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# Remote Project Management: Challenges and Best Practices

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September, 2021

TECNOLOGIAS
E ARQUITETURA

Department of Science and Technology

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# Acknowledgements

To my supervisor Ruben Filipe de Sousa Pereira and my Co-supervisor Isaías Scalabrin Bianchi: I am grateful for your support and dedication throughout this challenging period.

To my parents Norma and José Luiz (*in memorian*), for all their love, courage, support and example. I am here, right now, because you are my base. Love you!

To my Family: thanks for all the support you give me, always!

Thanks to all dear friends who helped me on this path.

And finally, my most important and sincere thanks. To my husband Marcelo and my son Pedro. What to say? Pedro, you are the reason for all this. Without you, I wouldn't be writing these lines. Marcelo, my love, without you by my side I wouldn't be able to. Thanks for the unconditional encouragement every day. Thank you for the English reviews, thank you for your patience, for your love and for having followed by my side on this beautiful adventure!

# Resumo

Com o avanço da tecnologia, tal como a internet e os meios de comunicação o mundo ficou muito mais conectado. As pessoas passaram a encurtar a distancia fisica através de facilidades tecnologicas. Esse avanço não afetou apenas o lado social da humanidade, mas abriu portas para que as organizações também pudessem usufruir desses beneficios. As pessoas foram capacitadas e incentivadas a trabalhar de casa. As empresas viram uma oportunidade de reduzir custos e obter os mais qualificados profissionais independente de sua posição geografica. Desta forma, a gestão de projetos com equipas remotas passou a ter um relevante lugar dentro das organizações. Diante da situação pandêmica que o mundo está a ultrapassar, trabalhar remotamente deixou de ser opção e passou a ser a forma de seguirmos em frente. Existem incontaveis estudos na comunidade cientifica a dissertar sobre gestao de projetos, seus riscos, desafios, melhores praticas, ferramentas e outros assuntos pertinentes. Mas somente um grupo pequeno e restrito de estudos estão diretamente relacionados com a gestão de projetos remota e equipas remotas. Para preencher essa lacuna, esse estudo visa identificar os principais desafios da gestão de projetos remota, bem como as práticas para mitiga-los. Para avaliar e demonstrar os resultados, 30 entrevistas qualitativas e 69 questionarios foram aplicados com gestores de projetos que estão desenvolvendo suas atividades de modo remoto 100% do tempo após o inicio da pandemia Covid-19. No final, pode-se ver uma lista de 14 desafios e 13 boas praticas que foram adotadas para manter seus projetos em dia e apoiar suas equipas nesse momento tão dificil. O autor conclui que foi um momento disruptivo tanto para os trabalhadores quanto para as empresas. Aumento da qualidade de vida e horarios mais flexiveis foram vistos como um grande beneficio. Em contra-partida, foram necessarias muito mais horas de dedicacao ao trabalho para que fosse possivel manter a produtividade dos projetos.

**Palavras-Chave:** Gestão de Projetos; Equipas Remotas; RPM pós COVID-19; Boas Práticas de RPM

# Abstract

With the advance of technology, such as the internet and media communications, the world has become much more connected. People have shortened the physical distance through technology facilitations. This advance not only has affected the social side of humanity, but has also opened up doors so that organizations could take part of these benefits. People were trained and encouraged to work from home. Companies saw an opportunity to reduce costs and get the most qualified professionals regardless of their geographic location. In this way, Project Management (PM) with Remote Teams (RT) has taken a relevant place inside organizations. In face of the pandemic situation the world is undergoing, working remotely stopped being an option and became the way to move on. There is an uncountable study on scientific community about PM talking about issues, challenges, best practices, frameworks and other topics, but only a few of them is direct related with remote project management (RPM) and/or RT. To fill this gap, this research aims to identify the main RPM challenges as well as the practices to mitigate such challenges. To evaluate and demonstrate findings, 30 qualitative interviews were performed and 69 surveys were applied with Project Managers who are developing their activities in a remote mode 100% of the time after the beginning of the Covid-19 pandemic. In the end, it is possible to see a list of 14 challenges and 13 best practices they had to apply to maintain their projects in the track and support their teams in this such difficult moment. The author concluded that was a disruptive moment for both workers and companies. Increased quality of life and flexible schedules were identified as a great benefit. On the other hand, much more dedicated work-hours were needed to maintain projects productivity.



**Keywords:** Project Management; Remote Teams; RPM after Covid-19; RPM Best Practices

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# Acronyms

| | | |
|---|---|---|
| BP | - | Best Practice |
| CH | - | Challenge |
| DSR | - | Design Science Research |
| MLR | - | Multivocal Literature Review |
| PM | - | Project Management |
| PMBok | - | Project Management Boy of Knowledge |
| PMI | - | Project Management Institute |
| RPM | - | Remote Project Management |
| RQ | - | Research Question |
| RT | - | Remote Teams |
| RW | - | Remote Work |
| SLR | - | Systematic Literature Review |

# Chapter 1 - Introduction

The importance and professionalization of PM had already been noticed in the beginning of the 60´s, but it became popular after the creation of Project Management Institute (PMI), founded in 1969. This organization is dedicated to study which are the practices proposed by the project managers that ultimately have success on their projects.

In 2020, because of the Covid-19 pandemic, the world dramatically changed and it became necessary to rethink the way we work, socialize and communicate (Li et al., 2020). Working from home, first seen by companies as an opportunity to reduce projects costs (Hertel et al., 2005), to search for the best qualified workers regardless of their location (C. M. Beise, 2004), or to be more agile (Lebedieva et al., 2011), it has now become the "new normal" for all, and the only way to move on (Dixit et al., 2020).

According to the Instituto Nacional de Estatística (INE) of Portugal whose published a survey (*Trabalho a partir de casa – Módulo ad hoc do Inquérito ao Emprego Trabalho a partir de casa devido à pandemia abrangeu um milhão de pessoas*, 2020), more than one million people, only in Portugal, started working from home in the second quarter of 2020. Out of these, 91.2% of workers said that the main reason was due to the Covid-19 Pandemic. This movement happened not only in Portugal but around the world. A survey published by Global Workplace Analytics, in May 2020, with about 3.000 responses, shows that 88% workers started to work from home on a regular basis during the pandemic. Only 31% of this studied group, were working at home on a regular basis before. In figure 1, It is possible to see the evaluation of remote work (RW) during the pandemic period.

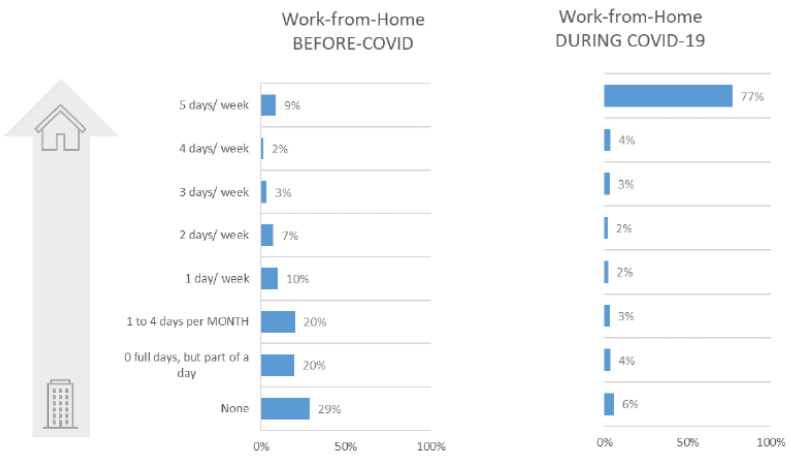


*Figure 1- Work from Home During Pandemic. Source: Global work-from- home Experience Survey,2020*

Currently, almost every organization have to rely on RT to execute their projects, and the difficult to manage these remote projects have increased (George et al., 2020). The most traditional organizations had to change their mindset and start believing that they could be productive and efficient without having their employees in the same place as their leaders.

Remote Project Managers face a variety of challenges, especially those who have never managed a remote team (Seerat et al., 2013). On the other hand, traditional Project Managers who work at the same physical location as the team, dispose of structured and tested practices such as the Management Body of Knowledge (PMI, 2017).

Remote Project Managers need to take responsibility not only for the normal PM issues and activities (such as complex, usually uncertain, interdependent tasks) but also for the cultural differences among team members and geographic distance. Since they have to combine all of these items (Casey & Richardson, 2006a), one can assume that the management of remote projects is more complex than in the traditional way.

Despite the fact that most of the guidelines that support the traditional project managers should support the remote project managers, new practices and/or additional project manager skills could also be used and applied as a way to be more adherent in order to achieve project success in a remote situation.

Based on the previous paragraphs, this research aims to elicit the main RPM challenges as well as the practices to mitigate such challenges. The goal was then translated into two research questions listed below:

RQ1 – Which are the main challenges of RPM?

RQ2 – Which are the best practices that can be used to mitigate RPM challenges?

To implement this study, the methodology chosen was the Design Science Research Methodology (DSRM), coupled with a Systematic Literature Review (SLR) to elicit the investigate questions. Individual semi-structured interviews and a survey were conducted, to evaluate and tune the results. Given the amount of literature about RPM, the SLR is a proper methodology to start the investigation (Budgen & Brereton, 2006). After the introductory chapter, the remainder of this dissertation is organized as follows: In the second chapter, the theoretical background was presented, and the author explained the major concepts to support the study, In the third chapter, the related work done by the author was explained and detailed. Following, the fourth chapter demonstrates the research methodology chosen and applied by the author. Finally, the fifth chapter, presents the research synthesis and the conclusions. Possible future work and some limitations that were intensified during the work were also mentioned in this chapter.

# Chapter 2 - Theoretical Background

In this section, we will introduce the three major concepts that support this study: Project Management (PM); Remote Project Management (RPM) and Methodologies. The next paragraphs briefly detail these concepts.

## 2.1. Project

Project can be defined like something temporary with start and finish dates, executed by a defined team and having defined phases in order to build something new and unique. A project has always clear objectives to be achieved at the end of it (Patah, 2007). Through the history books, it is easy to note that the presence of projects is not something new. One of the earliest documented examples of projects that can be cited is the great engineering work of the Pyramids in Egypt (Value et al., 2003), which is currently considered one of the Seven Wonders of the World.

Two main characteristics of a project can be highlighted: the timing (temporariness) and the delivery of something new (uniqueness) (Styk et al., 2019).

a) Temporariness: a project has a well-defined beginning and end target. During this defined time, the objectives of each phase of the project have to be achieved. Also, the fact that a project is something temporary does not imply that it will have a short duration. It could last for months or years.

b) Uniqueness: as the product is unique, its own characteristics must be developed progressively, that is, work in stages, paying special attention to details so that the objectives proposed in the initial scope are achieved. The fact that a project is unique does not mean that there are no others doing the same thing. Each project is developed within a different organizational context, using different resources and meeting the specific goals of each organization. For example, if a bank decides to develop a software for managing the clients accounts, it will probably be very similar to another software developed by another bank with the same objective, although they will never be the same product.

## 2.2. Project Management

PM can be applied to any situation where there is an enterprise that differs from what is fixed or a routine inside the organization. PM is the key of success for projects. Without a good PM effort, a lot of projects would fail. Project can be defined like project like something temporary

with a date to start and a date target to finish, executed by a defined team and defined phases to build something new and unique. One project always has clear objectives to achieve at the end (Patah, 2007). Through the history books it is easy to note that the presence of projects is not something new. The earliest example that can be cited was the great engineering work of the Egypt Pyramids (Value et al., 2003), which is currently considered one of the Seven Wonders of the World.

Nowadays, organizations realize that it is important to achieve their strategic goals, work with project, project managers and PM methodologies (Patah & De Carvalho, 2007). There is no place for organizations with rigid structures and highly bureaucratic. That´s why they should carry out significant changes and implement new practices more adjusted to this reality (Gomes & Romão, 2016)

### 2.3. Remote Project Management

PM is the process to organize the whole work that a team has to do in order to achieve a goal in a specific time. Being an interactive process, PM can be considered as a set of activities needed to produce a result in a date range pre-defined, with a group of resources and a budget defined.(Jamali & Oveisi, 2016a). Also, Project managers are the professionals who have the set of knowledge, skills, techniques and tools used to plan, execute and monitor the project. Besides that, they have the responsibility to maintain the team on the same page, focused on deliveries and motivated until the end of the project (PMI, 2017). Not only do project managers need to deliver projects on time, on schedule, and within budget, they also need to ensure quality and user satisfaction for the work delivered. Project managers need to continually find ways to do this better. It is important to cite that a good PM program could help the organization to implement its corporate strategy.

Remote Projects are projects executed by members distributed across work locations when face-to-face communication is not possible nor viable to be done (Watfa & Todd, 2017). These projects are executed by cross-functional teams that are pulled together for a specific purpose (Watts et al., 2008). Another important Remote Project characteristic is the fact of PM processes are executed in the remote world (Leuthold et al., 2012). Management could be represented by all the work, tools and system information the project managers have to use to coordinate and communicate the information across the project (Seerat et al., 2013).

In this context is necessary to define Remote Team like a group of people who are dispersed geographically, sometimes with differently time zones. This group conducts all or most of its interactions via electronic means, like Intranet, intranets, extranets and other software's to communicate and collaborate on tasks projects (Casey & Richardson, 2006b). The way these teams interact with each-other defines them as "remote". The team is motivated and work together to achieve the project goals even though they might never meet.

Many organizations decided to implement remote teams like a strategy of the offshore and outsource policy. Globalization leads to an efficient new business paradigm of remote teams, where organizations may focus their effort in the core competencies and outsource all other functions and needs (Hsu, 2011). It is possible to cite some main reasons why organizations invest in remote teams, like: provide innovative problem solving strategies; provide diversified organizational culture; increase the customer satisfaction – clients can be supported round the clock (Seerat et al., 2013).

## 2.4. Project Management Methodologies

PM methodologies appear as an important tool to optimize and improve the organizations management. They are fundamental for the organizations to better systematize its objectives and strategies in order to achieve them. Every day, the organizations have the challenge to focus on the clients´ needs and on the society in general. They need to maximize their success in implementing their projects, having high-efficiency and accurate budget managing, time-lines, scope and risks.

A PM methodology can show "what should be done" to properly manage a project (Ur Rehman & Hussain, 2007). There are a lot of methodologies available and organizations have to find out which one is the best and more adherent to their culture and way of working (Styk et al., 2019). All methodologies have risks, and understanding those risks and finding ways to monitor, mitigate, and manage those risks is an important aspect for a good PM. In this session, we will present some of them, the ones we consider more important and more used by organizations around the world.

### 2.4.1. Prince 2

This methodology was developed by the CCTA - Central Computing and Telecommunications Agency, of the British Government. Since 1989 it has been used in UK like a standard for PM and it can be used for all types of projects.(Luqman, 2006) The name "Prince" is an acronym from

**PR**ojects **IN** a **C**ontrolled **E**nvironment. The methodology is structured in four integrated elements: principals, themes, processes and project environment.

### 2.4.2. PMBok

The Project Management Body of Knowledge - PMBok is a combination of 10 knowledge areas, distributed in 5 different process groups which represent the project life cycle, shown in Figure 2. The aim of PMBOK is to decrease the risk and increase the quality and the success of the projects (Jamali & Oveisi, 2016b)

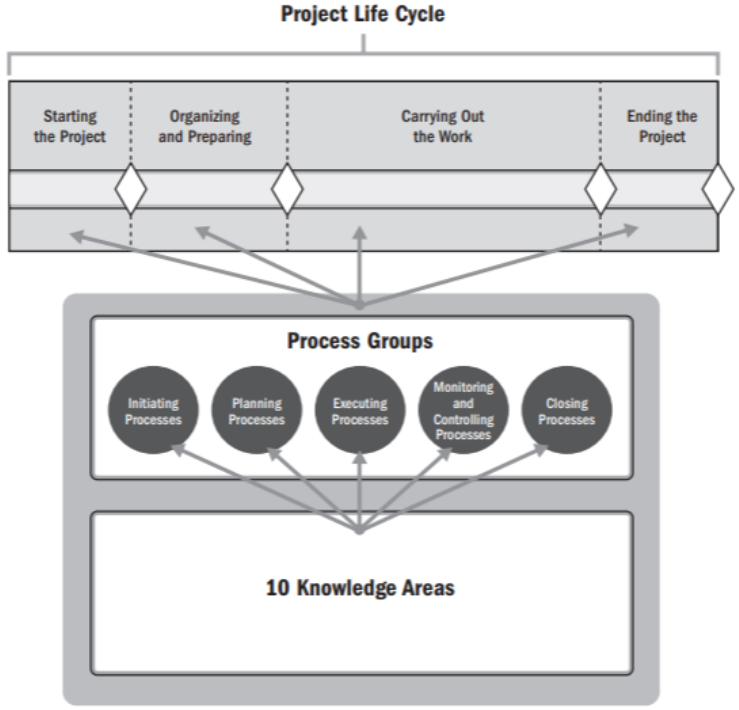


*Figure 2 - PMBOK Components (PMI, 2017)*

### 2.4.3. Waterfall

We can consider Waterfall methodology like the classical way to organize software development. It consists in starting and concluding each phase of the development process before the beginning of the next phase, like we can see in Figure 3.

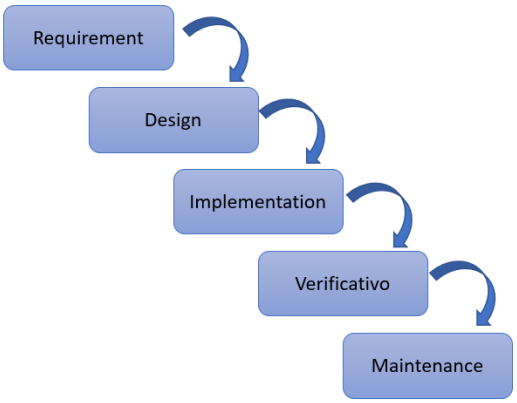


*Figure 3 - Waterfall development model - adapted from (Duka, 2013)*

This methodology imposes great rigidity to the execution of the project. If the project is developed in a controlled environment and the requirements are clear and known, this methodology can bring good results.

### 2.4.4. Agile

Agile methodology was created to respond the need for frequent changes and fast delivery from the software industry (Hayat et al., 2019). Instead of a sequential process, this methodology follows an incremental approach. Agile methodology has flexibility to handle cost, scope and quality, thus answering efficiently the stakeholders needs. The aim is to reduce the process software overhead, like documentation, and concentrate all the team effort to guarantee software development and tests. In this case, the customer or stakeholder involvement is essential for the success of project (Khalil, 2007).

There are still a variety of other methodologies available for Project Managers. We can quote the Rational Unified Process – RUP, Microsoft Solution Framework – MSF, for example (Ur Rehman & Hussain, 2007), Extreme Programming -XP and Dynamic System Development Method – DSDM (Coram, 2001). But we notice that agile methodology is mainly alternate solution of waterfall methodology face to the need of companies to be increasingly competitive and efficient. The authors Khalil and kotaih published an article (Khalil, 2007) comparing these two methodologies and, at the end, they show there is more succeeded projects development with agile methodologies than waterfall (Figure 4).

