

Digital technologies in project management: An asset for teams or a source of stress?

Received: 02/09/2024

Accepted: 17/12/2024

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Abstract:

The aim of this article was to determine whether the use of digital tools in project management was an asset for team members or a source of stress. We conducted a questionnaire survey of individuals in the field, which enabled us to show that these technologies can be both assets and sources of stress for project teams. Their integration requires a considered approach, with strategies aimed at maximising their benefits while preserving the well-being of team members. Practical recommendations have been put forward on how to make the most of these tools, which are now indispensable in every field.

Keywords: Project management, Digital technologies, Project teams, Digital tools, Well-being at work.

Jel Classification Codes: J28, J81, M54, O33.

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1. INTRODUCTION

In the digital era, technologies play an important role in various sectors and are profoundly transforming professional practices. From education to administration, passing through sales and management, they offer easy access to information, improving the efficiency of processes and encouraging innovation. Project management is no exception. Indeed, digital technologies have become essential in this field, where management platforms, instant communication tools and collaboration software are ubiquitous (Marnewick & Marnewick, 2022), enabling teams to collaborate more fluidly, to optimise planning and to monitor the progress of tasks in real time (Sayed, 2022; Marnewick & Marnewick, 2022, Gonçalves et al., 2023); and thus boosting productivity and coordination within teams.

Project management is known to be a particularly stressful field, with many challenges to overcome to ensure the success of a project. Among the main sources of stress often cited in the literature, we have the overload of work (Heck & Faulx, 2017; Fasthoff et al., 2023), where employees are submerged by the amount of tasks to be accomplished and tight deadlines to be met. We also have communication failures that can lead to misunderstandings and conflicts (Pinto, 2014; Sazvar et al., 2022), all of that can lead to dissatisfaction within the team and demotivation of its members (Darling & Whitty, 2019; Fasthoff et al., 2023). Digital technologies, by facilitating collaborative working and the exchange and sharing of information in real time and at any time, could exacerbate these sources of stress.

The question of the study:

Faced with this duality, we ask the following question : ***Are digital technologies an asset in project management or a source of stress for teams?***

This question raises the following issues:

- Do digital technologies facilitate or complicate communication between project team members?
- What impact can these technologies have on the workload?
- Can these technologies demotivate the team?
- Is it possible to do without these technologies in project management today?

Hypothesis:

To answer these questions, we put forward the following hypotheses:

- In the current context, digital technologies enable large-scale communication, which encourages international collaboration but also role ambiguity and contradictory orders.
- The ease with which information and documents can be shared can make it difficult to prioritise tasks and lead to work overload, while the immediacy made possible by these tools can lead to higher demands in terms of deadlines.
- The fatigue caused by work overload and the stress due to inadequate communication can demotivate some members of the team, especially where there are inequalities in terms of digital skills.
- Given the advantages offered by these technologies in project management, in terms of saving time and improving performance, it would be inconceivable today to do without them.

The Objectives of the study:

Our work aims to :

- Understand how digital technologies can facilitate or complicate the exchange of information between project team members.
- Identify the benefits of these technologies in terms of managing different tasks and their distribution.
- Explore the sources of stress associated with project management and the possibility of aggravating them with these technologies.
- Propose recommendations for the effective integration of digital technologies in project management.

The importance of the study:

Our subject is of great interest insofar as it responds to recent concerns in project management, in the current context characterised by :

- The widespread adoption of digital technologies in all sectors, making it necessary to explore their impact on project management.
- Globalisation, which is leading to the creation of multinational teams often working remotely, raising questions about the contribution of these technologies for geographically dispersed teams.
- Increasingly tight deadlines, which are tending to become the norm in all areas, requiring the use of these tools, which can help to meet these deadlines but which can also increase this pressure because of the unrealistic expectations they can lead to in terms of availability and responsiveness.

- Recognition of the importance of the well-being of project team members in current models, and therefore interest in a study exploring the effects of digital technologies on their stress.

