

Impact and Sustainability of Virtual Teams in an Adaptive World

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Abstract. *Virtual Teams Model is nowadays a framework, moreover a structure designed to guide the organization of teams that collaborate remotely, and there are still different voices which are debating the effectiveness and efficiency of related structure in an adaptive environment. The current scientific literature is likely continuing to evolve, researchers are exploring topics related to impact of virtual collaboration and the sustainability of the model for business success, looking at motivation as the main human factor which values high. The research method was appointed quantitative and qualitative methods, two structured, three months' period surveys and questionnaires were conducted, the qualitative phase aimed to uncover rich, context-specific information that quantitative methods alone might not capture. 30 IT specialists from Bucharest, average 32, were asked the three semi structured questions about the overall impact, long term sustainability and employers' motivation of virtual teams' setup in their organizations. The analysis unveils a significant boost in impact, and a simultaneous decline in sustainability and motivation. While heightened impact signals successful outcomes, reduced sustainability shows challenges in keeping long-term effectiveness. At the same time, waning motivation poses a risk to team engagement and overall performance. Striking a balance is crucial; strategies focusing not only on maximizing immediate impact but also on sustaining effectiveness and bolstering motivation are vital for enduring success in team dynamics. Initiative-taking measures and adaptive leadership are imperative to navigate and mitigate potential setbacks in the interplay of impact, sustainability, and motivation.*

Keywords: telecommuting, efficiency, effectiveness, adaptability, organization, strategy

Introduction

In the dynamic landscape of today's adaptive world, the assessment of virtual teams' impact and sustainability holds paramount significance. The purpose of this paper is to analyze if and how the virtual teams' dynamics affect sustainability in an organization and what impact it might have.

The dynamics in an organization during the very adaptive world brings risks and opportunities to business growth and it could affect it dramatically. The analysis of impact and sustainability in a project, particularly within project teams, is crucial for evaluating organizations efficiency and effectiveness. Balancing both aspects ensures constructive and harmonious collaboration, showing areas for improvement and fostering adaptability and resilience. The proposed comprehensive evaluation framework outlines clear goals and a continuous monitoring process, emphasizing stakeholder involvement and transparent communication.

“People are at heart of every technology transformation” (Forsgren N., Humble J., 2018) and evaluating their impact needs a nuanced understanding of the intricate interplay between technology, human dynamics, and organizational goals. Sustainability, in this context, extends beyond ecological concerns to encompass the longevity and effectiveness of virtual team structures. Motivating virtual teams becomes a critical aspect of this assessment, as the absence of physical proximity requires innovative approaches to foster cohesion, engagement, and goal alignment. In this ever-evolving landscape, recognizing and cultivating the intrinsic and extrinsic motivational factors that drive virtual team members is essential for ensuring their enduring success

and adaptability. This assessment serves as a compass, guiding organizations through the complexities of virtual teamwork in an adaptive era.

Impact and sustainability in virtual teams within organizations hinge on several key criteria, as other researchers found, as well:

Firstly, clear communication channels and collaboration tools must be in place to ease seamless information exchange among team members, fostering efficient workflow. Recognizing and celebrating individual and team achievements becomes essential, as virtual teams lack the immediate feedback present in traditional office settings. Motivating virtual teams in organizations involves addressing unique challenges related to remote collaboration. Implementing technology that eases collaboration, such as video conferencing and project management tools, enhances connectivity, and helps bridge the physical distance among team members, reinforcing a positive team spirit. Combined, these criteria create a motivating environment for virtual teams, promoting engagement and productivity.

Second, team members' diverse skills and ability should be strategically harnessed, ensuring a synergistic approach to problem-solving. In Team Topologies we understand which possible ways are to evolve the organization design to supply powerful capabilities for innovation and rapid delivery in response to a quickly changing operating context (Skelton M, Pais M., 2019). Additionally, supplying opportunities for skill development and career advancement, even in a remote environment, contributes to sustained motivation.

Third, leaders must set up a supportive virtual culture that promotes trust, engagement, and accountability, creating a positive team dynamic. We have delved into the practical guide for people working, collaborating, and leading in remote, virtual and hybrid teams, and hybrid teams, and then working from home (Hall K, Hall A., 2021). Establishing a supportive virtual culture that values work-life balance, flexibility, and trust is paramount.

Fourth, continuous training and upskilling initiatives are imperative to keep the team adaptable to evolving technologies and industry demands and we found a world of ideas in The Ultimate Handbook for Remote and Hybrid Teams (Owen J., 2021)

Lastly, a focus on employee well-being, including measures to prevent burnout and keep work-life balance, contributes to long-term sustainability, and quickly develops an actionable plan and delivers results previously out of reach (Neeley T., 2021).

By addressing these criteria, organizations can enhance the impact and sustainability of their virtual teams, driving success in an increasingly dynamic and digitalized work environment. Efficiency involves perfecting resources and streamlining processes to achieve aims promptly, while effectiveness measures an organization's ability to meet its goals and create meaningful impact. A well-balanced approach ensures judicious resource use, yielding maximum output, and considers both short-term and long-term impacts on stakeholders and the environment. Nonetheless, motivation is the bond between all pieces that come together, in relation to resources who are defining the dynamic of virtual teams. All organizations suffer from a disengaged morale of their employees (Laloux F., 2104).

The analysis of organizational impact, sustainability, and motivation is centered in this article around the virtual teams' concept by answering the below three research questions:

1. Impact of Virtual Teams: "How would you rate the overall impact of virtual teams' setups, on organizational outcomes?"
2. Sustainability of Virtual Teams: "To what extent do you believe that virtual teams' model contributes to long-term sustainability in the context of an organization?"

3. Motivation in Team Environments: “Considering virtual team setup, how do you perceive the impact on employee motivation and their engagement levels?”

Answering the research questions, using two different sessions, have given us the opportunity to understand if and how transformative virtual teams’ model is, during time, by business evolving factors and by inherent challenges and transformations in organizations. Also, we would want to assess how impact and sustainability can be measured about motivation, the human factor, and how it affects business models and organizational processes towards success.

We expect that regular evaluation is crucial for teams to adapt to evolving challenges, enhance transparency, and sustain efficiency in virtual collaboration. Ongoing assessment serves as a vital mechanism for gauging progress, finding areas for improvement, and contributing to the long-term success of adaptable team models in an ever-changing professional environment.

The research goal is to understand the impact, sustainability, and motivation within virtual teams in IT organizations and how these will affect the dynamics of the business, and we have used mixed methods research, to gain a comprehensive understanding of the topic. We were using Surveys and Questionnaires; Surveys were employed to gather quantitative data on various aspects of virtual teams, such as team members' motivation, perceived impact, and satisfaction. Likert scales and closed-ended questions are commonly used to quantify responses. Also, we were able to use qualitative interviews which supplies a deeper understanding of the experiences, feelings, and motivations of virtual team members.

This paper follows a structured format, beginning with an insightful introduction that sets the stage for understanding the critical dynamics of virtual teams in today's evolving landscape. The literature review then examines the existing scientific discourse on the impact, sustainability, and motivation of virtual teams in adaptive environments. The methodology section elucidates the research design, incorporating a mixed-methods approach with qualitative interviews and quantitative surveys targeted at IT professionals. Subsequently, the results and discussions present a nuanced analysis of the gathered data, unraveling the complexities of virtual team dynamics. Finally, the paper concludes by synthesizing key findings, offering implications for the field, and emphasizing the paper's contribution to understanding and navigating the challenges faced by virtual teams.

Literature Review

The literature on the dynamics of virtual teams within organizations emphasizes the pivotal role these teams’ models play in affecting efficiency and effectiveness. When managed effectively, virtual teams can use diverse talents and perspectives, fostering innovation and problem-solving. However, challenges such as communication barriers, trust issues, and a sense of isolation can hinder their success. Research underscores the need for organizations to invest in technology, prove clear communication protocols, and implement effective leadership strategies to perfect the dynamics of virtual teams, maximizing organizational efficiency and effectiveness.

