementation of social media tools. These concerns center around the risk of compromising privacy and confidentiality, as well as the quality of the information being shared. Kanagarajoo et al. (2020) recommended that for tasks that require confidentiality and data security, human management is preferable over technology.

One additional challenge of using social media tools within project management teams is the potential for miscommunication and misunderstandings due to the lack of nonverbal cues that are present in face-to-face interactions (Kanagarajoo et al., 2020). This can lead to conflicts and delays in project completion. Moreover, the use of social media tools may also make it easier for groups or teams to split up into smaller sub-groups leading to the development of "in- and out-groups" (McFarland and Ployhart, 2015) and leaders may lose their ability to influence and regulate culture and norms.

Due to the fact that there are varying preferences of social media tools depending on the country or region poses a challenge when adopting the use of social media tools specifically for virtual teams. Additionally, some social media platforms may be banned in certain countries, which further complicates the adoption of these tools. (Kanagarajoo et al., 2020).

2.3. Effective implementation of social media tools

As social media continues to become increasingly integrated into our daily lives, managers are faced with the task of determining whether and how their firms should use social media tools for organisational purposes, however, this task is not without its challenges. One of the biggest challenges managers face is navigating the complex legal landscape surrounding social media use. As McFarland and Ployhart (2015) note, social media contexts are believed to be so different from conventional contexts that new laws and legal guidelines are being established to govern their use. One of the reasons why the legal

landscape surrounding social media is so complex is that social media contexts require new interpretations of existing standards, principles, and practices, they continue to explain that that the traditional legal and ethical frameworks for organisational communication are inadequate to address the unique challenges posed by the use of social media tools.

To successfully integrate social media tools into project management, it is crucial to develop a comprehensive adoption strategy. However, as Daemi et al. (2020) point out, the lack of an adoption strategy is currently the biggest hurdle to widespread adoption of social media tools in a project management setting. Without a clear plan for how social media tools will be used and what its benefits will be, it is likely that its potential will not be fully realised.

Despite these challenges, there are organisations working to help managers navigate the complex legal landscape of social media. For example, the National Labor Review Board has taken a proactive stance on social media use and is working to influence the evolving legislation around its use   Additionally, reports and press statements from regulatory agencies, such as the Equal Employment Opportunity Commission, have been made available to help employers understand their legal obligations when utilising social media. By staying up to date with these developments, managers can ensure that their use of social media is both legal and ethical.

2.4. General conclusions

In conclusion, the use of social media tools within project management teams has both benefits and challenges. While social media tools provide a platform for real-time communication and collaboration, they also present potential risks associated with data security and privacy. Project managers should carefully consider these factors before deciding to use social media tools within their teams.

Additionally, the use of social media tools in a project management setting is not yet widespread (Kanagarajoo et al., 2020), especially when compared to the significant growth and overall development that social media has had in the previous years (Hysa et al., 2019). More research is needed to understand the long-term effects of using social media tools within project management teams.

For this reason, there are still no controlled guidelines and strategies for the effective integration and ulitisation of social media tools into project management, and take full advantage of its resources and opportunities to simplify tasks while mitigating the risks associated with its use. As a result, there is a need to evaluate the impact of social media tools on project management to fully comprehend their influence on project success and

potential risks. At the same time, this assessment can provide valuable insights for developing comprehensive guidelines and appropriate strategies for incorporating social media tools into project management practices.

De Souza et al. (2021) suggest that additional research is required to better understand the motivations behind the adoption of digital technologies such as social media in project management. "Further studies, particularly case studies that shed a real-world perspective, are required to explore the integration of social media in project management" (Daemi et al., 2020).

3. Research Question

The primary objective of this research project is to conduct an in-depth investigation into the increasingly pervasive use of social media tools within project management teams. The study aims to provide a comprehensive understanding of the potential benefits and drawbacks of integrating social media tools into project management teams, as well as the factors that significantly impact its effective implementation.

To accomplish this, the research will delve into how project managers and team members utilise social media tools for communication, coordination, and collaboration. Specifically, the study aims to examine how the use of social media tools affects team performance, productivity, and satisfaction.

In order to investigate the use of social media tools within project management teams, this research project poses the following research question: What are the benefits and drawbacks of using social media tools for team collaboration within project management teams, and what factors influence its effective implementation and impact on team performance, productivity, and satisfaction?