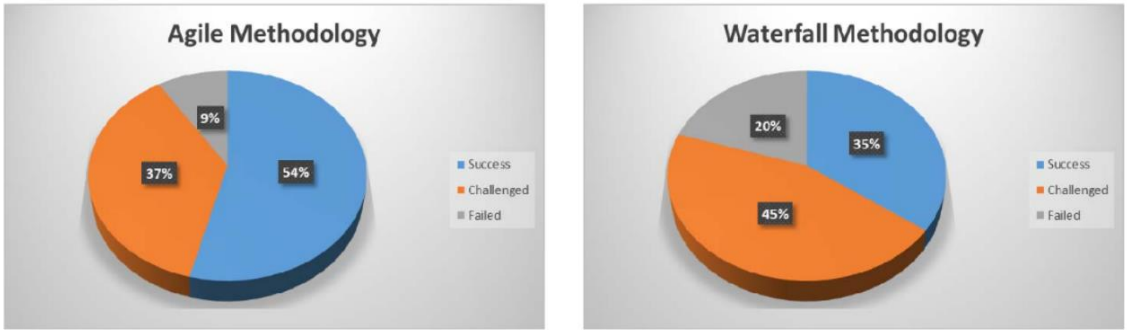


*Figure 4 - Numbers of success, challenge and failed Projects developed in Agile Methodology vs Waterfall Methodology (Khalil, 2007)*

Each PM methodology has its own advantages and disadvantages. Organizations must be able to evaluate which on is better for their cultural environment and needs for each project.

### 2.4.5. Remote Project Practices in Project Management Methodologies

Having a single model for PM, such as the Waterfall methodology, is not enough for organizations to improve their processes and, consequently, their deliveries with the speed and the quality that the market has demanded. When organizations work with agile methodologies with continuous iterations during the entire software development life cycle, they must decide which kind of framework will be the most adherent for their projects. Scrum is the most popular method used by companies, being confused with the concept of agile methodology itself. We can define scrum like an agile, lightweight framework that provides steps to manage and control the software and product development process (Srivastava et al., 2017) to help people, teams and organizations to generate value. While deepening the theme, we could observe some tips or practices cited to help the use of scrum with remote teams. We can quote below, some of them:

- Absolute transparency and communication → working with remote teams is a big trend. The Project Manager has to have in mind that being available for the team is the prior priority. Since the project manager will not have the team sitting next him, finding a communication channel to interact with the team is essential.
- Understand the scope of the project → this is, again, another problem of communication that the project manager has to give all attention. It is critical to make sure that all members have the same understanding of how the product of the project should behave.

- Documentation → once it comes to interfacing with remote teams, all documents, codes, tests or decisions made about the project need to be well-documented and available in a click-to-download way.
- Be prepared → Project manager has to be prepared for all kind of situation. Is important to think what to do in case of someone of the team has problems with internet, or has the notebook crashed, for example. The project manager has to pay attention if the team are giving signals of discomfort, even though this is a little harder with remote teams. And be accessible for the team to bring psychological safety and engagement prom everyone into the working agreement.

PMI – Project Manager Institute also did not neglect the look at agile methodology and remote teams. The PMBok (PMI, 2017) is updated and reviewed every four to five years and is currently in its sixth edition. One of the most major and high impact changes were the incorporation of Agile Concepts in all 10 knowledge areas. In this new edition, the knowledge area who was named "Human Resource Management" was changed for "Project Resource Management", to signify that the project manager has to manage both team resources and physical resources. In this chapter they introduced the concept of remote teams and cited some challenges of managing remote teams. For example:

- Possible feeling of isolation for team members;
- Gaps in sharing the experience and knowledge;
- Cultural and time zone differences.

To talk specifically about remote teams, the PMBok created a new section inside the process "Acquire resources" and cited the benefits that a remote team model can bring to the project but they highlight communication planning as relevant in a remote team environment.

# Chapter 3 – Related Work

To detail the related work, a Systematic Literature Review (SLR) was performed in order to provide an objective summary for the studied topic (Okoli & Schabram, 2012). Working with SLR can improve literature reviews by bringing transparency and rigor for the research (Trisnawati et al., 2019). It is a way of interpreting all available research that is important for the objective of this study. The SLR was done between September and November of 2020. Performing a SLR involves three main phases: Planning; Conducting and Reporting the review (Brereton et al., 2007) as shown in Table 1.

*Table 1 - Performing a SLR*

| Planning | Conducting | Reporting |
|---|---|---|
| Identify the need for review | Managing studies and final selection | Report the findings (writing and validate) |
| Objective of the review | Data extraction and synthesis | |
| Data sources, search strategies and inclusion criteria | | |

## 3.1. Planning

The first phase of SLR started with the identification of the need for the review. This research aims to identify the main RPM challenges as well as the practices to mitigate such challenges and the relationship between both of them. Then, it was necessary to define the scope and the breadth of the SLR. Therefore, the objective of this former phase of SLR is to explore what has been done by the scientific community regarding the challenges and related best practices involved in RPM within remote teams.

The first task is to define the keywords (Table 2) followed by the data sources (Table 3), then the search strategies (Table 4), and finally, inclusion and exclusion criteria (Table 5).

*Table 2 - Keywords*

| ID | Keywords |
|---|---|
| **K1** | "Remote Project Management" |
| **K2** | "Virtual Project Management" |
| **K3** | "Remote" + "Project Management" |
| **K4** | "Virtual" + "Project Management" |

*Table 3 - Data Sources*

| Name | Link |
|---|---|
| ACM | https://dl.acm.org/ |
| IEEE | https://ieeexplore.ieee.org/Xlor/home.jsp |
| SPRINGER | https://link.springer.com |
| WEB OF SCIENCE | https://webofknowledge.com |
| SCOPUS | https://scopus.com/ |

*Table 4 - Search Strategies*

| **Filters** | |
|---|---|
| **F1** | Search of keywords in the entire text |
| **F2** | Search of keywords only in "Abstract" |
| **F3** | Search of keywords only in "Title" |
| **Filters applied form F3 results (Title)** | |
| **F4** | Remove duplicate articles in databases |
| **F5** | Remove articles that did not meet the inclusion criteria |
| **F6** | Remove articles that do not allow download |
| **F7** | Remove articles after content analysis (not relevant to the proposed study) |

*Table 5 - Inclusion/Exclusion Criteria*

| **Inclusion/Exclusion Criteria** | |
|---|---|
| Inclusion | English Documents Only |
| | Only documents published in Conferences and Journals |
| Exclusion | Documents written in other languages (not English) |
| | Documents published in other media or books |

### 3.2. Conducting

The process of conducting the SLR was done manually by searching the databases already presented in the previous session. To every filter applied, a better result and selection of articles was improved. After applying 7 filters, I obtained a final result of 68 articles, presented on figure 5, to be studied in depth in order to contribute to this research.

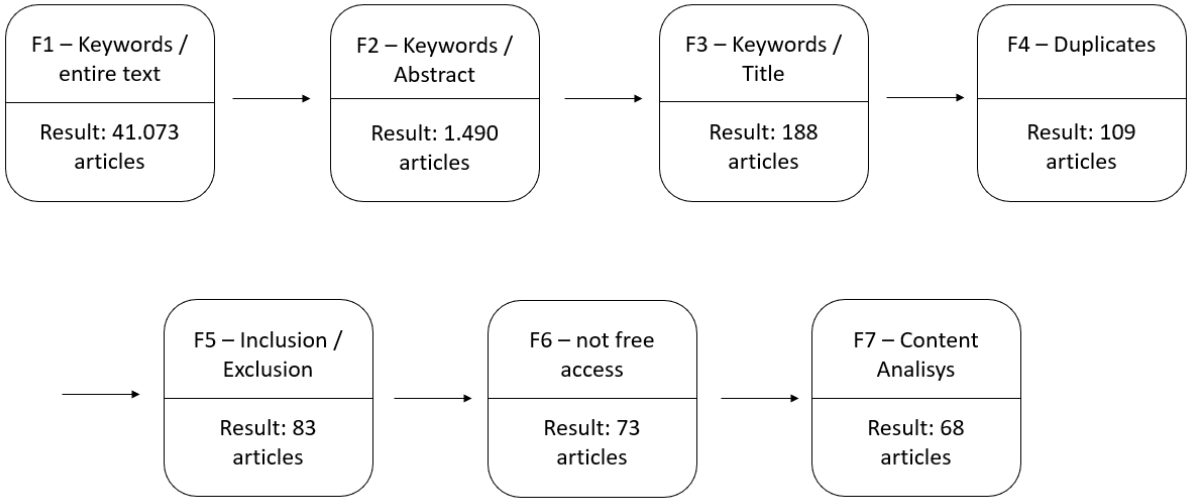


*Figure 5 - SLR Conducting*

In Appendix I section, I present the name of conferences and journals where the articles that served as the basis for this study were presented and discussed. Then, research was done regarding the quality of these conferences and journals, as can be seen in Table 6.

*Table 6 - Journals and Conferences Ranking*

| **Type** | **Rank** | **Num Articles** |
|---|---|---|
| Conferences | A | 1 |
| | B | 2 |
| | C | 1 |
| | N/A | 29 |
| Journals | Q1 | 13 |
| | Q2 | 4 |
| | Q3 | 8 |
| | Q4 | 2 |
| | N/A | 8 |

Finally, it was noticed that the majority of articles about RPM were published in the last decade, as shown in the graphic on Figure 6.

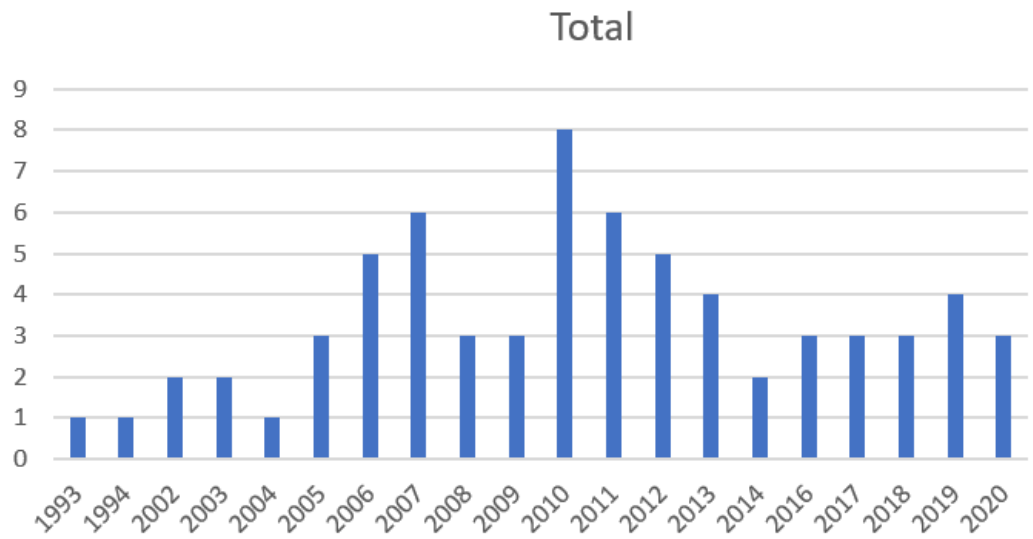


*Figure 6 - S Studies per year of publication*

### 3.3. Reporting

There are some studies talking about RT and PM, there were no many studies relating challenges and best practices, even the relation between them, implemented to improve the PM with remote teams. Therefore, this section details and analyze some of the most similar studies that cite some best practice and/or challenges about RPM. In Table 7, there is a demonstration if the articles are adherent or not with the objective of this study.

After reading with a lot of care and attention these articles, I noticed that instead all of them had a reference and a relation between at least one challenge and one best practice, some of them proposed a tool or a framework or webservice to solve the problem cited. It´s not the focus of this research proposes a new tool to help on RPM. So, in the following paragraphs I describe the most adherent studies about the related theme.

Martin Pazderka and Thomas Grechenig (Pazderka & Grechenig, 2007) in their paper about Project Managed Matured Models describe in first place two kinds of matured model: the traditional one (CMMI) and a multi-dimension model (OPM3), which is an extended approach of the first one. They later explain the fact that organizations are working more and more with remote project teams and, in order to stablish the relationship between maturity models and remote teams, they had to explore and understand the challenges a remote team has to face. In section IV they analyze each challenge they had previously identified and suggest an associated best practice that, they believe, addressed the challenge. At the end of the paper, they suggest a set of best practices defining a strategy of how current maturity models can be extended to increase the success of remote projects and teams.

*Table 7 - SLR Reporting -articles studied and the adherence with the objective*

| Reference | RPM CH | RPM BP | Publication | Rank | Year |
|---|---|---|---|---|---|
| (Tilley & Mueller, 1993) | | | Conference | - | 1993 |
| (Williams & Nicolle-Evans, 1994) | | | Journal | Q1 | 1994 |
| (Ohara, 2002) | | | Journal | Q1 | 2002 |
| (Kirikova, 2002) | ✓ | | Conference | A | 2002 |
| (C. Beise et al., 2003) | | | Conference | - | 2003 |
| (Bergamaschi et al., 2003) | | | Conference | - | 2003 |
| (C. M. Beise, 2004) | ✓ | ✓ | Conference | B | 2004 |
| (Yin et al., 2005) | | | Conference | - | 2005 |
| (Nauman & Iqbal, 2005) | ✓ | | Conference | - | 2005 |
| (Giurgiu, 2005) | | | Conference | - | 2005 |
| (Nauman et al., 2006) | ✓ | ✓ | Conference | - | 2006 |
| (Casey & Richardson, 2006a) | ✓ | ✓ | Conference | - | 2006 |
| (Abels et al., 2006) | ✓ | ✓ | Journal | Q2 | 2006 |
| (*Stanger e De Abreu - 2006 - Virtual collaboration tools used in project manage.pdf*) | | | Journal | - | 2006 |
| (*Bergamaschi et al. - 2006 - An intelligent data integration approach for colla.pdf*) | | | Journal | - | 2006 |
| (Harej & Horvat, 2007) | | | Conference | - | 2007 |
| (Pazderka & Grechenig, 2007) | ✓ | ✓ | Conference | - | 2007 |
| (*Han et al. - 2007 - Evaluation of CITIS as a collaborative virtual org.pdf*) | ✓ | ✓ | Journal | Q1 | 2007 |
| (Doloi, 2007) | | | Conference | - | 2007 |
| (Zigurs et al., 2007) | | | Journal | - | 2007 |
| (Khazanchi & Zigurs, 2007) | ✓ | ✓ | Conference | - | 2007 |
| (Mumbi & McGiill, 2008) | ✓ | | Journal | Q3 | 2008 |
| (Control et al., 2008) | | | Journal | Q1 | 2008 |
| (Hsu & Lee, 2009) | | | Conference | - | 2009 |
| (Owens et al., 2009) | | | Journal | Q1 | 2009 |
| (H. Li et al., 2009) | | | Journal | Q1 | 2009 |
| (C. Beise et al., 2010) | ✓ | ✓ | Conference | B | 2010 |
| (Hsu, 2010) | ✓ | ✓ | Conference | - | 2010 |
| (Xie & Liu, 2010b) | | | Conference | - | 2010 |
| (Xie & Liu, 2010a) | | | Conference | - | 2010 |
| (Lee et al., 2010) | | | Conference | - | 2010 |
| (Lee et al., 2010) | | | Journal | Q3 | 2010 |
| (Ni & Wang, 2010) | | | Conference | - | 2010 |
| (Martínez et al., 2010) | | | Conference | - | 2010 |
| (Lebedieva et al., 2011) | | ✓ | Conference | - | 2011 |
| (DiBello & Missildine, 2011) | | | Journal | Q3 | 2011 |
| (Hsu, 2011) | ✓ | ✓ | Journal | - | 2011 |
| (Procter et al., 2011) | | | Journal | Q1 | 2011 |
| (Arain & Burkle, 2011) | | | Journal | Q1 | 2011 |
| (McCuen, 2011) | | | Journal | Q1 | 2011 |
| (Bandic Glavas & Majstorovic, 2012) | ✓ | ✓ | Conference | - | 2012 |
| (Mitlacher, 2012) | | | Journal | Q3 | 2012 |
| (Abdelhameed, 2012) | | | Journal | Q3 | 2012 |
| (Leuthold et al., 2012) | | | Journal | Q3 | 2012 |
| (D, 2012) | | | Conference | - | 2012 |
| (Seerat et al., 2013) | ✓ | | Conference | - | 2013 |
| (Mkrttchian & Stephanova, 2013) | | | Journal | - | 2013 |
| (Piraquive et al., 2013) | | | Conference | - | 2013 |
| (Rughini et al., 2013) | | | Conference | - | 2013 |
| (Zhong & Hao, 2014) | | | Journal | - | 2014 |
| (Mihaescu et al., 2014) | | | Conference | - | 2014 |
| (Bourgault et al., 2016) | | ✓ | Conference | - | 2016 |
| (González-Marcos et al., 2016) | | | Journal | Q1 | 2016 |
| (*Maratou et al. - 2016 - Enhance learning on software project management th.pdf*) | | | Journal | Q1 | 2016 |
| (Watfa & Todd, 2017) | ✓ | ✓ | Conference | - | 2017 |
| (Bissaliyev, 2017) | | | Journal | Q2 | 2017 |
| (Kumsap, 2017) | | | Conference | - | 2017 |
| (González-Marcos et al., 2018) | | | Journal | Q3 | 2018 |
| (Didehvar et al., 2018) | | | Journal | Q1 | 2018 |
| (Mohan et al., 2018) | | | Journal | Q2 | 2018 |
| (Kaur et al., 2019) | ✓ | ✓ | Conference | - | 2019 |
| (Sharma & Trivedi, 2019) | | | Journal | Q4 | 2019 |
| (González-Marcos et al., 2019) | | | Conference | - | 2019 |
| (Ahmed, 2019) | | | Journal | - | 2019 |
| (Makoviy & Khitskova, 2020) | | | Journal | Q3 | 2020 |
| (Brockhoff, 2020) | | | Journal | Q2 | 2020 |
| (Rehman et al., 2020) | ✓ | | Journal | Q4 | 2020 |

Marijana and Vlado (Bandic Glavas & Majstorovic, 2012), in a 2012 paper, defined that RPM would be the future of the organizations. In fact, nowadays, RPM is the reality of most organizations in the world. In section 2 they describe some reasons that drove organizations to implement remote teams and emphasize the trend of communication. They also explain the necessity of IT knowledge and the reliance on technology tools to share data and information among the remote project team members. The most common software used to help the Project Managers maintain projects on track, such as Microsoft Project, Zoho Projects and Primavera, is also described. Further, they defend that is important to increase the use of virtual spaces like Internet, Extranet and Intranet to mitigate the communication issue with remote projects, as well as the full use of these software's to address the trends of development of computer support and virtualization of PM.

Valentine Casay (Casey, 2010) presented a case study placed in Ireland of a project with two remote teams working together (Malaysians and Irish) who had different levels of experience and maturity. The author spent 5 months inside the organization, on a full-time basis, working for the research which included document review, direct observation, interviews, focus groups and questionnaire completion. As a conclusion, the author describes the challenges and good practices for 6 areas that are important to a successful implementation of a globally distributed information system development strategy. These areas are: 1) organizational virtual team strategy; 2) risk management; 3) infrastructure; 4) implementation of a virtual process; 5) team structure and organization; 6) conflict management.

"Role of a Project Management in Virtual Teams´ Success" (Rehman et al., 2020) is one of the most recent articles published that are related to this study´s objective. In this article the authors present some of the motivations for organizations to implement remote projects. For instance, it mentions cost reduction, 24/7 working possibilities, enhanced productivity, among others. They defend that the major issues that arise when working with remote projects and remote teams are due to two factors: lack of communication and lack of collaboration. In figure 7, presented in this article, it is possible to reflect how these two factors have a special influence on the project team to have a high collaborative result when working in a full-time remote context in order to make the projects´ activities successful.

