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LISBON**  
BUSINESS & ECONOMICS

**MANAGEMENT SKILLS AND STRATEGY ADAPTATION  
IN A DIGITAL INNOVATIVE  
REMOTE CO-WORKING ENVIRONMENT IN BANKING SERVICE**

**A Success story or a Lost opportunity?**

BY

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## ABSTRACT

Companies have thrived with technological evolution throughout history and more specifically with Digital Innovation in the nearest future.

Developing strategies and business in alignment with an ever more demanding client, focusing on customer journey and full featured dedicated customer experience.

Management skills which have been crucial for this engagement, are now being put into question in one of the most challenging endeavors ever.

Going through a worldwide pandemic and having most of companies' workforce change from a social shared workplace to an isolated home office environment, in an amazingly short period of time, create an unprecedented need to urgently look at management tools, processes, skills and policies.

To help focus the study in hand, novobanco, a Portuguese Bank of reference, shall be used as the main support for the research investigation data collection, with statistical analysis based upon anonymous data, attained from various sources, namely, through surveys within different business and technical areas.

## ACKNOWLEDGMENTS

I thank my loved ones, without whom it would not have been possible to achieve this life milestone. Their support and patience were fundamental in accomplishing this step.

My sincere thanks to my Dissertation Instructor, for his precious guidance throughout this process.

I thank novobanco, for promoting the conditions to develop and work on this Thesis, and for the information that was graciously made available for study purposes, allowing the use of its' name as a main reference.

Thank you all, and I hope to have met expectations.

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## ACRONYMS

- AL – Augmented Leadership
- EE – Employee Engagement
- FoW – Future of Work
- MBO – Management by Objectives
- OSH – Occupational safety and health
- HCT – Telework Home-centered
- FAT – Framework Agreement on Digitalization
- WLB – Work Life Balance
- SOP – Standard Operating Procedures
- VPN – Virtual Private Network
- BYOD – Bring Your Own Device

## 1. INTRODUCTION

### 1.1. PURPOSE

The aim of this Thesis is to identify if Management skills and strategies must be adapted to the new reality of remote work. The benefits that may arise from this new work model, the challenges and the downfalls that may come from it or from not adapting correctly to it.

As scope for data collection, the Thesis will focus on analyzing information gathered from different HR perspectives and business areas of intervention within the banking industry, namely using data from novobanco as reference.

This approach will allow for a deep dive into the reality of this type of industry, and the results and recommendations will be oriented towards it, not applying its' findings necessarily within other companies and corporate realities.

### 1.2. STATEMENT OF THE RESEARCH PROBLEM

The purpose of this study is to gather an underlying understanding of the issues which support and answer the following research problem: *What skills and adaptation must Management Levels undertake, to succeed in a Digital Innovative remote co-working environment?*

### 1.3. KEY RESEARCH QUESTIONS

Aiming to better understand and answer the Investigation Question which supports this study, the following research questions have been raised:

Q1. Do common management strategies apply to Digital remote co-working environments?

Q2. Are specific business areas of the Banking service, influenced in different forms or impacted at different levels by remote work? does "one size fit all"?

Q3. Will traditional organizational performance metrics and productivity control measures be affected by this new work model?

Q4. Is there a strategic alignment between employees and employers' perspectives and expectations, regarding remote work performance and productivity evaluation?

Q5. How will this new work model affect talent retention and employees' motivation and engagement?

## 2. RESEARCH METHODOLOGY

### 2.1. RESEARCH PLAN for Data Collection

In this study there will be a phased approach to gather information from different perspectives. Based on selected literature during the first phase, a strategy will be established, to better focus and direct data collection from both the managers and employees' point of view, towards the answer of the problem statement in study.

#### Phase I: Literature Review

- Consultation of Management, Top Journals, and International reviews.

#### Phase II: Data Collection

- Departmental Survey from core central services which have experienced different remote work experiences, such as Human Resources, Marketing, Communication, Operations, Digital Innovation, IT Department.
- Surveys that were undertaken by the Human resources department, at a transversal level within the organization, within central services and commercial areas, aiming to:
  - monitor the impact of the pandemic on the banks' employees (professional and personal/health);
  - keep a close line of communication (understanding difficulties that were being felt and gathering information for improvements);
  - Prepare for a safe post-pandemic return (help understand the requirements of each specific area, to define the best approach and guidelines, regarding motivation, productivity, performance, and wellbeing).

#### Phase III: Analytics

- Statistical treatment of the data gathered in Phase II;
- Analysis of the results, elaboration of potential recommendations and future work.

### 3. LITERATURE REVIEW

#### 3.1. Key Search Words

Consultation of Management, Top Journals, and International reviews, was made taking into consideration the following key search words:

- Performance management
- Remote work or virtual work or telework or work from home
- Right to disconnect
- European Labor law
- Distant Leadership
- Employee engagement
- Digital collaboration
- Productivity and telework

#### 3.2. Journals, Books and Academic papers

##### 3.2.1. Employee Engagement and Retention

###### 3.2.1.1. Agile Leadership Transformation and Employee Engagement

A competitive organization in present times, must be an Agile Organization, at all levels, starting from top management.

Based upon a study from the International Association of Applied Psychology, “agile workers” experience higher levels of engagement when they work from home, within a flexible work arrangement model (Georg. Leadership & Organization Development Journal, 2020).

Modern, agile working methods are basic principles which apply best in flat hierarchies, with objective guided performance management, and a transparent, individually responsible committed workforce.

A strategic framework for appropriate leadership tasks is essential in a world of continuous change and improvement (Denning, 2018).

The implementation of a framework for employees to perform in an agile setting and opportunities to collaborate remotely taking advantage of digital, cloud-based collaboration tools is evermore essential (Georg. Leadership & Organization Development Journal, 2020). Leadership must take into consideration the differences within its workforce, regarding those which are digitally savvy, aiming towards a remote digital oriented management, and those with a traditional office based, fixed labor hours, classical face-to-face management (Baumruk (2004), Saks (2006), Bates (2004) and Busse (2018), this approach is known as an “Augmented Leadership” (AL) framework.

A basic important and simple question, maintains Leaders in the continuous search for improvement: “Which leadership style leads to optimal results, in relation to both employees needs and in terms of efficient and effective achievement of business goals?” (Busse, Ronald; Weidner, Georg. Leadership & Organization Development Journal, 2020).

There are different theoretical views, both assuming a face-to-face relationship between manager and employees:

- Transactional leadership: characterized by continuous exchange processes between leaders and employees, with leader defined goals and requirements, awards and incentives or sanctions (Bass 2003);
- Transformational leaders: leading through motivation, a shared vision and belief in ideas and values, creating enthusiasm in employees (Bass 2003);

The World Economic Forum (WEF) calls remote collaboration “one of the biggest drivers in transformation” of the workplace (WEF, 2019).

The ability to lead employees effectively under fast and continuous changing conditions, requires proactive actions instead of passive or reactive positions.

It is critical to think out of the box, be creative and motivated, which means people must work in a positive environment open to change, based on collaborative goal settings and results evaluation.

### 3.2.1.2. Talent Engagement and Retention

Organizational success relies on people (Glaister, Karacay, Demirbag, & Tatoglu, 2018), therefore talent management and retention are critical themes for every Human Resources department. To obtain strategic sustainable corporate success, it is more than ever, important to identify, attract, engage, develop, and retain talented employees (Collings & Mellahi, 2009).

With a new HR reality, where international resources engagement is a possibility, supported on remote co-working policies, the identification of talent has broadened to a worldwide market of potential resources.

The adoption of telework has played a relevant role in this strategic goal, namely due to issues regarding Work Life Balance (WLB). Teleworking creates higher levels of organizational commitment, job satisfaction and well-being, however, there are also negative outcomes such as work intensification and an increasing inability to disconnect.

This theme is still very controversial and requires further study since many results are contradictory in their findings. A study of employee commitment based on satisfaction and happiness at work, stated that there is a positive impact in Organizational performance and productivity (Rego, Ribeiro, Cunha, and Jesuino, 2011).

Work Life Balance (WLB) strategies contribute significantly for job satisfaction, and when incorrectly managed may arise burnout, becoming a significant problem for organizations, increasing depression, absenteeism, performance, and work engagement (European Management Journal, December 2020).

WLB is directly connected with the Future of Work (FoW) as we know it.

Organizational leaders have a great challenge in present dynamic markets, aiming to retain talent and knowhow.

Leader's communication of their vision and values, and being able to manage diversity, is essential to increase performance and productivity while enhancing employee's satisfaction and commitment, reducing absenteeism and HR rotation (Dolan & Altman, 2012 and Ashmos & Duchon, 2000).

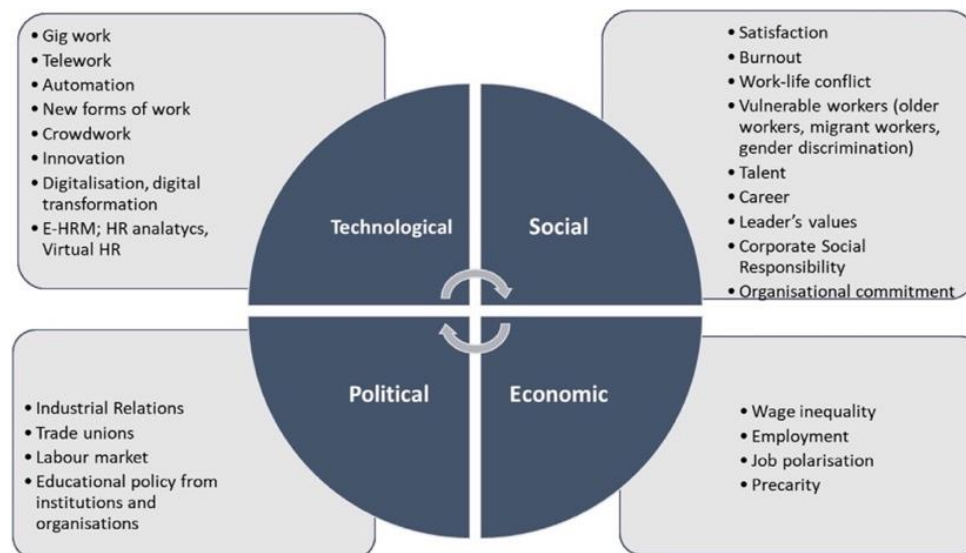


Figure 1 Classification of FoW themes (European Management Journal, Dec 2020)

### 3.2.1.3. Distant Leadership and Employee Engagement

Digitization brings new challenges regarding labor law and regulatory frameworks.

New forms of work (e.g., gig work, crowd work, telework), require definition of policies and regulatory measures, to guarantee basic rights for workers and avoid the increase of precarious work.

With higher educated employees, self-determined work assumes a focal position in employee engagement and sense of accomplishment. Development of digitization and flexibilization create new forms of work and employment, making it ever more important to assess the state of occupational safety and health (OSH) focusing on workplace conditions and psychosocial hazards and risks.

Various surveys have shown that constant reachability has arisen as one of the main concerns, from this digital evolution, mainly due to the stress caused by high expectations of flexibility, speed of communication and the assumption that employees are always connected/online, making it very difficult to coordinate and manage family and work lives.

“A world of work where overwork is the norm. With the growth of the service sector and increasingly faster digital workflows, it can be assumed that working life will become even more dynamic, complex and intensive in the future.” (Ahlers, Elke. International Journal of Labour Research, 2016).

There has been an increase in digitization and technological proficiency at various dimensions, and to help employees set boundaries between work and private life, explicitly stipulating expected reachability hours is considered a positive measure (Vogl and Nies, 2013).

With new flexible remote work forms, OSH standards must be expanded, and regulatory actions must be revised.

Risk assessment is considered a very successful tool when facing stress related work factors, in a digitized environment (Ahlers, Elke. International Journal of Labour Research, 2016).

These stress factors have also changed and become more complex, with a new challenge, considering that the traditional search for a specific workplace cause and its health consequences is out of date in our present reality, with workers in remote spaces, affected simultaneously by time pressure requirements, high work intensity and constant reachability. It is necessary to look at work health within a broader scope, considering also social factors, remote work conditions and interactive work engagement tools.

Occupational safety legislation provides for a legal orientation considering Risk assessments (e.g., German Safety and Health at Work Act, S.5) and can minimize the health risks of work-related stress.

Work-related stress must be openly discussed and cooperatively taggled with. This is quite challenging, and requires training, planning, procedures, and instruments (Ahlers, 2011, 2015).

“In the digitized working world, risk assessments should be viewed as ongoing and dynamic processes that enable successive improvements to working conditions by involving employees and taking their specific interests into account” (Ahlers, Elke. International Journal of Labour Research, 2016).

Considering the increasing demands for flexibility, reliable and predictable working hours need to be guaranteed, as indicated in the Working Hours Act (*Arbeitszeitgesetz*). Compliance with existing provisions on risk assessments for psychosocial hazards, and existing provisions of the Safety and Health at Work Act must be applied, implemented, and monitored in companies.

### 3.2.2. Performance Management

#### 3.2.2.1. Readiness for Progressive Performance Management

Performance management has been defined as a management's systematic application of processes, aimed at optimizing human performance in an organization (Warren, 198 Goal-Setting Theory).

Performance management has many guideline processes and although they are followed as a standard by most managers, these do not objectively correlate with leading theories concerning work motivation, since performance management continues to be a predominantly top-down effort.

Performance management is mostly seen as something imposed, and not as a participated action involving both employer and employees, thus most employees do not look at performance management as a helpful or valued element of their jobs (Coens and Jenkins, 2000).

Changes in the workplace have made it harder for supervisors to be effective managers of others' performance. Specific trends affecting performance management include decentralized workforces, enlarged spans of control, lack of direct experience, and evolving performer expectations (Fletcher, 2001). Decentralization and remote work sites mean supervisors are often not able to directly observe performers, making it difficult for them to credibly manage performance in the traditional sense.