Given the rapidly growing popularity of social media platforms and tools, it has become increasingly important to investigate how project management teams can leverage these tools to streamline their operations and achieve better outcomes. Consequently, this research project is critical in providing valuable insights into the challenges and opportunities that arise from integrating social media tools into project management processes.

The research project aims to go beyond simply identifying the benefits and drawbacks of integrating social media tools into project management teams. Ultimately, it aims to identify and provide practical recommendations and best practices for project managers and team members to optimise the use of social media tools while minimising potential risks and pitfalls.

This research project will contribute to the advancement of knowledge in the field of project management, providing a foundation for future research in this area. The findings from this study will be of great interest to project management practitioners, academics, and researchers alike, as it will provide insights into the effective integration and implementation of social media tools into project management teams.

4. Methodology

As previously stated this research will address the question *'What are the benefits and drawbacks of using social media tools for team collaboration within project management teams, and what factors influence its effective implementation and impact on team performance, productivity, and satisfaction?'*.

To achieve this goal, a well-crafted research methodology has been proposed, based off of Saunders' research onion (Saunders et al., 2019) as a conceptual framework. The research onion model is a layered approach to research, where each layer represents a different stage in the research process. There are five layers in total, each of which will be elaborated in the following sections.

By utilising this comprehensive approach, the research methodology will be able to delve deeply into the complexities of social media tools in project management teams and produce reliable and valid results. This research onion framework will provide a clear roadmap for conducting the study, ensuring that each stage is carefully planned and executed, resulting in a well-structured and rigorous research process.

4.1. Philosophy

The first layer is the research philosophy, this is the foundation of the research as it focuses on the set of beliefs and assumptions that will shape and guide the overall approach to the research. For this particular research two philosophies were considered, *pragmatism* and *interpretivism*.

Pragmatism is a research philosophy that emphasises the practical application of knowledge and the importance of empirical evidence. It makes the assumption that reality is objective and that it may be understood through measurement and observation. Pragmatists believe that research should aim and be designed to address real-world issues and practical problems, and that its findings should be useful and applicable to everyday life. A combination of quantitative and qualitative data, according to pragmatists, can offer a more comprehensive and thorough understanding of a research problem.

On the other hand, interpretivism emphasises the subjective nature of reality and the value of understanding the meanings that individuals attribute to their experiences. It is predicated on the idea that reality is socially constructed and that people's views perceptions and interpretations of the world are influenced by their historical, cultural, and social settings. It argues that social sciences research needs to be conducted differently than natural sciences research as "human beings and their social worlds cannot be studied in the same way as physical phenomena" (Saunders et al. 2019). According to interpretivists, qualitative data is more suited for understanding the subjective nature of reality and research should be designed to study the complexities and nuances of the human experience.

While both pragmatism and interpretivism are concerned with understanding the world and generating knowledge, they have different ontological and epistemological assumptions. Whereas interpretivism assumes that reality is subjective and that knowledge can be gained through understanding people's experiences and interpretations, pragmatism holds that reality is objective and that knowledge can be reached through empirical evidence. Pragmatism emphasises the practical application of knowledge, while interpretivism emphasises the importance of understanding the complexities of human experience.

While pragmatism fits with the research in that the evidence must be empirical and come from the subjects' experience rather than from theory or logic and the knowledge obtained from the research needs to be implemented and applicable in real life scenarios, it fails to fulfil the subjective nature of the subjects' experience with social media. Therefore, the interpretivist philosophy was chosen to guide this research since it satisfies all the required criteria, it accepts the subjective nature of the subjects' experiences and the fact their perceptions will be influenced by external settings such as culture, region, time and social circumstances.

4.2. Approach

The research approach is the second layer of the onion and it is a key component of the research design as it encompasses the overall strategy for conducting the research. There are two primary research approaches, these are deductive approach and inductive approach.

A deductive approach begins with the formulation of a broad hypothesis or theory, which is then tested by the empirical gathering and analysis of data. In other words, the researcher formulates a broad hypothesis or idea before planning the study to test it. This strategy is frequently associated to positivism and quantitative research methods since it uses statistical analysis to find causal links between variables and test hypotheses.

On the contrary, an inductive approach begins with specific observations and facts and then uses those observations to create more general ideas or hypotheses. This research approach, which aims to comprehend complex phenomena and investigate the meanings that people identify with their experiences, is frequently linked to interpretivism and qualitative research methods. In order to generate new ideas or hypotheses, the researcher collects data through observation and interviews, then analyses that data to find patterns, themes, and relationships.