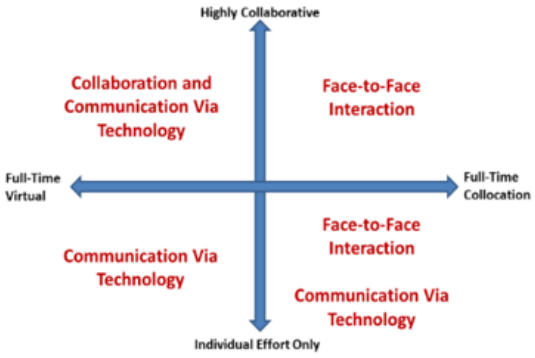


*Figure 7 - Communication and Collaboration matrix (Rehman et al., 2020)*

The authors explored the challenges of software PM in a remote working environment to focus on how these challenges affect relationships and performance of RT, how to build mutual trust within members and how higher leadership can influence a remote setting. They prepared a questionnaire based on literature review related to remote team management issues and analyzed the answers of 25 respondents based in 12 different organizations.

Christian, Charles and Adrian (Leuthold et al., 2012) worked together on the paper named "Virtual Project Management: Introduction". This paper, with an easy language, gives the reader a short introduction into RPM and the major differences between RPM and classical PM. In the first section, they present the motivations to ensure the need of RPM by organizations. In the sequence, they address the differences between classic PM and RPM. A comparative table is presented, showing six processes based on PMBok that have significant differences regarding tools, methods and skills between PM and RPM. The six processes are: control schedule; acquire project team; develop project team; distribute information; report performance.

### 3.4. RPM Challenges

As a result of this study, it is possible to present what are the main challenges described in literature. In the next table (Table 8) it is possible to see these challenges. After that a description of each on is presented.

*Table 8 - SLR Challenges*

| ID | Challenges | Reference | Count |
|---|---|---|---|
| **SLRC1** | Information Redundancy / Share Information | (Pazderka & Grechenig, 2007); (Seerat et al., 2013); (Nauman & Iqbal, 2005); (Khazanchi & Zigurs, 2007); (Hsu, 2011); (Han et al., 2007) ; (Mitlacher, 2012); (Abels et al., 2006); (Casey, 2010); (Casey & Richardson, 2006a); (Bandic Glavas & Majstorovic, 2012); (Kaur et al., 2019); (Zigurs et al., 2007); (Khazanchi & Zigurs, 2007); (Nauman & Iqbal, 2005); (Rehman et al., 2020) | 16 |
| **SLRC2** | Language Barriers / Cultural Differences | (Pazderka & Grechenig, 2007);(Seerat et al., 2013);(Nauman & Iqbal, 2005);(C. Beise et al., 2010); (C. M. Beise, 2004); (Hsu, 2010); (Nauman et al., 2006); (Casey & Richardson, 2006a); (Casey, 2010); (Kaur et al., 2019); (Nauman & Iqbal, 2005); (Rehman et al., 2020) | 12 |
| **SLRC3** | Slow Development of Trust and cohesion | (C. Beise et al., 2010); (Khazanchi & Zigurs, 2007); (Nauman et al., 2006); (Pazderka & Grechenig, 2007); (Mumbi & McGiill, 2008); (Mitlacher, 2012); (Kaur et al., 2019); (Zigurs et al., 2007); (Khazanchi & Zigurs, 2007); (Rehman et al., 2020) | 10 |
| **SLRC4** | Lack of face-to-face communications | (Pazderka & Grechenig, 2007); (Nauman & Iqbal, 2005); (Watfa & Todd, 2017); (C. M. Beise, 2004); (Nauman et al., 2006); (Casey, 2010); (Mitlacher, 2012); (Casey & Richardson, 2006a); (Nauman & Iqbal, 2005) | 9 |
| **SLRC5** | Reliance on technology tools | (C. Beise et al., 2010); (C. M. Beise, 2004); (Khazanchi & Zigurs, 2007); (Watfa & Todd, 2017); (Casey, 2010); (Casey & Richardson, 2006a); (Zigurs et al., 2007); (Khazanchi & Zigurs, 2007) | 8 |
| **SLRC6** | Time and space differences | (C. Beise et al., 2010); (Nauman et al., 2006); (Pazderka & Grechenig, 2007); (Casey & Richardson, 2006a); (Rehman et al., 2020) | 5 |
| **SLRC7** | Leadership of the Project Manager and team collaboration | (Kaur et al., 2019); (Seerat et al., 2013); (Casey, 2010); (Pazderka & Grechenig, 2007); (Rehman et al., 2020) | 5 |

SLRC1 - Information Redundancy / Share Information: Information sharing can be viewed as a process to create and disseminate knowledge. If the Project manager and the team starts to use a lot of different channels of communication, probably, they will be confused and important business information will be lost. It´s necessary to choose the right tool for the Project. Communication and tools selection could be a decision of the organization, or a choice by the team. Nowadays, development in telecommunications and information technologies are increasing(Bandic Glavas & Majstorovic, 2012) and it helps the organizations to do the right choice.

SLRC2 - Language Barriers / Cultural differences: A language barrier exists where team members with different native languages cooperate within a project. Although choosing a main, common working language (e.g., English) helps to reduce this challenge. This is not only true for the RT and the communication inside the project, it has to be defined also for contracts, processes, all the project documentation, understand requirements and tests of the product created (Casey & Richardson, 2006). Are the various beliefs, behaviors, languages, practices and expressions

considered unique to members of a specific ethnicity, race or national origin? When the project manager has a RT working with, these differences should be understood and treated.

SLRC3 - Slow Development of Trust and cohesion: The issue of trust is very important in a remote team because the team members are geographically dispersed and without the social-context (Kaur et al., 2019). Developing trust in a remote team could be the biggest challenge for the organization. Respect without trust, characteristics like efficient, productivity and creativity, which are essential for the success of the project, are not developed. The absent of trust leads to dissatisfaction among the team members which effects the performance of the team.

SLRC4 - Lack of face-to-face communications: While RW can make it easy to work from anywhere and, in most cases, close to the family and in the comfort of your home, it also has disadvantages. These disadvantages are mainly linked to the social sphere, since this type of work can reduce the interaction with other team members. There is a consensus that face-to-face communications help expedite the project flow and reduce risk, especially in the early project phases (Pazderka & Grechenig, 2007). Without that, some professionals end up isolating themselves and having minimal contact with other people, which can affect indispensable skills for the project, such as the ability to communicate and work as a team.

SLRC5 - Reliance on technology tools: For RT, communication and technology is at the core. Internet, video conferences, email, knowledge sharing tools are essential to development the project. And, since team members work from different locations, there is a extent of reliance on technology for collaboration and communication (Zigurs et al., 2007).

SLRC6 - Time and space differences: these two things become a challenge when the team are in different locations with very distant time zones. Coordination, visibility, communication and cooperation are all negatively impacted by time and geographically space differences. If these are not managed correctly, they can cause further barriers and complexity within a project (Pazderka & Grechenig, 2007). It could be difficult for the project manager organize an agenda of meetings and synchronize the work to do. Sometimes it will be necessary to have a flexibility by the team members to alternating meeting times, for example.

SLRC7 - Leadership of the Project Manager and team collaboration: The project manager has to be a person who care of the team. the attitude of the project manager should be assertive yet not bossy (Kaur et al., 2019). The moral of employees could be affected in a remote and extreme

situation. A leader must be able to listen to, and communicate with, a wide range of people. Empathy and courage are a critical part of emotional intelligence and leadership effectiveness.

### 3.5. RPM Best Practices

In the same way we described the challenges cited by the authors, in this section, the goal is to detail the best practices described in the articles studied (Table 9).

*Table 9 - SLR Best Practices*

| ID | Challenges | Reference | Count |
|---|---|---|---|
| **SLRBP1** | Share Knowledge, documents and templates | (C. Beise et al., 2010); (Bandic Glavas & Majstorovic, 2012); (Hsu, 2011); (Han et al., 2007); (Pazderka & Grechenig, 2007); (Mitlacher, 2012); (Casey, 2010); (Seerat et al., 2013); (Bourgault et al., 2016); (Abels et al., 2006); (Zigurs et al., 2007); (Khazanchi & Zigurs, 2007); (Rehman et al., 2020) | 13 |
| **SLRBP2** | Build trust and collaboration within the remote team | (C. M. Beise, 2004); (Nauman et al., 2006); (Pazderka & Grechenig, 2007); (Casey & Richardson, 2006a); (Casey, 2010); (Mumbi & McGiill, 2008); (Mitlacher, 2012); (Beise et al., 2010); (Seerat et al., 2013); (Zigurs et al., 2007); (Rehman et al., 2020) | 11 |
| **SLRBP3** | Developing communication protocols and partners | (C. Beise et al., 2010); (Khazanchi & Zigurs, 2007); (Pazderka & Grechenig, 2007); (Seerat et al., 2013); (Bourgault et al., 2016); (Casey, 2010); (Abels et al., 2006); (Casey & Richardson, 2006a); (Khazanchi & Zigurs, 2007); (Rehman et al., 2020) | 10 |
| **SLRBP4** | Developing interpersonal relationships; cultural awareness | (C. Beise et al., 2010); (Nauman et al., 2006); (Pazderka & Grechenig, 2007); (Seerat et al., 2013); (Casey, 2010); (Mumbi & McGiill, 2008); (Mitlacher, 2012); (Casey & Richardson, 2006a); (Zigurs et al., 2007); (Rehman et al., 2020) | 10 |
| **SLRBP5** | Supported by good technologies (infrastructure) | (C. Beise et al., 2010); (Bandic Glavas & Majstorovic, 2012); (Hsu, 2010); (Pazderka & Grechenig, 2007); (Seerat et al., 2013); (Casey, 2010); (Casey & Richardson, 2006a); (Zigurs et al., 2007); (Rehman et al., 2020) | 9 |
| **SLRBP6** | Regular agenda of meetings and conference calls | (Pazderka & Grechenig, 2007); (Casey, 2010); (Seerat et al., 2013); (Zigurs et al., 2007); (Rehman et al., 2020) | 5 |

SLRBP1 - Share Knowledge, documents and templates: Trading information about the project, (risks, obstacles and deliverables) is a positive and important side of the project routine. The project managers have to coordinate a lot of participants that have different concerns for their rewards and benefits with the project. To overcome this limitation, information technology has effectively promoted the integration of all information in the project environment (Han et al., 2007). To keep track of the projects' progress, project manager has to use one of the many tools available. these tools can help managers monitor the progress by sending reminders to some specific team members about deliverables and tasks that should be done in a certain time or date. Gantt Charts, for instance, show tasks involved in a process and can easily demonstrate if a Project is on, ahead or behind schedule. Moreover, Network diagrams, review techniques and work breakdown structure can also help managers ensure that each team member is spending

enough time on completing their assigned task, therefore making remote team function more effectively (Casey, 2010).

SLRBP2 - Build trust and collaboration within the remote team: Another important practice is to define the role of every team member, making sure everyone understands and feel responsible for it. Teams, regardless of whether they are face-to-face or remote, evolve as members learn about each other, resolve conflicts in style and values, and develop trust and cohesion. (Beise et al., 2010). Keeping track of these roles is vital for a project manager in order to show the team what tasks have or have not been done. By doing so, project managers can generate expectations on team members and make them aware of the ongoing of the project. If an employee clearly knows his role and what to expect of it within a project, both the project manager and the employee can check if their expectations match, thus making a project run in a smoother way. The project manager should give and receive feedbacks within the team, stakeholders and clients.

SLRBP3 - Developing communication protocols and partners: When the project works with a remote team that, not necessary, speaks the same language, it´s important to define and establish with all of the team members a main language and communication protocols to make the project go on a right way. It is essential to build a common understanding of project related terms and methods thus facilitating the management of projects conducted in dynamic remote environments. (Abels et al., 2006). Probably, provide training to employees to improve their proficiency in this language will be necessary.

SLRBP4 - Developing interpersonal relationships; cultural awareness: because of the cultural differences between team members (different cultural background), but also organizational cultures with different norms and values, some miscommunications and conflicts should appear. To address this challenge, the project manager should foster a climate where the team are aware of this difference and use this diversity for the benefit of project and the team. The moral of employees could be increased by creating leisure outdoor activities to keep everyone happy. More over by cheering employees from remote teams to interrelate, cooperate and work with each other builds personal relationships (Seerat et al., 2013).

SLRBP5 - Supported by good technologies (infrastructure): Deciding which communication platform will be used in the Project is very important and should be one of the first steps taken by Project Managers. Furthermore, availability and investment in infrastructure is essential to

support a RT strategy is essential (Casey & Richardson, 2006a) . This problem needs to be considered at an early stage of the project. This way, especially when handling RT, everyone can easily stay informed about Project timelines and also collaborate without any problem.

SLRBP6 - Regular Agenda of meetings and conference calls: Implementing routine meetings is another important step for remote projects. Since team members are scattered around the globe, setting a specific day and time for a meeting (on a daily or weekly basis) can bring a sense of "in-office" team or community and also keep everyone informed about the project. This kind of regular meetings can address issues like information redundancy, lack of face-to- face meetings, project team knowledge and cross team collaboration (Pazderka & Grechenig, 2007).

### 3.6. Synthesis of Literature Review

Considering that working from home has become the normal for millions of workers around the world because of the Covid-19 pandemic, one may assume that a large number of workers and employers alike are, facing challenges in dealing with the sudden shift to remote working. The extent of these difficulties is likely to vary depending, among other factors, on the level of prior experience with RW. Project Managers who already had some experience with RW, even with only a few members of their team, had an easier adaptation than those who had their work exclusively performed on site.

Before the Covid-19 Pandemic, RW was seen and studied as a way to globally bring together the best employees from companies, in addition to reduce costs and other corporate advantages. But now, this working model has become essential to help the world overcome this moment. Therefore, this study aims to bring the perceptions, challenges and experiences that project managers faced during this transition phase.

It is possible to note that only a small number of the related studies make comments about the key points that will be explored in this study: challenges and best practices to RPM. Except for one article, all of them were published a year ago. In the perspective of the quality of these studies, most of them have no ranking. All these factors give me a great opportunity to focus this research on proposing a model where the main challenges from RPM could be mapped and the best practices that should be able to solve or mitigate them.

As can be seen in previous chapters, there is a gap to be filled regarding the relationship between challenges and best practices from RPM. It is a fact that there are differences between PM and RPM, but only a few studies approach these differences and what the remote project managers are doing to mitigate the challenges that affect their day-by-day work because of this virtualization.

The Covid-19 pandemic accelerated the adoption of RW. All fear of using this cooperation model was confronted with the urgency of keeping organizations operating. However, literature see the RW as a gradual way of transforming companies to obtain better results. Because of this moment, many companies were forced to implement RW, even going against their culture, beliefs and purpose.

For this research, I propose a new look of these remote challenges and which are the appropriate best practices to mitigate those challenges in the actual scenario, where working remotely is the reality of most project managers. This study is a strategic tool for project managers who want to improve their skills regarding fully RPM and a first step for further academic developments in this field.

# Chapter 4 – Research Methodology

As the main methodology for this research, the Design Science Research (DSR) has been chosen (Hevner, 2007). Paraphrasing Peffers et al (Peffers et al., 2007), *"A methodology is a system of principles, practices and procedures applied to a specific branch of knowledge."* DSR focuses on the development and performance of artifacts as a way to improve their functional performance as well as improving current practices and research knowledge. The DSR has a process method with some phases that could, for the purpose of this study, be described as:

1- Problem Identification and Motivation: Define the specific research problem and justify the value of a solution. Based on the previous studies, the problem proposed and presented in Chapter I – Introduction consists in identify the main RPM challenges as well as the practices to mitigate such challenges and the relationship between both of them. As a motivation, this study will help Project Managers who changed the way of work from traditional to an RPM without having a transition phase and will help to improve the success of Remote Projects in general.

2- Define the objectives for a solution: This phase consists in define the objectives (could be qualitative or quantitative) of a solution for the problem studied and defined in the anterior chapters. From the nature of the problem, we can rationally deduce what are the objectives. To achieve this, one must know in what state the problem is, as well as its current solutions (in case there is any) an how effective they are (Peffers et al., 2007). It was proposed to elicit the main RPM challenges as well as the best practices to mitigate such challenges.

3- Design and development: Consist of defining which artefact will be used, its requirement, architecture and the creation of it. There are many types of artefacts that could be created, like models, methods or constructs. For this research, I decided to use Multivocal Literature Review (MLR).

4- Demonstration and Evaluation: This phase is composed of observation and measuring how well the artefact supports the solution of the problem. This is a cyclical phase, where the research can decide to phase 3 (Design and development) to improve the artifact or continue on to the next phase (Communication). I will use the Semi-Structured interviews and a survey to run this phase.

5- Communication: communication to diffuse the resulting knowledge. Were chosen for this phase a Dissertation to communicate the results.

In the Build phase the artifact will be identified, therefore a MLR will be conducted. The main advantage of MLR is the fact that it uses SLR, which includes scientific or formal papers, but also uses "grey" literature or non-published papers, such as: videos, web-pages, blogs, and others. In this manner, MLR is useful to expand the research with more constantly produced papers, articles and different sources, without losing a qualitative analysis procedure (Garousi et al., 2019). And use a MLR in this context is very important because a lot of good material about RPM are being published for good organizations with insights about the rapid transition between local teams to RT. This grey literature address RW in a broad way, and have a good material to be studied. The MLR used in the Build phase will follow the seven guidelines proposed by Hevner R. et al. (Hevner et al., 2004) in Design Science Research in Information System:

1- *Design as an artifact*: Design-science research must produce a viable artifact in the form of a construct, a model, a method or an instantiation.
2- *Problem relevance*: The objective of design-science research is to develop technology-based solutions to important and relevant business problems.
3- *Design evaluation*: The utility, quality, and efficacy of a design artifact must be rigorously demonstrated via well-executed evaluation methods.
4- *Research contributions*: Effective design-science research must provide clear and verifiable contributions in the areas of the design artifact, design foundations, and/or design methodologies.
5- *Research rigor*: Design-science research relies upon the application of rigorous methods in both the construction and evaluation of the design artifact.
6- *Design as a search process*: The search for an effective artifact requires utilizing available means to reach desired ends while satisfying laws in the problem environment.
7- *Communication of research*: Design-science research must be presented effectively both to technology-oriented as well as management-oriented audiences.

The Demonstration and Evaluation phase is where the researcher determines if the artifact behaves well. For these phase, Semi-Structured Interviews and a survey will be conducted. Semi-structured interviews are a very common method used in qualitative science. Both researchers and participants take part in a formal interview with participants being informed about the goals of the research. A pre-defined list of questions and topics will be addressed during the interviews, but other topics may arise during the interview and the researcher can

decide to address it or not. Nevertheless, having an interview protocol is recommended. All of these phases are represented in Figure 8.