The Covid-19 pandemic significantly changed the paradigm of organizing activities in organizations and had an immediate impact on everyone who either received help from or suffered due to its adoption. Das, Zutshi, and Janardhanan (2021) construct a detailed and correct analysis of the experiences of various companies, organizations, and institutions, from startups to industrial giants and multinational companies. These case studies highlight the issues of organizational efficiency and effectiveness, standing for the ability for adaptation, resilience, and sustainability.

With help from Skelton and Pais (2019), who define various models of team topologies, we've understood how executive leadership and business leaders focus on strategies related to team performance growth because teams are always work in progress and are organizations best shot at delivering value continuously and sustainably by aligning them to the business. In estimating the results offered by the two surveys, we aimed to supply some of the best justification around for practices that can significantly improve IT organizations by adopting different strategies to accelerate organizational efficiency using Forsgren, Humble and Kim's model (2018).

The scientific research has focused on finding the leverage points through which telecommuting is seen or not as a factor for the growth of organizational efficiency and effectiveness, using the theoretical approach presented by Neeley (2021). We have considered multiple perspectives, including the descriptions given by Hall and Owen (2021), about the management of virtual teams and those using telecommuting. Furthermore, the guide for creating organizations from the perspective of the new level of consciousness offered by Laloux (2014) has offered a new, holistic, and very surprising frame of reference.

The impact of virtuality on team effectiveness has been extensively explored in many seminal works, studies, and articles, by Purvanova (2021) and Sanchez, Rueda, Zimman, Haydon, Diaz, and Kawasaki (2023). These articles delve into the virtuality of organizational teams, offering comprehensive insights into the dynamics of virtual collaboration.

Virtuality, in this context, is defined as an analysis of the quality of being virtual—an encompassing concept closely aligned with our research but applied on a broader scale. This analytical framework goes beyond the conventional understanding of virtuality, extending into both organizational and non-organizational team settings. The studies employ rigorous methodologies, including meta-analysis and mixed methods approaches, to assess the multifaceted dimensions of virtual team interactions and leadership behaviors. By scrutinizing the nuances of virtuality, these works contribute significantly to our understanding of how virtual teams run, highlighting the complexities and nuances inherent in the evolving landscape of contemporary teamwork within and beyond organizational boundaries. We are getting closer to the idea of continuous analysis of the need of changing models as per the adaptability needed in modern organizations and the above articles are taking us closer to the concept.

Current literature on telecommuting focuses on its formation, collaboration mechanisms, and challenges, often overlooking the critical aspect of ongoing evaluation and improvement. This study proposes a new perspective that emphasizes the need for a systematic and continuous evaluation approach to virtual teams, aiming to strengthen organizational performance. By promptly finding and addressing decrease of motivation in teams, organizations can perfect the effectiveness of their virtual teams and enhance overall performance.

In summary, the selected literature supplies a comprehensive foundation for understanding modern management, team dynamics, remote work, and organizational resilience, all of which are relevant to current research on the virtual teams in an adaptive environment.

Methodology

Our research goal was to explore the factors influencing the choices of IT organizations about the use of virtual teams and their impact on organizational efficiency and effectiveness and for this reason, we have used the following statistical methods, described below:

Quantitative Phase:

- **Survey and Questionnaire Design:** A structured survey and questionnaire instrument were designed to gather quantitative data from a targeted sample of IT professionals.
- **Quantitative Data Collection:** Surveys were distributed to thirty IT professionals from different organizations.
- **Quantitative Data Analysis:** The data obtained from surveys were analyzed using statistical techniques. The specific statistical methods likely include descriptive statistics as means and frequencies and inferential statistics, correlation analysis and regression analysis, to identify trends and patterns in the quantitative data.

Qualitative Phase:

- **Interview Design:** Semi-structured interviews were conducted with the same thirty employees from various IT organizations, with a three-month gap between interviews.
- **Qualitative Data Collection:** Two interviews were conducted, focusing on understanding respondents' experiences, preferences, and perceived impact on organizational performance.
- **Purposive Sampling:** A purposive sampling strategy was employed to select participants with diverse perspectives.
- **Semi-Structured Interviews:** The interviews followed a semi-structured format with the same set of questions, allowing for consistency in data collection.

Methodological Triangulation:

- The study used both quantitative and qualitative data collection techniques to achieve methodological triangulation. This approach enhances the study's rigor by combining the strengths of both methods and providing a more holistic understanding of the research topic.

Temporal Aspect:

- The study considered a temporal aspect by conducting interviews at two different time points (October 2023 and January 2024), allowing for insights into potential changes or developments over time.

The use of quantitative methods driven the research through the application of standard statistical analyses to explore relationships and patterns in the collected numerical data.

We've conducted two interviews with the same thirty employees from various IT organizations, with a three-months period in between the interviews, these individuals are working in IT organizations from Bucharest, Romania, within different domains: Banking, Gaming, Financial, Health and Consultancy, the average age is thirty-two, from which seventeen are males and thirteen females. The respondents are working in different professions, as IT Development Engineers, Project Managers, Business Analysts, and IT Quality Engineers. The first interview was conducted in October 2023 and the second interview was conducted at the beginning of January 2024.

These interviews were semi-structured and focused on understanding the respondents' experiences, preferences, and the perceived impact on the performance of their respective organizations, and the questions were:

1. "How would you rate the overall impact of virtual teams' setups, on organizational outcomes?"
2. "To what extent do you believe that virtual teams' model contributes to long-term sustainability in the context of an organization?"
3. "Considering virtual team setup, how do you perceive the impact on employee motivation and their engagement levels?"

The interview questions were formulated based on the insights obtained from the qualitative phase and are to be answered by our study and could be formulated around the idea that organizations which are using virtual teams' model would prove greater adaptability and sustainability in rapidly changing or adaptable environments. Also, the aim is to understand if and how motivation has a direct impact on organizations and make a vantage point upon sustainability.

Quantitative methods data collection was used, easing the processing of statistical data. The same surveys were distributed to a group of IT professionals from different organizations to quantify the trends and patterns shown in the qualitative phase. The data obtained from surveys were then analyzed using statistical techniques to find the answer to the formulated research questions.

The use of quantitative method driven the research to apply the standard statistical analyse to explore relationships and patterns in the collected numerical data.

Results and Discussions

The results emphasize the diversity of perspectives in the IT industry and the importance of adaptability and continuous evaluation, We have ask a number of 30 respondents from IT industry in Bucharest, Romania from which 17 are males and 13 females, as described succintely below:

Table 1: Respondent Demographics

Demographic	Value
Total Respondents	30
Industry	Information Technology
Area which respondents live	Bucharest, Romania
Interview Frequency	Twice, with a three-month interval

Source: Authors own research.

We have used an evaluation scale in interviews compounding five levels of satisfaction, as identified below, from 1 to 5:

Table 2: Evaluation Scale

Scale	Description
1	Against
1	Against
2	Neutral
3	Favorable
4	Happy
5	Incredibly happy

Source: Authors own research.

To analyze the tables and supply results on impact, sustainability, and motivation, we have calculated the average score for each criterion and then interpret the results based on the given scale:

Impact:

Average Impact Score = (Sum of Impact Scores) / (Number of Respondents)

Average Impact Score = (82) / (30) = 2.73

Interpretation: On average, the respondents view the impact as close to favorable.

Sustainability:

Average Sustainability Score = (Sum of Sustainability Scores) / (Number of Respondents)

Average Sustainability Score = $(75) / (30) = 2.50$

Interpretation: On average, the respondents view sustainability as moderate in between neutral and favorable.