Since it has been stated that the inductive approach is linked to interpretivism it is only logical this was the chosen approach for this research. Additionally, this research approach is particularly useful for research questions that aim to explore and comprehend complex phenomena that are not easily measurable or quantifiable as well as understand the subjective experiences of individuals or groups, as is the case with the proposed research question, which aims to identify patterns and relationships in people's experiences that may influence their use of social media tools within project management teams. The purpose is to get a sense of what is currently happening with the use of social media tools within project management teams in order to better understand people's relationship with these tools and why or why not they are being used.

Furthermore, according to Saunders et al. (2019), when a topic is new and there is little existing literature about it the inductive approach is a better option to work with by "generating data and analysing and reflecting upon what theoretical themes the data are suggesting" (p. 157). The inductive approach usually involves three steps, these are: data collection through observation, interviews or other qualitative methods, data analysis to identify patterns, relationships or themes and finally the development of a theory or explanation.

4.3. Choice
The third layer is the methodological choice, it involves selecting the most appropriate research methods and techniques to answer the research question. This layer is particularly important because the choice of research methods and techniques can have a significant impact on the quality and validity of the research findings (Saunders et al. 2019). In this layer, a range of factors have to be considered to determine the most appropriate research methods and techniques to use.

For the purpose of this study a qualitative approach was chosen since the research question is focused on exploring subjective experiences or perceptions about social media tools and how the participants' social, cultural, and historical contexts influence their behaviour and experiences. Furthermore, according to Saunders et al., (2019) an

interpretive philosophy is usually associated with qualitative research since it focuses on exploring and interpreting the "subjective and socially constructed meanings about the phenomenon being studied" (p. 179). Since this research aims to provide an understanding of the social phenomena that is the use of social media tools from the perspectives of the participants by exploring how they perceive it and their personal experiences, emotions and attitudes towards social media tools, it is clear the right path to follow was that of a qualitative research and more specifically a mono-method qualitative study was implemented, this will be further discussed in the next section.

4.4. Strategy

The fourth layer of the onion is the research strategy, it refers to the overall approach or plan for conducting the research and encompasses the specific techniques, methods, and procedures that will be used to collect and analyse data.

As mentioned in the previous section, a mono-method qualitative study was chosen, this was implemented with a survey strategy in the form of a structured questionnaire. The survey strategy is usually used to answer 'what', 'where', 'who', 'how much' and 'how many' type questions (Saunders et al., 2019), therefore it fits the profile needed for this research.

Since this is a qualitative research, the aim of the questionnaire is not to analyse and report numerical data but to understand and explore the perceptions and personal experiences of participants, therefore there are a number of open questions that participants have to answer in their own words according to their personal experience. The multiple choice questions are mostly to gain some insight into their background to be able to better understand their experiences and attitude towards the use of social media tools.

4.5. Time horizon

Layer number five is the time horizon and refers to the time frame over which the research will be conducted, this can be done either as a cross-sectional study or a longitudinal study and includes decisions about the duration of the study, the frequency of data collection, and the time required for data analysis.

In a cross-sectional study, data is collected from a sample of individuals at a single point in time. The purpose of a cross-sectional study is to provide a snapshot of a population or a particular phenomenon, which is the case of this study, at a specific moment in time. In their book Research Methods for Business Students, Saunders et al. (2019) explain that cross-sectional studies may be attempting to describe the incidence of a phenomenon (*what are the benefits and drawbacks of using social media tools for team collaboration*

within project management teams) or how factors relate to one another (w*hat factors influence its effective implementation and impact on team performance, productivity, and satisfaction*) and they usually employ the survey strategy.

One advantage of conducting a cross-sectional study is that these type of studies are relatively quick and easy to conduct, as data is collected at a single point in time. Cross-sectional studies are also useful for identifying associations between variables, such as the relationship between the usage, or lack thereof, of social media tools and demographic factors such as age or geographic location.

4.6. Techniques and procedures

This is the final layer and refers to the process of collecting and analysing the data. In the current study, the process of data collection is accomplished through a structured questionnaire that was distributed online to members of project management teams and project managers.

The questionnaire is based on that of the study conducted by Kanagarajoo, M.V., Fulford, R. and Standing, C. (2020), titled *The Contribution of Social Media to Project Management.* However, the questionnaire was adapted to focus specifically on the use of social media tools rather than social media in general. The revised questionnaire got rid of some questions that were not relevant to the purpose of this research and reformulated others, this made it shorter and more targeted, reducing the risk of participant drop-out.