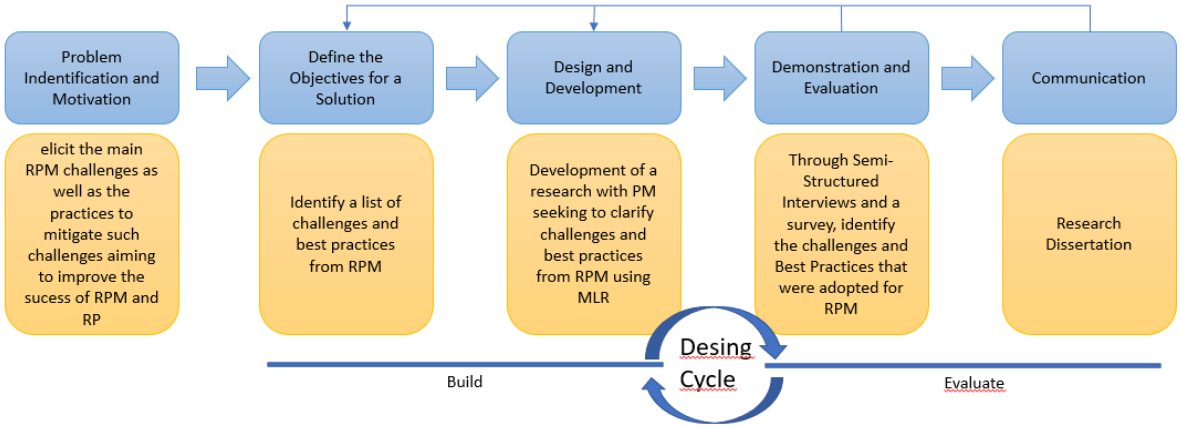


*Figure 8 - Adapted phases of DSR*

To help the study and take as many opinions as possible, a survey was also used. In both cases, the author used the same interview protocol and asked open-ended questions which allows the participant to create options for responding. In this kind of interviews or survey, the participants can reveal real life experiences, social reality and perspectives about the central theme.

A research interview could be considered one of the most important qualitative data collection methods. Because of this, interviews have been widely used in researches and studies. Executing semi-structured interviews is not a trivial job. The interviewer needs a lot of skills, such as intensive listening and the capacity to take notes. To get a good result and not become a waste of time and opportunity, the process to conduct semi-structured interviews needs to be well prepared and planned. (Qu & Dumay, 2011). There are many decisions to take, like who is the target audience, how many interviews will be needed, how to conduct these interviews and how the results will be analysed. The goal for qualitative interviews is to transform the interview opinions and emotions into a productive source of knowledge.

Specifically for this research, it was decided to interview, at least, thirty project managers, face-to-face. Regarding the number of interviews, qualitative grounded theory studies generally suggest that one should include between 20 and 30 interviews (Marshall et al., 2013). Because of the Covid-19 restrictions, all of these interviews were conducted using tools such as Zoom, Teams, WhatsApp or Skype.

The interview process took place from March to June 2021. The selection of each participant was done through the interviewer's knowledge and, consequently, indications from the participants themselves. For each one, a communication (email, SMS or WhatsApp message)

was sent informing the objective of the research and asking if the person was interested in participating on the research. For each respondent, at the beginning of the interview, they were asked if they authorized the recording of the interview and if the content could be used for academic purposes. There was no respondent who did not accept these questions. At the end of the interview process, we had a total of 17 hours of recording and the average time for each one was about 34 minutes. A word document transcript was created for each interview, adding up to 177 pages of text. In Appendix II, is possible to see some interviews transcription.

The interview questions were designed to address all research topics, as can be seen in table 10. However, the interviews were carried out in such a way that respondents could answer the questions in an exploratory way, with the interviewer performing a role of director and advisor. Allowing respondents to feel comfortable and establishing a relationship of trust, so that their messages and perceptions were addressed clearly, was one of the constant concerns throughout the process.

*Table 10 - Interview and survey applied questions*

| ID | Question |
|---|---|
| Q1 | Name |
| Q2 | Age |
| Q3 | Where do you live? (City / Country) |
| Q4 | How many years of experience do you have in project management? |
| Q5 | Have you always worked in person (physically inside the company you work for)? Or, have you had any remote work experience before? |
| Q6 | How long have you been performing your activities in a model 100% remotely? |
| Q7 | How was, in general, the migration from face-to-face to remote work? |
| Q8 | What are your opinions/feelings about remote project management? |
| Q9 | What challenges did you face in this transition (fate-to-face to remote) with you team? |
| Q10 | Could you name any differences in your day-to-day actions as a remote project manager? |
| Q11 | Was there any best practice that you started to develop due to remote project management? |
| Q12 | How do you imagine will be the working model in future (2022)? |
| Q13 | What are the project management challenges that you believe we will face once this pandemic moment is over? |

But it was not a simple task to approach and get the consent of these 30 project managers (Table 11). Many people contacted said that they were unable to conduct interviews for many reasons. Some of them said it was because of schedule incompatibility, while others because they do not feel comfortable with interviews. As a result of these negative responses and to ensure the quality of the study by seeking a larger database in order to have a rich and interesting research result, it was suggested to these people, instead, to answer an on-line survey. In this way, it was possible to overcome the barrier of incompatible schedules and shyness of the people approached. A survey can be answered at the most convenient time for each person, as it can be adjusted to each person's schedule and tasks. With the acceptance of this suggestion, this on-line survey was also applied.

*Table 11 - Interviewees´ Profile*

| ID | Gender | Country | Role | PM Exp. |
|---|---|---|---|---|
| **I01** | M | BRA | Project Manager Specialist | 09Y |
| **I02** | M | BRA | PMO – Project Manager Specialist | 25Y |
| **I03** | M | BRA | Consultant and Prince2 Trainer | 20Y |
| **I04** | M | PRT | Scrum Master | 10Y |
| **I05** | M | BRA | Scrum Master | 16Y |
| **I05** | M | PRT | Senior Product Owner | 15Y |
| **I07** | F | PRT | Senior Partner Business Manager | 10Y |
| **I08** | F | BRA | Project Manager | 03Y |
| **I09** | F | BRA | Product Manager and Mkt Lead | 05Y |
| **I10** | F | PRT | Website Creation Specialist | 12Y |
| **I11** | M | PRT | Project Manager | 16Y |
| **I12** | F | BRA | BI and Data Management Specialist | 15Y |
| **I13** | M | BRA | BI and Data Management Coordinator | 20Y |
| **I14** | M | PRT | Project Manager | 14Y |
| **I15** | M | BRA | Project Manager | 20Y |
| **I16** | F | BRA | Consultant Manager | 10Y |
| **I17** | M | BRA | Head of IT Operations Services | 19Y |
| **I18** | M | PRT | Project Manager | 12Y |
| **I19** | M | BRA | VP of Mktg and Communication | 20Y |
| **I20** | M | PRT | Manager | 11Y |
| **I21** | M | PRT | Project Manager | 18Y |
| **I22** | M | BRA | IT Director | 10Y |
| **I23** | F | BRA | IT Manager | 18Y |
| **I24** | F | PRT | Digital Marketing Manager | 05Y |
| **I25** | M | PRT | Senior Sales Account Executive | 22Y |
| **I26** | M | PRT | Project Manager | 20Y |
| **I27** | M | PRT | Project Manager | 15Y |
| **I28** | M | PRT | Release & Quality Management | 10Y |
| **I29** | F | BRA | Head of Project Portfolio Office | 20Y |
| **I30** | M | BRA | Senior System Analyst | 30Y |

The on-line survey was made available on google-docs and the link was sent to the target audience. The questionnaire was applied from April to July 2021. It was guaranteed that the people who participated in the interviews did not respond to this. A question regarding the authorization of the answers for academic purposes was also placed on the survey. The questions were exactly the same as those used in the interviews and already presented. All of them were open-answer so that respondents could describe their experience and feelings about

the topic studied. This way, we had a result of over 69 project managers answers, and in Appendix II it is shown some survey answers.

To ensure the plurality of the sample, participants with different backgrounds, gender, age, countries and characteristics were chosen to take part in this study as you can see in Appendix III session. At the end of the period, we had reached a group of 99 interviewees, either through face-to-face interviews or on-line survey.

The face-to-face interviews were much more exploratory. During the sessions, the interviewees were able to openly express their perceptions and opinions about the subject covered. Despite being very useful to pluralize the results of this study, the survey, in general, restrict the respondents' answers. As a complement to the interviews, the survey results were of great value.

# Chapter 5 – Discussion

In this chapter, the author presents the finding results about challenges and best practices during the most impacting event which changed all the organizations modus operandi, the Covid-19 Pandemic. This pandemic forced the world locked-down and all of us were unable to go out and carry out our activities the way we were used to. One of the biggest changes was the adoption of remote work. An SLR was performed to elicit the main challenges and best practices for RPM in a condition without a world pandemic. Then, 99 Project Managers were interviewed or answered an on-line survey to help the author understand what really happened when they had to drastically change their way of working.

It is important to note that all these challenges and best practices were described by the participants, focusing on their own activities and practical experiences. All of them, in different levels, had the chance to freely express and describe their goals and their pains. In Appendix III, the author demonstrates the plurality of the sample, and Table 18 present the list of surveys' participants.

## 5.1. RPM Challenges

During all the interviews and survey period, the first objective was look for the real experience lived by the project managers who had to quickly migrate from a fully face-to-face model to a fully remote model. Table 12 lists all the challenges cited by the respondents and in Table 13, it is possible to see the map of interviewees answers.

*Table 12 - RPM Challenges experienced during Covid-19 pandemic*

| ID | Challenges | Count |
|---|---|---|
| **CH1** | More work hours to ensure productivity and projects flow | 23 |
| **CH2** | New work mode | 21 |
| **CH3** | Excess of information | 18 |
| **CH4** | Social isolation and loss of contact | 17 |
| **CH5** | Communication with the team and among team members | 14 |
| **CH6** | Absence of appropriate space work could lead to anxiety and depression for team members | 13 |
| **CH7** | Immediate communication dependency | 12 |
| **CH8** | Online tools and new technologies learning | 11 |
| **CH9** | Lack of team commitment | 10 |
| **CH10** | Technological, organizational and personal problems | 10 |
| **CH11** | Lack of collaboration and trust within team members (among them and with the organization – synergy) | 09 |
| **CH12** | Individual and group activity integration | 07 |
| **CH13** | Presence of conflict between personal and professional life | 07 |
| **CH14** | Processes and control activities | 06 |

*Table 13 - Challenges map - interviewees answers*

| I/CH | CH1 | CH2 | CH3 | CH4 | CH5 | CH6 | CH7 | CH8 | CH9 | CH10 | CH11 | CH12 | CH13 | CH14 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I01 | ✓ | ✓ | ✓ | ✓ | | | | | | | | ✓ | | |
| I02 | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | |
| I03 | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | |
| I04 | ✓ | | | | ✓ | ✓ | | | | | ✓ | | | ✓ |
| I05 | ✓ | | ✓ | ✓ | | ✓ | | | ✓ | ✓ | | | | |
| I06 | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | | | | ✓ | |
| I07 | | ✓ | ✓ | | | | ✓ | ✓ | | | | ✓ | | |
| I08 | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | | | | |
| I09 | | | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | ✓ |
| I10 | ✓ | ✓ | | ✓ | | | | | | ✓ | | | ✓ | |
| I11 | ✓ | | ✓ | | | | ✓ | ✓ | | | | | | ✓ |
| I12 | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | ✓ | ✓ | | | | |
| I13 | | | | | ✓ | ✓ | | | | ✓ | | | | ✓ |
| I14 | ✓ | | | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | |
| I15 | ✓ | ✓ | ✓ | | | ✓ | | | | | ✓ | | | |
| I16 | ✓ | ✓ | | | ✓ | | | ✓ | | ✓ | | | ✓ | |
| I17 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | |
| I18 | ✓ | | ✓ | ✓ | | ✓ | | | | | ✓ | | | |
| I19 | | ✓ | | ✓ | ✓ | | ✓ | ✓ | | | | | | |
| I20 | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ | | ✓ | ✓ | | | |
| I21 | ✓ | ✓ | ✓ | | | | | | | | | | | |
| I22 | ✓ | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | | ✓ | ✓ |
| I23 | | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | | | | |
| I24 | ✓ | ✓ | | | | | ✓ | | | | | ✓ | | |
| I25 | ✓ | | ✓ | ✓ | | ✓ | ✓ | ✓ | | | ✓ | | | |
| I26 | ✓ | ✓ | | | | | | | ✓ | ✓ | | | | |
| I27 | ✓ | | | | ✓ | | | | | | | ✓ | | |
| I28 | ✓ | ✓ | | ✓ | | ✓ | ✓ | | ✓ | | | ✓ | | ✓ |
| I29 | | ✓ | ✓ | | | | | ✓ | | | ✓ | | ✓ | |
| I30 | ✓ | ✓ | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | ✓ | |

CH1 - More work hours to ensure productivity and projects flow:

It has been noticed that the number of on-line meetings has dramatically increased, knowing that this is the only possible way to talk to teams in a remote environment. Therefore, daily work hours also increased. Many times, the Project Managers do their tasks off the regular job hours. *"All workers tried to make up for the physical lack through meetings. any 15 minutes free, come someone who wants to talk to you. to handle the work to be done, I started to increase my daily workload. tasks that only depend on me started to be done at night or on weekends* [I16]*."* People are feeling exhausted with all these increased hours on a daily basis.

CH2 - New work mode:

Because of the Covid-19 pandemic, many collaborators (Project Managers and Team Members) were forced into a reality never before experienced: how to make remote work so productive as office work was? Companies also had to adapt themselves. It was

indeed a disruptive moment for many people. Most companies had second thoughts about remote work because it was necessary to ensure that all collaborators were productive and dedicated to work during office hours. *"Whenever I asked if we could work from home, the answer was no. They claimed that this work model was not part of the company's culture* [I12]*."* This became a very demanding moment for Project Managers because many documents were being asked for by CEO´s in order to verify a team´s productivity.

On the other hand, Project managers and team managers began realizing that, just because a collaborator is working from home, that does not mean that he or she is available 24 hours a day. It was necessary to find a mid-point. Even for Project Managers that already had previous experience with remote work, this was a challenging moment. There is a huge difference between working remotely a few days in the week – as an option – and working from home 100% of the time – out of necessity.

CH3 - Excess of information:

Processes, procedures and policies had to be revised and created in a very short time. It was cited during the interviews that, in the beginning of the pandemic, everything was relevant information. The number of e-mails, documents and projects notes rose so much that brought a negative effect in the communication. *"It was necessary to understand what was relevant information and what was a way of being present, that the person was connected and doing he/she job. Absolutely everything turned into email, report or document* [S68]*."* With time, this big anxiety to generate information started to reduce and eventually went back to the normal levels. The use of some collaborative tools also helped to keep the documentation of the Project updated without generating a great amount of re-work.

CH4 - Social isolation and loss of contact:

Isolation brings uncertainties about who to look for in order to talk about specific issues, where to find specific support, how and when to approach colleagues, which leads to blockages and delays. It is very important to encourage teams to communicate whenever they feel overwhelmed, functioning as an early alert to spot the risk of burnout and to determine when tasks or team members must be relocated. *"Not everyone is made for remote work. Those with large families felt exhausted, those living alone showed depression. It is hard to handle these issues remotely* [S52]*."* The conflict between professional and personal life and the challenges related to boundaries

management between work time and personal obligations are exacerbated, including the incapacity of switching off of work and to realize other tasks.

CH5 - Communication with the team and among team members:

Communication has shifted from the synchronous model to the asynchronous model. It became more complex, being mandatory to have well-defined channels and processes. *"Working remotely brings some challenges. One of them is the paradigm shift regarding communication, that goes from synchronous to asynchronous* [I06]*."* One of the greatest challenges of remote team management is to keep all collaborators on the same page, making sure everyone is working towards the same business goal. Teams might feel a lack of clarity upon priorities and tasks needed to be done.

CH6 - Absence of appropriate space work could lead to anxiety and depression for team members:

Providing an adapted space to the workers needs, which allows him to concentrate, seems obvious, but many times it is simply not possible to have the most adequate place. *"Not everyone has an ideal place to work from home. Often, someone of the team works at the dinner table, along their children taking classes online* [I28]*."* The absence of a place like this was cited as a factor that may have caused the increase of stress and anxiety among workers. Sometimes even affecting his or her individual performance and the projects productivity. Workers who had to face pandemic while having children at home also demanded more attention from Project managers. Getting to know people, how they are feeling, regardless of the job, has become a big challenge for Project managers. *"I started calling people just to see how they were doing. but this also caused anxiety. Why is the project manager calling at this time* [I02]*?"* Many times, on a physical location, one could tell by the workers face and posture how his or her level of stress was and if there was something wrong with him or her. In the remote work model, this type of evaluation turned out to be impossible.

CH7 - Immediate communication dependency:

Teams need to know when and how they can contact colleagues and direct superiors to ask for support and to communicate their progress. *"We created a communication channel, via WhatsApp, even though it is not a regulated company tool, so that the team could communicate at any time with everyone involved in the project. The goal was to create a channel to get questions answered quickly* [I19]*."* Project managers had to

become more available to unlock any situation that might put at risk the good flow of projects.

CH8 - Online tools and new technologies learning:

Workers who had to become familiar with new and different technological tools, on top of the shift to a new way of work organization, had to spend more time in this learning process, which explains, in part, why many people have to work more hours to adapt to this new reality. *"We had to accelerate personal and autonomous development to learn how to use new tools. We had to understand how this on-line world was, because we did not had time for that.... With this pandemic, we started looking for tools that could help us in PM, tools for collaborative meetings with rooms of discussion, finally, we had to adapt fast* [I29]*."* There is a growing number of available tools and software's to monitor and follow the workers activity.

CH9 - Lack of team commitment:

It should be considered that not having a daily contact with teams could lead into situations which would demand more intervention from Project managers. *"I noticed that the fact that people already knew each other personally, made it easier to switch to the remote model. the team is already cohesive and trusts each other. the on-boarding of a new member to this team, in fully remote work mode, was a challenge to be overcome* [I26]*."* Handling conflicts in a remote way could be more difficult than on site. It was also noticed that when the team members are not familiar with each other or even if a team is composed of younger people, a bigger support from Project managers is necessary in order to keep them focused and integrated with the team.

CH10 - Technological, organizational and personal problems:

Not all companies were prepared to migrate from 100% presential to 100% remote work in a very short time. In order to achieve this, it was necessary a great financial investment, team allocation and projects shut down to focus into this transition. The concern of information security was also highlighted by Project Managers. *"All migration was done on an emergency basis. The company had no practice with remote work and within two weeks we moved all operations to the remote model. Not everyone had adequate equipment to work from home, it was necessary to connect VPN and guarantee access to systems, for example. Anyway, it was a task force to manage to reduce the impacts* [S44]*".* New projects with the simple objective of providing VPN´s,

acquire notebooks, distribute equipments and to put systems into clouds were quickly created to comply with the pandemic moment.

CH11 - Lack of collaboration and trust within team members (among them and with the organization – Sinergy):

Teams where the majority of the members are working remotely rely strongly on electronic communication to foment collaboration, trust and transparency. With time, the level of professional distancing and isolation has increased. Team collaboration slowly decreases because, by communicating through electronic ways, people have a tendency to share less information with colleagues and, in some cases, find it more difficult to interpret and comprehend the information which they receive. Teams need to trust each other. *"I had some conversations with my team to establish a relationship of trust between us, trying to make them realize that despite not being together in person, we have to continue to give the best work we can. Suggestions and opinions are valued and respected by everyone. We have to maintain the win-win relationship that we had in a presential work* [I09]*."* Employees must feel the responsibility to take decisions without being afraid of negative repercussions. They must also feel that making mistakes is part of the learning process and development. If they feel confident enough, they will not unnecessarily involve other people into problem solving or decision taking, what will result in a higher efficiency for the whole team.