Motivation:

Average Motivation Score = (Sum of Motivation Scores) / (Number of Respondents)

Average Motivation Score = $(81) / (30) = 2.70$

Interpretation: On average, the respondents view motivation as close to favorable.

Results for second interview on three criteria used for research:

Impact:

Average Score: $(98) / 30 = 3.27$

Interpretation: The average impact score is favorable, suggesting the respondents perceive a clearer positive impact, in between favorable and happy, which can be perceived as satisfied.

Sustainability:

Average Score: $(67) / 30 = 2.23$

Interpretation: The average sustainability score is close to neutral, showing a moderate feeling about sustainability.

Motivation:

Average Score: $(72) / 30 = 2.40$

Interpretation: The average motivation score is moderately favorable, suggesting that respondents generally feel motivated.

After the two rounds of interviews, we have added the answers to both interviews, given by all thirty respondents, using the scale described above:

Table 3. Joint Analysis of Virtual Teams in IT Organizations

Respondent ID	1st interview responses			2nd interview responses		
	Impact	Sustainability	Motivation	Impact	Sustainability	Motivation
R1	5	2	3	4	1	1
R2	1	1	1	2	2	1
R3	3	1	1	1	1	2
R4	4	2	1	3	1	3
R5	2	2	2	5	3	4
R6	3	2	2	5	4	5
R7	3	5	3	3	2	5
R8	3	4	3	2	1	3
R9	3	3	3	4	5	4
R10	3	3	1	1	2	2
R11	2	3	1	4	1	1
R12	1	2	5	5	3	1
R13	4	1	5	3	2	1
R14	4	1	5	5	2	2
R15	2	1	4	2	4	3

Respondent ID	1st interview responses			2nd interview responses		
	Impact	Sustainability	Motivation	Impact	Sustainability	Motivation
R16	3	4	4	1	1	1
R17	1	2	4	4	1	2
R18	5	3	3	5	2	1
R19	5	3	3	3	5	3
R20	2	4	3	2	1	1
R21	1	1	3	4	2	4
R22	4	1	4	1	3	5
R23	3	3	2	4	1	2
R24	1	4	1	3	3	3
R25	2	2	1	2	5	1
R26	1	3	2	3	4	2
R27	2	4	2	5	2	3
R28	3	5	3	4	1	1
R29	3	2	3	4	1	2
R30	3	1	3	4	1	3

Source: Authors own research.

Interview results comparison for both interviews, shows the total of answers and the average explored, split by the three factors: Impact, Sustainability and Motivation.

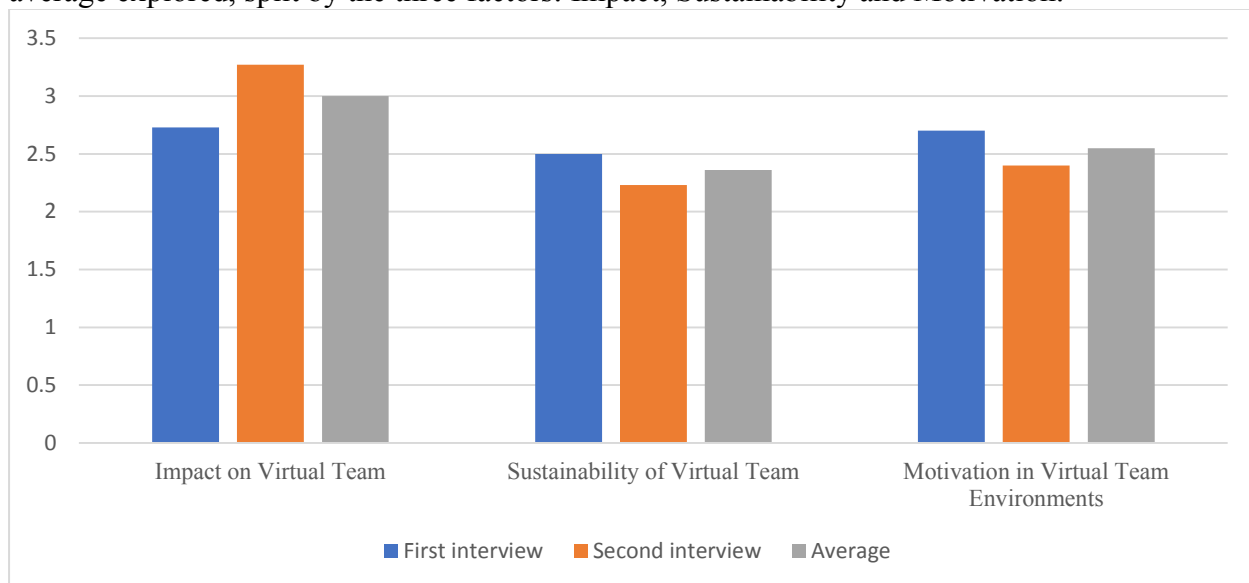


Figure 1. Interview results comparison

Source: Authors' own research.

Also, to be able to analyse the answers generally, we have created the above graphical view, which shows clearly the ambivalent view of answers after only three months period of time in between the interviews. Interviews results per respondents detailed, shows the totality of 30 respondents answers in both interviews, detailed.

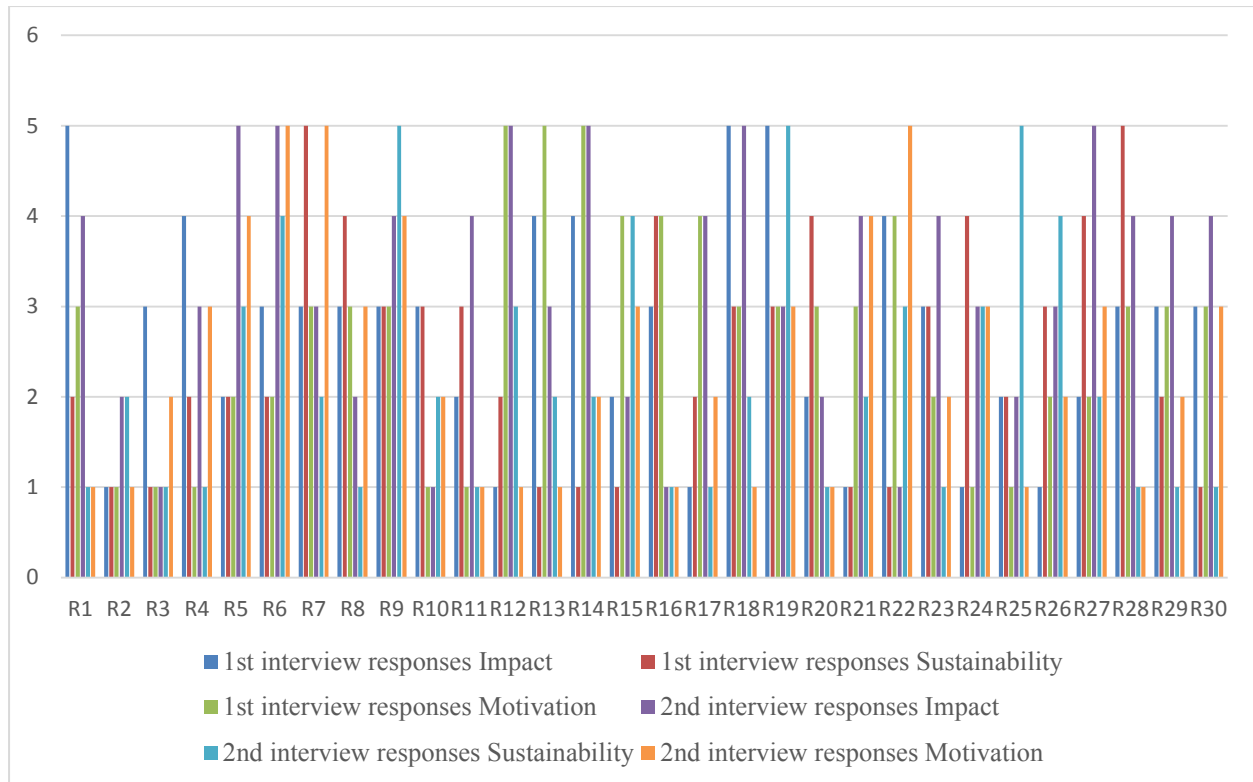


Figure 2. Interviews results per respondents detailed

Source: Authors' own research.