The survey was designed using the Survey Monkey platform due to its user-friendly interface and ability to customise questions. The survey was made available online and distributed through various social media channels and platforms to increase the reach of the survey and attract participants from diverse backgrounds and nationalities. A comprehensive list of these channels and platforms is provided in the accompanying chart (Table 2).

By utilising an online questionnaire and various social media channels, this study aims to gather a vast amount of data from a diverse group of respondents, increasing the study's validity and reliability. Ultimately, this process will ensure that the study's findings are robust, making a significant contribution to the field of project management.

The survey will remain online for a period of four weeks to obtain the maximum amount of responses. This, along with the diffusion channels used, will ensure a combination of snowball sampling, self-selection sampling, and convenience sampling (Saunders et al., 2019).

In qualitative research, determining the appropriate sample size is a complex and nuanced process. Sandelowski (1995) emphasised that there are no fixed formulas or power analyses that can be applied to determine the minimum number of sampling units required. Instead, the key objective is to ensure that the sample size is manageable while still being large enough to generate a deep and comprehensive understanding of the experience being studied. Sandelowski's argument highlights the importance of balancing the need for rigour and depth in qualitative research with practical considerations such as time, resources, and feasibility. Ultimately, the decision on the appropriate sample size for a given study should be based on careful consideration of these factors in light of the research question and the goals of the investigation. (Fugard and Potts, 2015)

4.7. Limitations

While the use of an online questionnaire and various social media channels to collect data for this study has many advantages, there are also some potential limitations that must be considered. One such limitation is that the respondents who participate in the study may be biased towards younger and more social media-active project team members and managers. This potential bias could result in the perception of a higher rate of social media adoption than actually exists, thus compromising the validity of the study's findings.

To address this limitation, the social media channels chosen for the distribution of the questionnaire will be selected with careful consideration. The aim is to ensure that the survey is accessible to individuals across a broad demographic range. For example, if the survey is being disseminated through social media platforms, the research team will choose platforms that have a diverse user base, including individuals of different ages and nationalities.

Furthermore, the questionnaire will be designed to capture information on the demographic characteristics of the respondents, including their age, region and feelings towards social media tools. This information will allow the research team to examine any potential biases that may exist in the sample of respondents and adjust the findings accordingly.

Another possible limitation of this methodology is that individuals who do not use social media may be excluded from the study. To mitigate this limitation, the research team will include a statement in the questionnaire inviting participants to share the questionnaire with other team members who might not use social media.

By taking these measures, the research team aims to ensure that the study's findings are not biased towards a particular demographic group and that the sample of respondents is representative of the population under study. Ultimately, this will increase the validity and

generalisability of the study's findings and contribute to the advancement of knowledge in the field of project management, benefiting researchers, practitioners, and project management teams alike.

Table 2. Survey distribution channels

LinkedIn	Open post on LinkedIn
	Private messages to people working on project management
Facebook groups	Clasificados Uniandes
	Clasificados Uniandes 2.0
	The profitable designer community
	Survey sharing / Panel – Post Survey, Find Participants, Get Responses
	Dissertation Survey Exchange – Share Your Research Study, Find Participants
	Survey Exchange
	Share Your Surveys
	Research Participation - Dissertation, Thesis, PhD, Survey Sharing
Survey Circle	Website
Survey Swap	Website
Personal network	Sharing the survey link to friends, family and acquaintances working in project management through WhatsApp, Instagram and Facebook
Reddit	r/SurveyCircle
	R/projectmanagement

5. Findings and analysis

The research problem identified a significant gap in the literature regarding the use of social media tools in project management teams. This lack of research also extends to the absence of controlled guidelines and strategies for effectively integrating social media tools into project management practices. Therefore, the research aims to investigate the use of social media tools within project management teams, the potential benefits and drawbacks associated with it, as well as the factors that influence its effective implementation. To achieve this, the study will explore how project managers and team members use social media tools for communication, coordination, and collaboration, and how it affects team performance, productivity, and satisfaction.

The research question that guides this investigation is focused on identifying the benefits and drawbacks of using social media tools for team collaboration within project management teams and understanding the factors that impact its effective implementation

and impact on team performance, productivity, and satisfaction. The research methodology followed an inductive interpretivist approach with a qualitative research strategy in the form of a structured questionnaire that was distributed online to members of project management teams and project managers. The purpose of this chapter is to present the results of this questionnaire.