Downsizing and flattening of organizations are other recognized trends in business (Barnes-Farrell, 2001; Latham and Wexley, 1994). However, as organizations get flatter, spans of control get larger. This concerns managers, since they do not have enough time to monitor the performance of all the employees reporting to them.

Presently employers and employees have different expectations when it comes to performance management and feedback. Employees aiming for participation and empowerment in the workplace, want to be involved in the performance management processes that directly affects them.

It has become fundamental to rethink performance management. Shifting responsibility from the manager to the employee has been considered a motivational strategy.

“Ultimately, managers aren’t responsible for their people’s performance. People are responsible for their own performance. There’s feedback all around you – if you pay attention. If you’re not getting enough feedback, ask for it!” (cited in Coens and Jenkins, 2000, p. 115).

HR has an important role to play in this changing organizational environment, with physical and conceptual changes of the traditional workplace and growing numbers of employees interested in taking charge of their own performance, performance management must adapt to a new company reality and perspective.

Goal setting effects on performance have been found to be reliable, valid, and useful across diverse work situations, directing attention to priorities and stimulating effort. Challenging goals tend to increase task performance, driving employees to apply their skills, knowhow and strategies leading to higher chances of success (Buchner, ThomasW, Human Resource Development International, Mar2007). Goal setting research has established that higher performance results are obtained from the combination of goals and feedback, rather than from goals or feedback separately (Locke and Latham, 2002), giving first role of importance to participative goal definition.

There are other theories that have a different approach to this issue, for example, the Control Theory that advocates self-monitoring and emphasizes feedback as the most important motivational strategy, and the Social Cognitive Theory that defends the concept of self-efficacy, “what people think or believe about their capabilities, helps explain how a performer’s beliefs about what he or she can or cannot do moderates performance. People who see themselves as highly capable performers tend to embrace difficult goals with above average commitment.” (Bandura, 1994). A common ground to these various theories, consists on the basis that a strong performance requires positive self-beliefs of efficacy, appropriate skills, and abilities. These define the choice, difficulty level and commitment to goal accomplishment, choices of work and career.

Management by objectives (MBO) emphasizes that both employers and employees should define performance goals together and work together to attain does goals. MBO management techniques identify three main components: setting of goals, participation, and feedback about task fulfilment. According to (Odiorne, 1965, 1986; McConkey, 1976), these are fundamental for high motivation, performance, and job satisfaction of employees.

### 3.2.2.2. Adaptation and Trends of Work Quality Management

Management by Objectives (MBO) has been considered one of the highest influencers of work-related stress. Studies have identified a direct positive connection between employer participation in goal definition and regular task feedback (not only during the annual evaluation process), with cognitive and social effects (e.g., pride and sense of self efficacy).

Reported results have documented that quality of MBO is an independent predictor that is unrelated to job-related or non-job-related stressors. However, management behavior has proven to be an additional source of stress that has to be considered in explorations of telework conditions. Studies demonstrate that the quality of MBO was the strongest predictor of experienced strain and job satisfaction among teleworkers (European Journal of Work and Organizational Psychology, European Journal of Work and Organizational Psychology, 2010). MBO offers both supervisor and subordinates a clearer understanding of their tasks and their individual work role. Reducing task-related stressors like unclear goals, vague expectations, role ambiguity, or unpredictability. Employees have a higher sense of control of the working procedures, techniques, means, and subgoals, responding with higher autonomy and satisfaction at work.

Adequate training of the organizations' management layers in MBO is necessary to promote the development of employees under remote conditions. These must include delegative goal-setting principles that give employees more autonomy and flexibility, together with performance management that include coaching and feedback behavior. Human resource management activities also have a relevant challenge, namely in the identification of potential non-job-related stressors, which should be considered before and during the remote work implementation process (e.g., exploration of the social background of potential teleworkers, provision of time-management trainings, or health circles are additional learning and backup instruments (Konradt et al., 2000b)). With the ongoing "virtualization" of work, traditional techniques should be carefully adapted to make them more suitable for the new challenges of remote work. Studies suggest that MBO provides successful management techniques for remote work, reducing stress and increasing job satisfaction (European Journal of Work and Organizational Psychology, 2010). Employees' expertise and competence are important success factors for companies, and the retention of this workforce is essential. (Expertise at work, A special issue of the European Journal of Work and Organizational Psychology, 2020).

## 4. DATA COLLECTION

Various surveys made during the pandemic, have allowed for diverse studies, with results and recommendations that shall be used in this thesis, to help support fundamental issues and answer the investigation questions in focus.

Virtual collaboration has grown significantly in the past years, and the pandemic has completely reinforced this trend as never seen before at a worldwide level, pushing all organizations to reinvent themselves.

### 4.1. Performance management in a remote co-working environment

“Experience changes hearts, but facts change minds, and a successful change initiative requires both.” (Global Work from Home Experience Survey, April 2020):

Results attained from data gathered during the survey above referenced, indicate that:

- 82% employees would like to work remotely at least part time (majority prefer a mix mode, average 2,5 days a week)
- 3% employees would not want to work remotely
- 36% would prefer to work remotely rather than receive a salary increase
- 30% would even accept a salary decrease
- 47% less time spent commuting
- 35 minutes/day less interruptions at home versus at the office
- 26% reduction of absenteeism
- 25% less turnover in companies that offer remote work options
- 15% increase in productivity

Distant agile leadership has been forced to thrive, due to many factors, such as global economic development, globalization, and shared economy trends.

Information gathered from the Global Work from Home Experience Survey, realized during the pandemic 2020, is an evidence of the most relevant factors influencing Work Life Balance.

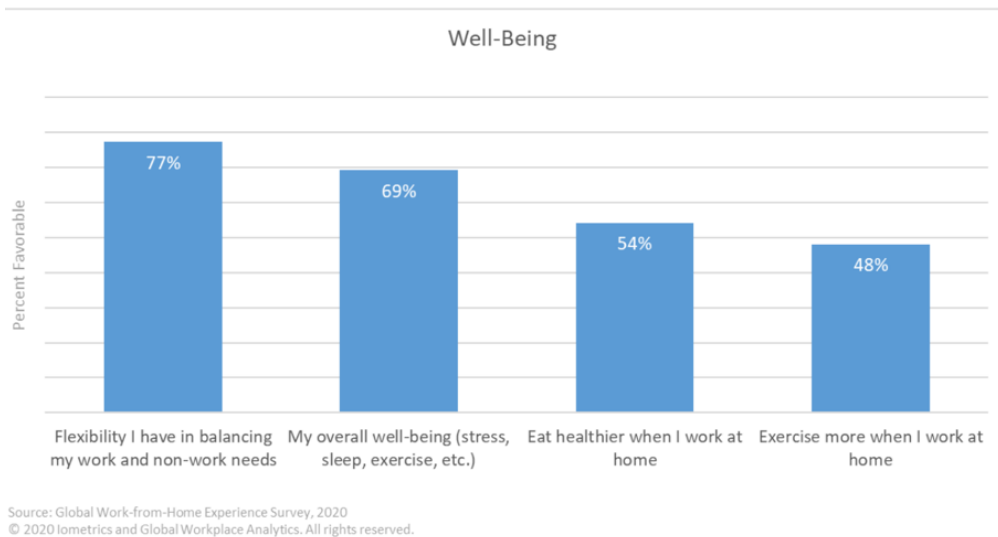


Figure 2 Well-being (Global Work from Home Experience Survey Report Final, 2020)

Many policies have yet to be adapted to a remote work environment, such as recruitment policies, regarding employee contracts that allow mobility and telework, out-of-office / country insurance policies, financial retribution, and infrastructure cost support (e.g., Internet services).

There have been recent studies which can help companies to better define their strategy, according to geography, company size and employee generation, however, there isn't an all size fits all approach, and further studies must be undertaken to evaluate long term benefits according to the type of organization, service, and market.

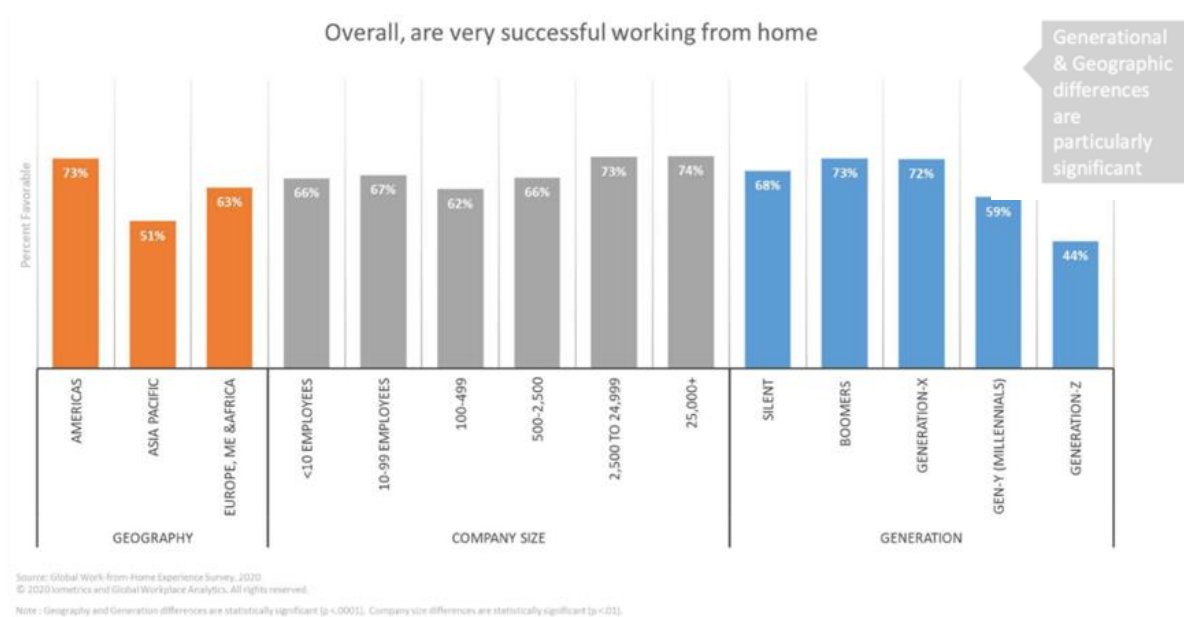


Figure 3 Work from Home Success (Global Work from Home Experience Survey Report Final, 2020)

According to “The Business Case for 2021”, by Global Workplace Analytics, 2020: Organizations with modernized technology infrastructure and tools, were far less challenged by the pandemic switch to remote work. The tools and technologies needed to support a 21st century remote workforce were already in place, with:

- Digitization
- Security Solutions
- Cloud Storage/Virtual Backup
- Cloud First Solutions (SAAS)
- Mobile Tech
- Platform-Agnostic Solutions
- Virtual Collaboration and Communications
- Virtual Help Desks

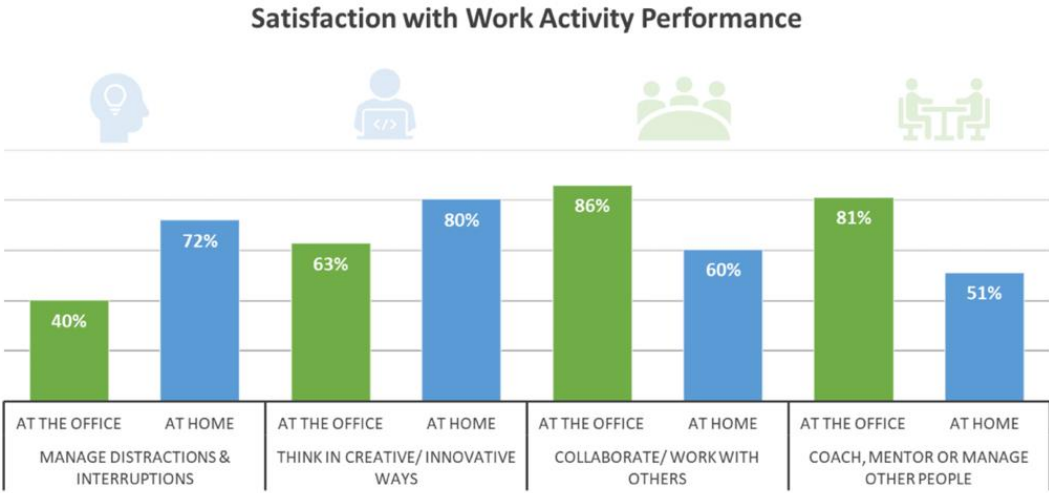
Work flexibility has also grown, supported on technological developments, presenting a serious challenge for occupational health protection, since employees are no longer working together in a specific company location, and therefore covered by central organizational occupational guidelines and policies. This acquired flexibility should allow employees to better organize their personal and work time, however studies demonstrate that, in reality the erosion between both boundaries disappears and constant reachability assumes a relevant negative impact in employees' wellbeing.

Performance management from the performer's perspective require further study. However, measurable benefits have already proven to be an outcome of self-directed performance management, based on increased individual employee motivation, resulting from improved self-belief and self-control, with a higher sense of belonging and commitment with the organization's performance evaluation processes.

A shift from the standard office-based work location to a remote co-working reality, has an immediate effect on the strategy of goal definition, since managers can no longer guide work on an always connected basis, with diverse interactions and constant reorientation, but must define a clear plan and task planning with each employee, allowing their monitorization and evaluation, through digital cooperative, collaborative production tools.

According to recent surveys, remote work has affected performance evaluation at different levels, depending on the type of work. This is a factor that is quite relevant for management decisions and for a strategy definition, regarding what may be a full organizational approach or a directly focused action, applied only to some departments, or even only to specific knowledge area within these departments.

As demonstrated in the image bellow, the type of work or even the personal interaction that may be required for a specific work, can have different implications, and require an adaptation of the strategic approach, regarding the effects on performance.