Results for first and second interview on three criteria used for research, together with the average value, are shown below, being an analyse of a median point of view, which shows clearer the differences and evolution of opinions in between two interviews, asking the same 30 respondents.

Table 4. Themes Explored

Theme	First interview	Second interview	Average
Impact on Virtual Team	2.73	3.27	3
Sustainability of Virtual Team	2.5	2.23	2.36
Motivation in Virtual Team Environments	2.7	2.4	2.55

Source: Authors own research.

We have created the view describing separately the change in Impact criteria, Sustainability criteria and Motivation criteria, showing graphically, using clustered column charts, and its used to compare values across our categories. The order of the categories is not important for our analyse:

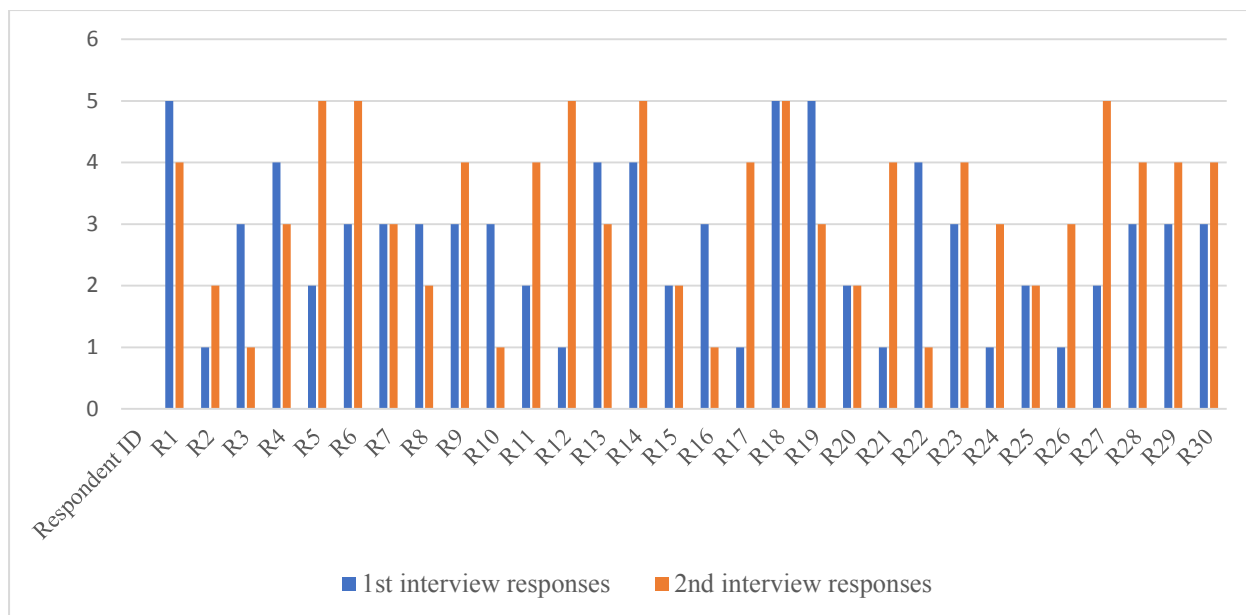


Figure 3. Interviews results on Impact factor

Source: Authors' own research.

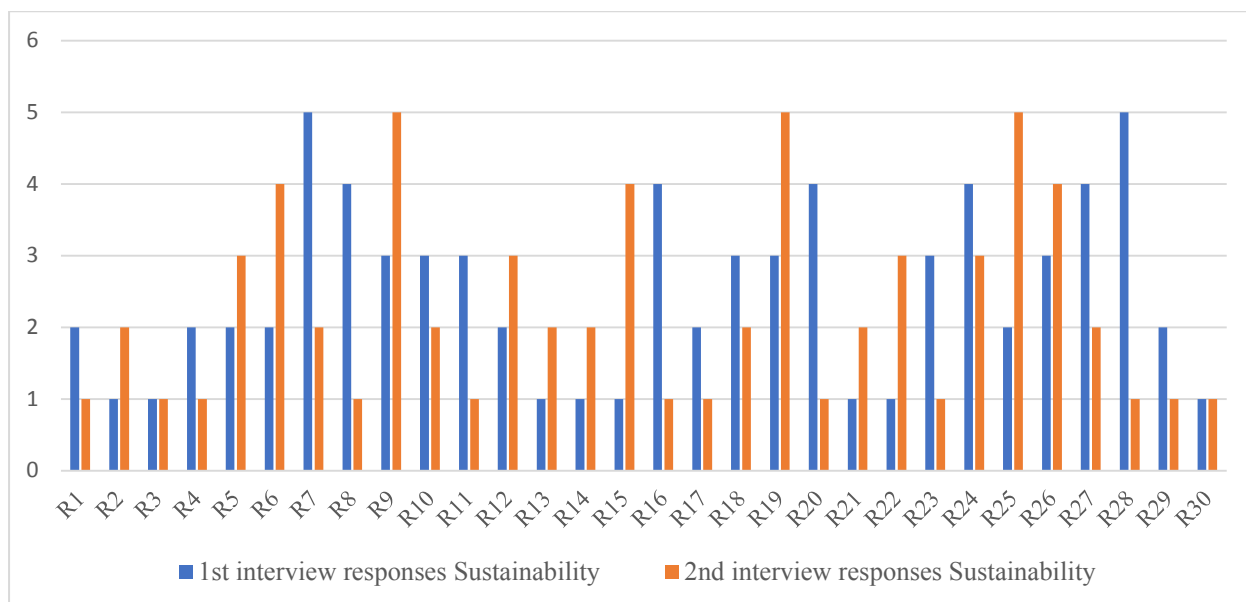


Figure 4. Interviews results on Sustainability factor

Source: Authors' own research.

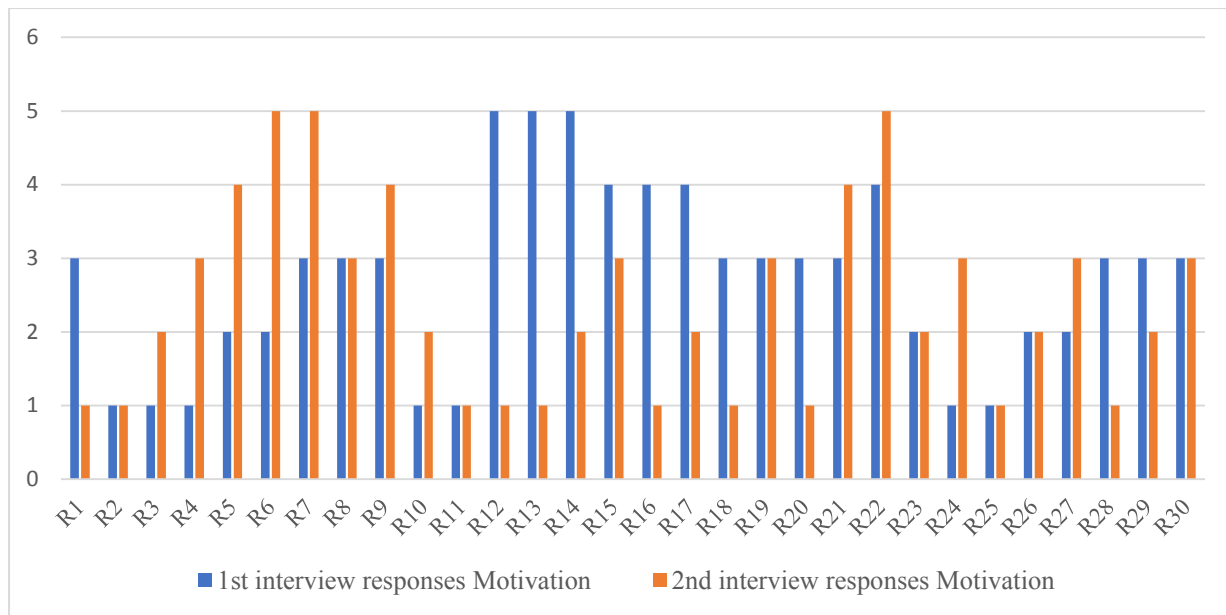


Figure 5. Interviews results on Motivation factor

Source: Authors' own research.