Methodology:

In order to give the most complete answer to our study problem, and considering the nature of our research, we are going to base ourselves on descriptive analysis. We will start with an extensive literature search in order to define the subject of our study as well as possible, and then move on to a field study with a view to collecting primary data from project members, who will be able to provide us with relevant information.

2. Conceptual framework

2.1. Project management

Project management is defined as a set of practices that aim to plan, execute and control projects in order to achieve specific objectives (Haberfellner et al., 2019) while taking into account time, cost and quality constraints (Gutterman, 2023). It is this focus on final deliverables within a limited time frame that differentiates it from general management (APM, 2024).

This discipline has matured over the last fifty years (Locatelli et al., 2023) to become a rich and rigorous field, which, according to these same authors, draws on theories from other disciplines to develop new theories specific to projects and relevant to practitioners and decision-makers.

The project, which consists of a single, temporary effort to achieve planned objectives, measured in terms of results (APM, 2024), goes through different phases, including initiation, planning, execution, monitoring and closure, with specific objectives and deliverables for each phase (Guttermann, 2023). This requires a temporary team dedicated to these specific objectives and involves several skills.

Project management competencies, which represent a set of knowledge, skills and attitudes that enable high levels of performance to be achieved (Ochoa Pacheco et al., 2023), have been standardised, according to these authors, by the Project Management Institute (PMI), which has established standards for them.

According to Bashir et al. (2021) and Amoah & Marimon (2021), these skills may be:

- *Technical*, involving knowledge of tools, as well as project management techniques and methodologies. We can consider that mastering digital technologies, which are essential in project management today, falls into this category.

- *Leadership skills*, which consist of the ability to lead and motivate a team. It is therefore important to ensure that teams remain motivated and to understand anything that could cause demotivation or a drop in performance among members in order to remedy it.

- *Communication skills*, which relate to the ability to communicate effectively with stakeholders and the importance of clear communication with them. Communication must therefore be flawless, especially when teams are geographically dispersed.

Amoah & Marimon (2021) add *risk management skills*, which relate to the ability to identify and mitigate potential risks, while Bashir & al. (2021) add *management skills*, i.e. the ability to plan, organise and control project activities, as well as *stakeholder management skills*, which refer to the ability to identify, analyse and manage stakeholder expectations. Indeed, involving stakeholders and obtaining their commitment is critical as it can significantly influence the success of the project (Haberfellner, 2019).

Furthermore, Özsoy & Sezgili (2024) stress that successful projects require a combination of technical and interpersonal skills, and emphasise the importance of soft skills such as leadership, communication and critical thinking, to effectively manage teams and projects. Indeed, according to Ochoa Pacheco et al. (2023) one of the key elements of project success is communication, which new technologies can improve within teams (Haberfellner, 2019). Özsoy & Sezgili (2024) suggest that project management education must evolve to include emerging technologies and innovative pedagogical approaches, in order to better prepare future project managers for a constantly changing work environment.

2.2. Project management teams

They are groups of people who work together to achieve specific objectives within a certain time and budget framework (Drouin & Sankaran, 2017). According to Chiocchio (2015), they are formed either according to a simple system, i.e. a single, autonomous and independent team, made up of individuals with a variety of skills, required to play roles and hold responsibilities specific to the project that has brought them together and working together to achieve the defined objectives. Or a multi-team system where different interdependent teams, each with their own objectives and

deliverables, work together to achieve a common goal, coordinating their work with each other, which requires increased communication and collaboration.

Project teams directly influence organisational performance by facilitating innovation, improving flexibility and responding quickly to change (Drouin & Sankaran, 2017). According to these authors, they enable better coordination, effective communication and rapid decision-making. According to Oh & Choi (2020), the success of projects depends largely on the individual skills of team members, which they classify into three types:

- *Emotional*, relating to self-awareness, intuition, resilience, and the ability to motivate others.
- *Managerial*, concerning the ability to properly manage resources, to communicate effectively, and to achieve objectives.
- *Intellectual*, involving strategic vision and critical analysis.