Source: Global Work-from-Home Experience Survey, 2020  
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*Figure 4 Satisfaction with Work Performance (Global Work from Home Experience Survey Report Final, 2020)*

#### 4.2. Productivity evaluation and adaptation to remote work

Senior leaders and middle management have long been the biggest resistant to remote work. However, having experienced it themselves, these have certainly become more open to this approach “*Experiences change hearts, but facts change minds. A successful change initiative requires both.*” (Kate Lister, President of Global Workplace Analytics)

The productivity concept has changed, and managers must adapt their role to help people do their best by, removing or reducing any barriers to their success.

People consider three of their most precious commodities, to be: time, energy, and health. And these are exactly the things that can be used as a proxy for measuring productivity in this new work paradigm.

In a survey of over 20,000 employees conducted by The Energy Project and Harvard Business Review, only 18 percent said they had time for creative or strategic thinking.

Travel to/from work	55 mins/day <sup>6</sup>
Email inefficiency	80 mins/day <sup>7</sup>
Struggling with technology	21 mins/day <sup>8</sup>
Interruptions	Every 11 mins <sup>9</sup>

Figure 5 Employee Time (*The Business Case for Remote work, by GLOBAL WORKPLACE ANALYTICS, 2021*)

This same study also evaluated how interruption time affected productivity in both environments: Home vs. Office (At the office = 78 minutes a day; At home = 43 minutes a day). The results of this study concluded that a 15% increase in productivity due to remote work.

Avg. round-trip commute	55 mins/day <sup>14</sup>
Percent of that time spent voluntarily working	47 percent <sup>15</sup>
Extra minutes of work/day	26
x 125 days/year (half-time remote work)	6.8 days/year

Figure 6 Extra Productivity from Commute Time Spent Working (*The Business Case for Remote work, by GLOBAL WORKPLACE ANALYTICS, 2021*)

Case studies show the option to work remotely can reduce absenteeism by between 26 percent and 88 percent, because workers:

- Are exposed less to sick coworkers
- Are exposed to fewer occupational and environmental hazards
- May be happy to work when they are not feeling well enough to go to the office
- Are sometimes willing and able to return to work (at home) quicker following a pregnancy
- Can often return to work (at home) more quickly following surgery or extended illnesses
- Can handle personal appointments without taking a full day off
- Avoid the stress of commuting, office politics, and frequent interruptions
- Are happier in their job and therefore less likely to take mental health days
- Often report sleeping better, eating healthier, and taking more time for exercise

This study indicates that a reduction of just 30% of absenteeism would add an extra three days of annual productivity.

Relatively to Business Continuity, studies identified that organizations that had modernized their technology infrastructure and tools before the pandemic, were far less challenged by the sudden switch to remote work than those that had not. They had already invested in the tools and technologies they needed to support a 21st century workforce.

Covid-19 accelerated the need for change, but it didn't create it. When the threat of pandemic is over and working in an office is once again an option, the majority, if not all of the costs a company will have incurred to support work-from-home, will improve its ability to compete in the years ahead (The Business Case for Remote work, by GLOBAL WORKPLACE ANALYTICS, 2021).

#### 4.3. The impact of employees Well-being in Performance and Commitment

A year-ago remote work was a reality for few companies worldwide, however with the pandemic this paradigm changed completely, and it became an obligation instead of an option.

Many companies are going to maintain remote work even if in a mixed approach, going from a controlled in-office “I see you, therefore I know if you are working or not”, to a strategy of task planning, monitoring, and evaluation of achievement, independently of how the employee spends or organizes the working day.

With no separation from work and family hours, these tend to blend into each other, losing work-life balance.

Going from a reality of productivity to performance as ‘high-end athletes’, connected in a 24 basis, certainly brings new challenges and also health risks that must be looked at seriously, due to their transversal impact in high levels of stress and insufficient rest, taking its consequences in every activity, from personal to professional.

A meta-analysis by Gallup, which involved 82 thousand teams and 1,8 million workers from diverse areas of activity in 73 different countries, showed common patterns regarding compromise of employees towards their companies.

The study indicated that employees which are committed have less 41% absenteeism, less than 70% work accidents and a 17% increase in productivity, with an impact of 20 to 21% increase in sales and profit.

The importance of managing expectations, recognizing the employees work and opinion, with a clear sense of work progression has an immediate impact in peoples’ well-being and work relation and compromise (book “Start & stop”, from José Soares, who has studied the impact of employees’ health related issues, on the companies’ health and business success).

Considering this study, few changes may have a big impact: for example, regarding in-office conditions, you would consider usually having coffee areas, making fruit available in these locations, having ready meals for employees to take home, etc.

Now, regarding remote work, it is necessary to adapt, for example, promoting specific hours for E-mail reading, keeping video meetings as short and effective as possible, maintaining time between each booked meeting to allow to process information, prepare the work which came out of the meeting, or just to simply relax before getting into a different work topic.

With burnout comes anxiety, lack of productivity and efficiency, with less concentration and ability to perform at higher performance levels.

HR has an important role in helping people find a stability within this new working model, with professional training sessions.

As an example of a company that had a life-balance approach and was prepared for the remote co-working reality, we may look at “Google”, its’ approach in no longer an exception, but an actual mainstream.

The social interaction, which is lost by working remotely, has a strong impact, that has not yet been fully studied.

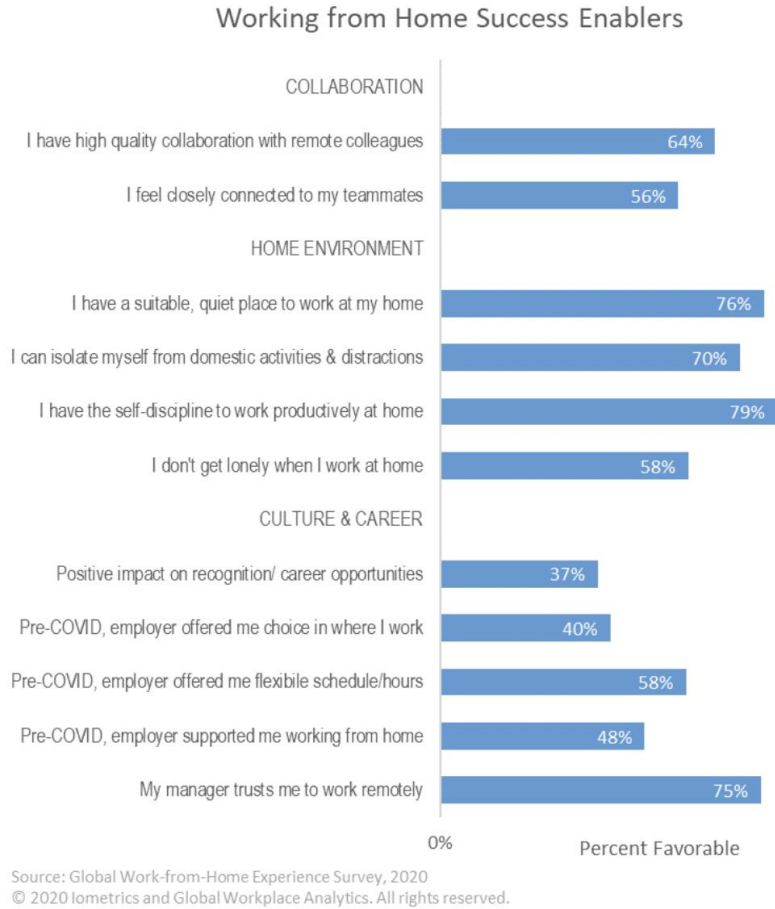
However, some ideas have shown to be potentially positive in the way they maintain interaction and communication between employees (at a social level), substituting the common coffee, with gatherings for meditation or yoga lessons, always focusing in maintaining the team’s cohesiveness and at the same time working on a stress-free orientation strategy. Each company must look at their specific work environment reality and take measures towards what better suits the organization and its’ employees (FoW Future of Work, by Pedro Pina, 2021).

A decentralized technological mediated work form, enabling employees to work in locations distant from the main organization, not only leads to dramatic changes in how we work, but it can also be seen as a core structure for a new work paradigm, including virtual teams, virtual departments, and virtual enterprises.

Thew studies have been undertaken regarding how teleworkers can be effectively managed, and how management strategies affect their motivation, performance, and psychological well-being.

It is important to rapidly start to analyze in depth, how job-related stressors, and non-job-related stressors (working conditions at home and family issues) affect teleworkers job satisfaction, health, and social stability.

The overlap of job-related and non-job-related activities during remote work, has negative and positive consequences for teleworkers. Studies on the motivation of employees to participate in telework have repeatedly revealed that the compatibility of housework and childcare with professional work are perceived as a central advantage (Glaser & Glaser, 1995; Grantham & Paul, 1995). The question of whether work stress influences family stress directly (spill-over model), it is compensated for by the family (compensation model), or it is independent (segregation model), has not yet been answered completely.



*Figure 7 Working from Home Enablers (Global Work from Home Experience Survey, 2020)*

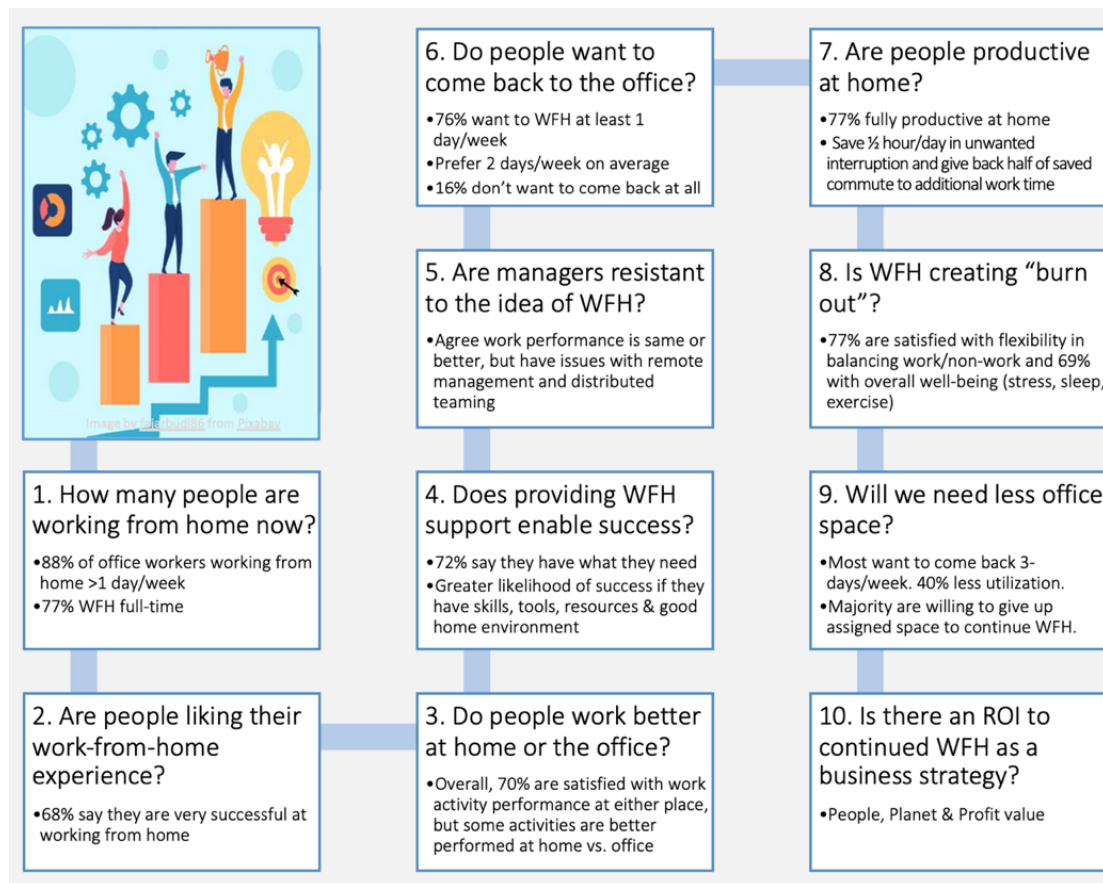


Figure 8 “Results” - Global Work from Home Experience Survey (Global WorkPlace Analytics, 2020)

The above results have several implications for management and teleworkers development and adaptation.

Present studies have documented that non-job-related stressors are particularly relevant in remote co-working environments, especially when home based.

These have shown that telework and related working forms such as virtual teamwork, do not necessarily imply a paradigm shift in traditional human resource management techniques, and do not require a complete change in the tasks and roles of managers.

#### 4.4. Cyber Security challenges and remote work

With unprecedented volume of telework, proactive cybersecurity defenses are imperative for organizations. It is essential to be prepared for cyber threats, optimizing security teams effectively and efficiently.

Managing the level of maturity of the organizations' risk and determining gaps related to people, processes, policies, or technology is a crucial task in this new remote co-working environment.

Knowing the level of cybersecurity maturity of the organization to be able to define an acceptable level of risk, while defining a plan to manage the risks and security gaps. In the financial area this risk tolerance is highly regulated, and the impact of risks regarding reputational, regulatory or compliance have high impact.

Establishing security metrics to track progress of the implemented plan of action, and being up to date regarding potential threats, with threat intelligent platforms and technology for timely and comprehensive threat intelligence, allowing the identification of threat trends within the industry are some of the basic steps for implementing a strategic cybersecurity plan for the organization with integration, automation tools and analytics.

Presenting information in an understandable way, explaining where threats have impacted peers across the industry, and showing success areas or those with needed improvement, help to validate investment and bring leadership onboard with the strategic security risk plan.

Standard Operating Procedures (SOPs) must be capable to allow telework, but also remote monitoring and management of the infrastructure. This is a true challenge when evolving from the traditional work environment.