In summary, based on the provided responses, the situation is generally perceived positively in terms of impact, sustainability, and motivation. The average scores are mostly on the neutral and favorable side of the scale, with the highest average in impact and the lowest in sustainability.

These percentages give an overview of the distribution of responses across distinct categories for each dimension. For example, the "Impact" dimension received the highest percentage of neutral responses, while the "Sustainability" dimension received relatively higher percentages of not-so-happy and against responses. The "Motivation" dimension has a significant percentage of against responses.

The given data presents a comparative analysis of the first interview responses and the second interview responses across various criteria (Impact, Sustainability, and Motivation) on a scale of 1 to 5.

The analysis shows important statistical variations in the responses between the 1st and 2nd interviews, while the impact improved notably, there were significant reductions in perceived sustainability and motivation. These changes may reflect shifts in perspectives, experiences, or circumstances over the interview intervals. It is important to consider the context and explore the reasons behind these changes, as they may supply insights into the evolving feelings of the respondents.

The substantial rise in the impact score within just three months between interviews signals a heightened recognition of the necessity to reassess and adapt work methodologies. This significant increase reflects an evolving awareness of the dynamic environment, prompting a positive shift in the perceived effectiveness and influence of current working approaches.

The sustainability score decreased, suggesting a questionable decline in perceived sustainability. The declining sustainability score raises concerns, showing a potential shift toward a less sustainable state. This prompts scrutiny and underscores the need for a thorough assessment of factors influencing sustainability to address and rectify the observed decline.

The noteworthy drop in the motivation score over three months raises questions about underlying circumstances and potential reasons for the decline. This considerable decrease prompts a deeper investigation into factors affecting motivation, needing an initiative-taking approach to address and reinvigorate team morale for sustained productivity and engagement.

Dependencies between Impact, Sustainability and Motivation is a graph which shows the dynamics of the interdependencies between factors.

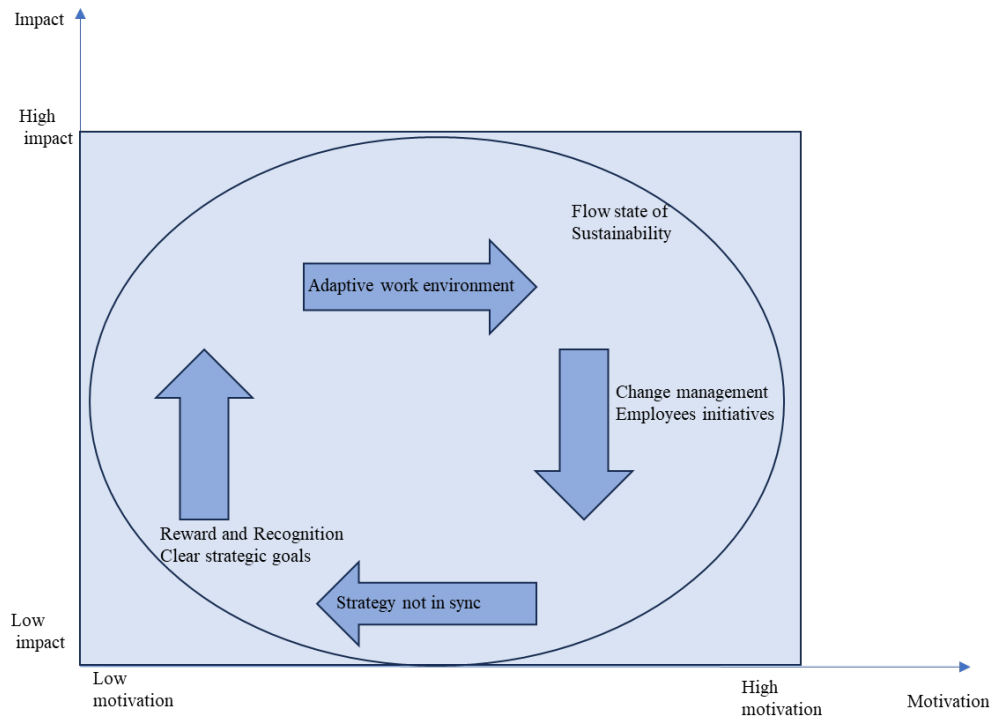


Figure 6. Dependencies between Impact, Sustainability and Motivation

Source: Authors' own research.

Using the information gathered from Laloux F. (2014), we have described in short, the flow state in organizations with main idea figured, as described below:

When increased impact, reduced sustainability, and low motivation, organizations need to look for implementing employee recognition and awards measures and to act for increasing organization sustainability on a mid- and long-term basis with clear strategic goals.

When minimal impact, high motivation, low sustainability: this situation could show that efforts are being made with enthusiasm, but the results may not be significant or enduring, which means there are areas for improvement.

High impact, high sustainability, high motivation is the ideal scenario for success.

Motivation drops, impact low, sustainability low: This could be a challenging phase where the first enthusiasm or drive has diminished, leading to suboptimal results and difficulty in keeping efforts.

Several research limitations arise from the temporal scope and potential volatility of conditions in the study. Firstly, the three-month interval between the first and second interviews may not capture longer-term changes in virtual team dynamics. Rapid shifts in organizational or market conditions may have occurred, affecting the relevance of the findings. Additionally, the evolving nature of technology and remote work trends could introduce unforeseen variables influencing virtual team behavior. Furthermore, participant perspectives may be subject to recall bias, affecting the accuracy of responses about the first interview during the second round. The

study's generalizability might be limited due to the specific focus on IT professionals, potentially overlooking variations in other industries. Lastly, external factors like global events or economic changes could have influenced virtual team experiences but are not explicitly accounted for. Acknowledging these limitations is crucial for interpreting the study's outcomes and encourages cautious extrapolation of results beyond the defined temporal and contextual boundaries. To draw meaningful conclusions, understanding the contextual intricacies and reasons behind these shifts in respondent feelings becomes paramount, offering insights crucial for perfecting virtual team performance in an ever-evolving landscape and a clear answer to our research questions about the highly dependency in between our three research criteria.

The results obtained are coordinated with the literature review, the lessons learned gathered from the 15 companies around the whole globe described by Das, Zutshi, and Janardhanan (2021), during the Pandemic are an insightful exploration of learnings for the future. Also, In Radostina K. Purvanova (2021), their results suggest that in work organizations, virtuality is a significant direct input – negative or positive – to team performance using 73 samples of organizational teams. Sanchez D., Rueda A., Zimman H., Haydon R., Diaz D., Kawasaki K. (2023) gave a refined view of the virtual team's leadership and concluded that none of the leadership behaviors are affecting team performance but moreover their motivation. Owen J. (2021) helps exploring how to sustain intrinsic motivation when working remotely for a positive impact as remote work is a change in basic assumptions. Skelton M. and Pais M. (2019) are empowering the idea that successful modern organizations need to be able to deal with changing circumstances by designing for adaptability, hence the rapid response to decrease sustainability when impact is high. Forsgren N., Humble J., Gene K. (2018) proved that organizational performance is linked to high performers and motivated individuals which are twice likely to exceed organizational performance goals.