The survey conducted on the use of social media tools within project management teams received fifty-seven responses. The findings of the survey will be presented in an organised manner, starting with the demographic section, where the respondents' characteristics and background will be explored. This will be followed by an examination of the usage of social media, where respondents' engagement and attitudes towards various social media tools will be discussed. The next section will explore guidelines and policies that users follow when using social media tools. Finally, some general conclusions will be drawn from the data collected.

5.1. Demographic

In the demographic section of the survey, respondents were asked to provide information about their age group, current employment region and role with respect to project management work.

In the first question, respondents were asked to provide their age group, with four possible answers to choose from. The results of the survey showed that the majority of respondents, accounting for 66.67%, or 38 individuals, fell within the 20 to 30-year-old age bracket. This was followed by 21.05%, or 12 respondents, who fell in the 31 to 40-year-old age group. Only a small percentage of respondents, 5.26%, or 3 individuals, reported being between 41 and 50 years old, while another 3.51%, or 2 respondents, fell within the 51 to 60-year-old age group. Lastly, yet another 3.51%, or 2 respondents, stated they were over 60 years of age.

The second question in the survey asked respondents about the region where they are currently employed, with seven possible answers to choose from. The results of the survey showed the majority of respondents, accounting for 59.65%, or 34 individuals, to be working in Europe. This was followed by 17.54%, or 10 respondents, who reported working in North America. A smaller percentage of respondents, 10.53%, or 6 individuals, reported working in Asia, while 8.77%, or 5 respondents, stated they currently work in South America. Only a small number of respondents, 3.51%, or 2 individuals, reported working in Australia. Note that no respondent reported working in either of the remaining two regions of Middle East and South East Asia.

The third question was an open-ended question regarding the respondent's current role with respect to project management work. The responses varied widely, with individuals working in different roles within different areas. Some respondents reported working in traditional project management roles, such as project manager or team leader. Other respondents reported working in areas such as UX research, AML specialist, marketing, IT engineering, interns, project and development team leads, associate to executive management, front-end development, social media consulting, associate portfolio officer, VP of finance, strategy management, project engineering, service coordination, and student services coordination.

5.2. Usage of social media tools

This section comprised questions four to seven as well as question ten and aimed to gather insights into the respondents' usage, reasons for using or not using, and sentiments towards social media tools within their work teams. The questionnaire inquired whether the participants utilised social media tools for collaborative work, the ways in which they employed these tools, and their rationale for abstaining from their usage, if applicable. Additionally, the survey sought to gauge the participants' attitudes towards the usage of social media tools in the context of their work teams.

The fourth question of the survey asked respondents whether they believed that social media tools could improve team communication and collaboration. The question required a simple yes or no response, and the results were quite clear. The overwhelming majority of respondents, 88.89% to be exact, answered yes, indicating that they believed that social media tools could indeed improve team communication and collaboration. Conversely, only 11.11% of respondents answered no, indicating that they did not believe that social media tools could improve team communication and collaboration. Three people abstained from answering the question.

In the fifth question, respondents were asked whether they used any social media tools within their project management team. The question was once again answered with a simple yes or no response. Of those who submitted a response, the majority, 70.37% (38 respondents), indicated that they did use social media tools within their project management team, while 29.63% (16 respondents) indicated that they did not use social media tools. Three people abstained from answering the question.

For those who answered yes to question five, questions six through nine were designed to explore how social media tools were being used within their project management teams. These questions sought to understand the types of social media tools being used, the

benefits of using social media tools, any challenges or limitations associated with using social media tools, and enquired about any guidelines and policies for social media use. For those who answered no to question five, the survey skipped directly to question 10, which asked about their reasons for not using social media tools within their team.

In question six, participants were asked to select which social media categories they used within their project management team. Respondents were allowed to select more than one option from a list of five categories. The results of this question provide insight into the most commonly used social media tools within project management teams.

The majority of respondents, 94.74% (36 respondents), reported using tools for virtual meetings. Instant messaging tools were also widely used, with 86.84% (33 respondents) of respondents reporting that they use them. Document sharing tools were also commonly used, with 86.84% (33 respondents) of respondents reporting that they use these tools. Of the remaining categories, tools for task management were used by 47.37% (18) of respondents, while only 26.32% (10 respondents) reported using social media tools for team building.