The most common used technology to allow remote work is based on Virtual Private Networks (VPNs), therefore their security policies, performance monitoring, utilization metrics, multifactor authentication, and helping to ensure that the workers network and endpoint access devices are protected and up to date with vulnerability patches and security configurations is critical. Endpoint detection and response capabilities must be in place to allow security operations personnel to quickly determine the extent of the threat and act upon the compromised devices or infrastructure.

As discussed previously, retaining qualified professionals has become one of the most difficult endeavors in this new organizational and social reality. Specialized knowledge and skillsets, create a workforce shortage across many different business and technological areas, increasing fatigue and burnout of these limited resources. This is a risk for the organization at all levels, and require assessments to evaluate the real current capabilities, redundancies, and gaps, identifying where to direct the companies' effort, if in platforms and technology, or if in knowhow and expertise.

It is important to implement tools integration and automation-oriented dashboards (which may filter information regarding real threats), to allow more efficiency of the workforce with access to insight information, helping to better sustain decisions and reaction to threats in a cyber relevant time, but it is also crucial to properly size teams and evaluate their health and well-being, to reduce the risk of human flaws and burnout (Global CISO Playbook for the New Normal, Strategy, Thoughts and Leadership, By Chris Kubic, CISO, Fidelis Cybersecurity, 2020).

#### 4.5. Are Banks ready to “go-remote”

Threats continue to evolve, and our environments are getting more complex and harder to defend, with new variables associated with remote work, and anywhere access to company tools and information.

This shift offers an opportunity for companies in many different areas, and Banking services are included. With customers moving to digital channels to conduct their financial lives, banks must realign their real estate portfolios with customer demand. Additionally, operating remotely allows to take advantage of more flexible working models and to be more agile in meeting demand.

To provide self-service opportunities, seamless experiences and faster issue resolutions, banks must increase automation, while dealing with increased technological threats and being able to handle the flood of customer transactions moving from physical to digital channels.

Modern trends like Bring Your Own Device (BYOD), Work@Home and Digital transformation blur the lines between internal “trusted” entities and external “untrusted” entities, which affect the traditionally defined network perimeter, that must be maintained but reinforced, defending applications and devices operating outside the perimeter.

This brings us to a new concept of security considered the “Zero Trust” approach. A new security paradigm which complements but does not replace perimeter-based security, it considers however the orientation to an end-to-end security model. Defined as the access policies for individual connections and resources (“*who, what, when, where and why*”).

Many companies have deployed zero trust security models in alignment with their Digital Transformation initiatives, while shifting workloads into the cloud. Others have started by their most critical systems or even with third party software services.

Banks will need to invest in training, to familiarize employees with new automation systems and workflows, and empower them to handle more complex interactions virtually instead of in the branch offices. Reinforce their risk awareness, regarding Email origin and identification, website security, phishing, and malware techniques.

Shifting to remote work must shift the companies’ security strategy from a reactive to a proactive posture, with proactive, predictive, and retrospective cybersecurity approach allowing to prioritize and mitigate urgent threats.

A successful implementation of remote digital co-working environments, will require flatter organizational structures where smaller groups and individual employees can make decisions more independently, leveraging to a more project-oriented performance management approach.

Banks face an increased challenge regarding security issues and compliance regulatory policies and should act swiftly. With strategic decisions regarding security and efficiency of remote employee workforce, optimizing new work arrangements to retain talent (with remote could work, allowing to tap talent pools in new geographies), while guaranteeing service levels and digital shifting business competition to engage and retain an ever-more digitally oriented customer (Are banks prepared for employees to work off-site indefinitely? August 2020 AmericanBanker.com).

#### 4.6. Interviews and Surveys - novobanco

To better understand the results of this study and its application towards the reality of novobanco, we must segregate the target subjects into two different scopes, according to their business realities, namely central services, and branch offices/agencies.

During the pandemic a massive survey was deployed throughout the Bank with a total target of 4254 employees (2520 from agencies and 1734 from central services), there were a total of 2938 respondents with a 69% participation rate.

During this survey from a total of 2938 respondents 55% executed remote home office work during this period while 45% did not. From the percentage that had executed remote work, 37% were working permanently from remote home office since the beginning of the pandemic, and the remaining had a fixed or dynamic rotation within their teams.



Figure 9 Remote Home Office work, novobanco Human Resources survey, 2020

To understand the effects of the relation WLB (Work Life Balance) the survey also gathered information regarding work hours and family support related issues.

Although 49,7% of the respondents that worked remotely, indicated an increase in working hours, due to the stretching of their finishing working schedule, a significant percentage of 32,3% maintained a normal work schedule. It is important however to further study this situation, to understand the motives behind the reported overwork, namely if it comes from difficulty balancing work and life demands, if there is an adaptation issue that may need to be addressed by HR through training, guidance and support, or what other direct/indirect variables are contributing for the situation in hand.

The context of home office, namely regarding family members age and dependence obviously concurs in a major relevant way to employees' WLB, and the following data must take into account that it was gathered during a pandemic, with parents having to balance teaching and caretaking activities with remote work.

Further study is necessary to understand the concrete impact in productivity and efficiency, both for employers and employees, removing the bias that the present data includes, when looking at remote work.

There is a huge difference between a home office socially imposed work situation, and a remote work scenario implemented with structured planning and goal definition, where remote work can be executed without the added family and social complexity here represented.

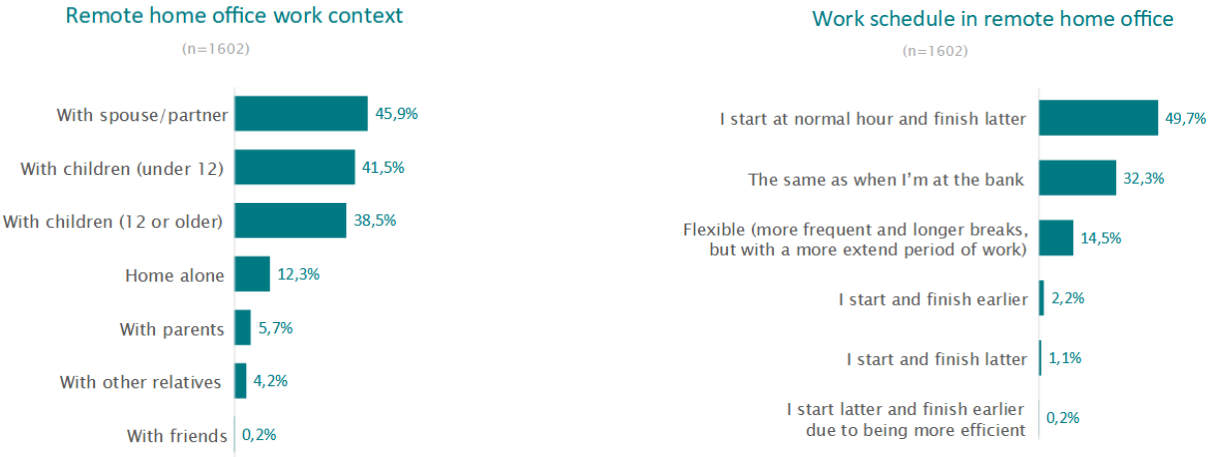


Figure 10 Remote Home Office work context, novobanco Human Resources survey, 2020

Comparing both realities in study, central services and branch offices, data in analysis starts to differ significantly, namely when regarding productivity perception and impacts.

54% of the respondents of central services consider that productivity in remote home office work environment increased, while only 35% of respondents from branch offices have this opinion, a tendency which is inverted when considering that only 5% of the respondents of central services viewed a negative impact in productivity from remote working, against 18% of respondents from branch offices.

This shows quite different perspectives, and the explanation comes from various relevant points that will be further detailed in the next graphics.

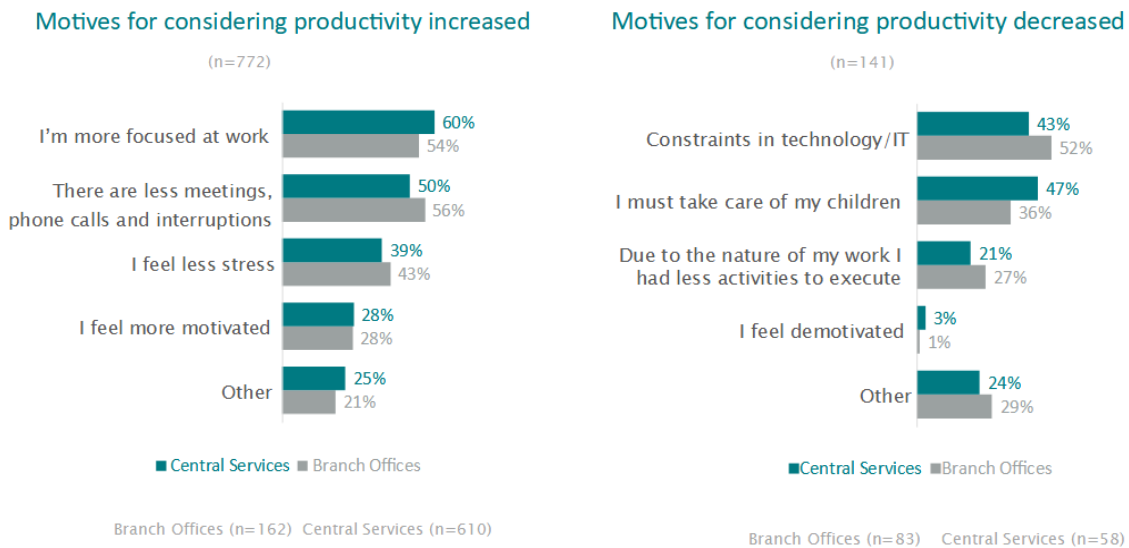


Figure 11 Motives for different Productivity perceptions in Home Office, novobanco Human Resources survey, 2020

Analyzing the data presented in the graphic related to an increased perception of productivity levels, it is easy to understand that interruptions in central services which are mainly organized in open spaces, tend to be an everyday issue, so remote work may be a positive factor. Less meetings, interruptions, and phone calls identified by the branch offices may be a biases information due to the changes that came with technological evolution and collaborative digital platforms like Office 365 (e.g., Teams, SharePoint). The same might be said by the less stress factor that was identified, since this was a period of restraint regarding customer physical engagement with the branch offices.

Looking at the graphic of productivity decrease, technological constraints are at the top of the issues identified by both central services and branch offices. There was indeed a major adaptation required from all technical and non-technical employees to embrace a completely different way of working and collaborating remotely with each other. Branch offices were certainly less adapted and had to adjust even more, so this is a very relevant and important issue, which clearly separated the companies that succeeded and kept business running, from those that could not cope technologically with this challenge in such a short period of time. Training and engagement of employees with the new collaborative organizational tools, would have a positive impact on this specific issue. Parenting activities is also a strong factor in this graphic, due to the pandemic scenario, so it must be dully treated within this specific context. Branch offices did not close during the pandemic being considered an essential service in community. Therefore, issues related to WLB were felt more relevantly by employees of central services.

Aiming to understand and prepare for a safe and productive return, the survey was directed both to employees and management levels, in this case focusing on central services, since these are effectively the departments that may enter a model of remote co-working (even so, not all central services department are eligible for this scenario).

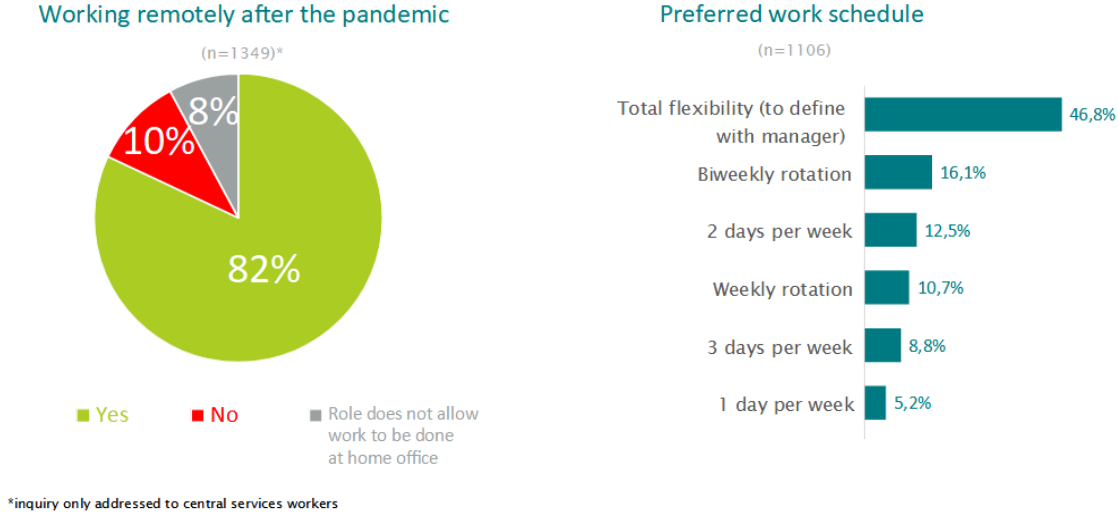


Figure 12 Remote Work after the Pandemic, novobanco Human Resources survey, 2020

With a positive response from 82% of the 1349 respondents, 46,8% preferred the approach of returning to work on site with total flexibility, while the remaining respondents positioned different rotation model proposals. There was an evident strong position and opinion regarding this thematic.

In all organizations, human resources assume a crucial role since their wellbeing impacts directly in the organizations’ health and success. Promoting a sense of belonging, achieved through good communication, team relationship, and alignment with the company’s strategic goals is therefore vital.

In this survey a total of 2938 respondents identified “concern” within the 70% scale, as the main feeling during the emergency phase of the pandemic, followed by “anxiety”, which was curiously followed by positive emotions felt during this difficult period, like “resilience” and “challenge”, in the 30% scale. Results attained from the last study regarding return to normality, show that although “concern” is still the main feeling in general, presently “hope”, “challenge”, “confidence” and “resilience”, by this order, have positioned themselves with the highest graded percentages. However, “tiredness” has maintained its position in the scale of 30% throughout this period and has not yet decreased as have for example “anxiety” and “fear”. This is an issue that must be taken into attention, to avoid its tendency to lead into burnout situations.