Figures are the visual representation of the data gathered, showing the diversity of answers in all three criteria taken in consideration but also show the change in perception of the respondents during time.

Figures and tables

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R22	4	1	4	1	3	5
R23	3	3	2	4	1	2
R24	1	4	1	3	3	3
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R27	2	4	2	5	2	3
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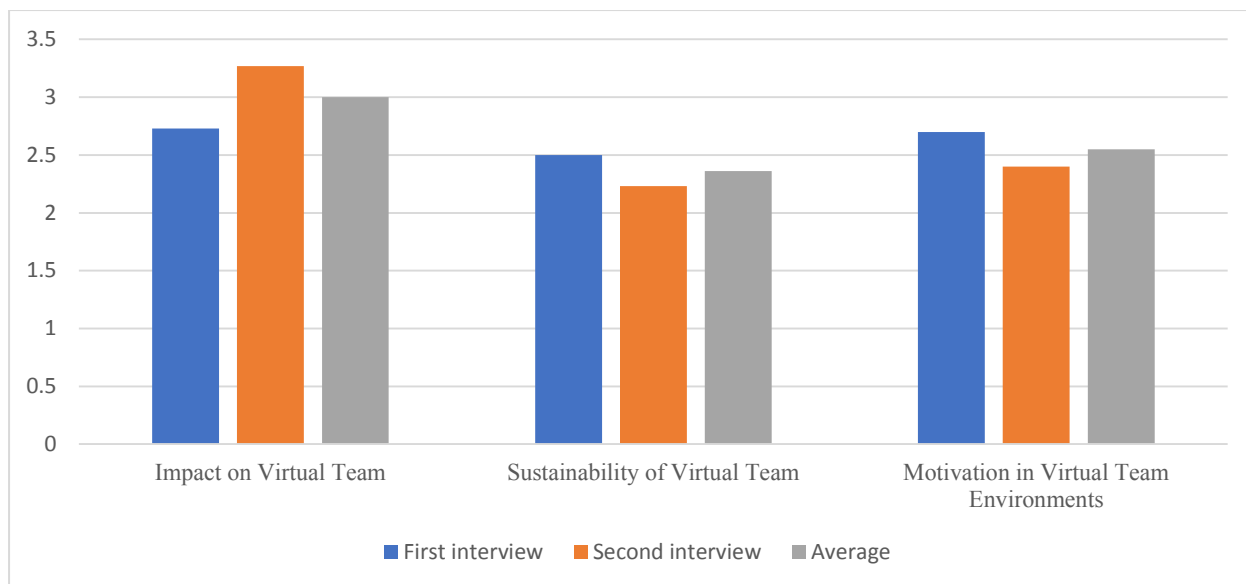


Figure 1: Interview results comparison

Source: Authors' own research.

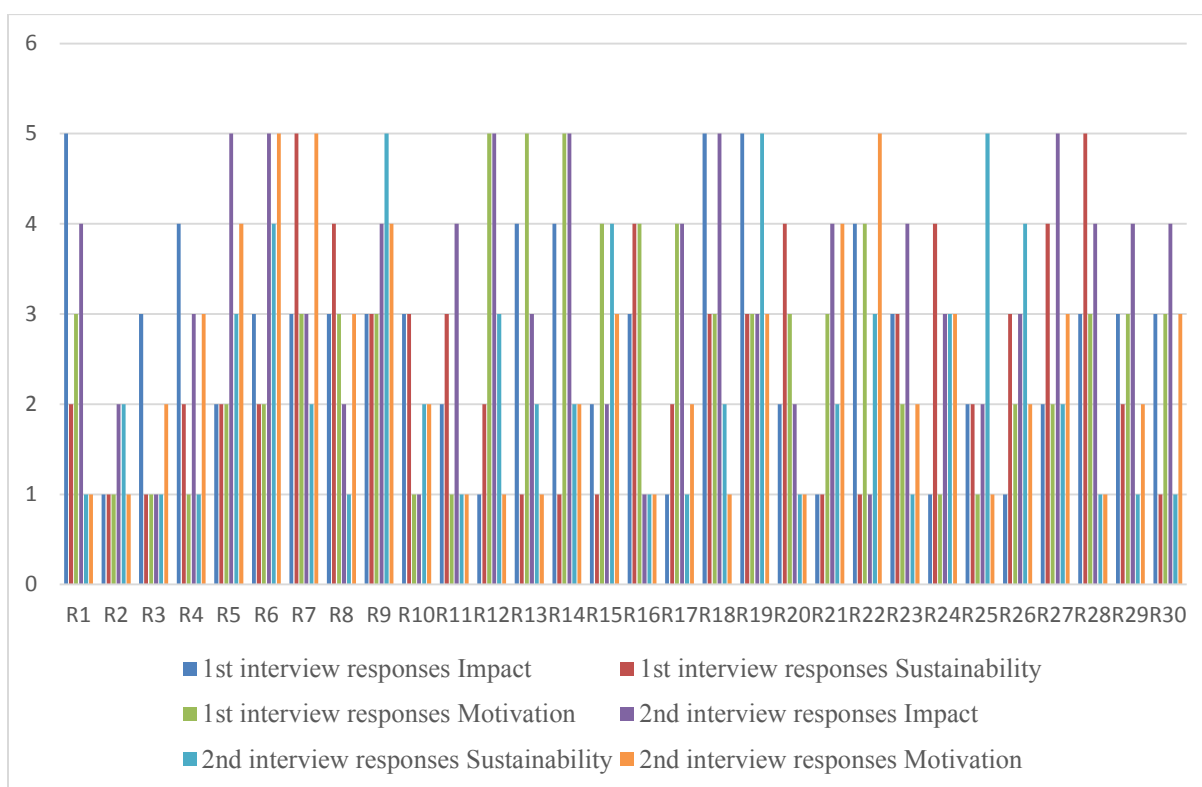


Figure 2: Interviews results per respondents detailed

Source: Authors' own research.

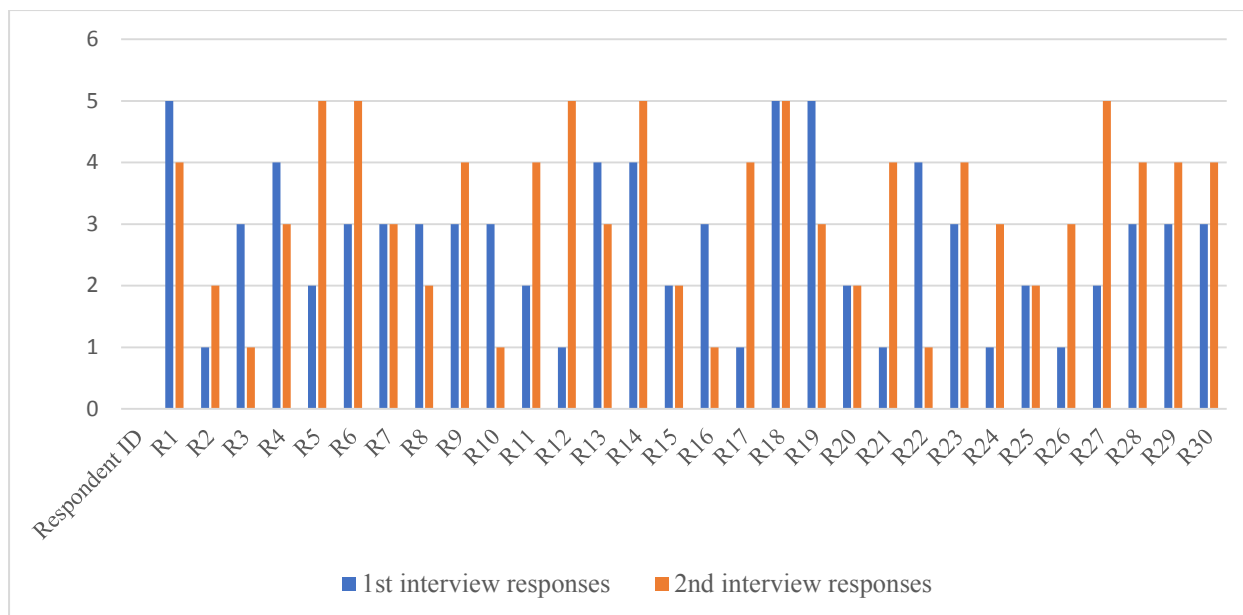


Figure 3. Interviews results on Impact factor

Source: Authors' own research.