Question seven, which followed from the previous question, asked participants to share which social media category and platform they found the most useful and why. Respondents mentioned four categories: document sharing (seven mentions), task management (ten mentions), virtual meetings (seventeen mentions), and instant messaging (seven mentions), with an additional write-in category called organisation mentioned three times.

Out of these categories, some specific tools were also singled-out, for document sharing, Google Drive was mentioned three times and Microsoft Office suite once. For task management, Slack was mentioned eight times and Trello once. For virtual meetings, Microsoft Teams was mentioned twelve times, Zoom once, Skype once and Google Meet once. For instant messaging, Google Chat was mentioned twice and WhatsApp once. In addition, one respondent mentioned Clarizen, a company's internal platform for task management and client reports.

As for why these platforms were useful, the most common keyword mentioned was '*easy*', with seven mentions. Other keywords included '*fast*', '*convenient*', '*known to everyone*', and '*range of services*', each mentioned twice, followed by '*innovative*', '*efficient*', '*dynamic*', '*fun*', and '*triggers immediate action*', which were each mentioned once.

Going back to question five, participants who answered no to that question jumped straight to question 10 which asked them to state their reasons for not using social media tools in their projects. The answers varied, one participant stated that they were working in a two-person project and did not require social media tools. Other participants did not provide any further information about their reasons for not using social media tools but simply stated they did not require them. Another participant stated that they did not use social media tools because their team members were not comfortable with them. Another answer was that the use of social media tools depended on the project. Finally, one participant mentioned that they only used social media for participant recruitment but did not use social media tools for any other purpose within their work team and did not have any specific reasons why.

5.3. Guidelines and policies

Finally, the questionnaire enquired about the extent to which participants had established policies or guidelines in place for the use of social media tools within their project management team and if so which were these policies.

Question eight asked participants if they had any guidelines or policies in place for the use of social media tools within their project management team, to which only a small percentage of respondents had policies or guidelines in place. Specifically, 31.58% (12 participants) answered yes to this question, while the majority of respondents, 68.42% (26 participants), answered no.

For question nine, which was only for participants who answered yes to the previous question, respondents were asked to provide an example of a guideline or policy they currently use. The answers varied, ranging from specific coding tasks based on which departments and groups were involved to more general policies such as cybersecurity policies and social media restrictions due to security and cyber attacks. Other examples included password protecting documents, using predefined templates, refraining from divulging company information, being respectful, not spamming group chats, being inclusive, respecting work hours, and providing concrete information.

5.4. Conclusion

To sum up the findings of the survey, the majority of respondents believe using social media tools within project management teams can lead to improved team communication and collaboration.

In fact, 70.37% of participants already make use of social media tools within their work teams. They reported using different tools for different purposes, but virtual meetings and

instant messaging are the most common uses with Microsoft Teams being the most popular choice due to its convenience and ease of access.

Despite the widespread use of social media tools, the survey reveals a lack of policies and guidelines in place for their use. The majority of the participants who stated using social media tools (68.42%) do not have any policies or guidelines in place for their use. The remaining 31.58% who claimed to have policies in place, provided very general rules they followed within their work places such as being respectful and password protecting documents.

Finally, the survey reports that 29.63% of participants do not use social media tools within their project management teams, yet no specific reasons or further information were given as to why.

In conclusion, the survey indicates that social media tools have become an integral part of project management teams, with the majority of participants believing that they can positively impact team communication and collaboration. Nonetheless, work places and teams fail to have policies in place to guarantee the safe and effective usage of social media tools.

6. Discussion

To recap, this research aims to address the following central research question: What are the benefits and drawbacks of using social media tools for team collaboration within project management teams, and what factors influence its effective implementation and impact on team performance, productivity, and satisfaction?

The previous section presented a comprehensive analysis of the data collected from the conducted survey. This section, aims to delve deeper into the implications of the findings and offer a more nuanced interpretation of the results. The objective is to provide a thorough understanding of the underlying factors that influence the effective use of social media tools for team collaboration within project management teams.

Some key findings of the survey include that the majority of respondents believe that incorporating social media tools into team work can yield positive impacts on team performance. Also, most of the participants already use social media within their project management teams indicating that social media has become an indispensable tool for team productivity, they use it mostly for virtual meetings and instant messaging but the majority of social media tool users do not have policies or guidelines in place for its effective

implementation leaving the team open to potential risks such as inappropriate use or breaches of confidentiality.