Motivation is known to be strongly affected by feelings and emotions, besides other external factors (e.g., financial compensation, performance evaluation, recognition, and other factors). Focusing specifically on the impact felt, due to the remote home office work factor on our 2938 respondents, we can observe a significant difference between positive motivation effects and negative effects in central services versus branch offices.

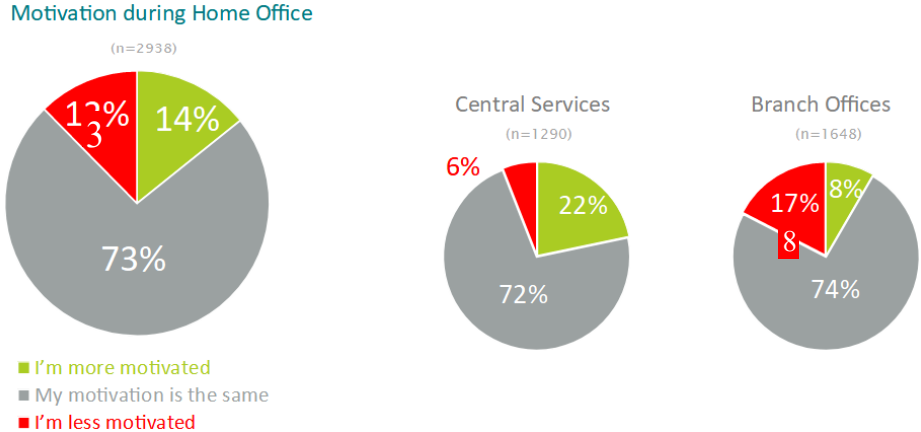


Figure 13 Motivation in Home Office, novobanco Human Resources survey, 2020

As previously acknowledged, central services had a higher permanent or rotation of employees in home office, with WLB issues being considered one the most positive aspects in this scenario. Branch offices due to the type of work and necessary client interaction, had to maintain a physical presence of their employees, which explains the feeling of “concern” present as one of the most negative impacts on motivational levels. The management levels perspective is in general quite similar to that of most of employees.

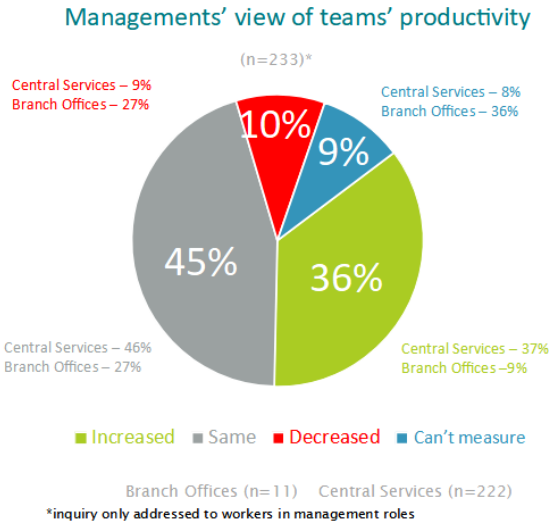


Figure 14 Productivity perceived by management, novobanco Human Resources survey, 2020

The study had 233 respondents, and a more positive view came from central services managers, where 26% consider that productivity kept its' levels and 37% even viewed an increase of productivity, against a small number of only 9% that reflected a negative impact in their team's productivity levels.

Branch offices managers, however, have presented quite an opposite perspective, with only 9% considering that productivity increased, 27% considering that it was not impacted, and a relevant 27% viewing as negative the productivity of their teams in this scenario.

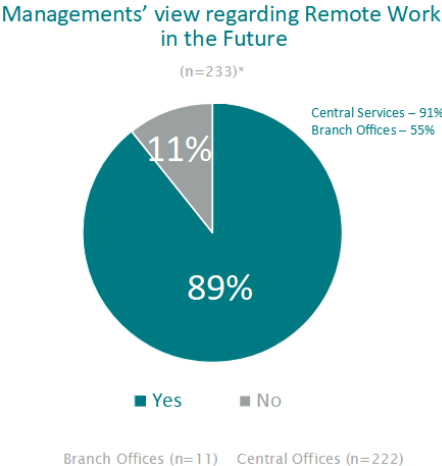


Figure 15 Managements' view Future of Remote Work, novobanco Human Resources survey, 2020

Taking into consideration the distinct realities of both focus groups, there is a convergence towards the perception that remote work has come to stay. With 89% of the inquired managers considering this to be a reality in adoption within their teams.

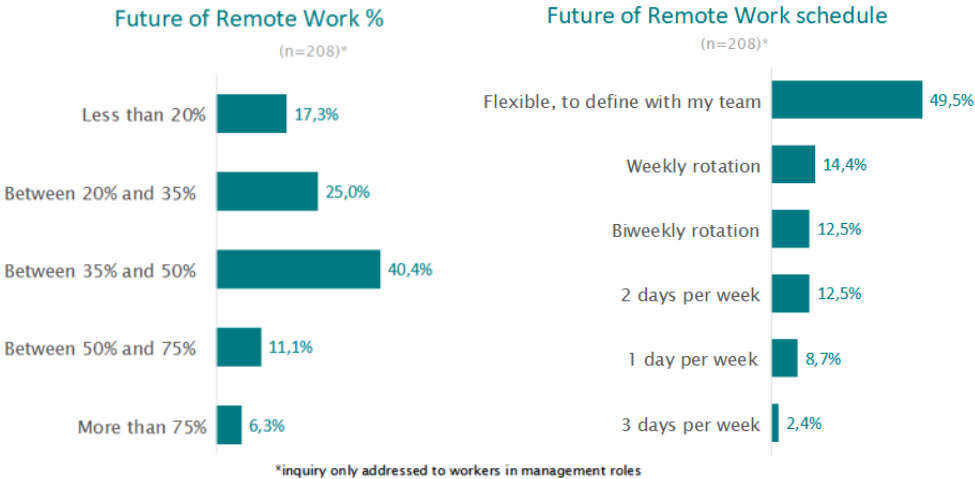


Figure 16 Future implementation of Remote Work, novobanco Human Resources survey, 2020

Results show that being able to manage with flexibility remote work rotation within their teams (49,5% respondents) and keeping below 50% the number of team members that are working remotely in each period, are the most relevant key questions for managers.

These are therefore structural guidelines, towards the definition of a work model, that may bring different management levels onboard with a future remote co-working model reality in novobanco.

## 5. ANALYTICS STUDY AND RESULT ANALYSIS

### 5.1. Survey Methodology

To answer the research questions of this thesis, a survey was made aiming to obtain the perspective of novobanco employees from various central services, regarding different influenced areas (this was the group which experienced remote work at its' fullest impact, since the Banks' agencies did not close, being considered an essential service to community).

This survey focused on assessing the impact on novobanco employees at both personal and professional levels, namely regarding the perceived influence of remote work:

- on productivity levels
- in team performance
- in team relationship and WLB (Work Life Balance)
- in the future of the organization

This survey had a total of 491 respondents, which answered all 14 questions.

The statistical model selected to process the collected data was the Multivariate Linear Regression model. Correlating various independent variables per dependent variable, in each of the study approaches described above.

All questions were graded from:

1. Nonexistent
2. Reduced
3. Medium
4. High
5. Very High

With exception of three respondent contextualization questions, which where range oriented and converted respectively from 1 to 4 metric values for statistic treatment purposes:

The respondents "Age":

- Less than or equal to 30 years
- Between 30 and 40 (included)
- Between 40 and 50 (included)
- More than 50 years

“Years working in novobanco” and “Years working within the department”:

- Less or equal to 5 years
- Between 5 and 10 (included)
- Between 10 and 20 (included)
- More than 20 years

*Note: Further detailed information might be consulted in “Annex 1 – SURVEY Specifications”.*

## 5.2. Perceived influence of remote work on Productivity Levels

To analyze if remote work influenced the perception of productivity levels, four independent variables were used to assess if they are good predictors: the age of the respondents and their working years at novobanco in the first model; and in the second model correlation to the variables concerning team performance evaluation and perceived need for process revision.

It is important to refer that 88% of the respondents are above 40 years of age and nearly 36% are above 50. Meaning that the youngest respondents only contribute for 12% of the collected data, bringing them close to being considered outliers within this analysis.

In the table of coefficients, you can identify that in the first model a negative correlation exists between the age of respondents and their perception of impact of remote work on productivity, since those above 40 years of age tend to consider that there was less impact than those within the younger range.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Durbin-Watson	
						F Change	df1	df2		
1	.046 <sup>a</sup>	.002	-.002	1.291	.002	.509	2	489	.601	
2	.370 <sup>b</sup>	.137	.130	1.203	.135	37.938	2	487	.000	2.005

a. Predictors: (Constant), WorkNBNum, AgeNum  
b. Predictors: (Constant), WorkNBNum, AgeNum, ProcessRevision, TeamPerformance  
c. Dependent Variable: Productivity

Figure 17 Model Summary Table - Perceived influence of remote work on Productivity levels

Results indicate that the second model including the four independent variables reduce error of the null model in 13%, and that the effect is statistically significant with  $F= 19.26$  and  $p=0.00$ .

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.698	2	.849	.509	.601 <sup>b</sup>
	Residual	815.186	489	1.667		
	Total	816.884	491			
2	Regression	111.587	4	27.897	19.262	.000 <sup>c</sup>
	Residual	705.298	487	1.448		
	Total	816.884	491			

a. Dependent Variable: Productivity  
b. Predictors: (Constant), WorkNBNum, AgeNum  
c. Predictors: (Constant), WorkNBNum, AgeNum, ProcessRevision, TeamPerformance

Figure 18 ANOVA Table - Perceived influence of remote work on Productivity levels

Both the respondents age and the years worked in novobanco, are not good predictors of the perceived influence of remote work in productivity levels, since they present respectively an effect of  $b=0.16$ ,  $\beta=0.00$  and  $b=0.00$ ,  $\beta=0.00$ , these are also identified as not statistically significant with  $p>0.05$ , namely  $p=0.86$  and  $p=0.94$ .

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.172	.291		10.906	.000
	AgeNum	-.083	.104	-.046	-.800	.424
	WorkNBNum	.001	.092	.001	.009	.993
2	(Constant)	.868	.380		2.283	.023
	AgeNum	.016	.098	.009	.166	.869
	WorkNBNum	.007	.086	.004	.077	.939
	TeamPerformance	.364	.053	.298	6.925	.000
	ProcessRevision	.233	.054	.183	4.309	.000

a. Dependent Variable: Productivity

Figure 19 Coefficients Table - Perceived influence of remote work on Productivity levels

Team performance and the perceived need for process revision are however both relevant predictors in the influence of productivity in remote work, with  $b=0.36$ ,  $\beta=0.29$  and  $b=0.23$ ,  $\beta=0.18$  respectively, presenting statistical significance with  $t=6.92$ ,  $p=0.00$  and  $t=4.30$ ,  $p=0.00$ .

Table of Results	R2	RSqaureChg	F Chg	p Chg
Model 1	0.00	0.00	0.50	0.60
Model 2	0.13	0.13	25.33	0.00
Model 2				
Variable	B	$\beta$	t	p
(Constant)	0.87		2.28	0.02
Age	0.16	0.00	0.16	0.86
Years working at NB	0.00	0.00	0.08	0.94
Team performance evaluation	0.36	0.29	6.92	0.00
Need for process revision	0.23	0.18	4.30	0.00

Figure 20 Table of results - Perceived influence of remote work on Productivity Levels

In this analyses' the predictor with the strongest association is Team Performance, which indicates that it has the most influence in the impact on productivity levels while in remote work, which brings us the need to understand how Team Performance was affected during this period.

Note: Further reference Tablets might be consulted in "Annex 2 – SPSS Data – Productivity study".

### 5.3. Perceived influence of remote work on Team Performance

To analyze if Team Performance is influenced by remote work, four independent variables were used to assess if they are good predictors: the respondents working years at the same department and the impact felt in team relationship while working remotely, were used in the first model; and the second model focused on the correlation with skill development due to digital collaborative tools and evaluation of the impact of these tools in team communication and sense of connection.

This variable correlation allowed the reduction of the error of the null model in 27%, with a statistically significant effect  $F= 47.32$  and  $p=0.00$ .

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Durbin-Watson		
					R Square Change	F Change	Sig. F Change			
1	.502 <sup>a</sup>	.252	.249	.916	.252	82.322	2	489	.000	
2	.529 <sup>b</sup>	.280	.274	.900	.028	9.475	2	487	.000	2.046

a. Predictors: (Constant), TeamRelationship, WorkDeptNum  
b. Predictors: (Constant), TeamRelationship, WorkDeptNum, CollaborationTools, SkillsDevelopment  
c. Dependent Variable: TeamPerformance

Figure 21 Model Summary Table - Perceived influence of remote work on Team Performance

The study indicates that the respondents' period of time working in the same department is not a good predictor of the perceived influence of remote work in a positive team performance, since it has an effect of  $b=-0.05$ ,  $\beta=-0.05$ , and it is also identified as not statistically significant with  $p>0.05$ , namely  $p=0.89$ . Team Relationship however is a good predictor, with  $b=0.44$  and a significant  $\beta=0.44$ , it is also statistically significant with  $p=0.00$ .