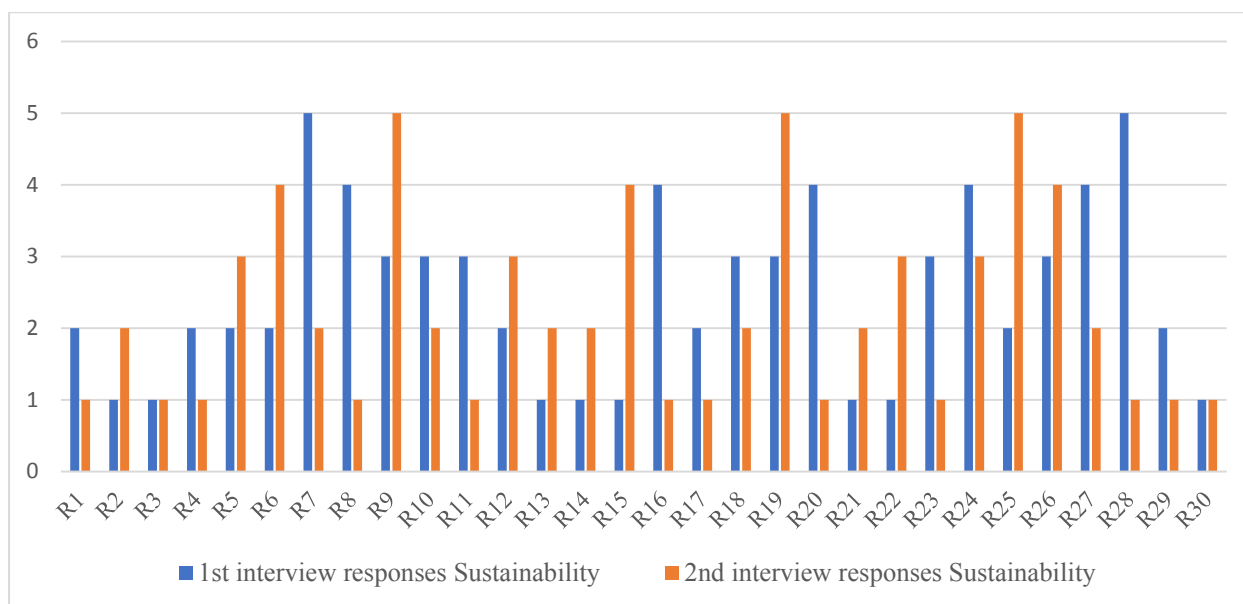


Figure 4. Interviews results on Sustainability factor

Source: Authors' own research.

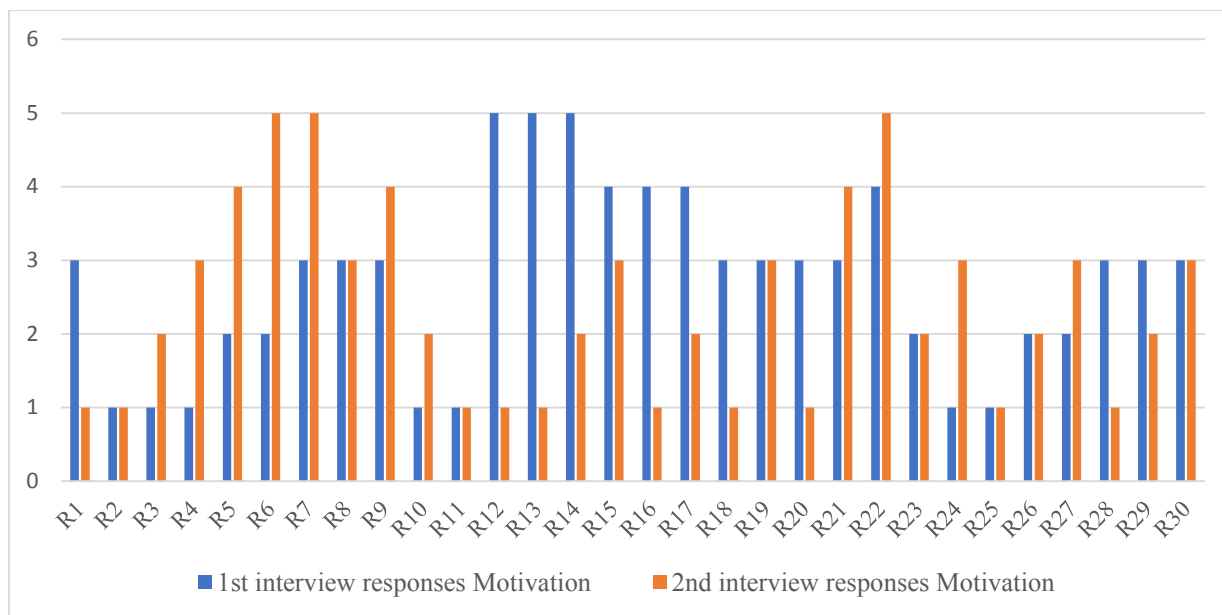


Figure 5. Interviews results on Motivation factor

Source: Authors' own research.

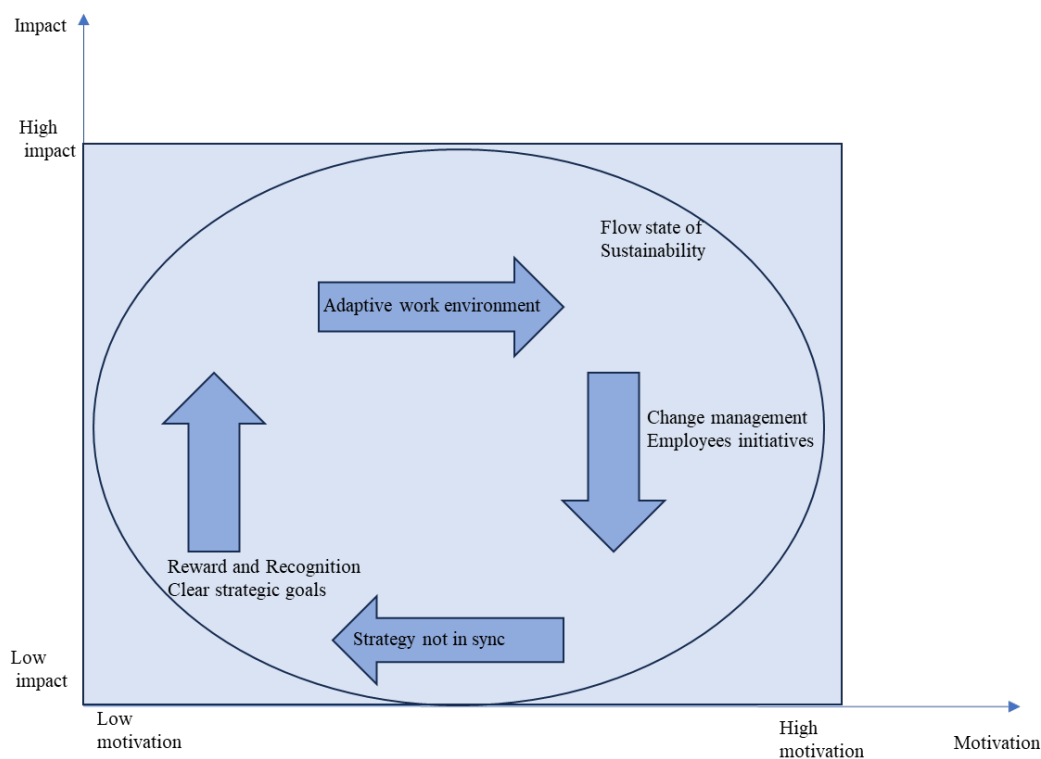


Figure 6. Dependencies between Impact, Sustainability and Motivation

Source: Authors' own research.