To capitalise on these elements, a clear structure and effective group dynamics are essential (Chiocchio, 2015). A good group dynamic is also highlighted by Manata et al. (2022) as a determining factor for project success, in addition to effective communication and strong collaboration within the team, particularly given the complexity of modern projects (Dasi et al., 2021). These authors add role clarity and a collaborative, motivating work environment as essential elements for team performance. Thus, according to Drouin & Sankaran (2017), high-performance teams share characteristics such as role clarity, strong leadership, positive group dynamics and commitment to common goals. We draw attention to the fact that poor communication, stress and

demotivation can undermine this commitment and therefore the achievement of the defined objectives. In addition, digital techniques, which are a great help in this regard, but which also keep individuals at a distance, can be detrimental to this role clarity and to the harmony of a collaborative environment.

2.3. Stressors in project management

Stress in project teams has a negative impact on the motivation, commitment, creativity and overall performance of team members, and can spread to other teams through emotional contagion (Razinskas & Hoegl, 2019).

Levels of motivation and stress vary over the life cycle of projects (Gällstedt, 2003) where, according to this author, the start is highly motivating and then various factors affect this motivation. These team stressors have an indirect negative impact on results through their effect on the well-being of members (Akgün et al., 2007) but also on the resilience of the team (Hartwig et al., 2020). There are several sources of stress specific to project teams (Razinskas & Hoegl, 2019) and various researchers have attempted to examine the factors that can cause stress in project team members. In particular, they highlight:

- *Role ambiguity*, which concerns the lack of clarity about everyone's roles and responsibilities. This ambiguity can create uncertainty and lead to interpersonal conflicts, creating a stressful work environment (Tomei et al., 2013; Pinto et al., 2014; Hartwig et al., 2020; Fasthoff et al., 2023), which is detrimental to team coherence and performance (Sazvar et al., 2022).

- *Communication failures*: insufficient communication between team members or poor communication can damage

team cohesion and increase stress (Tomei et al., 2013). Indeed, the lack of clear information that can result from a miscommunication can cause confusion and leave individuals feeling lost (Darling & Whitty, 2019). This situation leads to mistakes and increases pressure within the team.

- *Work overload*: Authors often cite work overload as a major stress factor in projects (Heck & Faulx, 2017). In addition, high performance expectations and the need to acquire new skills can put extra pressure on team members (Razinskas & Hoegl, 2019; Sazvar et al., 2022), affecting their well-being and performance (Hartwig et al. 2020). Furthermore, working simultaneously on several projects contributes to work overload (Gällstedt, 2003; Heck & Faulx, 2017), which can become unmanageable and lead to a feeling of overwhelm and inefficiency. In fact, this workload and the simultaneity of projects can lead to conflicts of priorities when individuals carry out their daily tasks, and force them to juggle several tasks, leading to a feeling of exhaustion (Fasthoff et al., 2023) as well as conflicts between members. Digital technologies, by making members' work easier, can increase the demands placed on them, leading to an accumulation of tasks and a willingness to embark on several projects at the same time.

- *The tight deadlines* that characterise today's projects impose a heavy workload, and the pressure to meet these deadlines is a stress factor (Darling & Whitty, 2019), as deadlines can, according to these authors, create heightened anxiety.

- *Lack of support*: the absence of social support from other members or managers can cause feelings of isolation and pressure (Pinto et al., 2014; Razinskas & Hoegl, 2019; Fasthoff et al., 2023), with members feeling overwhelmed by their responsibilities and unable to cope with challenges (Tomei et al., 2013; Darling & Whitty, 2019). On the contrary,

recognition and emotional support can mitigate, according to Akgün et al. (2007), the harmful effect of team stressors. Digital technologies can offer opportunities for collaboration and innovation, but they can also, maintain distance between members and block this much-needed support to keep the team motivated and performing.