CH12 - Individual and group activity integration:

Remote work management, however, require decentralized control models. This means giving more autonomy to professionals. Decentralizing management is not a simple task for the majority of Project leaders who are used to on site work. It is mandatory to clarify and withdraw priorities to the unnecessary and unrealistic work under the actual circumstances. *"Within Project Management, we raise the reporting rigor. It was something that was eventually done more informally, a conversation. And we increased that a bit. What happens is: what we solved by looking at the colleague next to us and talking a little, we started to hold meetings of 15 minutes, 30 minutes, 1 hour, whatever* [I27]*."* Many times, this type of work agreements was done in an informal way, simply gathering 2 or 3 team members around the table or even during lunch time and coffee break. All this became virtual through another meeting and documentation.

CH13 - Presence of conflict between personal and professional life:

One of the most significant challenges that remote workers have been facing during the pandemic is the conflict between professional and personal life because of the lack of borders between them. *"Work is now living inside the collaborators house* [I24]*."* The pandemic has destroyed the notion that a paid job and a personal life are two completely distinct domains, as well as the myth of the ideal worker that can and should always be available to perform job related functions. Workers who might have felt more this impact were the ones that had to conciliate the job with overlooking elderly or school aged kids at home. *"The project manager has to understand the working conditions of the team members, because this can influence productivity. We also had to be a bit of a psychologist* [S25]*."*

CH14 - Processes and control activities:

The companies had to review processes and activities to work in remote model with all the employees. "*We had to define new processes and acquire new tools to carry out our work. Informal agreements no longer exist. Now we put everything on Jira so everyone knows their work goals and what overall goals must be achieved* [I04]." New rules to regulate the remote work in general, had to be defined. Project managers had to look at their methodologies, processes, activities to see what worked and what did not for RPM and adapt them for the new scenario.

## 5.2. RPM Best Practices

To mitigate all these challenges, even without a direct relationship between them, the Remote Project Managers worked hard. Some best practices might be considered new to some PM, others were just refined, like table 14 presents. Table 15 shows the map of interviewees answers.

*Table 14 - Best Practices applied into RPM during Covid-19 Pandemic*

| ID | Best Practices | Count |
|---|---|---|
| **BP1** | Daily Meeting | 28 |
| **BP2** | Taking care of inter-personal relations | 21 |
| **BP3** | Self-managing time | 21 |
| **BP4** | Planning of remote meeting | 21 |
| **BP5** | Encouraging the routine culture | 17 |
| **BP6** | Virtual rooms | 15 |
| **BP7** | New tools training | 13 |
| **BP8** | Hours flexibilization | 13 |
| **BP9** | Celebrate | 12 |
| **BP10** | Financial support | 10 |
| **BP11** | Create virtual communication channels focused on the well-being and health of team members and their families | 09 |
| **BP12** | New collaborative tools | 07 |
| **BP13** | Review of companies' objectives | 06 |

*Table 15 - Best Practices map - interviewees answers*

| I/BP | BP1 | BP2 | BP3 | BP4 | BP5 | BP6 | BP7 | BP8 | BP9 | BP10 | BP11 | BP12 | BP13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| I01 | ✓ | ✓ | | | | | | ✓ | | ✓ | | ✓ | |
| I02 | ✓ | ✓ | ✓ | ✓ | | | ✓ | | ✓ | | | | |
| I03 | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | ✓ | |
| I04 | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | |
| I05 | ✓ | | ✓ | | | ✓ | ✓ | ✓ | | ✓ | ✓ | | ✓ |
| I05 | ✓ | ✓ | | ✓ | ✓ | | | | ✓ | | ✓ | | |
| I07 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | ✓ | | |
| I08 | ✓ | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | | |
| I09 | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | |
| I10 | ✓ | ✓ | | ✓ | | ✓ | | | | ✓ | | ✓ | ✓ |
| I11 | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | | | | |
| I12 | ✓ | ✓ | ✓ | | | ✓ | | ✓ | ✓ | | | | |
| I13 | ✓ | | ✓ | ✓ | ✓ | | ✓ | | | ✓ | ✓ | ✓ | |
| I14 | ✓ | ✓ | ✓ | | | | | | | | | | ✓ |
| I15 | ✓ | ✓ | | ✓ | ✓ | ✓ | | | ✓ | | | | |
| I16 | ✓ | | ✓ | | ✓ | ✓ | ✓ | ✓ | | | | | |
| I17 | ✓ | ✓ | ✓ | ✓ | ✓ | | | | ✓ | | | | |
| I18 | ✓ | | | ✓ | ✓ | | ✓ | | | | | | ✓ |
| I19 | | ✓ | ✓ | | ✓ | ✓ | | | | | ✓ | ✓ | |
| I20 | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | | ✓ | | | |
| I21 | ✓ | ✓ | | ✓ | ✓ | ✓ | | | ✓ | | | | ✓ |
| I22 | ✓ | ✓ | ✓ | ✓ | | | ✓ | ✓ | | | | | |
| I23 | ✓ | ✓ | | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | |
| I24 | ✓ | | ✓ | | | ✓ | | | | ✓ | | | |
| I25 | ✓ | ✓ | | ✓ | ✓ | | | ✓ | | | ✓ | | |
| I26 | ✓ | ✓ | ✓ | | | | ✓ | | ✓ | | | ✓ | |
| I27 | ✓ | | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | ✓ | | | ✓ |
| I28 | ✓ | ✓ | ✓ | ✓ | | | | ✓ | ✓ | | | | |
| I29 | | ✓ | | ✓ | ✓ | ✓ | | | ✓ | ✓ | | | |
| I30 | ✓ | | ✓ | | | ✓ | | | | | ✓ | ✓ | |

BP1 - Daily Meeting:

Even those Project managers that only used to work with waterfall methodology had to bring some of the good practices of agile methodology to their PM. The most cited among all interviewed was the daily meeting of Project follow-up. *"Bringing daily follow-*

*up meetings, despite being described as one of the activities of agile methodologies, was essential for managing projects remotely* [I22]*."* Some of them did these meetings with small teams while others did in a way that everybody was present in order to also help integration.

BP2 - Taking care of inter-personal relations:

Ensure that the social relations among teams are kept, even when they are working from home, also brings benefits to trust development*. "Initially, I implemented a virtual cafe with only one requirement: open cameras. 30 minutes on Fridays where they talked about everything, except work. Now, I'm studying a way to implement games to decompress the team* [S28]*."* Informal video calls combined with virtual coffee breaks, lunches or team activities to share experiences amid the Covid-19 pandemic have proven to cause a positive effect on the well-being of people in a manner of belonging to the organization and mutual trust.

BP3 - Self-managing time:

Many Project managers cited as a good practice the setting up of meetings with no one invited. *"In the beginning of remote work, my day was completely full of meetings and I started to work, do my homework, after 7pm. It would not work, right? So, I started to close some hours during the day to have meetings with myself* [S36]*."* The main goal was to establish designated hours so that the individual task could be done during regular office hours, thus reducing the great number of after work hours.

BP4 - Planning of remote meeting:

It was cited as a big challenge, faced by all, the great number of meetings, since this is the only way to communicate with team members. But, on the other hand, these meetings had to be adjusted and well planned. *"In a remote meeting, you don't interrupt as often as you interrupt or were interrupted in person, so the issue of raising your hand, waiting to speak, listening to what the other said repeated that you understood for then, you formulate what you will talking so I think this was also a very big benefit for professionals, learning how to speak in a meeting. Learn how to give more objective presentations. Another huge benefit was the time, right the punctuality of the meetings nowadays, at least in our company, the meetings actually start and end on time so if you are 3 minutes late for the meeting, you arrive like this: Wow, sorry for the delay* [I29]*!"* Defining the topics to be discussed, the duration of the meeting, ensuring the

participation of the right people for the decision and, at last, documenting and distributing the outcome became a good practice in PM.

BP5 - Encouraging the routine culture:

Working from home brought the challenge of being available at any time to the company. Project managers established rules with their teams, prioritizing on a regular basis the importance of keeping lunch hours as well as beginning and end of a Labour Day in order to diminish stress and anxiety. *"I try to keep my routine as close as possible to face-to-face work, and I encourage the team to do the same. I usually woke up early to go swimming, now I go to my balcony to do my physical activities. I always try to preserve my lunch-time and at the end of the day, I will take care of my plants. With that I try to keep myself sane* [I15]*."*

BP6 - Virtual rooms:

With the objective of keeping the team working together, virtual rooms were created with focus on team collaboration. It worked as if everyone was physically inside a room. *"My team and I work with virtual room. We keep the audio -ON- all the time. When I want to talk with someone, I just need to say hello. No need to schedule a meeting. This gives a felling of presence, show that I am there for everyone, as if I were right next to people in person* [I05]*."* It was important to keep the audio on so that communication could flow better. This way, bonds were created, increasing productivity and team synergy. If one had any doubt, it was shared with the whole team without having to send e-mail and scheduling formal meetings.

BP7 - New tools training:

Give priority to some types of formation that are more relevant to the actual moment, such as leadership skills, time management and communication. Create support groups in tolls as, for instance, WhatsApp, so people can help each other with technological issues. VPN accesses, network setup, access to systems in a virtual environment. *"For being a teacher too, I was already working with distance learning. My company is also small, so it was easy to give all the support needed, that everyone could quickly migrate to remote work* [I03]*."*

BP8 - Hours flexibilization:

One of the benefits that home office brought was the flexibilization of hours. Project managers became open to the teams so that management could be done by deliver and productivity. *"We ended up gaining more flexibility in terms of work-hours. Developers, that naturally prefer to work overnight – this is in the developer´s blood. And, that does not have the slightest problem for us. During the day, the developer is present at the appointments and everything else… But if he or she want to develop at night? Cool! I think it turned out to be a positive point* [I01]*."* The notion that a collaborator works from 09:00 until 18:00 on a controlled environment has changed. People who prefer to work at night or even those who had to adjust their workload due to the support to elderly or children became much more accepted. The important was the deliver, not the physical presence.

BP9 - Celebrate:

It is common, by the end of a projects phase or even the whole Project, to celebrate. These meetings became virtual but did not end. Sending gifts to the collaborators house, having dinner or scheduling a celebration time outside the office hours was also done. *"We had to do something to be closer to the team. I started doing it when some project was finished, I promote an on-line happy hour. Once, I hired a musician to sing and play guitar for us. I sent for the team some snacks and a cup of toast. At the end of the year, we customized a Bluetooth headphone and sent to all employees' home. It was a big success! They really enjoy these things, these gifts* [I17]*."*

BP10 - Financial support:

Reimburse the real costs of equipment used for home working. Allowing that equipment that were used on site could be taken home or offering a sole amount for the acquisition of the necessary equipment to work from home were actions that companies adopted during the pandemic and all Project managers approved them as a way to ensure productivity and motivation of teams. *"The company offered a voucher from a large department store so that it was possible to purchase something the employee deemed necessary for their well-being* [I23]*."*

BP11 - Create virtual communication channels focused on the well-being and health of team members and their families:

Provide formation sessions focused on behavioural and social aspects. These sessions helped virtual teams to acquire more knowledge and competences to minimize risks for the mental and physical health of collaborators. *"In my company, the human resources department, created a newsletter with contents provided by collaborators with tips on movies, series, games to play at home with kids and even food recipes* [I07]*."* Another best practice cited was getting in touch by phone with team members during the weekend, for example, simply to check upon them, to see if everything was fine, was also a way to listen and to be closer to the collaborators.

BP12 - New collaborative tools:

Bringing new collaborative tools to the company and diminish the formality in some documents was also a good practice adopted. One example cited was the use of the Teams tool to record the meeting and immediately transcribe it, so that the meeting was already documented. *"We implemented the full use of Microsoft Teams as a continuous work tool. …. If you make a meeting with this software, it already records and transcribes the entire meeting. We can create a documentation from this record in just a few minutes, just throw it Word. So, all this documentation is even easier to be produced* [I13]*."* It decreased the necessity of having templates with the company logo and various fields to be completed. The focus became the quality of the information.

BP13 - Review of companies' objectives:

In the beginning of the Covid-19 pandemic, many companies took another look into their strategic planning. *"We had to re-evaluate our strategic plan, to define which projects had to stop in that moment, and which on should be continued* [I21]*."* Project managers, along with the companies' main leaders, got together to define new objectives and decide which projects had to continue, had to stop or had to be created to ensure a great result for companies during this time.

## 5.3. Other Impressions

After analysing all the challenges and Best Practices described previously, it is possible to present a matrix to relate which best practices could be used to mitigate the all these challenges (Table XXX)

*Table 16 - Challenge and Best Practice relation*

| | BP1 | BP2 | BP3 | BP4 | BP5 | BP6 | BP7 | BP8 | BP9 | BP10 | BP11 | BP12 | BP13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CH1** | √ | | √ | √ | | | √ | √ | | | | √ | √ |
| **CH2** | √ | | √ | √ | √ | | √ | | | | √ | √ | |
| **CH3** | √ | | | √ | | √ | | | | | | √ | |
| **CH4** | | √ | | | √ | | | | √ | | √ | | |
| **CH5** | | √ | √ | | √ | | | | | | | | |
| **CH6** | √ | √ | | | √ | | | √ | | √ | √ | | |
| **CH7** | √ | | | | | √ | | | | | | √ | |
| **CH8** | | | | | | | √ | | | | | √ | |
| **CH9** | √ | | | | | √ | | | √ | | | √ | |
| **CH10** | | √ | √ | | √ | | | √ | | | √ | | |
| **CH11** | | | | | √ | √ | | | | | √ | √ | |
| **CH12** | | | | | √ | | | | | | | | |
| **CH13** | | | √ | | √ | | | √ | | | √ | | |
| **CH14** | | | | | | | √ | | | | | √ | √ |

During the interviews, it was impossible not to think about what the future will be like. How will be the next year (2022) since we have almost all the population vaccinated and an expectation of full control from Covid-19 pandemic? A total of 83% of the interviewed believe that the hybrid work model is the future for the organizations. The companies are adopting this model right now, in September 2021, to try to get back the employees to work presential. On the other hand, only 3% of the participants adapted so well to the remote work model that they do believe this is the best model for the future. And, least, 14% believe that on site work will return, mainly due to cultural characteristics of organizations (Figure 9).

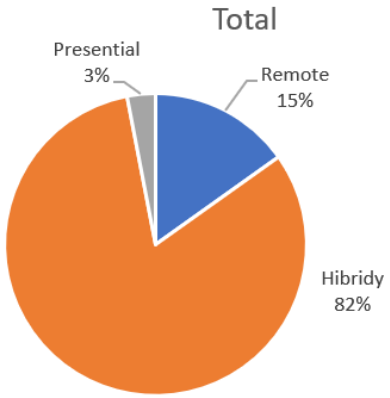


*Figure 9 - Work model in the future (opinion of interviewers)*

Some interviewees pointed that the work model will be an employee decision. When one person candidate to a new job, the model of work (full remote, full presential or hybrid) will be an important item to accept or not a job [04,31]. For the next five years, the

companies and the government, with laws to support the remote work, will organize and full implement the remote work.

# Chapter 6 – Conclusion

As a conclusion for this research, it can be said that the RPM under normal circumstances is very different from the RPM amid a pandemic situation. While the first one was mainly seen by companies as way to reduce costs, work with collaborators anywhere in the World and also enhance the quality of life of employees, among other benefits, the second one generated some new best practices and challenges so that PM could deal with this new situation.

The RPM caused by the Covid-19 pandemic situation has brought some impacts, concerns and even an increase into organizations costs, at first, so that life could move forward.

The challenges most cited during the interviews can be presented as:

- Increase of work;
- Tendency to social isolation;
- Lack of motivation:
- Distraction with domestic matters.

To overcome these challenges, project managers presented several practices. Each one worked in their own way, giving them their personal touch. But it is possible to highlight:

- Overcoming physical absence through virtual interactions outside the scope of work;
- Help the team to obtain all the necessary infrastructure to carry out the work;
- Organize all project documentation so that communication didn't stop flowing;
- Take care of the team.

After the first impacts cause by the abrupt need to work remotely, we can realize that the remote work model for project managers or other professionals is here to stay. Positive sides related to the quality of life, security, being close to the family, do not wasting time going to and coming back from work, make most people willing to keep their jobs even in a remote way.

However, issues related to personal relations, such as being physically close to team members as well as lunch and coffee break gathering, were pointed out as critical success factors in order to keep developing the activities with quality. Work group, where synergy and active collaboration among all is mandatory, was also cited as uncomfortable in a remote situation, resulting in a loss of quality.

As a result of this research, the scenario of working twice a week in person at the company's premises and three times a week at home was considered the most appropriate one according to the opinion of the interviewed project managers. All the employees interviewed are eager to

return to the life they had before, being able to come and go as they wish, so the hybrid model is now at the spotlight.

Project managers had to adapt their skills and used methodologies to find a new way of working. Bringing the agile methodology techniques into projects that followed the waterfall methodology was a recurrent subject on the interviews. Not only agile, not only waterfall. It was needed to bond the best qualities of both methodologies in order to ensure good results to the projects.

This research also showed that remote project managers, besides taking care of intrinsic activities of each project, such as planning, delivery guarantee, quality of delivered material or aligning the stakeholder's expectations, for instance, had to act more and more as personal leaders. Seeking the well-being of each team member, making sure that everyone, apart from having the ideal conditions to work from home, were also psychologically well, was an extra challenge during this process.

During the interview process, with people from 2 different countries, the opportunity arose to see if there was any difference between the RPM in Portugal and the RPM in Brazil. No differences were found regarding challenges and good practices. Regardless of cultural differences, all project managers tried to overcome the challenges that were presented, seeking to work their projects and teams so that everything goes well. It was found that project management maintains its universal language where all project managers seek good planning, keep team activities up to date and ensure a good result at the end of the projects.

Overall, at the end of this study, it is possible to conclude that project managers see more benefits with the RPM, instead of being presential all the time. After everything is organized and RPM work is smoother, the benefits will stand out and organizations can bet on this new PM model.

## 6.1. Limitations

All the interviews were done remotely. The interviewees were selected through the author´s personal knowledge, besides some project managers indicated by the interviewees. Scheduling the interviews and ensuring a good time for everyone was a challenge for this work. 50% of the respondents were outside Portugal, making the time zone difference a difficulty to schedule the interviews. But despite this difficulty, having managed to complete 30 face-to-face interviews, it turned into a lot of material to be worked on, giving a good diversity to the sample.

Because of the inhibition or simply the lack of availability of project managers, it became necessary to guarantee the survey application. Many of the people contacted said they had no time to be interviewed but saw no problem in answering a survey, in case the author decided it was relevant. In this case, the use of the survey served to complement the interviews and ensure more volume of respondents to the studied sample.

## 6.2. Future Work

New research must be carried out in a time of non-pandemic context, as this took place during the years 2020/2021 (Covid-19 pandemic). It will be important to investigate good practices and challenges where the work format, face-to-face or remote, is a choice rather than an imposition. We can cite to further studies:

1) What is the best scenario to be adopted by companies?
    a. Fully on site
    b. Hybrid
    c. Fully remote
2) How will PM methodologies behave? The merging of good practices from agile and waterfall methodologies will become a new management model?
3) How to separate the personal and private life of project managers and their teams. What is the perfect balance?
4) How will the projects and teams' evaluation be done: is it really necessary to fulfill the work hours inside a predefined time? Or guarantee that the evaluation of projects and collaborators can be done through productivity and delivery?

Additionally, this exact same study could be conducted in others countries, with different cultures, to guarantee if the list of challenges and best practices for RPM are the same or influence the results obtained in this study.