Conclusions

In conclusion, our research is trying to contribute to the ongoing discourse on the impact and sustainability of virtual teams in an adaptive world and sheds light on the complex dynamics of virtual teams and their influence on organizational outcomes, supplying insights into the factors shaping their impact within an adaptive environment and taking in account human factor, that is motivation.

Our exploration of how motivation influences organizational success highlights its complexity, influenced by personal values, goals, rewards, recognition, and needs satisfaction. Motivation's crucial role in shaping behavior and decision-making emphasizes its significance in virtual teams and organizational performance and distinctly shows the importance of human factor in the organizational interplay.

Research Question 1 delved into the dynamics of virtual teams and their impact, revealing a notable increase in perceived impact over a three-month interval. The analysis underscores the multifaceted nature of virtual team dynamics, emphasizing the need for comprehensive strategies to perfect their effectiveness work environments. The results supply valuable implications for organizations looking to adapt and thrive amidst ongoing changes. This positive shift suggests an evolving awareness of the need to reassess working methods in response to the rapidly changing landscape, leadership support and clear goals alignment which play pivotal roles in enhancing perceived impact.

Moving to Research Question 2, the focus shifted to the influence of virtual team models on sustainability and success. The study aimed to discern the extent of this influence and prioritizes continuous refinement of teams' processes and sustainable practices and aligning them to organizational goals and strategy. This inquiry stands as a crucial step toward fostering resilient and enduring organizational practices and underscore the essential role of virtual team models in shaping sustainable and successful organizational trajectories, supplying a roadmap for future strategic implementations.

Research Question 3 analyzed how motivation within teams influences organizational success. A motivated team is more likely to show increased productivity, creativity, and resilience, directly contributing to organizational success and long-term sustainability. Recognize and celebrate individual and collective achievements, fostering a positive and empowering environment. The measured changes and their consequences emphasize the need for continuous assessment and adaptation.

The correlation between increased impact, reduced sustainability, and diminished motivation underscores the importance of a nuanced approach and emphasizes the need for a comprehensive strategy. A surge in impact, if not complemented by sustainable practices and a motivated workforce, may jeopardize long-term success. The results show that rise in impact, fall in sustainability and motivation is presenting a short-term solution which will not survive in time.

A strategic approach involves intertwining efforts to enhance team motivation with a commitment to sustainable practices. Recognizing individual and collective achievements, fostering a positive work culture, and promoting skill development contribute to team motivation. Simultaneously, integrating initiatives, refining processes, and aligning organizational goals with sustainability aims ensure long-term viability. This delicate equilibrium not only boosts morale and productivity but also sets up an enduring foundation for organizational success, proving that a harmonious blend of motivation and sustainability is key to resilient and prosperous outcomes. Addressing these interdependencies is vital for organizational success, causing continuous

evaluation, support mechanisms, and adaptive leadership to perfect the balance among impact, sustainability, and motivation in virtual team dynamics.

Looking on different combinations of factors related to impact, sustainability, and motivation, we are recon that each combination stands for a unique scenario or state and have applied lessons given by the corporate resilience and endurance in face of unprecedented economic challenges Das, Zutshi, and Janardhanan (2021).

Regularly reassessing and adjusting these measures will contribute to the ongoing success of virtual teams within the organization, bolster team resilience, nurture motivation, and instill practices ensuring enduring effectiveness. Fostering a supportive work environment, supplying necessary resources, and addressing challenges promptly contribute to the sustainability of virtual teams. As workplaces evolve, the study underscores the importance of regularly reassessing telecommuting effectiveness, emphasizing adaptability for organizations to remain responsive to changing dynamics and perfect team structures for enhanced performance and profitability.

Beyond its immediate findings, this research supplies a foundation for future research and practical applications. The results guide organizations in making informed decisions about implementing and managing teams, especially those using telecommuting. Our study starts a broader conversation about the evolving nature of work and the role of virtual collaboration in achieving organizational goals.

Recognizing the inherent subjectivity in assessing phenomena suggests promising paths for future research. While subjective opinions offer valuable insights, they can also introduce biases and limitations. Therefore, integrating objective performance metrics into research methodologies can provide a more balanced perspective. By quantifying various aspects of the subject under investigation, researchers can mitigate the influence of subjective biases and enhance the rigor of their analyses. Additionally, adopting a multi-method approach that combines qualitative and quantitative techniques can enrich the depth and breadth of inquiries, allowing researchers to capture a more comprehensive understanding of the phenomenon.

Moreover, revisiting investigations over a broader time interval holds significant potential for refining our understanding. Such an approach enables researchers to observe patterns and trends that may unfold over extended periods, shedding light on the long-term viability and effectiveness of proposed models. By considering routine and external factors that may impact motivation and sustainability, researchers can develop more robust frameworks that account for real-world complexities and dynamics. This holistic perspective can inform the development of more resilient and adaptable models, better equipped to navigate evolving circumstances and challenges. In essence, recognizing and addressing limitations paves the way for more nuanced and insightful research endeavors, ultimately advancing knowledge and driving innovation.

References

- Das, S., Zutshi, A., & Janardhanan, J. (2021). *The Great Lockdown: Lessons Learned During the Pandemic from Organizations Around the World*. Hoboken, NJ: John Wiley & Sons, INC.
- Forsgren, N., Humble, J., & Gene, K. (2018). *Accelerate: Building and Scaling High Performing Technology Organizations*. Portland, OR: IT Revolution Publishing.
- Hall, K., & Hall, A. (2021). *Leading Remote and Virtual Teams: Managing Yourself and Others in Remote and Hybrid Teams or When Working from Home*. Berkshire, UK: Global Integration Limited.
- Laloux, F. (2014). *Reinventing Organizations*. München, Germany: Change Factory Publishing.

- Neeley, T. (2021). *Remote Work Revolution: Succeeding from Anywhere*. Harvard: Harvard Business School.
- Owen, J. (2021). *Smart Work: The Ultimate Handbook for Remote and Hybrid Teams*. London, UK: Bloomsbury Publishing.
- Purvanova, R. K. (2021). *The Impact of Virtuality on Team Effectiveness in Organizational and Non-Organizational Teams: A Meta-Analysis*. Retrieved from <https://iaap-journals.onlinelibrary.wiley.com/doi/10.1111/apps.12348>.
- Sanchez, D., Rueda, A., Zimman, H., Haydon, R., Diaz, D., & Kawasaki, K. (2023). *Team Success: A Mixed Methods Approach to Evaluating Virtual Team Leadership Behaviors*. Retrieved from MDPI - Publisher of Open Access Journals
- Skelton, M., & Pais, M. (2019). *Team Topologies – Organizing Business and Technology Teams for Fast Flow*. Portland, OR: IT Revolution Publishing.