2.4. Digital technologies in project management

The integration of digital technologies has transformed the way we manage the projects, facilitating collaboration between team members, whether on site or remotely (Sayed, 2022). According to this author, project management software plays a key role by offering task management, document sharing and real-time communication functionalities. In this way, they improve transparency and accountability within teams and increase interaction between team members (Chernova et al., 2023).

A number of authors have taken an interest in the use of digital technologies in project management:

- *Improved collaboration*: Collaboration platforms enable effective communication and collaboration between team members (Handojo, 2023), making it possible for geographically dispersed teams to work remotely using videoconferencing tools and online collaboration software (Gonçalves et al., 2023; Lizsewski, 2024).

- *Agility and flexibility*: using digital tools that facilitate the integration of agile methods, teams can adapt quickly to changes and unforeseen events (Chernova et al., 2023; Handojo, 2023).

- *Resource management*: Through tools, for monitoring the allocation and use of resources in real time, the digital

technologies enable to manage these resources more effectively (Gonçalves et al., 2023).

- *Planning and monitoring*: project management software provides better visibility of deadlines and the progress of tasks (Chernova et al., 2023).

- *Automation of repetitive tasks*, enabling team members to reduce the time spent on certain administrative tasks and focus on those with higher value (Handojo, 2023).

- *Real-time decision-making*: by providing access to large databases and advanced analyses, project managers can make more informed and responsive decisions (Gonçalves et al., 2023; Handojo, 2023).

Varzaru (2022) looked at the acceptance of these technologies in project management and examined how users perceive and adopt them. He identified key factors in their adoption, such as their perceived usefulness, perceived ease of use and attitude towards their use. According to this author, team members are more likely to adopt these technologies if they perceive them as useful and easy to use.

3. Field study

3.1. The study population and sample

Our study, which aims to find out whether digital technologies are an asset for project teams or rather a source of stress, will focus on individuals who work in project management. This population is indeed relevant to our research and is the most likely to provide us with answers to our question.

We worked on a sample of 30 individuals. Our sample is not probabilistic; it is a convenience sample, but it will enable us to understand the phenomenon under study.

3.2. The study tool

For this study, we used the questionnaire as data collection tool since it is the most suitable tool for obtaining primary information directly from the population concerned by the study and understanding this population.

Our questionnaire is organised into 5 themes as follows :

Theme 1 : Personal information, with the aim to find out the respondent's profile in terms of age, project management experience, familiarity with digital tools and degree of mastery of these tools.

Theme 2 : Digital technologies and communication, which aims to obtain quantifiable data on respondents' perceptions of the impact of digital technologies on communication within the project team.

Theme 3 : Digital technologies and workload, which we will use to find out whether these technologies are likely to lead to excessive workloads.

Theme 4 : Digital technologies and team motivation, to find out whether these technologies can have an impact on the motivation of project team members.

Theme 5 : Futures perspectives, which will give us respondents' views on the extension of the use of technology in project management, the need for training and whether AI will present challenges in this area.

3.3. The questionnaire administration

We enlisted the help of FastForwardConsulting (FFC), Algeria's leading project management consultancy and the official representative of the American Institute of Project Management, the *Project Management Institute* (PMI) in our country.

Through its network of project managers, FFC gave us access to various project teams. After testing the questionnaire with FFC experts to validate the questions and ensure they were clear, we were able to submit it by email, during the period from 1 to 15 April 2024 and collect responses from 30 individuals working in project management.

4. Results and Discussion

To count and analyse the responses we used SPSS 24. We used various statistical tests to analyse the responses in the best possible way and extract relevant information to answer our research question.

4.1. Reliability test : In order to ensure our instrument validity and to assess the internal consistency, we started with the reliability test, as shown in the table 1 below.

Table 1. Reliability statistics

Cronbach's Alpha	Items number
,733	25

So

Source : SPSS24 analysis

With an Alpha of around 0.733, our measure has acceptable internal consistency. Through this consistency based on 25 suggested items, we can conclude that our scale is sufficiently detailed and has a good quantity of data to support its reliability. It is therefore sufficiently reliable to be used.