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	138.002	2	69.001	82.322	.000 <sup>b</sup>
	Residual	409.874	489	.838		
	Total	547.876	491			
2	Regression	153.354	4	38.339	47.325	.000 <sup>c</sup>
	Residual	394.522	487	.810		
	Total	547.876	491			

a. Dependent Variable: TeamPerformance  
b. Predictors: (Constant), TeamRelationship, WorkDeptNum  
c. Predictors: (Constant), TeamRelationship, WorkDeptNum, CollaborationTools, SkillsDevelopment

Figure 22 ANOVA Table - Perceived influence of remote work on Team Performance

Skill development due to digital collaborative tools and evaluation of the impact of these tools in team communication and sense of connection are both relevant predictors for positive performance in remote work environment, with  $b=0.14$ ,  $\beta=0.12$  and  $b=0.10$ ,  $\beta=0.82$  respectively, presenting statistical significance with  $t=2.91$ ,  $p=0.00$  and  $t=1.94$ ,  $p=0.00$ .

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.816	.160		11.384	.000
	WorkDeptNum	-.025	.037	-.026	-.667	.505
	TeamRelationship	.499	.039	.502	12.822	.000
2	(Constant)	.948	.268		3.533	.000
	WorkDeptNum	-.005	.037	-.005	-.133	.895
	TeamRelationship	.445	.040	.447	10.990	.000
	SkillsDevelopment	.143	.049	.127	2.911	.004
	CollaborationTools	.109	.056	.082	1.945	.052

a. Dependent Variable: TeamPerformance

Figure 23 Coefficients Table - Perceived influence of remote work on Team Performance

In the table of coefficients, you can identify that in the first model a negative correlation exists between the years respondents worked in the same department, and their perception of remote work impact on performance, since those that have been working for a longer time in the same department tend to consider that there was less positive impact on team performance.

Table of Results	R2	RSqaureChg	F Chg	p Chg
Model 1	0.25	0.25	82.32	0.00
Model 2	0.27	0.03	9.47	0.00
<hr/>				
Model 2				
Variable	B	$\beta$	t	p
(Constant)	0.94		3.53	0.00
Years Working at Dept	-0.00	-0.00	-0.13	0.89
Team Relationship	0.44	0.44	10.99	0.00
Skills Development	0.14	0.12	2.91	0.00
Collaboration tools	0.10	0.08	1.94	0.05

Figure 24 Table of results - Perceived influence of remote work on Team Performance

In this analyses’ the predictor with the strongest association is Team Relationship, which indicates that the positive relation and collaboration within the team has the most influence on Performance levels while in remote work. At this point it is necessary to understand how Team Relationship was affected by remote work.

Note: Further reference Tablets might be consulted in “Annex 3 – SPSS Data – Performance study”.

#### 5.4. Perceived influence of remote work on Team Relationship

To analyze if Team Relationship is influenced by remote work, three independent variables were used to assess if they are good predictors: the first model, analyzed if Work Life Balance was positively affected during this period; and the second model added the effects of Reducing burnout with better task planning and Risk Analysis integration of initiatives for employees' well-being.

**Model Summary<sup>c</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			Durbin-Watson		
					R Square Change	F Change	Sig. F Change			
1	.355 <sup>a</sup>	.126	.125	.993	.126	70.870	1	490	.000	
2	.380 <sup>b</sup>	.144	.139	.985	.018	5.057	2	488	.007	1.993

a. Predictors: (Constant), WLB  
b. Predictors: (Constant), WLB, BurnOut, RiskAnalysis  
c. Dependent Variable: TeamRelationship

Figure 25 Model Summary Table - Perceived influence of remote work on Team Relationship

With these variables in analysis, it was possible to reduce error of the null model in 14%, with a statistically significant effect  $F= 27.38$  and  $p=0.00$ .

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	69.927	1	69.927	70.870	.000 <sup>b</sup>
	Residual	483.479	490	.987		
	Total	553.407	491			
2	Regression	79.745	3	26.582	27.386	.000 <sup>c</sup>
	Residual	473.662	488	.971		
	Total	553.407	491			

a. Dependent Variable: TeamRelationship  
b. Predictors: (Constant), WLB  
c. Predictors: (Constant), WLB, BurnOut, RiskAnalysis

Figure 26 ANOVA Table - Perceived influence of remote work on Team Relationship

Work Life Balance has the strongest association, with  $b=0.31$ ,  $\beta=0.34$ , and is statistically significant  $t=8.01$  and  $p=0.00$ . Reducing burnout with better task planning, is also a relevant predictor for explaining a positive team relationship and communication in a remote work environment, with  $b=0.12$ ,  $\beta=0.11$  and it is statically significant  $t=2.66$ ,  $p=0.00$ .

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.040	.148		13.829	.000
	WLB	.323	.038	.355	8.418	.000
2	(Constant)	1.466	.264		5.554	.000
	WLB	.308	.038	.339	8.009	.000
	BurnOut	.127	.048	.117	2.663	.008
	RiskAnalysis	.050	.057	.039	.879	.380

a. Dependent Variable: TeamRelationship

Figure 27 Coefficients Table - Perceived influence of remote work on Team Relationship

Risk Analysis integrating initiatives for employees’ well-being, is considered not relevant presenting a small beta,  $b=0.05$  and  $\beta=0.04$ , and it is also statistically not significant with  $t=0.88$  and  $p=0.38$ .

Table of Results	R2	RSqaureChg	F Chg	p Chg
Model 1	0.12	0.12	70.87	0.00
Model 2	0.14	0.14	5.06	0.00
Model 2				
Variable	B	$\beta$	t	p
(Constant)	1.46		5.55	0.00
WLB	0.31	0.34	8.01	0.00
Burnout	0.12	0.11	2.66	0.00
Risk analysis	0.05	0.04	0.88	0.38

Figure 28 Table of results - Perceived influence of remote work on Team Relationship

Note: Further reference Tablets might be consulted in “Annex 4 – SPSS Data – Team Relationship study”.

## 5.5. Survey Analysis and Comments

Based on the statistical analysis of these survey results, it is possible to infer that by reducing burnout with better task planning, there is a positive impact in Work Life Balance. Therefore, this must be a priority when considering remote work. The segregation of major goals into concrete, objective, and measurable tasks, that may be planned for execution in short periods of time, allowing for faster evaluation and adjustment if required.

This specific strategy allows management to control performance and production more effectively at a distance, without requiring employees to be ‘always connected’ or ‘always online’.

Work Life Balance is essential for each individuals’ well-being, promoting social and professional positive interactions, which necessarily create better team relationship and cooperation. Supported by the use of digital collaborative tools, that allow better team communication and sense of connection, positively affects the teams’ performance, increasing productivity levels in a remote working environment. Training of these tools is crucial for a good adaptation and positive results.

Productivity levels are also shown to be impacted by process revision, which must be taken into consideration and duly adjusted, when adapting to a new work model.

Timing is crucial in this aspect, and agile methods have proven to be well applied in this context, as show in other studies, this method allows organizations to adapt faster and easier, with less vertical entropy and flatter organizational structures.

Unexpectedly, neither the age of respondents nor the time they have worked in novobanco or specifically in a specific department, presented themselves as relevant variables in this study, existing homogeneity throughout the respondent group, with scarce outliers.

This survey allowed for a closer detailed view of the novobanco employees perspective, regarding remote work impactful issues, complementing the data gathered from the surveys undertaken by the human resources department, reinforcing the previously presented results, and helping to better draw the path for management strategic decisions.

## 6. FINDINGS AND CONCLUSIONS

### 6.1. Main conclusions and Recommendations

The findings and conclusions of this thesis must be viewed taking into consideration that all collected data was gathered during a pandemic. Therefore, there is a certain bias that cannot be ignored, since remote work was performed in a context where people were working, parenting, and being teachers to their children at the same time, while also being restrained of essential freedom and liberties, living in an environment constantly concerned with security and health issues.

This Thesis aimed to answer the research problem “*What skills and adaptation must Management Levels undertake, to succeed in a Digital Innovative remote co-working environment?*”, and in order to do so, reference literature and recent studies of issues related to remote work were taken into consideration. To better focus on this specific thematic and its application in the Banking Services, surveys made by the novobanco Human Resources department were also incorporated in the study. A specific survey developed for this thesis was undertaken in its’ Central Services, since these experienced the remote work model in higher degree, when compared with employees of the agencies/branch offices, that were kept open to clients, being considered an essential service to society.

Based on the collected data from top journals and other recent studies and related literature, communication is identified as one of the key players, assuming a crucial role in the success of implementing Remote Work Models within organizations. To embrace remote work as a reality, organizations must have a flatter hierarchy, where communication can flow more easily, helping to maintain a sense of belonging and cooperation within teams that may be working remotely or in a hybrid model.

In a remote work environment, digital collaborative tools are essential, to allow people to interact with more proximity, and give managers the capability to keep a close channel for task planning, and performance and productivity evaluation. These must however be adapted from the traditional goal definition per year/semester, to a weekly or daily base task planning model, allowing to evolve from an “always on” control method, to a task monitoring approach,

avoiding the negative impacts and consequences of burnout situations, and giving employees a perspective of completion.

Collaborative tools must be an asset and not an added difficulty for employees and employers, therefore they must be implemented alongside with processes revisions and training.

Lack of Training was identified by employees as one of the main gaps, which created difficulties to adapt to remote work, for those who entered a rotation work model. However digital collaborative tools were also considered a booster regarding skills development in a short period of time, motivating people towards its use and being considered by those who adopted them as an asset of extreme positive value, for communication within the organization.

Data indicates that there are employees that prefer working in the office, and those who find remote work as the basis for Work Life Balance. Each organization must identify and acknowledge these two realities to create the model that best suites its purposes, promoting employee engagement.

Employee engagement is identified as one of the most relevant keys to enhance performance and productivity, and studies find that the sense of belonging and being part of the companies' goal strategy are fundamental factors, only achieved with good vertical communication and adjusted processes. Compensation methods do not promote the same long-term effect.

Although age and working years in the bank, would be expected to have an influence in the perceived issues of Work Life Balance and performance and productivity evaluation regarding the impact on teams working remotely, this was found to be a bias concept, since it did not affect neither of the above.

This study identified a general consensual approach of employees towards remote work, being considered a positive model that promotes engagement and work life balance, while maintaining performance and productivity levels.

## Recommendations:

Management strategies must be effectively adapted in certain aspects, to allow for a successful implementation within the different layers of the organization.

- Processes must be adjusted, to accommodate hybrid teams with remote and on-site employees, working together independently of their physical location.
- Good communication models must be in place, based on collaborative digital tools, which necessarily imply a need for training, to take advantage of their fullest potential.
- Based on published literature and studies regarding remote work, a clear correlation is identified, between employee engagement and participatively defined goals, structured into short period task planning. These create smaller windows for evaluation and recognition, and faster capability for adjustment and reorganization in an agile manner, enhancing overall team performance.
- Management should also review employee retention methods, since this new worldwide spread reality, brings new challenges, with higher rotation, flexibility, and possibilities for employees to work abroad or from abroad.

Further study must be made in this area, without the influence of an ongoing pandemic, to allow for a better understanding of other adaptations that companies must take regarding human resources policies, since governmental Labor Regulation is now being revised and adjusted to this new reality and remote work concept.

Presently in discussion for approval, are the following labor regulations:

“The right to disconnect” – specifies that employers should not contact employees on their resting hours, except in case of major justifiable necessity, with a proposal for being considered a serious sanctionable infraction. The same law article establishes that any impact on professional progression or work conditions, due to the execution of the precedent right is considered a discriminatory action.

It is also indicated that employees may turn off their collaborative work tools and communication systems on their resting hours, without any disadvantage nor sanction.

“Working on-prem” – Every two months employers must have presential contact with their employees, reducing isolation and promoting contact between workers.

“Home Office expenses” – Companies will have to support costs related to conditions that did not exist previously to the remote working model, paying for employees’ additional expenses related to energy, internet services or others directly associated, like IT equipments acquired to execute work (in comparison with the expenses of the same month of the previous year, before changing from on-prem to remote).

Fiscally these expenses are considered costs for companies and are not considered as retribution for the employee.

Never have we seen such a fast-tracking change, with an organizational relevance of unknown precedence, regarding labor law, structural and operational processes, human resources management, engagement, and retention.

Many studies have been made during the last two years, regarding the future of remote work, trying to understand if this would be a persistent working model or if traditional on-prem presential work would return to its’ previous numbers and position in labor market.

The results tend to indicate that it is a new reality, that has come to stay, however, in this thesis it was possible to identify, many aspects of traditional management strategies that must be reviewed and adjusted, if remote work is to be a success story, namely within the banking services here in focus.

Regarding novobanco, the company in study, different departments and business areas have very distinct realities within the organization, and a full remote work approach is effectively not a viable orientation, since there are areas of activity that must have on site representation and client face to face communication. Supported on technological evolution and online banking, but not substituting human interaction.

Remote work is however an important strategic move, impacting human resources engagement and retention, while allowing for reorganization of the traditional workspace. Based on a consistent and well-structured hybrid model with rotation within teams, adapted to each area of activity and supported on strong communication and collaborative tools, it has proven to be an engagement booster and productivity enhancer.

Flexible work has positioned itself as the future work model, thriving worldwide within a fast-evolving labor market, driven by a major pandemic that has had a social, political and life changing impact, and as shown in this study, novobanco has proven to be capable of adjustment to this new reality, being agile in its’ adaptation and reorganization, the major factor for success.

## 6.2. Teaching Notes and Future Work

Studying if management skills must be adapted to the new reality of remote work in the banking industry, was a challenging task due to the bias brought by the pandemic, into the overall collected data.

A clearer understanding of the thematic, without the influence of this social bias, is a relevant study for future academic papers.

The future of work as we know it has changed forever, making this a challenging and thriving moment to be living an unprecedented shift in the labor market, creating the opportunity for various investigations within different influenced areas.

The following development of this study may be accomplished by students within a group environment, where the case may be handed and discussed, or each group may present its perspective and methodology approach to the class.