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# Appendix I

*Table 17 - List of Conferences and Journals*

| Type | Name |
|---|---|
| Conferences | 13th European Conference on e - Learning ECEL-2014 |
| | 2009 Joint Conferences on Pervasive Computing, JCPC 2009 |
| | 2010 IEEE International Technology Management Conference, ICE 2010 |
| | 2010 International Conference on Management and Service Science, MASS 2010 |
| | 2011 11th International Conference - The Experience of Designing and Application of CAD Systems in Microelectronics, CADSM 2011 |
| | 23rd DAAAM International Symposium on Intelligent Manufacturing and Automation 2012 |
| | 2nd International Symposium on Computer, Communication, Control and Automation (3CA 2013) |
| | 3nd Balkan Region Conference on Engineering Education |
| | 4th International Conference on Electrical & Electronics Engineering and Computer Science (ICEEECS 2016) |
| | 7th International Conference on KMO |
| | ACM-SIGMIS CPR Conference |
| | CME 2007 Conference - Construction Management and Economics: 'Past, Present and Future<br>Conference on Information Systems Development |
| | ICMIT 2006 Proceedings - 2006 IEEE International Conference on Management of Innovation and Technology |
| | IEEE International Engineering Management Conference |
| | IEEE international Engineering Management Conference 2005 |
| | IET Conference Publications |
| | International Conference on Computer Supported Education |
| | International Conference on Industrial Engineering and Engineering Management - IEEM2010 |
| | International Conference on Innovative Computing Technology, INTECH 2016 |
| | International Conference on Internet Technology and Applications, ITAP 2010 - Proceedings |
| | ITT 2019 - Information Technology Trends: Emerging Technologies Blockchain and IoT |
| | Proceeding of the 6th International Workshop on Computer-Aided Software Engineering |
| | Proceedings - 2006 IEEE International Conference on Global Software Engineering, ICGSE 2006 |
| | Proceedings - 4th International Conference on Web Information Systems Engineering, WISE 2003 |
| | Proceedings of 2013 Science and Information Conference, SAI 2013 |
| | Proceedings of SPIE |
| | Proceedings of the 36th Annual Hawaii International Conference on System Sciences, HICSS 2003 |
| | Proceedings of the 9th International Conference on Computer Supported Cooperative Work in Design |
| | Proceedings of the Annual Hawaii International Conference on System Sciences |
| | Proceedings of the International Conference on E-Business and E-Government, ICEE 2010 |
| | Proceedings of the International Conference on Information Technology Interfaces, ITI |
| | Symposium on Advances in Database and Information Systems |
| Journals | Advanced Materials Research |
| | Advances in Intelligent Systems and Computing |

| | |
|---|---|
| | Automation in Construction 2007 |
| | Buildings |
| | Computer Supported Cooperative Work |
| | Computer-Aided Design and Applications |
| | Computers and Education |
| | Construction Management and Economics |
| | Encyclopedia of E-Collaboration |
| | Interactive Learning Environments |
| | International Défense and Homeland Security Simulation Workshop |
| | International Journal of Applied Engineering Research |
| | International Journal of Innovative Technology and Exploring Engineering |
| | International Journal of Networking and Virtual Organisations |
| | International Journal of Project Management |
| | International Journal of Web-Based Learning and Teaching Technologies |
| | International Transactions in Operational Research |
| | IT Professional |
| | Journal of Business & Economics Research |
| | Journal of Computers |
| | Journal of Information Technology |
| | Journal of Management History |
| | Journal of Product Innovation Management |
| | Journal of the Brazilian Computer Society |
| | Lecture Notes in Computer Science |
| | Lecture Notes in Electrical Engineering |
| | Organization, Technology and Management in Construction 2019 |
| | Project Management Approaches for Online Learning Design |
| | Project Management Journal |
| | WIT Transactions on Information and Communication Technologies |

# Appendix II

Examples of Transcription:

Entrevista realizada em: 17-03-2021

Transcrição de entrevista gravada

***Daniela:*** Luís, Então Primeiro de tudo queria agradecer seu tempo, sua disponibilidade, a sua ajuda neste momento que a gente está desenvolvendo as nossas teses de mestrado. Eu sei que é uma questão que fora todo o nosso trabalho do dia-a-dia, a gente ainda tem nosso mestrado pra fazer. e eu sei o quanto isso nos consome. Então, muito obrigada pela sua disponibilidade. Eu queria iniciar pedindo para você me dizer seu nome, onde você mora e a sua idade e seu tempo de gestão de projetos. Há quanto tempo você trabalha com a gestão dos projetos?

***Luis:*** Meu nome é Luis Ruanito. Eu tenho 49 anos moro em Portalegre, mas trabalho em Lisboa. Portanto agora durante o confinamento é que estou aqui a 100%, mas o meu local de trabalho é Lisboa. E termos de gestão de projetos desde 2008, e 2011 com Certificação.

***Daniela:*** Certificação PMP?
***Luis:*** Certo
***Daniela:*** Eu sou certificada PMP desde 2013 e venho na luta ir para colher PDU´s todos esses anos.

***Daniela:*** E me diz uma coisa, você então trabalhava em Lisboa. sua prática de trabalho era totalmente presencial e por conta dos confinamentos da Covid você passou a trabalhar remoto, ou já tinha alguma experiência nesse tipo de modelo?

***Luis:*** Não totalmente, até 2019 era totalmente presencial. A partir de setembro 2019 ficava três dias em Lisboa e ficava 2 dias num organismo que pertence a mesma empresa em Portugal.

***Daniela:*** Então já tinha aí um início de um Trabalho Remoto. E como é que foi esse momento? Essa migração do trabalho presencial pro Remoto que você citou, desde o início desse modelo híbrido aí no final de 2019 até março de 2020. E nesse momento de ruptura que a gente teve no início de março de 2020, que de repente a empresa disse: olha amanhã ninguém está aqui mais

o escritório, todo mundo remoto. A empresa entregou as máquinas com VPN´s e cada um seguiu sua a vida.  Como é que isso foi para você?

***Luis:*** não foi muito difícil porque, assim:  nós temos que separar sempre por duas situações: em termos de eficácia no houve alteração e até pode ter aumentado. Em termos de eficiência aumentou de certeza. Se tem alguns Hand-caps, digamos assim porque havia sempre a falta de aquelas conversas de corredor onde se obtém muita informação. A socialização direta por exemplo, quando nós temos um problema, as vezes a gente ia bater à porta de alguém. As coisas resolvem-se muito mais rápido do que propriamente ser pelo telefone, mas de resto não se notou grande coisa porque na prática o rigor e a qualidade do trabalho não diminuíram. Mas há sempre alguns problemas envolvidos nisto. Quando as pessoas totalmente a teletrabalho por vezes pensas que se calhar com esta tarde linda, ao meio-dia posso ir embora e posso voltar a trabalhar às 20:00. Portanto temos que arranjar aqui sempre é uma forma onde as equipas estejam a trabalhar pelo menos umas 4 ou 5 horas em conjunto para possam colaborar.

***Daniela:*** Integrados, né? todo mundo na mesma página digamos assim

***Luis:*** outra coisa que também houve alteração. foi mais também carga burocrática.  Ou seja, quando nós estamos à distância nós temos mais a tendência de querer registrar tudo aquilo que fazemos para no caso se ter que provar que se vou fazer isto ou aquilo e, portanto, aqui, nota-se um pouco mais de carga burocrática.

***Daniela:*** e você notou que o seu trabalho passou a ser uma carga horária maior? porque eu percebi isso e outros entrevistados que disseram assim: olha eu perdi um pouco o controle da minha agenda porque afinal de contas eu passei a ficar disponível 24 por 7 e aí eu tive que dar uma equilibrada nisso nessa fase inicial

***Luis:*** é assim: depende. porque, por vezes, há dias que eu posso iniciar meu dia de trabalho mais tarde e fazer outro tipo de tarefas pessoais, porque eu já sei que no final da tarde eu vou ter mais trabalho em teremos de entidade patronal. Eu como faço, eu estou um pouco mais além do que a gestão de projetos, como sou chefe de projetos eu tenho que acordar também várias equipas com vários gestores de projetos e a área de onde eu trabalho tem a ver com cobrança de impostos por vezes surge um problema e eu tenho mesmo que intervir. Não posso dizer ok isto Fica para amanhã às vezes esta questão do horário não é assim tão linear com isso. Nós também temos alguns Suplementos remuneratórios exatamente para compensar este trabalho

digamos assim Fora de Horas. portanto às vezes torna-se difícil estar a dizer que trabalhei mais uma ou mais duas horas. Às vezes é difícil, mas admito que possa acontecer um pouco mais de horas de trabalho Sim.

***Daniela:*** Aumentou um pouco o dia-a-dia de trabalho por estarmos um pouco mais, digamos assim, mais disponível em casa ne...

***Luis:*** Sim, sim.

***Daniela:*** E você percebeu... Você me falou que você lidera várias equipes também. Como é que foi essa migração pra sua equipe? para essas pessoas que estão ligadas com você que provavelmente também não estavam de Trabalho Remoto 100% do tempo. Você notou alguma ação que você passou a fazer para poder estar mais perto dessas pessoas que... Como você disse não têm mais aquele momento do café aquela conversa de corredor, aquele presencial ali que se resolvia e passou a ser de forma só pelo computador. Você fez alguma ação de integração nova teve alguma coisa que você trabalhou nesse sentido?

***Luis:*** é assim, todos os gestores de projetos com quem eu costumo trabalhar são de empresas externas portanto são contratações que nós fazemos. E eu sempre tive uma boa relação com todos eles. Portanto, eu por vezes, sempre presencial ia lá ter com eles para falarmos um pouco agora aqui pego no telefone fazemos conferencias também videoconferências com zoom mesmo que não seja só por motivos de trabalho. portanto, mantemos sempre aqui uma determinada relação que mistura trabalho e extra trabalho. Portanto não se notou grande diferença nesse aspecto e aliás, depois, todos esses gestores com que eu costumo trabalhar alguns deles estão aí, por exemplo esse da Opensoftware e esses dois da Accenture já são Séniores e também já costumavam ter também acontecer um trabalho misto

***Daniela:*** Então essa parte fica um pouco mais suave. Foi uma transição um pouco mais suave para esse momento. e você percebeu que você teve que desenvolver alguma boa prática para poder continuar tendo o tracking dos teus projetos em dia? Como por exemplo, a implantação de uma determinada ferramenta? cuidado com a comunicação? Fazer com que todo mundo reportasse mais vezes? Você teve uma ação de solicitar mais reports? Essas boas práticas de gestão?

***Luis:*** nós quando estávamos presencialmente, do momento pra outro podíamos ir ter com as equipes, não tínhamos propriamente um dia pra marcar Reuniões para fazer ponto de situação. Portanto a distância começamos a agendar sempre no mesmo dia sempre a mesma hora as reuniões de PDS.
sempre tudo o que saísse fora desse âmbito, mas que fosse urgente será sempre tratado pelos outros meios, ou telefone ou pelo menos, nós utilizamos o Teams mais do que inclusive o zoom, mas é uma ferramenta de qualquer das formas para videoconferência. mantivemos, se calhar, aumentamos um pouco a formalidade das coisas, ou seja, nós por exemplo por vezes podíamos escrever qualquer coisa rápido no papel. Olha, toma lá faz lá isto... E agora começamos a utilizar ferramentas mais colaborativas e, portanto, como já tínhamos agora isto já em formato digital, também tivemos a preocupação de manter o maior rigor no armazenamento.
portanto ferramentas colaborativas, repositório de informação e depois a difusão dessa informação por toda a equipa. Eu também comecei a utilizar mais uma ferramenta que é o trello.

***Daniela:*** Conheço.... Já utilizava no Brasil

***Luis:*** pronto, se calhar quando estava lá presencialmente era mais comedidos e fazia-se exatamente a mesma coisa. portanto agora fez-se a transformação digital. houve aqui, foi mais um pouco de preocupação, foi com a questão da segurança da informação. como nós trabalhamos com informação bastante confidencial e agora como temos esta informação em portáteis para se trabalhar, portanto, aumentou-se aqui um pouco mais o reforço da segurança mais um reforço de fazer backups. portanto houve também essa preocupação. De resto não alteramos muito os nossos modos trabalhar. pegamos talvez, foi na forma como a gente fazia e utilizamos ferramentas para substituir esse modo de atuação

***Daniela:*** foi mais uma questão de organização mesmo do dia-a-dia de trabalho que já acontecia

***Luis:*** por exemplo nas reuniões começamos a ter mais preocupação. uma reunião presencial por vezes como já estava ali presencialmente aquilo tendia a alongar-se o pessoal estava atrasado... Agora não, como está agendado, são reuniões muito mais curtas, são mais focadas são melhor preparadas digamos assim.

***Daniela:*** Você sabe, que só a título de curiosidade você é a sexta pessoa que eu entrevisto e todos eles tocaram no mesmo ponto da questão da formalidade das reuniões, da pontualidade. No Brasil, a questão da pontualidade é meio...

***Luis:*** Aqui é igual.

***Daniela:*** Essas pessoas que entrevistei, que são do Brasil, foi assim o primeiro tópico foi questão da pontualidade e do conteúdo das reuniões, quer dizer, que a reunião realmente tem um objetivo e tem aquele porquê. A agenda passou a ser toda virtual. Então se eu me atraso nessa reunião aqui com você significa que a próxima reunião eu também vou entrar atrasada e as pessoas vão estar esperando por mim e não vão estar vendo que eu estou ali na outra sala terminando outro assunto. Então esse tipo de cuidado passou a ser o top 1 da minha lista de boas práticas: a questão da pontualidade e eu ouvi hoje uma coisa muito interessante: A educação das pessoas também foi afetada durante as reuniões porque na reunião presencial você tinha um diálogo Um pouco mais aberto, podia fazer uma piadinha e enfim, atendia o telefone no meio da reunião - Espera aí que é o meu filho está ligando eu tenho que resolver isso - que de repente as pessoas começaram a sentir que essa questão da educação de você estar prestando mais atenção e cuidado para falar na reunião que isso também foi uma coisa que mudou o trabalho pelo fato de estar remoto. você percebeu esse tipo de ação também?

***Luis:*** sim e as conversas paralelas e depois é assim: numa reunião presencial normalmente existem alturas que toda a gente tem tendência de estar a falar ao mesmo tempo o que aqui já é mais difícil. portanto as pessoas aqui também ficam um pouco mais controladas e depois por vez também há aquele delay entre a pessoa estar a falar e até se começar a ouvir também evita que isso aconteça. Portanto ficaram mais disciplinadas as reuniões

***Daniela:*** Resumidamente o Trabalho Remoto, na gestão dos seus projetos, manteve-se a qualidade do trabalho que já tinha. E de alguma forma trouxe uma questão de uma eficiência um pouco maior porque as pessoas estão mais focadas naquilo que está acontecendo durante o dia-a-dia de trabalho. Assim fazendo um grande resumo do que a gente conversou aqui

***Luis:*** e a ideia com quem eu tenho falado com várias pessoas é que voltar atrás já vai ser muito difícil

***Daniela:*** era a minha próxima pergunta. qual era o seu sentimento com esse modelo que enfim, está aí agora. Eu acho que a gente não volta mais. a gente pode até voltar, na minha opinião, para o Hibrido. mas não para o 100% presencial.

***Luis:*** voltar a 100% eu acho que já não volta. quer no Estado quer nas empresas. as empresas porque muitas as consultoras inclusive já estão a despachar digamos assim, dos edifícios nos grandes centros de Lisboa pra começarem a ter sítios mais pequenos e fazer os sistemas híbridos. já conheço várias equipas que estão assim. No próprio estado também já está a fazer o híbrido hoje. portanto onde eu trabalho, somos uma grande organização, somos 12.000 cerca de 12.000 funcionários. E em menos de um mês tínhamos cerca de 7000 em teletrabalho. somos capazes de ser a maior entidade do Estado que estivesse em teletrabalho e boa parte já não quer voltar ao presencial. Em termos do teletrabalho também temos que aqui dividir duas coisas: entre o que é estar em casa e o estar em instalações adequadas para esses efeitos. Pronto, eu penso que o futuro irá ser um sistema híbrido. Irmos um ou dois dias, o que for, a sede ou ao nosso local de trabalho e o restante de ser mais em centros preparados para o efeito e não propriamente em casa porque temos problemas de segurança...

***Daniela:*** Tipo espaços de co-working, por exemplo.

***Luis:*** Certo

***Daniela:*** E você teve relatos de pessoa da que trabalham com você da sua equipe, que tiveram dificuldade de separar um ambiente de trabalho? porque isso interfere muito na qualidade do dia-a-dia. Eu por exemplo o meu filho tem 22 anos, mora no Porto, faz engenharia... eu não tenho uma criança pequena no meu dia-a-dia aqui solicitando a minha atenção durante o dia de trabalho então a minha migração para o tele trabalho foi muito simples. Eu já tinha meu ambiente de Estudo. eu tenho um quarto separado para mim onde eu passo o meu dia aqui a minha maior interferência é o meu cachorrinho quando ele escuta um barulho na rua eu sai latindo. mas eu não tive esse tipo de problema. A sua equipe teve alguma coisa, você teve que lidar com esse tipo de situação também, desse lado mais pessoal das pessoas?

***Luis:*** Diretamente com as equipas que eu trabalho, não porque é relativamente tudo muito novo. e eu também, o meu filho já tem 17 anos, mas já não faz tanta algazarra. mas eles são pessoas novas que nem sequer tem filhos. De colegas do trabalho, que de vez em quando temos que participar de reuniões: aí nota-se que alguns tem casas mais pequenas em Lisboa e que aí já ouve-se por vezes algum ruido. Estou a recordar de caso em concreto em que a filha de colega estava também a professora ao mesmo tempo e de vez em quando ouvia-se a conversa que ela estava a ter com a professora. isso acontece. por isso é que eu acho possivelmente será melhor ter esses centros de teletrabalho do que propriamente em casa pôr essa falta de condições.

***Daniela:*** Então era isso, mais uma vez gostaria de agradecer. E como eu falei, era muito simples. era só para buscar mesmo a percepção do Trabalho Remoto; o que que ele mudou no seu dia-a-dia; quais foram as ações que a gente passou a tomar. Estou vendo muito essa questão da segurança da informação da comunicação, como você e as pessoas que relataram muito para mim a questão do aprendizado de novas tecnologias.

***Luis***: A gente sempre foi da área de TI e tinha toda a tecnologia mão, mas numa situação como essa gente teve que aprender a utilizar o "Trello" sem ser só post-its, né? Ele ser uma ferramenta para ajudar um pouco mais no nosso dia no nosso dia-a-dia do que ele ser somente uma ferramenta bonitinha para ajudar nas reuniões presenciais.

***Daniela:*** Então esse também foi uma questão que eu senti assim que as pessoas têm relatado bastante para mim. Mas agradeço muito seu tempo a sua simpatia muito obrigado então eu vou para a gravação aqui para a gente se despedir melhor

Entrevista realizada em: 27-03-2021

Transcrição de entrevista gravada

***Daniela:*** Bom Júlio, eu queria primeiro te agradecer seu tempo a sua disponibilidade para você tá aqui comigo me ajudar aí na nessa pesquisa para mim a dissertação a gente começar como eu te falei o objetivo da tese é a gente buscar. Quais foram os grandes desafios e as boas práticas que a gente passou a adotar na gestão dos nossos projetos em função do trabalho remoto pegando essa linha da covid da pandemia Mundial que a gente está enfrentando que fez com que a gente saísse da nossa zona de conforto e passasse a trabalhar de uma forma um tanto quanto diferente do que a gente costumava. quer dizer o teletrabalho obrigatório o trabalho Home Office obrigatório desde março do ano passado. então para gente começar eu queria que você me diz seu nome sua idade o seu tempo de experiência em gestão de projetos se você tem alguma certificação enfim, um pouquinho da sua a vida profissional nesse sentido.