4.2. Dispersion tests :

-The use of digital technologies and their mastery

We will first analyse the dispersion of responses to the questions on the frequency with which respondents use digital tools for their work and their mastery of these tools.

Table 2. The use of digital technologies and their mastery

	N	Minimum	Maximum	Mean	Standard deviation
You use digital technologies in your work	30	3	5	4,60	,621
You master the various digital technologies involved in project management	30	3	5	4,13	,681
N valid (list)	30				

Source : SPSS24 analysis

- For the question concerning the use of digital technologies in their work, the average response was 4,60. It is high, which suggests that, on average, respondents make extensive use of digital technologies in their project work. The standard deviation, which measures the dispersion of responses around the mean, is low, at around 0,621, which indicates that the responses are fairly homogeneous around the mean. The responses are therefore uniform regarding the frequent use of these technologies in project management.

- For the question about the various digital technologies involved in project management mastery, the mean was 4,13. This indicates that, on average, respondents feel they have a good command of digital technologies. The standard deviation

is low, at 0,681, indicating good consistency in respondents' perceptions of their proficiency in digital technologies, with few extreme variations. The majority of respondents therefore feel confident in their skills in digital technologies related to project management.

-Digital technologies and communication

Here, we will analyse the dispersion of responses to the questions concerning the impact of digital technologies on communication among the project team members. The dispersion is given in the table 3 below, following by the interpretation.

Table 3. Digital technologies and communication

	N	Minimum	Maximum	Mean	Standard deviation
Digital tools facilitate communication within the team	30	3	5	4,50	,630
Communication via instant messaging or videoconferencing is as effective as face-to-face meetings	30	2	5	3,43	1,223
Sharing documents online improves the transparency and traceability of exchanges	30	3	5	4,53	,629
The information I receive via digital tools is clear and relevant	30	2	5	3,93	,907

The use of digital communication tools increases the risk of misunderstandings between team members	30	1	5	3,60	1,070
I feel comfortable expressing my concerns via digital communication channels	30	2	5	3,93	1,081
Communication via digital tools meets my needs in terms of collaboration	30	2	5	3,83	1,053
N valid (list)	30				

Source : SPSS24 analysis

The majority of respondents believe that digital tools facilitate communication within the team, with a high mean of 4,50 and a low standard deviation of 0,630 indicating a homogeneity of responses. They are less convinced that communication via instant messaging or videoconferencing is as effective as face-to-face meetings, with an average of 3,43. The standard deviation of 1,223 indicates a wide variation in opinion, showing that opinions are divided.

Respondents agree that sharing documents online improves the transparency and traceability of exchanges, with a high mean of 4,53 and a low standard deviation of 0,629, indicating a high degree of consistency in responses. They also feel that the information received via digital tools is generally clear and relevant, with an average of 3,93, but the standard deviation of 0,907 indicates a certain variation in perceptions.

With regard to the risks of misunderstandings between team members that could arise from the use of digital communication tools, respondents agree with an average of 3,60, but the standard deviation of 1,070 shows that opinions vary on this point.

With an average of 3,83, some respondents are more comfortable than others in expressing their concerns through digital communication channels. The average of 3,93 means that they feel that these tools generally meet their collaboration needs. However, the respective standard deviations of 1,081 and 1,053 show a certain variability in perceptions.

-Digital technologies and workload

In the following, we will analyse the dispersion of responses to the questions regarding the impact of digital technologies on the project team workload.