The assignment can be divided into different sections of study, according to preference:

1. Studying the organization and managements' perspectives, challenges, and strategies for successfully leading with remote work forces.  
(3.2.1.: page 10 to page 15)
2. Analyzing the necessary adaptation of human resources management, regarding productivity and performance evaluation in a remote co-working environment.  
(3.2.2.: page 16 to page 19; 4.1.: page 20 to page 24; 4.2.: page 25 to page 26)
3. Approaching this thesis analysis through the employees' view, positive and negative impacts of remote work, e.g., work life balance, burnout, and right to disconnect.  
(4.3.: page 27 to page 30)
4. Assessing the influence of digitalization and its' challenges, in the successful implementation of hybrid work models within the banking service area.  
(4.4.: page 31; 4.5.: page 32)

With the correct guidance, supported on academic literature Top Journals and various other recent published articles and studies, it is possible for students to further this study and investigation, understanding the full impact of this new work model in organizations worldwide in future years to come.

Enlarging the labor market, creating easier rotation and exchange of experiences, with a work from any ware mindset, will most certainly change the way people live, where they live, and how they interact and engage with the companies they work for.

One of the main pillars of society has changed with “*A new reality of Work!*” and further studies must be held in various structural areas, from social, political, to economical, to better understand and successfully guide its’ impact in a positive way.

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## 8. APPENDIX

### Annex 1 – SURVEY specification

# Adaptation to Remote Work model

This questionnaire is anonymous, and your participation and response are optional.  
(The expected time for completion is 5 minutes - 14 questions)

Thank you for participating in this survey for an Academic Thesis, about the impact of remote work and the personal and organizational adaptation it requires.

...

\* Required

## Profile definition

Defining the profile of the respondent

1. What is your age? \*

Less than or equal to 30 years

Between 30 and 40 (included)

Between 40 and 50 (included)

More than 50

2. Years working in Novobanco ? \*

Less than or equal to 5

Between 5 and 10 (included)

Between 10 and 20 (included)

More than 20

3. For how long have you worked in the same present department ? \*

Less or equal to 5

Between 5 and 10 (included)

Between 10 and 20 (included)

More than 20

## Remote Work

Options :

1- Non existent; 2- Reduced; 3- Medium; 4- High; 5- Very High

4. How do you evaluate the impact on Productivity levels, in remote work (Home Office) ? \*

1   2   3   4   5  
           

5. Was your teams' performance impacted in a positive way ? \*

1   2   3   4   5  
           

6. Do you consider there was a positive impact of remote work on Team relationship and collaboration within the work group ? \*

1   2   3   4   5  
           

7. Do you think burnout may be reduced if there is a revision of the evaluation model and weekly/monthly task planning ? \*

1   2   3   4   5  
           

8. If employees where to participate directly in the definition of their goals, do you think there would be a positive impact on motivation and performance levels ? \*

1   2   3   4   5  
           

9. How do you evaluate collaborative tools (e.g., Office 365, Teams, Yammer), in the success of communication between teams ? \*

1   2   3   4   5  
           

10. Do you consider that remote work allowed for faster development of skills and know-how regarding productivity collaborative tools (e.g., presentations, meetings, sharing online) ? \*

1   2   3   4   5

11. Do you think it is important for the organization to promote, well-being initiatives, and risk analysis, including social and personal work conditions ? \*

1   2   3   4   5  
           

12. Did remote work positively affect your Work Life Balance ? \*

1   2   3   4   5  
           

13. Do you consider your department should review internal operational processes ? \*

1   2   3   4   5  
           

14. In what maturity level would you classify the processes in your department, regarding implementation in a remote work context ? \*

1   2   3   4   5

## Annex 2 – SPSS Data – Productivity study

### Descriptive Statistics

	Mean	Std. Deviation	N
Productivity	2.91	1.290	492
AgeNum	3.2093	.71275	492
WorkNBNum	3.4411	.80387	492
TeamPerformance	3.36	1.056	492
ProcessRevision	3.18	1.014	492

### Correlations

		Productivity	AgeNum	WorkNBNum	TeamPerformance	ProcessRevision
Pearson Correlation	Productivity	1.000	-.046	-.028	.322	.224
	AgeNum	-.046	1.000	.617	-.161	-.050
	WorkNBNum	-.028	.617	1.000	-.101	-.041
	TeamPerformance	.322	-.161	-.101	1.000	.140
	ProcessRevision	.224	-.050	-.041	.140	1.000
Sig. (1-tailed)	Productivity	.	.156	.269	.000	.000
	AgeNum	.156	.	.000	.000	.136
	WorkNBNum	.269	.000	.	.013	.184
	TeamPerformance	.000	.000	.013	.	.001
	ProcessRevision	.000	.136	.184	.001	.
N	Productivity	492	492	492	492	492
	AgeNum	492	492	492	492	492
	WorkNBNum	492	492	492	492	492
	TeamPerformance	492	492	492	492	492
	ProcessRevision	492	492	492	492	492

### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	WorkNBNum, AgeNum <sup>b</sup>	.	Enter
2	ProcessRevision, TeamPerformance <sup>b</sup>	.	Enter

a. Dependent Variable: Productivity

b. All requested variables entered.

### Excluded Variables<sup>a</sup>

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	TeamPerformance	.323 <sup>b</sup>	7.438	.000	.319	.974
	ProcessRevision	.223 <sup>b</sup>	5.046	.000	.223	.997

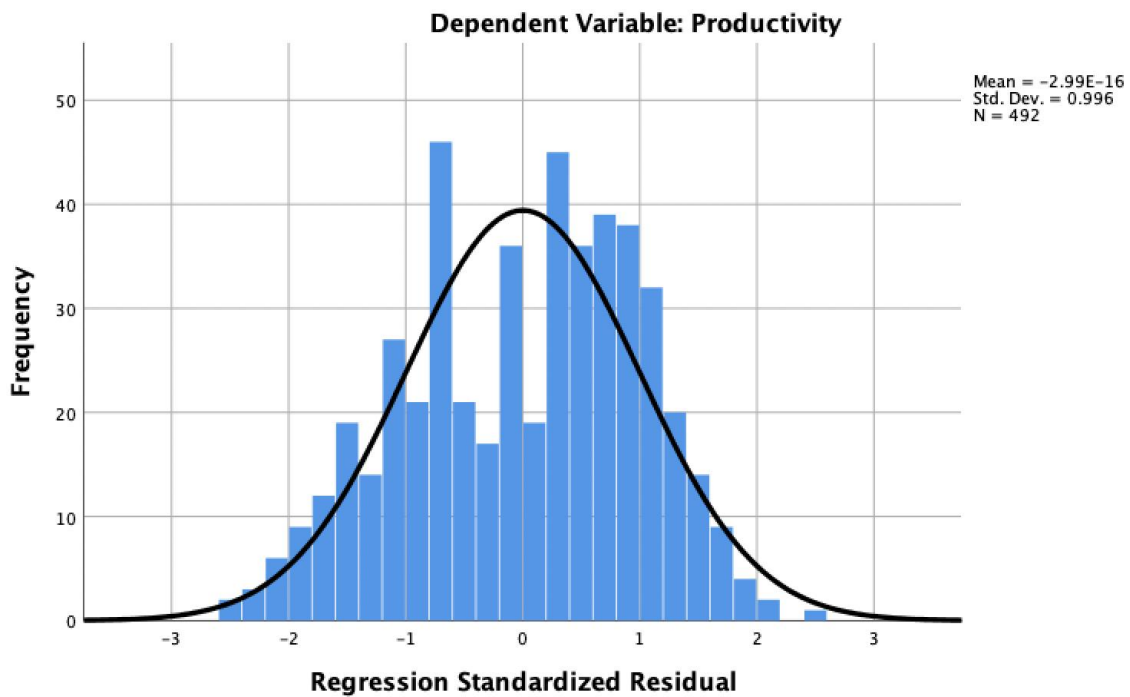
a. Dependent Variable: Productivity

b. Predictors in the Model: (Constant), WorkNBNum, AgeNum

### Residuals Statistics<sup>a</sup>

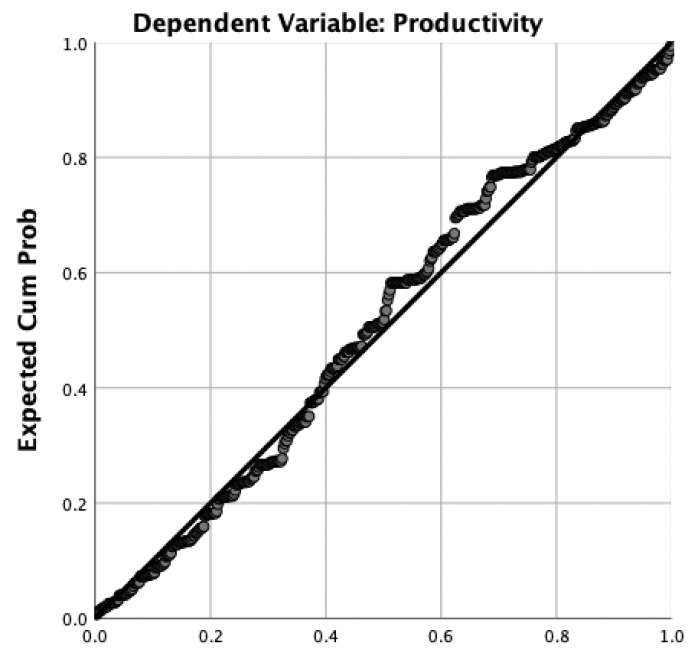
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.54	3.94	2.91	.477	492
Residual	-2.945	3.000	.000	1.199	492
Std. Predicted Value	-2.871	2.174	.000	1.000	492
Std. Residual	-2.447	2.493	.000	.996	492

a. Dependent Variable: Productivity



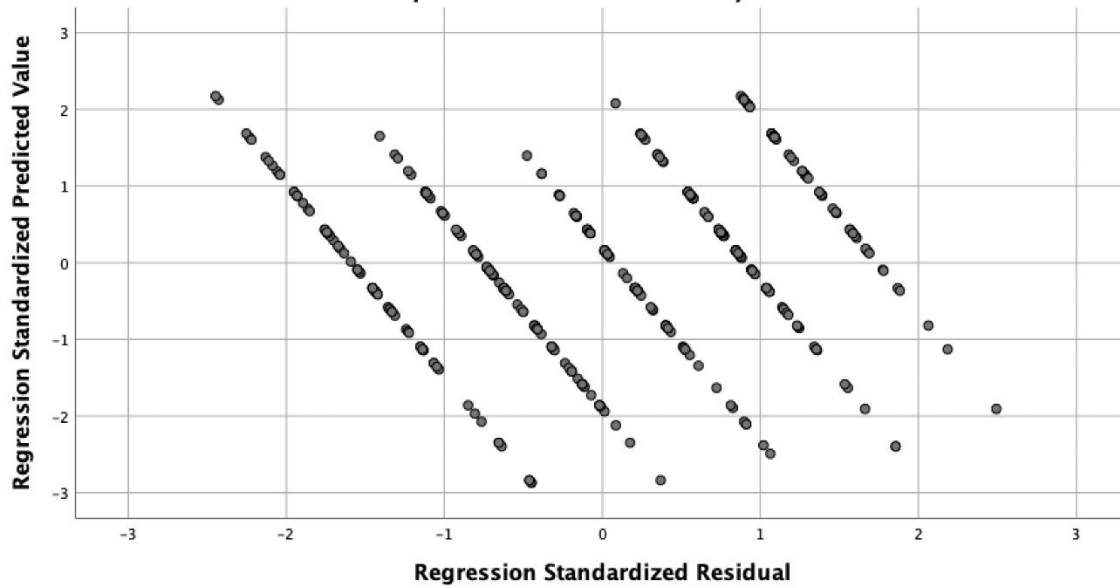
## Regression Standardized Residual

### Normal P-P Plot of Regression Standardized Residual



### Scatterplot

#### Dependent Variable: Productivity



## Annex 3 – SPSS Data – Performance study

### Descriptive Statistics

	Mean	Std. Deviation	N
TeamPerformance	3.36	1.056	492
WorkDeptNum	2.4350	1.10260	492
TeamRelationship	3.22	1.062	492
SkillsDevelopment	3.80	.942	492
CollaborationTools	4.15	.797	492

### Correlations

		TeamPerfor mance	WorkDeptNu m	TeamRelatio nship	SkillsDevelop ment	Collaboration Tools
Pearson Correlation	TeamPerformance	1.000	-.019	.501	.303	.209
	WorkDeptNum	-.019	1.000	.014	-.078	-.125
	TeamRelationship	.501	.014	1.000	.319	.168
	SkillsDevelopment	.303	-.078	.319	1.000	.402
	CollaborationTools	.209	-.125	.168	.402	1.000
Sig. (1-tailed)	TeamPerformance	.	.337	.000	.000	.000
	WorkDeptNum	.337	.	.377	.042	.003
	TeamRelationship	.000	.377	.	.000	.000
	SkillsDevelopment	.000	.042	.000	.	.000
	CollaborationTools	.000	.003	.000	.000	.
N	TeamPerformance	492	492	492	492	492
	WorkDeptNum	492	492	492	492	492
	TeamRelationship	492	492	492	492	492
	SkillsDevelopment	492	492	492	492	492
	CollaborationTools	492	492	492	492	492

### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	TeamRelationship, WorkDeptNum <sup>b</sup>	.	Enter
2	CollaborationTools, SkillsDevelopment <sup>b</sup>	.	Enter

a. Dependent Variable: TeamPerformance

b. All requested variables entered.