***Julio:*** Então, vamos lá é um prazer estar participando aqui da pesquisa, Daniela e meu nome é Júlio Lima. Eu tenho 50 anos. Eu tenho certificação PMP já desde 2009 e hoje, eu tenho uma equipe grande. Eu trabalho na maior empresa de mídia da América do Sul e a terceira ou quarta a empresa do mundo de mídia e entretenimento e a segunda em share, eu trabalho aqui na Globo do Brasil e a gente hoje, eu tenho essas diversas equipes de baixo da minha gestão, eu tenho uma equipe de mais ou menos 100 funcionários e cerca de 300 terceiros. e hoje dentro da minha equipe eu tenho uma equipe de projetos também que toca os meus projetos os projetos da área de segurança da Globo como um todo na eu hoje. Eu trabalho numa área de operações e tecnologia. Então a minha área se chama gestão de usuários e serviços eu tenho eu atendo todos os 18 mil colaboradores e terceiros da Globo nos seus 32 sites ao redor do Brasil em alguns escritórios internacionais como Nova York e Londres. e hoje no Brasil a presença que a gente tem é Globo mesmo é São Paulo, Rio, Brasília, Belo Horizonte, Recife e Porto Alegre. E aí dentro da minha área eu tenho o atendimento não só aos usuários finais, então essa questão da Home Office impactou em cheio a minha atividade, porque no final das contas, as pessoas usam máquinas fornecidas pela empresa, pela minha área. Tem toda a questão de VDI que também sou eu, que forneço. VPN, uma série de outras coisas, né? E eu tenho uma área que se chama central de serviços que é uma central de atendimento e tem uma de relacionamento tem uma área que cuida da parte service now de inteligência e tem uma área de projetos e tem uma área que cuida de work-places, plataformas e a gente cuida também de toda plataforma de colaboração. Office 365, licenciamento tudo isso.

***Daniela:*** Como é que foi essa migração. Desde quando vocês estão trabalhando nesse regime de home office começou mesmo em março de 2019, como é que foi esse período de migração? Como é que vocês trabalharam?

***Julio:*** Até então, começo de 2020 para completar a gente estava no processo de fusão de empresas. tudo nessa nova entidade que era chamada Globo. então começo de 2020, a gente começou a receber notícias do problema da China. E aí quando a coisa começou a espalhar pela Itália pela Europa era questão de tempo de chegar no Brasil. A empresa não tinha uma cultura. Apesar de ser uma empresa grande com muitos funcionários e prestadores, alguma coisa só 18 mil pessoas a gente não tinha uma cultura de trabalho remoto até então. Muito pelo contrário, a empresa ia na contramão do trabalho remoto não se acreditava muito nisso e assim de fato, eu comecei a gente começou a se preparar para o trabalho remoto no começo de março, né? E efetivamente só começou a pensar no trabalho remoto, porque a gente começou a ver que algumas áreas da empresa, mesmo sem terem uma orientação específica do comitê executivo de que a gente estaria entrando em home-office. Mas alguns gestores começar a liberar suas equipes, né?

E aí com essa movimentação que aconteceu lá um pouco antes de 12 de março, se eu não me engano acho que lá para o dia 9 de março do ano passado a gente começou a se planejar porque a gente percebeu que o Tsunami ia chegar, né e efetivamente chegou no dia 16 de março, a empresa emitiu um comunicado dizendo que as pessoas iam ficar em home-office, eu acho e a partir do dia 16 mesmo já tinha quase todo mundo em casa e foi uma loucura, né? Porque tipo assim não tem até hoje a gente não tem notebook para todo mundo, né? Esse ano a gente tá comprando quatro mil e 100 notebook entre notebooks de diversos tipos e configurações. Mas assim para minha equipe foi meio caótico, a gente passou um mês e meio aí quase dois meses trabalhando de domingo a domingo para poder viabilizar. Porque até então a gente tinha limitação de licença de VDI, a gente teve que crescer, quase dobrar capacidade do VDI em um ano na e depois a ao longo do ano a gente começou a fazer um trabalho também de migrar o VDI para RDS- Remote Desktop para a gente poder voltar aos patamares anteriores de VDI esse ano. porque a gente não teria, a gente cresceu quase um milhão de reais de licença, então precisava voltar aos patamares de VDI do ano passado.

E aí assim é num primeiro momento a ideia Inicial minha era começar com VPN porque achava que seria o movimento mais fácil, né? Mas teria mais fricção para o usuário. como a empresa ainda tem muita gente que não sabe ou Conhece muito pouco de tecnologia ia ficar muito difícil para as pessoas começarem a usar efetivamente A VPN então num primeiro momento. A gente acabou adotando VDI. Daí a gente teve que fazer quase que o mapeamento de 15 16 mil pessoas

priorizar quem ia ter acesso ao VDI, dar acesso pra essas pessoas, o que elas precisavam no VDI e a gente levou nesse processo aí alguma coisa em torno de um mês e meio quase dois então a gente foi de 16 de março até final de abril. E aí assim meados de maio assim a gente já estava tratando um outro probleminha que tinha de acesso, mas foi assim, e hoje assim a gente evoluiu muito ao longo de um ano então hoje a gente a gente já tem as máquinas que são Windows todas é um alto pilot não então hoje eu já começo para as máquinas desse ano, eu já começo a fazer atualização de build do Windows 2010 de pet de segurança, tudo via nuvem. assim os caras não precisam mais tá conectado por exemplo, na VPN. eu consigo fazer pela VPN também, mas não é necessário, né a consigo fazer atualização consigo fazer inventário consigo... tô fazendo um deploy de monitoração de máquina pela internet, então a gente vai conseguir monitorar se a máquina do cara tá com baixa performance. E por que que tá?

Então a gente evoluiu muito ao longo de um ano, a gente migrou todo mundo para softphone também, então, isso foi uma outra coisa que está dando ganho, a gente começou a recolher o telefone das mesas das equipes, que de casa tem acesso ao seu ramal da Globo. Seja no desktop ou no celular, celular próprio na E isso também deu ganho gigante. Além disso eu cuido também da parte de videoconferência por causa do teams. Então a gente a empresa adotou até então no ano passado até março a gente não dava um Skype. Usava muito larga escala e quando foi abril para maio a gente fez o shift do Skype pro teams.

E hoje a empresa toda usa basicamente o teams como front-end de trabalho do computador então hoje a gente tem no teams, a conexão, que é a nossa intranet, a gente tem um assistente virtual, né? Tem os times mesmo tem acesso para OneDrive ele tem um monte de coisas ali que é basicamente o cara ou chaveia pro teams ou ele chaveia para o outlook, para aquilo ele precisa pra trabalhar.

***Daniela:*** esses foram os grandes desafios a sua organização, quer dizer: aumento de custo colocar todo mundo em casa, mexer na cultura da empresa porque ela não tinha a cultura de trabalho remoto e sim de trabalho presencial mais para você e para sua equipe. O que que você sentiu de desafios? Eu li muito e já ouvi alguns relatos como a empresa precisava comprovar que eu estava trabalhando de nove as seis que eu estava disponível ali por conta dessa questão Cultural de contar as cabecinhas, de saber que o time está todo integrado. Você com a sua equipe, você teve alguns desafios nesse sentido? como sua equipe recebeu que dizer também todo mundo tinha condições de ter um espaço para o home-office de trabalhar de casa o dia a dia isso foi uma preocupação para vocês. Teve esse tipo de conversa de adaptação de enviar para equipes algum Equipamento necessário, como por exemplo, terá uma pessoa que é um

PCD. E aí tem que mandar alguma coisa para casa dela para ajudar ela nessa virada de chave e teve assim algum desafio nesse sentido?

***Julio:*** Por um lado a gente teve aumento de custos em algumas coisas falando ainda sobre a empresa por outro lado a gente teve redução de custos operacionais porque a gente acabou fechando muitos sites então no final das contas o resultado da empresa para esse ano foi até foi até positivo por causa dessa economia né meio que economizou 10% por cento do orçamento de despesa da empresa. E aí a gente conseguiu no final das contas fazer empresa fechar no verde na positivamente que foi importante porque até permitiu com que a empresa pagasse bônus para as equipes também, né? sobre o ponto de vista da equipe, essa questão do coronavírus, a pandemia no final das contas foi um componente a mais de um ano que já seria complicado para a gestão por causa da fusão. então no final das contas, a minha a minha área não existia da forma como ela existe hoje em nenhuma das 5 empresas que eu falei para você. Então já tinha uma questão de união de pessoas de diversas empresas diferente com três diferentes formas de diferente que já seria um desafio por ser né? Além disso com a questão do coronavírus. A gente começou além de ter hoje os problemas culturais que naturalmente existem né? A gente ainda teve o problema de estar o grosso das pessoas em casa, a gente fez um trabalho que tanto a central de serviço quanto a central de atendimento a gente colocou 100% da equipe em home-office, rodando em turno fazer isso com atendimento remoto e com o softphone e, mas assim as pessoas no final das contas perderam contato entre si e essa e a questão do Virtual. Apesar de você terá a possibilidade de poder falar e ver as pessoas, mas é diferente porque você não tem aquela questão da interpretação do ato. você não consegue olhar no olho no olho. Então você não sabe se a pessoa tá com algum sentimento ruim.

***Daniela:*** aquela linguagem corporal você perde, né?

***Julio:*** Isso. então foi bastante difícil, até porque a gente teve alguns percalços como eu falei de relacionamento dentro da equipe, mas esse é um ponto. aí assim do outro lado a empresa a gente fez um trabalho de ver quais eram as pessoas que teriam elegibilidade junto com RH o perfil de mobilidade, mas a empresa acabou tomando decisão muito tarde. o que empresa fez, ela postergou muito para tomar decisão das compras de computador então efetivamente a gente é uma parte de 6000 notebook, né e 11000 desktops. E aí esse ano aí a gente tá comprando 4100 mais ou menos notebook diversos modelos para chegar um número ali de 10000 usuários mais ou menos com mobilidade. e o vai trabalhar com máquinas locais vai ter que ir lá localmente trabalhar, né? Mas isso foi definido do final do ano para cá. Em paralelo, a

empresa também demorou um pouco de tempo para tomar decisão de dar alguma ajuda de custo para as pessoas terem no seu Home Office e acabou que tomou quando eu tomo a decisão ela deu uma ajuda de custo de r$ 750 o pessoal comprar cadeira para trabalhar em casa com ergonomia, mas por exemplo no meu caso da minha experiência mesmo. Eu montei, não fiquei esperando, e montei o escrito por mim mesmo. Assim que eu percebi, fui montar um escritório para mim. Aí, acabei montando. mas hoje assim, isso já está mais equalizado.
Esse ano a gente vai começar o processo de distribuição das máquinas. já com essas evoluções todas que eu te falei e eu acho que vai ser vai ter menos fricção para as pessoas, sobre o ponto de vista da minha equipe o que a gente teve que fazer eu comecei, para estar mais próximo do pessoal. Eu comecei a fazer quando eu tinha um determinado projeto que eu fechava eu fazia um happy-our online. E aí uma vez eu contratei tem uma menina para tocar para gente para cantar não é uma outra vez. Eu mandei tipo assim uns snaks com canequinha de brinde. no final do ano a gente personalizou um headphone Bluetooth, né? Compramos para todos os cento e poucos funcionários, e distribuímos também, mandamos entregar em casa eu agora para o começo de do ano, né? Como a gente vai tá finalizando. O Q1 um em abril a gente deve fazer uma reuniãozinha virtual e a gente vai mandar fazer umas canequinhas personalizadas com os avatares das pessoas e é uma forma do time tá mais próximo e assim é foi sucesso porque esses brindes assim, principalmente a galera que é mais nova, os milênios a geração Z geração x Milênios e tal, eles curtem bastante essas coisas, esses mimos.

***Daniela:*** Eles se sentem pertencendo aquele grupo, né?

***Julio:*** no final das contas, foi uma estratégia bem sucedida aí também é do meio do ano para cá, porque eu estava querendo muito fazer um trabalho de time, um time-Building com eles, só que eu comecei a sentir que não ia rolar o presencial. E aí a gente eu tomei a decisão de depois de julho a gente iria fazer. E aí eu consegui me organizar. Aqui em cima das entregas todas para gente tinha para fazer a gente fez um trabalho team-building virtual, e que levou uns três dias assim meio expediente cada dia para construção de visão valores missão, vou te falar que no primeiro momento eu fiquei bem cético de que ia funcionar, mas incrivelmente eles se engajaram participaram bem. A equipe toda participou bem. Em novembro geralmente novembro a gente tem um negócio na empresa que contrata uma consultoria para fazer uma pesquisa de engajamento.

***Daniela:*** Uma pesquisa de clima, né?

***Julio:*** Sim. E eu assim surpreendentemente eu achei que a minha para ser sincera, eu achei que a minha pesquisa de clima ia ser muito ruim, ia ser abaixo de 65, tá? E assim depois de todas essas ações que a gente fez do meio do ano para cá e a gente eu consegui de uma maneira ou outra ir resolvendo os problemas de conflitos fazendo todo mundo remar numa mesma direção na minha pesquisa de engajamento foi a uma das melhores da divisão. Assim, na verdade ficou empatada Com Outra área na área de segurança teve uma pesquisa de engajamento com 73 pontos e a minha área teve 73 também só que a diferença que a área de segurança não tem 40 pessoas e aqui tem 100 pessoas só de colaboradores

***Daniela:*** é isso faz uma grande diferença

***Julio:*** E aí assim eu vou te falar que sob o ponto de vista de entregas do ano passado a gente não foi tão bem. Eu acho que a gente foi mediano, mas o esforço que eu gastei para cuidar do time para estar perto do time, né entender a necessidade das pessoas para esse ano, eu acho que a gente vai estar numa melhor posição do que o ano passado. Talvez eu tivesse se eu não tivesse tomado essa decisão esse ano passado eu teria tido uma pesquisa de engajamento ruim , eu teria tido um resultado ruim e eu voltaria a ter as mesmas coisas esse ano. Então a minha expectativa esse ano é que a gente tem uma pesquisa de clima melhor do que a do ano passado e efetivamente a gente está melhor estruturado para poder responder mais as entregas desse ano.

***Daniela:*** e você notou assim, que de trabalhar de forma remota, vocês tiveram que se preocupar mais com documentação, compartilhamento de conhecimentos com enfim você já falou que vocês usam o Teams ou outlook... Mas vocês tiveram um aumento do número de reuniões, passou de uma metodologia de gestão mais tradicional para mais ágil? Vocês fizeram algumas mudanças assim nesse enfoque do dia de trabalho?

***Julio:*** sim. efetivamente a gente a gente hoje eu uso uma metodologia de projetos híbridos para projetos maiores a gente trabalha com cronograma com datas bem definidas, mas trabalha também com MVPs no meio do caminho. porque se você colocar os mvp´s sem ter uma data final, minha experiência diz que a data final vai escorregando, escorregando, escorregando... e você perde o cronograma, né? Então a gente a gente tem usa uma metodologia hibrida para projetos maiores e complexos. com relação a documentação é basicamente, eu tenho um time muito forte no processo. Eu tenho quase 50 pessoas na equipe entre colaboradores e terceiros

que que fazem levantamento é mapeamento de processos, seja de suporte de tecnologia. Porque a gente acaba que dá suporte porque a ferramenta de ACM fica sob responsabilidade do meu time né então a gente dá suporte a todas as áreas de tecnologia da empresa, suporte de produção de conteúdo, aplicações, infraestrutura a todo mundo, a hub digital, produtos digitais. Então a gente tem uma questão da documentação forte e seguiu normalmente não vi grandes problemas não.

***Daniela:*** Vocês já estavam bem estruturados nisso né?

***Julio:*** Já. mas efetivamente o que eu sinto o que eu ainda sinto um pouco de um pouco de dificuldade é que eu gosto de estar presente das pessoas então eu acho ainda muito a questão do virtual do online eu acho muito impessoal então realmente você não consegue ter a visão da Linguagem corporal das pessoas para saber como é que elas estão reagindo determinado assunto na Então tá assim que eu tenho procurado pelo menos ir duas vezes por semana na empresa, até porque eu tenho um time que tá no dia a dia de um time de end-user que está lá dentro tá lá ajudando as redações em jornalismo, jornalismo trabalhando o tempo inteiro tem gente que tá trabalhando na distribuição de conteúdo, seja no canal a cabo, seja no canal aberto, seja no Globo play então a gente precisa ajudar precisa dar suporte a quem tá lá no dia-dia também

***Daniela:*** e esses caras não vão para o modelo remoto porque não tem condição.

***Julio:*** A gente até fez um modelo remoto, mas efetivamente, tem coisas que precisa ter gente localmente. Mas a gente colocou algumas pessoas o grosso tá atendendo remotamente ou pelo teams pelo LogMeIn. Mas ainda tem um grupo ainda pequeno nos sites mais importantes que está presencial. E aí a gente faz um rodízio para essa galera

***Daniela:*** e você acha que a tua turma ganhou em qualidade de vida pelo trabalho remoto? O que você percebe deles assim?

***Julio:*** então trabalho remoto não é para todo mundo. Isso é fato! eu tenho casos na minha equipe de gente que não quer nunca mais voltar para o trabalho presencial porque tá super acostumado com trabalho remoto produz bem, mas tem gente por exemplo que tá doido para voltar para o presencial porque o porquê tem em três filhos e aí a casa vira o caos, mas a esposa ou o marido e mais a mais diarista, cachorro, papagaio... eu tenho gente que nem tem essa

condição toda de ter um monte de gente em casa. Tem até casa grande, mas não tem foco e aí o cara cai a produtividade e aí o cara passa o dia inteiro no Instagram fazendo selfie. E aí o chefe do Chefe segue o cara. E aí o chefe do chefe sou eu, né? Aí eu viro e fala para chefe dele. Fala assim, cara fulaninho, passa o dia inteiro tirar um selfie e vai dormir 1 hora da manhã no dia seguinte não pode, né. não aguenta.

***Daniela:*** Eu acho que os desenvolvedores que eu já ouvi muito e conversando aqui com amigos que são desenvolvedores, é que eles estão curtindo essa questão do teletrabalho porque eles entendem que desenvolver quase que enfim. Então você teu silêncio você trabalhar na hora da Inspiração você tá então eles fazem aqueles horários padrões combinado, as regiões os daily-meetings, as coisas operacionais que eles têm, mas se a tarde não trabalhar porque ele trabalhou a madrugada inteira desenvolvendo, isso para ele possibilitou mais qualidade porque ele trabalha a hora que ele quer então essa também é uma vertente do desenvolvimento.

***Julio:*** sem dúvida teve uma questão de qualidade de vida, principalmente para quem mora em grandes centros urbanos, né? Principalmente aqui no Brasil que a gente não tem uma oferta muito boa de transporte coletivo, você ganha um tempo importante na sua vida diária e você pode estar fazendo outras coisas, né? E não tem aquela necessidade de se deslocar para o trabalho o problema que eu vejo do trabalho 100% remoto. E essa é uma decisão que a empresa meio que já tomou é que a gente Aonde tiver um prédio na área metropolitana. Se tiver um prédio em prédio Globo, a gente vai ter um rodízio de 60% da força de trabalho.