Table 4. Digital technologies and workload

	N	Minimum	Maximum	Mean	Standard deviation
Digital project management tools enable me to prioritise my tasks effectively	30	3	5	4,37	,669
The ability to collaborate remotely increases the demands in terms of deadlines for completing a task	30	2	5	3,83	1,085

The lack of visibility of other people's workloads makes it difficult to allocate tasks	30	2	5	4,23	,858
Constant notifications via digital tools increase my stress in terms of tasks to be completed	30	1	5	3,43	1,104
I feel a lot of pressure to be available online at all times	30	1	5	3,33	1,093
I find it difficult to disconnect from my working day when working with digital tools	30	1	5	3,33	1,295
N valid (list)	30				

Source : SPSS24 analysis

The majority of respondents consider that digital project management tools enable them to prioritise their tasks effectively, with a high mean of 4,37 and a low standard deviation of 0,669, indicating a homogeneity of responses.

Many feel that the ability to collaborate remotely increases the demands on time to complete a task, with a mean of 3,83. But the standard deviation of 1,085 shows a certain diversity of opinion on this question.

The majority of them find that the lack of visibility over the workload of others makes it difficult to allocate tasks, with an average of 4,23 and a standard deviation of 0,858. In addition, they consider, with an average of 3,43, that the constant notifications via these tools increase their stress linked to the tasks to be accomplished. That said, the standard deviation of

1,104 shows variability in the responses, with some individuals finding the notifications very stressful while others do not perceive them as such.

With an average of 3,33, respondents feel considerable pressure to be available online at all times, but the standard deviation of 1,093 indicates significant variability in this perception. The same applies to the difficulty of disconnecting from their working day because of digital tools (mean of 3,33 and standard deviation of 1,295).

-Digital technologies and team motivation

In this point, we will analyse the dispersion of responses to the questions relating to the impact of digital technologies on team motivation.

Table 5. Digital technologies and team motivation

	N	Minimum	Maximum	Mean	Standard deviation
I feel just as motivated working remotely as I do face-to-face	30	2	5	3,70	1,208
The misunderstandings that can arise from the use of digital communication tools have a negative impact on my motivation	30	1	5	3,47	,900
Inequalities in digital skills can demotivate team members	30	2	5	3,90	,995

The lack of recognition that can be felt when we are far from the hierarchy can affect my motivation	30	1	5	3,77	1,194
I feel isolated working with my team remotely	30	1	5	2,97	1,217
The lack of real social interaction can affect my motivation	30	1	5	3,47	1,074
The lack of social support accentuated by these tools can demotivate me	30	1	5	3,10	1,155
N valid (list)	30				

Source : SPSS24 analysis

With an average of 3,70, respondents feel that they are moderately motivated when working remotely, compared with face-to-face work. But the standard deviation of 1,208 reveals a disparity in the responses. They do, however, agree on the impact of misunderstandings generated by the use of digital communication tools on their motivation, with an average of 3,47 and standard deviation of 0,900 indicating consistency in the responses on this subject.

Inequalities in digital skills can demotivate team members, with a mean of 3,90 and a standard deviation of 0,995 showing that perceptions are relatively homogeneous, suggesting that the majority of respondents consider inequalities in digital skills to be a demoralising factor.

With a mean of 3,77, respondents recognise that the lack of recognition when remote from the hierarchy can affect motivation, but the standard deviation of 1,194 indicates that opinions vary with some respondents feeling this lack of recognition to be significant, while others are less concerned.

The majority of respondents do not feel truly isolated when working remotely with their team, with a mean of 2,97 and a standard deviation of 1,217. That said, the lack of real social interaction can affect motivation, with an average of 3,47. The standard deviation of 1,074 indicates that perceptions are varied but that this lack of social interaction may be perceived as a major demotivating factor for some. The same is true for the lack of social support accentuated by these tools, which can demotivate respondents, with an average of 3,10 and a standard deviation of 1,155, which shows that this factor is more important for some than for others.

- Respondants' perspectives on digital technologies

In what follows, we will present an analysis of the dispersion of responses regarding respondents' opinions on the use of digital technologies in project management.