### Excluded Variables<sup>a</sup>

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	SkillsDevelopment	.159 <sup>b</sup>	3.884	.000	.173	.891
	CollaborationTools	.127 <sup>b</sup>	3.212	.001	.144	.956

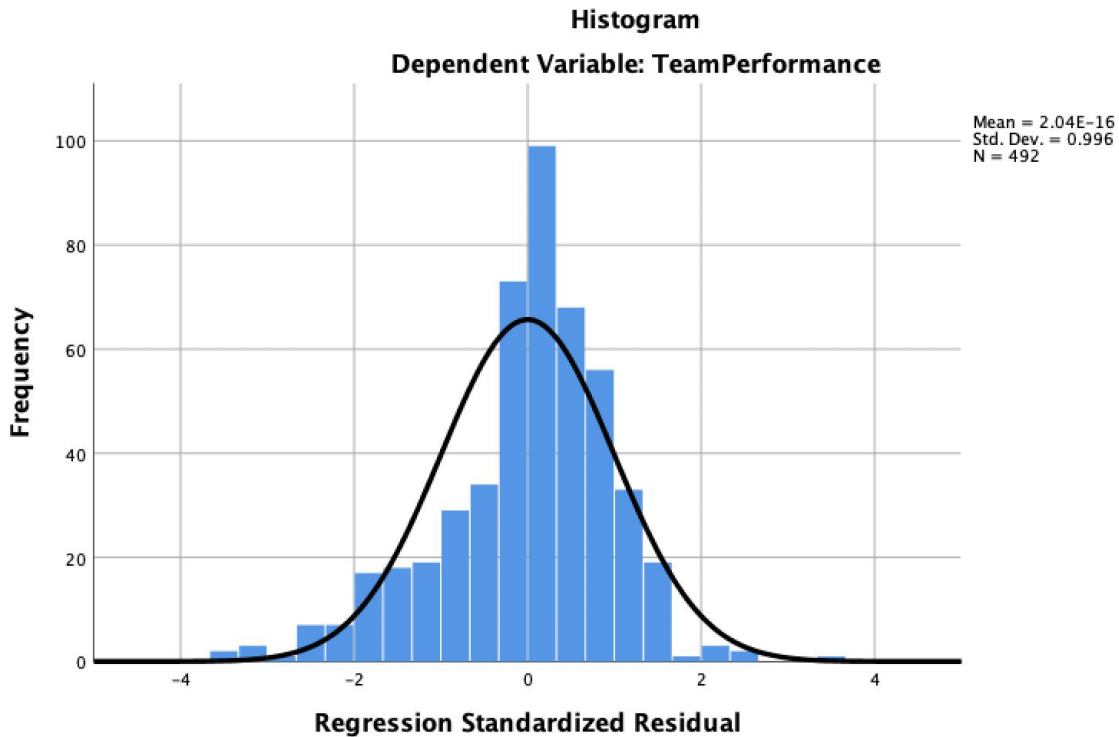
a. Dependent Variable: TeamPerformance

b. Predictors in the Model: (Constant), TeamRelationship, WorkDeptNum

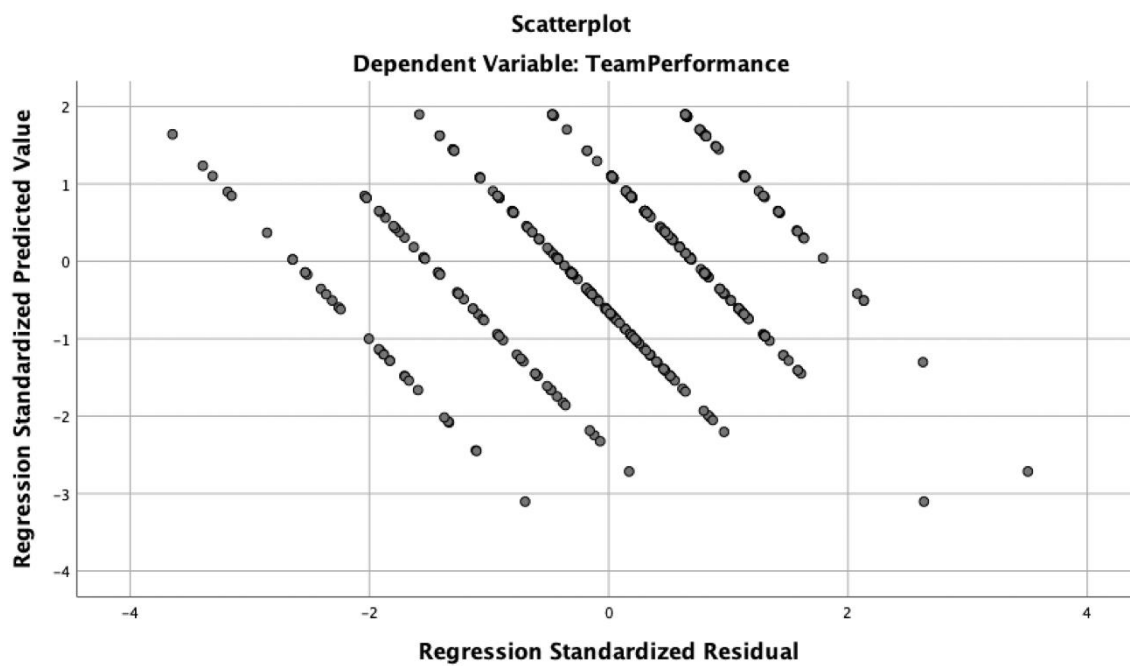
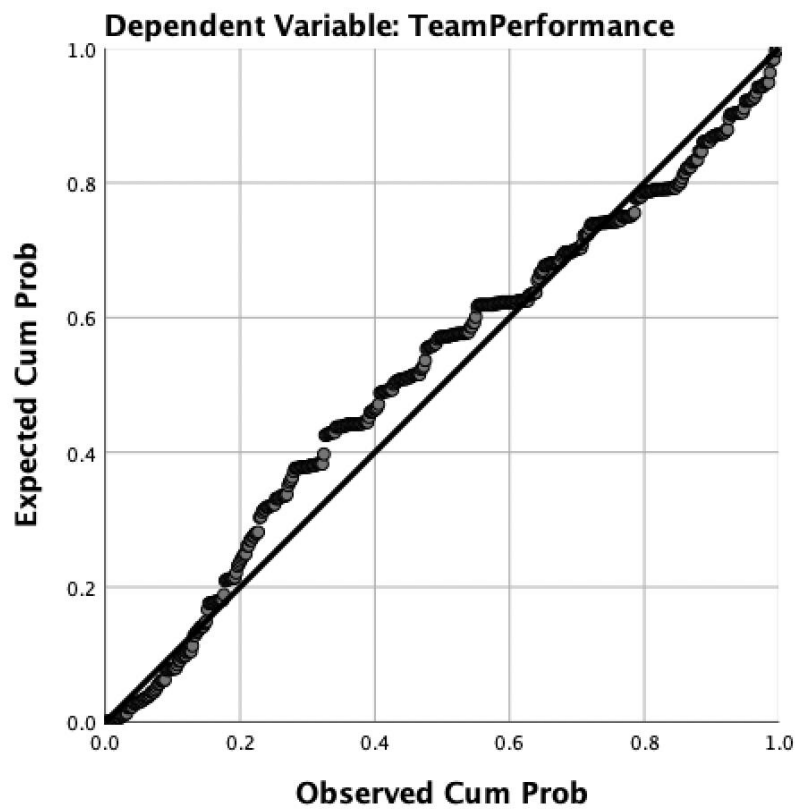
### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.63	4.42	3.36	.559	492
Residual	-3.282	3.153	.000	.896	492
Std. Predicted Value	-3.104	1.898	.000	1.000	492
Std. Residual	-3.646	3.503	.000	.996	492

a. Dependent Variable: TeamPerformance



### Normal P-P Plot of Regression Standardized Residual



### Descriptive Statistics

	Mean	Std. Deviation	N
TeamRelationship	3.22	1.062	492
WLB	3.67	1.169	492
BurnOut	3.33	.983	492
RiskAnalysis	4.12	.826	492

### Correlations

		TeamRelationship	WLB	BurnOut	RiskAnalysis
Pearson Correlation	TeamRelationship	1.000	.355	.159	.125
	WLB	.355	1.000	.087	.148
	BurnOut	.159	.087	1.000	.303
	RiskAnalysis	.125	.148	.303	1.000
Sig. (1-tailed)	TeamRelationship	.	.000	.000	.003
	WLB	.000	.	.026	.001
	BurnOut	.000	.026	.	.000
	RiskAnalysis	.003	.001	.000	.
N	TeamRelationship	492	492	492	492
	WLB	492	492	492	492
	BurnOut	492	492	492	492
	RiskAnalysis	492	492	492	492

### Variables Entered/Removed<sup>a</sup>

Model	Variables Entered	Variables Removed	Method
1	WLB <sup>b</sup>	.	Enter
2	BurnOut, RiskAnalysis <sup>b</sup>	.	Enter

a. Dependent Variable: TeamRelationship

b. All requested variables entered.

### Excluded Variables<sup>a</sup>

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics Tolerance
1	BurnOut	.128 <sup>b</sup>	3.057	.002	.137	.992
	RiskAnalysis	.074 <sup>b</sup>	1.728	.085	.078	.978

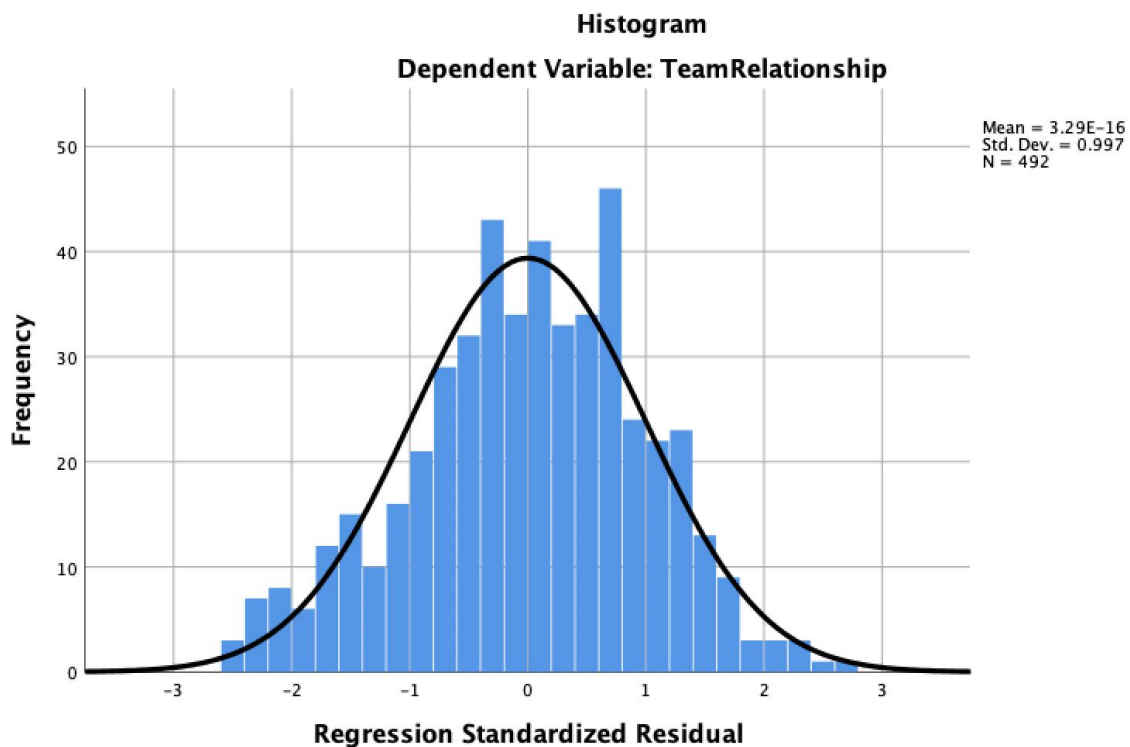
a. Dependent Variable: TeamRelationship

b. Predictors in the Model: (Constant), WLB

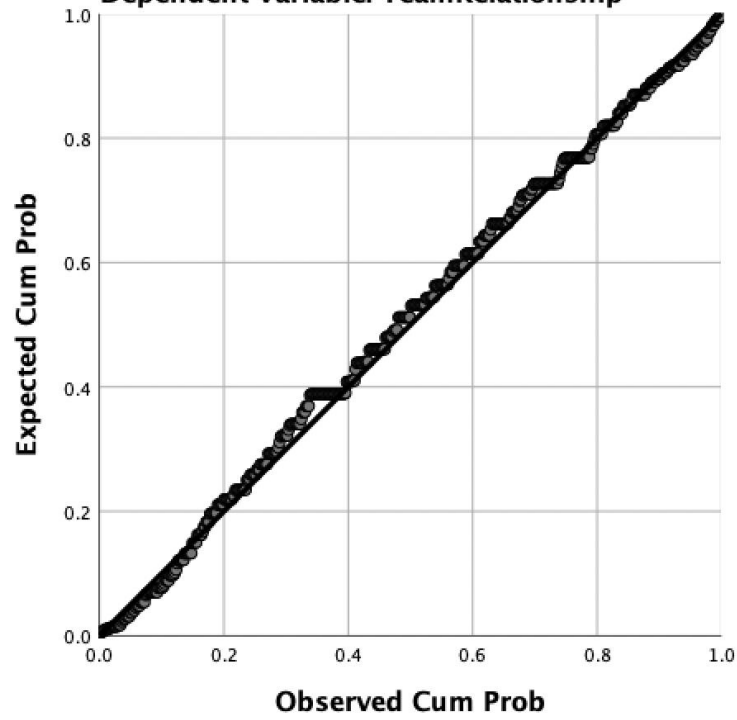
### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.95	3.89	3.22	.403	492
Residual	-2.537	2.596	.000	.982	492
Std. Predicted Value	-3.158	1.655	.000	1.000	492
Std. Residual	-2.575	2.635	.000	.997	492

a. Dependent Variable: TeamRelationship



**Normal P-P Plot of Regression Standardized Residual**  
Dependent Variable: TeamRelationship



**Scatterplot**  
Dependent Variable: TeamRelationship