The distribution of the respondents' ages provides valuable insight into the demographics of the surveyed population. The highest proportion of respondents were young adults between the ages of 20 to 30, which may indicate that the surveyed population skewed towards a younger age group. The data further reveals that the number of respondents decreased steadily as the age groups increased. This distribution indicates that the survey's reach was relatively limited among the older age brackets.

When analysing the employment region of the respondents, it becomes apparent that Europe is a major hub for project management jobs, given the high percentage of respondents working in the continent. Additionally, North America also emerges as a popular region for project management projects, as evidenced by the significant number of respondents employed there. However, it is essential to note that these findings may reflect a certain bias, given that the survey was conducted in English. As a result, the relatively low number of respondents from South America and Asia may be a consequence of this linguistic limitation.

Moreover, the lack of respondents from the Middle East and Southeast Asia is worth mentioning. It is possible that this could be due to a smaller sample size or the regions being less popular destinations for project management employment opportunities.

The diversity of roles reported by the respondents indicates that project management work encompasses a wide range of responsibilities and areas of expertise and all of these could benefit from using social media tools. It is interesting to note that the respondents reported working in both traditional project management roles as well as roles that involve project management in a more indirect manner. This suggests that project management skills as well as knowledge into social media tools are highly valuable in many different fields and industries.

The open-ended nature of the question allowed for a wide range of responses, providing the research with valuable insight into the various roles and responsibilities associated with project management work. It also highlights the importance of understanding the specific context in which project management work is being conducted, as the roles, responsibilities and needs of the project may vary widely depending on the industry, company, and specific project.

With respect to the respondents' feelings towards the use of social media tools within the work teams, the results suggest that there is a general consensus among respondents that social media tools can have a positive impact on team communication and collaboration as has been stated in the literature most notably by McFarland and Ployhart (2015), Treem and Leonardi (2012) and Paul et al. (2016).

This is not surprising, given the widespread use of social media tools in both personal and professional settings. Social media tools provide a quick and easy way for team members to share information, collaborate on projects, and stay connected, regardless of their physical location (Ray 2014; Steen at al., 2022; Kanagarajoo et al. 2020; Daemi et al. 2020; Hysa et al. 2019).

It is worth noting that a small percentage of respondents did not believe that social media tools could improve team communication and collaboration. Further research would be needed to understand the reasons behind this belief. Nonetheless, the overwhelming majority of respondents who answered the question in the affirmative suggest that social media tools are likely to remain an important tool for team communication and collaboration in the future. In line with this, the results of the survey also indicate that the majority of respondents are currently using social media tools within their project management team.

Only a small amount of participants indicated they did not use social media tools within their work teams, yet no specific reasons or further information were given as to why. However, it is important to recognise that not all teams and workplaces will find social media tools necessary or appropriate for their needs.

The study also reveals that virtual meeting tools like Microsoft Teams and Zoom are the most commonly used social media tools among participants, followed by instant messaging and document sharing. This highlights that project management teams highly value real-time communication and collaboration, and that social media tools can provide an effective platform to facilitate this process (Zwikael et al., 2022). Furthermore, it suggests that virtual meetings are an essential part of team collaboration, and the popularity of these tools underscores their efficacy.

On the other hand, task management and team building categories are found to be less commonly used by the participants. While task management is crucial to project management work, it appears to be less frequently incorporated into social media usage than other categories. One possible reason for this could be that tools that offer this feature, such as Slack or Trello (which were mentioned by some participants), are paid

tools. Alternatively, task management could be effectively handled through virtual meetings or group direct messages, which are more popular among the participants.

As for team building, it may not be a primary use case for social media tools within project management teams. This could be because people may still prefer to conduct team building activities in person, rather than online (Kanagarajoo et al. 2020). Therefore, social media tools may be more suitable for other aspects of team collaboration.

In terms of the reasons behind respondents' choices for their most frequently used social media tools, ease of use was found to be the primary factor, followed by convenience and widespread familiarity. These findings highlight the importance of user-friendly tools that simplify work processes and addresses a challenge previously identified in the literature by Kanagarajoo et al. (2020) which states that preferences of tools depending on the country poses a challenge when adopting the use of social media tools. Consequently, people tend to favour tools that are globally accessible and widely recognised, such as Microsoft Teams.

It is worth noting that the majority of participants who reported using social media tools within their project management teams do not have any policies in place for its use. This poses significant concerns about potential risks such as breaches of confidentiality or inappropriate use of social media within the team (Hysa et al., 2019).