Table 6. Respondants' perspectives

	N	Minimum	Maximum	Mean	Standard deviation
Digital technologies can be excluded from project management	30	1	5	1,77	,971
Digital technologies need to be integrated more widely into project management	30	2	5	4,37	,765

All team members should be trained in the use of digital tools	30	2	5	4,60	,675
AI-enabled tools will pose more challenges in terms of project management	30	1	5	4,03	1,217
N valid (list)	30				

Source : SPSS24 analysis

The mean of 1,77 indicates that the majority of respondents think that these technologies cannot be excluded from project management, with a standard deviation of 0,971, which means that the idea of working without these technologies is rejected.

There is a strong consensus in favour of a wider integration of digital tools in project management, with a high mean of 4,37 and a low standard deviation of 0,765, reflecting a homogeneity of opinion on this point.

Furthermore, a high mean of 4,60 indicates that most respondents consider it important for all team members to be trained in the use of these digital tools, with a standard deviation of 0,675 showing general agreement.

The majority of respondents also agree that AI will pose more challenges to project management, with an average of 4,03. But the standard deviation of 1,217 reveals a wide range of opinions on this question.

4.3. Linear regressions

- *Working on line pressure*

We will start by analysing which variable has a significant effect on the pressure felt by members of the project team to be available online.

Table 7. Pressure to work online

Model		Non-standardised coefficients		Standardised coefficients	t	Sig.
		B	Standard error	Beta		
1	(Constant)	1,219	1,064		1,146	,263
	The ability to collaborate remotely increases the demands in terms of deadlines for completing a task	,030	,168	,030	,179	,859
	The lack of visibility of other people's workloads makes it difficult to allocate tasks	-,098	,223	-,077	-,440	,663
	Constant notifications via digital tools increase my stress in terms of tasks to be completed	,291	,173	,294	1,679	,106

I find it difficult to disconnect from my working day when working with digital tools	,424	,138	,503	3,082	,005
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a. Dependant variable : I feel a lot of pressure to be available online at all times

Source : SPSS24 analysis

For the item ‘Constant notifications via digital tools increase my stress in terms of tasks to be completed’, the coefficient found of 0,106 shows a positive effect on the pressure felt to be available online, suggesting that constant notifications may increase task-related stress, although it is not statistically significant at the 95% confidence level.

The coefficient of 0,005 for the item ‘I find it difficult to disconnect from my working day when working with digital tools’ shows that the difficulty of disconnecting after a day's work with digital tools has a significant and positive impact on the pressure felt to be available online. In other words, the greater the difficulty, the greater the pressure to be available online.

-Misunderstanding among the group

In what follows, we will explore the regression for misunderstandings that can arise from the use of communication tools and their impact on motivation.

Table 8. Misunderstandings arised from digital communication tools

Model		Non-standardised coefficients		Standardised coefficients	t	Sig.
		B	Standard error	Beta		
1	(Constant)	,003	,835		,004	,997
	The lack of visibility of other people's workloads makes it difficult to allocate tasks	,410	,157	,391	2,616	,015
	The use of digital communication tools increases the risk of misunderstandings between team members	,190	,132	,226	1,436	,163
	The lack of recognition that can be felt when we are far from the hierarchy can affect my motivation	,277	,119	,368	2,321	,028

a. Dependant variable : The misunderstandings that can arise from the use of digital communication tools have a negative impact on my motivation

Source : SPSS24 analysis

The significant coefficient of 0,015 indicates that the lack of visibility of other people's workloads makes it difficult to allocate tasks, which has a significant and positive impact on the perception that misunderstandings linked to digital tools have a negative impact on motivation. Furthermore, the

coefficient of 0,028 indicates that the lack of recognition felt when one is far from the hierarchy can significantly affect motivation.

-Remote working and isolation feeling

Here, we will analyse the regression for the isolation feeling when the teams members are working remotely.