***Daniela:*** Essa era a minha última pergunta: como é que você vê o futuro da tua empresa em questão trabalho remoto***.***

***Julio:*** Então vê se já tá meio que batido o martelo tá? pode ser que mude o número ou não, mas assim, a empresa que já tomou a decisão de que obviamente para aqueles cargos que tem mobilidade os cargos que tem que trabalhar presencialmente não tem jeito bom trabalhar 100% presencialmente, mas os cargos que tem mobilidade, a tendência é que 40% da sua semana em casa na de Dois a três dias em casa e de 2 a 3 dias no trabalho,

***Daniela:*** mas num esquema de rodízio das equipes então, por exemplo um time todo um desses seus times todos né? Naquele dia você não vai ter vai ter sempre gente em casa e gente no escritório.

***Julio:*** o time vai estar mesclado. eu vou ter uma parte do time em casa uma parte do time presencial e o que eu acho que eu vou te ser sincero que eu acho que isso faz Falta porque eu acho que no remoto você perde essa questão da intimidade do Dia a Dia você perde a oportunidade de olhar para alguém e ver que aquele dia aquela pessoa não tá bem aí você pode chamar né? Que no virtual você não vai ver, né? E aí você consegue ver se a pessoa chegou com chegou amuada, se a pessoa tá chateada, a forma como a pessoa fala e aí você consegue chamar a pessoa tomar um café perguntar o que que tá acontecendo se precisa de alguma ajuda, né? E a própria interação do time, eu acho que perde muito identidade. Você tá todo mundo remoto, mas eventualmente a gente vai ter a gente vai ter time 100% remoto, porque por exemplo a gente sabe que a gente tem uma escassez de mão de obra de Desenvolvedor. Então hoje com essa questão do trabalho remoto eu posso contratar um brasileiro que está na Austrália trabalhando de desenvolvedor e pagar e ele vai trabalhar lá normalmente ou contratar um alemão, um americano que não vai ter problema, entendeu? A única questão que a gente tem que ver agora é assim, como vão se dar essas políticas todas. de contratações e o que que a gente vai ser ativamente fornecer para o cara, né? Porque aí tem sempre discussão. Ah eu vou mandar um notebook da empresa para Nova Zelândia, né? Talvez não faça sentido e a gente tem vivido algumas coisas assim do tipo hoje, a gente tem que contratado gente em Uberlândia no interior da Bahia...

E aí assim a gente manda o computador para o cara, mas isso traz outros aspectos porque depois se o cara sai para outra empresa o que você faz? você pega o computador do cara e abate da rescisão dele, você manda uma empresa ir buscar aí tem que fazer um check list para saber se o cara vai devolver o computador correto com as condições corretas, o se, quebrou alguma coisa da máquina, entendeu? agora um cara que vai estar na Alemanha na Nova Zelândia. A gente já vai ter mais dificuldade de fazer isso

***Daniela:*** E você achou que o seu dia a dia passou a ser mais burocrático porque quando a gente saiu do presencial acabou exatamente a conversa do Corredor aquela coisa de fulaninho em vem aqui me ajudar a resolver isso aqui aqueles assuntos que a gente resolvia ali ao pé da mesa agora tem que marcar um Zoom, ou um Skype marcar um teams então eu não sei se você tem a mesma percepção que eu mas eu passo o meu dia inteiro abrindo reunião, abrindo reunião abrindo reunião porque a única forma que eu tenho de falar com as pessoas é através de Teams e Skype.

***Julio:*** Então é isso até engraçado assim isso realmente é uma verdade né eu acho que no primeiro momento teve a questão do over é porque a empresa não tinha uma política adequada ou nem definida para isso na verdade não tinha uma política bem estruturada. Então você começava a Se você começar a trabalhar 9 horas da manhã ia até às 10 horas da noite, se começasse as 10 horas da noite ia até às 11 horas ou meia-noite E era uma reunião atrás da outra e as pessoas não se preocupavam com o horário de almoço, com nada

***Daniela:*** 24x7

***Julio:*** a minha operação já é 24 por 7. e eu já vivo um pouco isso, mas efetivamente você não tinha tempo para nada nem para almoçar. Cansei de almoçar em reunião fechava câmera ia comendo aqui enquanto estava reunião estava rolando agora a empresa meio que já regulamentou que tem que ter a hora de almoço, é por volta de uma hora 2 horas da tarde, obvio que isso não é fixo, mas tenta se respeitar, né? Mas eu continuo a gente continua Nesse Ritmo maluco de engatar uma reunião na outra sem parar durante o dia então assim eu acho que a gente passa muito o dia em reunião e acaba que eu hoje tenho dificuldade muito grande de ler meus e-mails, porque se você deixar eu passo 10 horas do trabalho em reunião. Ou você presta atenção na reunião. Ou você lê os e-mails.

***Daniela:*** não dá tempo de fazer o dever de casa, né as decisões que foram tomadas nas reuniões, engatando uma reunião na outra, você fica com backlog imenso de trabalho.

***Julio:*** Isso é fato. E aí assim às vezes eu vou começar a trabalhar mesmo as 8 horas da noite 9 horas da noite que aí é quando baixa a poeira ou efetivamente. Eu estou procurando, me educando a não trabalhar no fim de semana, eu agora na época do BBB não tá dando porque eu acompanho os programas durante a noite. Então a gente está sempre em sala de guerra quando o programa começa até o programa virar da Globo para o Multishow, ate terminar o multishow. então a gente sempre acompanha, mas é muito isso que eu vejo assim.
E a outra coisa que eu vejo também é que tudo foi muito novo! as empresa realmente não tinha política para nenhuma dessas coisas e assim eu vejo umas coisas muito loucas assim porque a geração essa geração mais nova no primeiro momento assim as pessoas queriam levar as máquinas dele monitores para casa e aí como é que você controla eu não tenho como controlar levar 10.000 monitores para casa e depois trazer de volta assim entendeu é impossível fazer esse controle hoje dentro da empresa de que a fulaninho levou a máquina para casa e não trouxe de volta acontecer aqui na hora que eu for procurar um computador do cara para fazer

o inventário do seu monitor dele não aparecer eu vou cobrar da área eu vou cobrar dele entendeu então não das contas
E aí as pessoas são muito impacientes assim porque as pessoas acham que o departamento de tecnologia é o mal de todos, a razão de todo mal. Não é o departamento de tecnologia que tem que fazer política pra definir quem não pode trabalhar em casa não pode quem tem direito a notebook porque não tem deveria ter um deveria ter lá cadastrado as funções da empresa, dizendo esse cara aqui, ele trabalha assim o equipamento de trabalho dele é esse né?

***Daniela:*** Muito mais uma ação de recursos humanos do que tecnologia propriamente dito.

***Julio:*** e assim o departamento de Recursos Humanos empurra isso para tecnologia e fala assim, olha bicho, tivermos umas reuniões lá. Meio psicopáticas. Tipo assim O RH não querer assumir que o processo de corrida de crédito era deles é como não é de vocês gente, quem define quem contrata como contato quando contrata são vocês. Vocês têm que me ver como a Amazon, você tem que me dizer assim, ó, fulaninho vai entrar no dia tal, e precisa disso pra trabalhar com antecedência e vou entregar para ele. Agora se eu não tenho informação nenhuma eu não sou o Chico Xavier, eu não consigo psicografar quem é o cara onde o cara mora aonde ele vai trabalhar e máquina que ele precisa que precisa de máquina não precisa. Porque dependendo da função é como se diz você tem Apple, você tem uma gama gigante de máquinas para poder suportar operação, então é complicado

***Daniela:*** Julio, te agradeço muito. Vou parar de gravar aqui para a gente dividir, mas muito obrigada pela sua contribuição.

Survey - sample answers:

| | |
|---|---|
| Nome | |
| Idade | 40 – 49 |
| Morada | Rio de Janeiro / Brasil |
| Sexo | Feminino |
| Qual a sua experiência em Gestão de Projetos (em anos)? | 22 |
| Sua experiência em Gestão de projetos sempre foi realizada de forma presencial (fisicamente nas instalações da empresa pra qual você trabalha) | Sim |
| Há quanto tempo você vem desempenhando suas atividades de forma remota? | 1 ano |
| Como foi, de forma geral, a migração do trabalho presencial para o remoto? | Foi súbito, mediante a imposição de isolamento social. A empresa tb precisou desenvolver rapidamente ferramentas que facilitassem o acesso remoto à rede da empresa, sendo este acesso realizado simultaneamente por todos os funcionários. |
| Quais são as suas percepções em relação a gestão de projetos desenvolvida de forma remota? | O desenvolvimento do trabalho, após a disponibilização das ferramentas para o trabalho em Home Office, foi realizado de forma tão eficaz quanto na forma presencial. |
| Quais os desafios que você enfrentou nessa transição (presencial para remoto) com sua equipe? | Implementação de ferramentas para acesso remoto, familiarização com os aplicativos, ajuste dos equipamentos pessoais de tal forma fosse possível acessar as informações disponibilizadas na rede da empresa. |
| Você pode citar alguma diferença nas suas ações do dia-a-dia enquanto gestor de projetos remoto? | A única diferença foi que passamos a fazer todas as reuniões de forma remota também, neste último ano, não tivemos nenhum encontro presencial seja com a equipe seja com clientes. |
| Houve alguma boa pratica que você passou a desenvolver em função da gestão de projetos remota? | O arquivamento de documentos passou a ser totalmente eletrônico, não havendo mais documentação impressa. Ainda necessitamos implantar um sistema para arquivamento eletrônico de documentos mais eficiente.<br>A empresa onde trabalho nunca havia desenvolvido, antes da pandemia pelo Novo Coronavírus, nenhum tipo de prática para trabalho usual no modo remoto. Tínhamos apenas acesso a correio eletrônico e algumas aplicações do SAP para realizar autorizações de forma remota. Logo após o início do trabalho remoto, a empresa desenvolveu um "mecanismo" de acompanhamento do trabalho desenvolvido pelos funcionários. É algo simples, porém, diariamente precisamos lançar no sistema todas as atividades realizadas durante o dia, considerando 7,5h de trabalho. Ou seja, apesar de estarmos no modo remoto, a cultura do trabalho presencial, onde devemos cumprir 7,5 horas de trabalho por dia, ainda é bem forte na empresa. (São 7,5h/dia, conforme acordo coletivo). |
| Como você imagina que vai ser o modelo de trabalho no futuro? | Modelo hibrido para os colaboradores |
| quais são os desafios na Gestão de Projetos que você acredita que vamos enfrentar assim que a pandemia passar? | Manter a confiança e respeito aos objetivos e não esmorecer. Também trabalhar bastante o clima organizacional, para amenizar os efeitos das crises de ansiedade. |

| | |
|---|---|
| Nome | |
| Idade | > 49 anos |
| Morada | Província de Québec - Canadá |
| Sexo | Masculino |
| Qual a sua experiência em Gestão de Projetos (em anos)? | 25 anos |
| Sua experiência em Gestão de projetos sempre foi realizada de forma presencial (fisicamente nas instalações da empresa pra qual você trabalha) | Não |
| Há quanto tempo você vem desempenhando suas atividades de forma remota? | 20 |
| Como foi, de forma geral, a migração do trabalho presencial para o remoto? | Foi bem tranquila |
| Quais são as suas percepções em relação a gestão de projetos desenvolvida de forma remota? | Satisfatória a medida que a tecnologia e ferramentas de comunicação evoluíam |
| Quais os desafios que você enfrentou nessa transição (presencial para remoto) com sua equipe? | Facilidade na comunicação rápida e direta, mas que exige um maior empenho para criar e estimular sinergia entre os participantes. |
| Você pode citar alguma diferença nas suas ações do dia-a-dia enquanto gestor de projetos remoto? | Reservar um tempo introdutório nas conferências para tratar temas genéricos, que eram debatidos presencialmente no ambiente de trabalho, quebra o gelo e cria uma relação de confiança, ao mesmo tempo que se demonstra uma preocupação com o bem-estar do outro. |
| Houve alguma boa pratica que você passou a desenvolver em função da gestão de projetos remota? | Manter a câmera ligada ajuda a esquecer a sensação de isolamento, hoje também imposta pela pandemia, e encoraja a comunicação entre os membros da equipe. |
| Como você imagina que vai ser o modelo de trabalho no futuro? | Modelo hibrido para os colaboradores |
| quais são os desafios na Gestão de Projetos que você acredita que vamos enfrentar assim que a pandemia passar? | Adaptação da política das empresas ao trabalho híbrido; - Disseminação da cultura organizacional; - Alinhamento das estratégias com planejamento dinâmico; - Otimização dos processos no que tange integração entre as áreas; - Acessibilidade e disponibilidade integral dos sistemas informatizados, redes, equipamentos e serviços de suporte 24h em 7 dias da semana; - Forma de treinamentos; - Seleção de perfil de colaboradores paramodelos híbridos de trabalho; |

# Appendix III

Plurality of the sample:

*Table 18 - Gender x Age*

| Type | Gender | Age Group | Count | % | Gender | Age Group | Count | % | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| **Interview** | | | | | | | | | **30** |
| | **Feminine** | | | | **Masculine** | | | | **09 \| 21** |
| | | 20 – 29 | 0 | 0,00 | | 20 – 29 | 0 | 0,00 | |
| | | 30 – 39 | 4 | 13,33 | | 30 – 39 | 2 | 6,67 | |
| | | 40 – 49 | 3 | 10,00 | | 40 – 49 | 14 | 46,67 | |
| | | + 49 | 2 | 6,67 | | + 49 | 5 | 16,67 | |
| **Survey** | | | | | | | | | **69** |
| | **Feminine** | | | | **Masculine** | | | | **23 \| 46** |
| | | 20 – 29 | 2 | 2,90 | | 20 – 29 | 2 | 2,90 | |
| | | 30 – 39 | 3 | 4,35 | | 30 – 39 | 12 | 17,39 | |
| | | 40 – 49 | 13 | 18,84 | | 40 – 49 | 17 | 24,64 | |
| | | + 49 | 5 | 7,25 | | + 49 | 15 | 20,29 | |

*Table 19 - Gender x PM Experience*

| Gender | PM Experience | Count | % | TOTAL |
|---|---|---|---|---|
| **Feminine** | | | | **32** |
| | 01 - 09 Years | 13 | 40,63 | |
| | 10 - 19 Years | 10 | 31,25 | |
| | + 20 Years | 9 | 28,13 | |
| **Masculine** | | | | **67** |
| | 01 - 09 Years | 17 | 25,37 | |
| | 10 - 19 Years | 28 | 41,79 | |
| | + 20 Years | 22 | 32,84 | |

*Table 20 - Gender x RW Experience*

| Gender | RW Experience | Count | % | TOTAL |
|---|---|---|---|---|
| **Feminine** | | | | **32** |
| | Yes | 6 | 18,75 | |
| | No | 26 | 81,25 | |
| **Masculine** | | | | **67** |
| | Yes | 24 | 35,82 | |
| | No | 43 | 64,18 | |

*Table 21 - Survey participants*

| ID | Gender | Country | Age Group | PM Exp. | ID | Gender | Country | Age Group | PM Exp. |
|---|---|---|---|---|---|---|---|---|---|
| **S01** | M | BRA | 40 – 49 | 20 Y | **S36** | F | BRA | 40 – 49 | 22 Y |
| **S02** | F | BRA | 40 – 49 | 20 Y | **S37** | F | BRA | + 49 | 15 Y |
| **S03** | M | PRT | 30 – 39 | 6 Y | **S38** | M | BRA | + 49 | 20 Y |
| **S04** | M | BRA | + 49 | 17 Y | **S39** | M | BRA | + 49 | 20 Y |
| **S05** | M | BRA | 40 – 49 | 15 Y | **S40** | M | USA | + 49 | 3 Y |
| **S06** | M | BRA | + 49 | 25 Y | **S41** | F | BRA | + 49 | 25 Y |
| **S07** | F | BRA | 30 – 39 | 1 Y | **S42** | M | BRA | + 49 | 25 Y |
| **S08** | M | PRT | 40 – 49 | 10 Y | **S43** | F | BRA | 30 – 39 | 7 Y |
| **S09** | M | BRA | + 49 | 22 Y | **S44** | F | BRA | 30 – 39 | 3 Y |
| **S10** | F | BRA | 40 – 49 | 20 Y | **S45** | F | BRA | + 49 | 20 Y |
| **S11** | M | BRA | + 49 | 20 Y | **S46** | M | BRA | 40 – 49 | 2 Y |
| **S12** | M | CAN | 40 – 49 | 5 Y | **S47** | F | BRA | 40 – 49 | 20 Y |
| **S13** | M | PRT | + 49 | 20 Y | **S48** | F | PRT | 40 – 49 | 5 Y |
| **S14** | F | BRA | 40 – 49 | 8 Y | **S49** | M | BRA | 40 – 49 | 7 Y |
| **S15** | M | PRT | 40 – 49 | 10 Y | **S50** | M | BRA | 30 – 39 | 7 Y |
| **S16** | M | BRA | 40 – 49 | 18 Y | **S51** | F | BRA | 40 – 49 | 20 Y |
| **S17** | M | BRA | + 49 | 3 Y | **S52** | F | BRA | 40 – 49 | 12 Y |
| **S18** | M | BRA | 40 – 49 | 20 Y | **S53** | M | BRA | 40 – 49 | 21 Y |
| **S19** | M | BRA | 30 – 39 | 12 Y | **S54** | F | BRA | 40 – 49 | 16 Y |
| **S20** | M | PRT | 30 – 39 | 8 Y | **S55** | M | BRA | 40 – 49 | 5 Y |
| **S21** | M | BRA | + 49 | 30 Y | **S56** | M | BRA | 30 – 39 | 6 Y |
| **S22** | M | BRA | 30 – 39 | 6 Y | **S57** | M | BRA | 40 – 49 | 22 Y |
| **S23** | F | BRA | 40 – 49 | 1 Y | **S58** | M | PRT | 20 – 29 | 2 Y |
| **S24** | F | BRA | + 49 | 15 Y | **S59** | M | BRA | 40 – 49 | 12 Y |
| **S25** | M | BRA | 40 – 49 | 12 Y | **S60** | M | NLD | 30 – 39 | 3 Y |
| **S26** | M | BRA | 30 – 39 | 10 Y | **S61** | M | PRT | 40 – 49 | 10 Y |
| **S27** | M | BRA | + 49 | 15 Y | **S62** | F | BRA | 40 – 49 | 4 Y |
| **S28** | M | BRA | 40 – 49 | 1 Y | **S63** | M | BRA | 40 – 49 | 5 Y |
| **S29** | M | BRA | + 49 | 20 Y | **S64** | F | BRA | + 49 | 20 Y |
| **S30** | F | BRA | 20 – 29 | 1 Y | **S65** | M | BRA | 40 – 49 | 13 Y |
| **S31** | F | BRA | 40 – 49 | 15 Y | **S66** | M | BRA | 30 – 39 | 13 Y |
| **S32** | M | BRA | + 49 | 15 Y | **S67** | M | BRA | 20 – 29 | 1 Y |
| **S33** | M | BRA | 30 – 39 | 14 Y | **S68** | M | CAN | + 49 | 25 Y |
| **S34** | M | BRA | 30 – 39 | 10 Y | **S69** | F | BRA | 20 – 29 | 1 Y |
| **S35** | M | PRT | 30 – 39 | 2 Y | | | | | |