Participants who stated having policies or guidelines in place indicated their policies to be more guided towards the concerns of data security and privacy (Hysa et al., 2019) and keeping information confidential (Kanagarajoo et al., 2020). These policies include coding tasks, password-protecting documents, and refraining from disclosing company information.

Additionally, some concerns that were addressed are the quality of the information being shared (Kanagarajoo et al., 2020), large amounts of data being generated which can overwhelm users (Harrin 2010; Hysa et al. 2019) and having information become redundant and difficult to search (Treem and Leonardi 2012; McFarland and Ployhart 2015) by implementing guidelines such as not spamming group chats, providing only concrete information and using predefined templates.

Furthermore, it is important to note that some concerns were addressed in the guidelines that were not previously mentioned in the literature, such as respect for one another, inclusivity, and respecting work hours. These policies and guidelines can ensure that social

media tools are used appropriately and effectively, while also fostering a positive team culture and work environment that prioritises respect and inclusivity.

The richness and diversity of these responses underscore the importance of establishing guidelines and policies for social media tool usage in project management teams, as it enables efficient and productive communication while safeguarding against potential threats and issues. By analysing these guidelines, project managers can identify the best practices and tailor them to their unique requirements, enhancing teamwork and optimising project outcomes.

To sum up, the data gleaned from this survey provides evidence that social media has transformed from being a mere platform for socialisation to a vital tool for team collaboration and productivity. These findings align with the growing trend of digital transformation in the workplace and highlight the importance of harnessing technology for optimised team performance. With the current advancements in social media tools, it has become increasingly clear that organisations can leverage these tools to foster an environment of collaboration, communication, and teamwork, thereby promoting productivity and success.

7. Conclusion

Social media tools have become increasingly popular in project management teams, as they offer several benefits that enhance team productivity and collaboration. By using tools such as Microsoft Teams and Slack, teams can communicate in real-time, track tasks, and monitor project progress, regardless of their geographical location. The positive impact of social media tools on team performance has been confirmed by this research, with most team members actively incorporating social media use into their work and processes.

The results of this research confirm that project management team members believe that incorporating social media tools into team work can yield positive impacts on team performance. As most of them actively incorporate social media use into their work and processes it demonstrates that social media has become an indispensable tool for team productivity mostly used for virtual meetings and instant messaging. These results also highlight that the use of social media tools is proven to help and facilitate processes, promote productivity and aid with team collaboration and communication.

However, it is important to note that this research has also identified potential drawbacks which were already highlighted in the literature such as security and privacy concerns. Fortunately, this drawbacks can easily be addressed and mitigated with the implementation of policies to guide the use of social media tools. This underscores the importance of

establishing clear policies and guidelines for their usage. Without these policies in place, project management teams may encounter potential risks and challenges.

The findings of this study also identified a significant gap in the literature regarding the use of social media tools in project management teams. Despite the significant benefits that these tools offer, the lack of research on their implementation and effectiveness is concerning. This lack of research also extends to the absence of controlled guidelines and strategies for effectively integrating social media tools into project management practices.

The limited knowledge base in this area is troubling, given that project management teams must operate in an ever-changing and dynamic environment. Social media tools can provide significant advantages to these teams in terms of enhancing communication, collaboration, and productivity. However, without clear guidelines and strategies for their usage, project management teams may not be able to take full advantage of these benefits. It is important to note that the lack of research and guidelines on the use of social media tools in project management teams does not mean that they should be avoided altogether. Rather, it highlights the need for a cautious approach that recognises the potential benefits and risks associated with these tools.

Further research is needed to determine the reasons behind the decision of some participants of not using any social media tools within their project management teams and understand why they might be acting as deterrents to incorporate social media in their workplace. The lack of guidelines and policies and the reason behind this also deserves the attention of researchers and scholars.

To conclude, social media tools are a vital component of project management teams. However, the lack of clear policies and guidelines in place for their usage can pose potential risks and challenges. It is therefore essential for project management teams to establish clear policies for the usage of social media tools. These policies should outline the expectations for team members, address potential risks, and provide guidelines on acceptable usage.

Project management teams should adopt a thoughtful and informed approach to the use of social media tools, based on the latest research and best practices, by doing so, teams can ensure the safe and effective use of social media tools while mitigating any potential risks and take advantage of their full potential.

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