Table 9. Remote working and isolation feeling

Model	Non-standardised coefficients		Standardised coefficients	t	Sig.
	B	Standard error	Beta		
1 (Constant)	-,162	,744		-,218	,829
The lack of recognition that can be felt when we are far from the hierarchy can affect my motivation	,338	,166	,331	2,030	,053
The lack of real social interaction can affect my motivation	,414	,207	,365	1,997	,056
The lack of social support accentuated by these tools can demotivate me	,136	,200	,129	,682	,501

a. Dependant variable : I feel isolated working with my team remotely

Source : SPSS24 analysis

For the variable ‘The lack of recognition that can be felt when we are far from the hierarchy can affect my motivation’,

the coefficient of 0,053 indicates that this variable has a positive impact on the feeling of isolation. The same applies to the variable 'The lack of real social interaction can affect my motivation', which has a coefficient of 0,056, meaning that the lack of real social interaction also has a significant positive effect on feelings of isolation.

5. CONCLUSION

In our article, we looked at the use of digital technologies with a view to defining whether they represent an asset for project teams or a source of stress. We began by exploring the field of project management, then focused on project teams and the various stress factors that can influence their performance. We also looked at the growing role and contribution of digital technologies in this field.

The integration of these technologies into project management has significant advantages, such as facilitating collaborative working. However, it has also emerged that these tools can exacerbate certain sources of stress, notably due to information overload and increased expectations in terms of deadlines. Stressors such as work overload and poor communication were highlighted as major challenges facing teams, which can also be exacerbated by these tools and lead to demotivation of team members.

Through our study, we found that respondents frequently use digital technologies in their work and generally feel competent in mastering them. The majority agree that these tools are beneficial for communication and that the sharing of documents that they make possible helps with traceability and

transparency, although they are more divided on the effectiveness of videoconferencing meetings.

Despite the wide range of opinions, the risk of misunderstandings cannot be ruled out when communication is based solely on digital tools.

Respondents were generally satisfied with the ability of digital tools to help them prioritise their tasks. They did, however, recognise the problem of visibility of other people's workloads.

Constant notifications and the pressure to be available online appear to be sources of stress, with great variability in the perception of these impacts. In addition, the difficulty of disconnecting after a day's work with these digital tools is a notable problem.

Misunderstandings and inequalities in digital skills are perceived as having a moderate to significant impact on motivation, with a fairly uniform perception on this subject.

Lack of recognition and social interaction is perceived to affect motivation, although opinions vary widely. Perceived isolation is relatively low on average, but perceptions vary widely. Lack of social support is also perceived as a moderate to low demotivating factor, with varying opinions among respondents.

In response to our problem, it appears that digital technologies represent both an asset and a source of stress for project teams. Their use can considerably improve project management by facilitating communication between members, but it requires a balanced approach to minimise the risks of work overload and demotivation.

In this context, our hypotheses are confirmed. This said, the last hypothesis, which states that it is inconceivable to work on

a project without digital tools, although confirmed, it remains essential to rethink the use of tools.

To ensure that digital technologies are used in a way that supports teams while minimising the risk of stress, we make the following recommendations:

- Organisations should put in place strategies to manage these tools in such a way as to maximise their benefits while preserving the well-being of their teams.
- Train teams in the use of digital tools, in order to reduce inequalities in skills and the stress and demotivation they can cause.
- Define guidelines for online communication as well as the channels to be used according to the type of information (urgent, non-urgent, etc.) in order to reduce information overload and communication failures.
- Reserve videoconferences for emergencies and limit their duration.
- Set up feedback systems to allow team members to express their concerns and ensure that they have properly understood.
- Schedule face-to-face meetings to give the team a real feel for the group's existence and real interaction.
- Select tools specific to the needs of the team to minimise the stress of adopting them.
- Monitor team members' workloads to avoid overload, and adjust tasks and deadlines as necessary.

Future avenues of research can be explored with regard to:

- The integration of AI in project management.
- A comparative analysis of AI-based digital tools in project management, assessing their impact on team performance and well-being.

- The customisation of project management tools according to the specific needs of each member in order to improve their satisfaction and efficiency.
- The use of conversational agents to facilitate communication and task management within the team.

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Appendix

To consult our questionnaire, follow the link or use the QR code below:



<https://forms.gle/bjczuLYhJ6rcKhFQ6>