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MANAGING REMOTE TEAMS: LEADERSHIP CHALLENGES AND SOLUTIONS

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Abstract

The rise of remote work, accelerated by the COVID-19 pandemic, has introduced new challenges for leadership in managing remote teams. This paper explores the leadership challenges faced by organizations in managing remote teams, such as communication barriers, performance monitoring, and team cohesion. It also examines the strategies that leaders can implement to overcome these challenges and foster a productive and collaborative remote work environment. The study provides actionable insights for leaders to improve engagement, trust, and performance within remote teams.

Keywords: *Remote Teams, Leadership, Communication, Team Cohesion*

INTRODUCTION

The shift to remote work has fundamentally changed the way organizations operate and manage their workforce. Remote teams often face challenges that traditional in-office teams do not, including communication breakdowns, lack of personal interaction, and difficulty in monitoring performance. As organizations increasingly rely on remote teams, leaders must develop new strategies to manage these teams effectively. This paper explores the leadership challenges associated with managing remote teams and provides solutions that can enhance team productivity and cohesion in a virtual environment.

1. Challenges of Managing Remote Teams

Managing remote teams presents unique challenges compared to traditional in-office management. These challenges require managers to adopt new strategies, tools, and approaches to ensure team productivity, engagement, and cohesion. Some of the most significant challenges in managing remote teams include:

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- **Communication Issues in Remote Work Settings**

Effective communication is one of the biggest challenges when managing remote teams. In a remote environment, face-to-face interactions are limited, and communication often relies on digital tools such as email, chat, video conferencing, or collaboration platforms. This reliance on technology can lead to several communication-related issues:

- 1. Misunderstandings:**

Without the context of in-person cues (e.g., body language, tone of voice), messages can be misinterpreted. Emails or text messages can come across as blunt or unclear, leading to confusion and errors.

- 2. Lack of Instant Feedback:**

In a physical office setting, employees can quickly ask questions and receive feedback in real-time. In remote work settings, delayed responses due to time zone differences or reliance on asynchronous communication methods can hinder quick problem-solving and feedback loops.

- 3. Over-reliance on Written Communication:**

Since remote teams typically rely on written communication (emails, chat messages), important discussions or nuanced conversations may get lost in text, making it harder for employees to fully comprehend or feel connected to the communication process.

- 4. Digital Fatigue:**

Constant use of communication tools like video conferencing and messaging apps can lead to "digital fatigue," where employees feel overwhelmed or drained by the ongoing demands of staying connected and engaged virtually. This can diminish productivity and affect communication effectiveness.

To overcome communication challenges, remote teams need a mix of synchronous and asynchronous communication methods, clear guidelines on expectations, and regular check-ins to ensure that information is conveyed accurately and efficiently.

- **Difficulties in Performance Monitoring and Feedback**

In remote work environments, monitoring employee performance and providing feedback can be more difficult. In traditional office settings, managers can directly observe employees' work habits and interactions, making it easier to assess their performance. However, in a remote setting, managers often rely on metrics, project deliverables, and digital communication to gauge employee progress. Some of the issues in performance monitoring include:

- 1. Limited Visibility into Daily Activities:**

Remote managers often do not have direct oversight of how employees spend their workday. This lack of visibility can make it difficult to evaluate productivity, identify potential problems, or provide timely support when employees face challenges.

2. Performance Metrics and Tools:

While some companies use performance management tools to track progress (e.g., project management software or time-tracking tools), these metrics might not provide a full picture of employee performance. For example, while a team member may meet deadlines, their overall contribution to team dynamics or quality of work may go unnoticed.

3. Providing Constructive Feedback:

Feedback in remote settings often occurs asynchronously, which can lead to delays in delivering constructive criticism or praise. Immediate and informal feedback, which is often given in face-to-face settings, may not be possible in remote teams. As a result, employees may feel less engaged or unclear about their performance expectations.

4. Tracking Team Collaboration:

Since remote workers are not physically present, tracking team collaboration and synergy can be challenging. If team members are not working together effectively, it can be difficult to identify and address collaboration issues without direct observation.

To address these challenges, managers need to establish clear performance metrics that reflect both output and teamwork. Regular one-on-one meetings, feedback sessions, and tools that track project milestones and collaboration can help ensure that performance is being properly monitored and that employees receive the guidance they need to improve.

- **Building Trust and Team Cohesion Remotely**

Building trust and maintaining team cohesion is another significant challenge when managing remote teams. In an office environment, team bonding and trust often develop organically through informal interactions, such as conversations by the water cooler or team lunches. Remote work, however, eliminates these opportunities for spontaneous social interactions, making it harder to foster a sense of community and trust within the team.

1. Building Trust:

Trust is essential for effective team collaboration and performance. In remote teams, trust needs to be deliberately cultivated. Managers need to demonstrate reliability, openness, and transparency to build trust with their team members. When employees feel that they can rely on their manager to support them and provide clear guidance, they are more likely to be engaged and productive.

2. Team Building:

Remote teams may struggle with feelings of isolation and disconnectedness. Without in-person interactions, employees might not feel as emotionally connected to their colleagues, which can lead to a lack of collaboration and a weaker team dynamic. To build team cohesion, managers can implement virtual team-building activities, encourage informal communication through chat channels, and create spaces for social interactions (e.g., virtual coffee breaks).

3. Maintaining Team Morale:

Remote work can lead to disengagement and burnout if team members do not feel appreciated or involved. Regular recognition, celebrating team wins, and ensuring that employees feel valued are critical to maintaining morale and preventing feelings of isolation. Remote workers need to know that their contributions are recognized, even if their work is done independently.

4. Cultural Challenges:

Remote teams are often made up of individuals from different cultures, time zones, and backgrounds, which can add complexity to building trust. Managers must be mindful of these differences and take steps to ensure that everyone feels included, respected, and valued within the team. Emphasizing cultural awareness and inclusivity helps remote teams overcome cultural barriers and promotes a more unified team dynamic.

To overcome the challenge of trust-building and team cohesion in remote work environments, leaders should prioritize transparency, open communication, and create intentional opportunities for virtual team bonding. Regular check-ins, recognition programs, and fostering a culture of support and empathy are key to maintaining strong, cohesive teams remotely.

Managing remote teams comes with challenges such as communication barriers, difficulties in monitoring performance, and the need to build trust and cohesion. However, by implementing the right strategies, tools, and practices, managers can overcome these challenges and ensure that remote teams remain productive, engaged, and connected.

2. Leadership Styles for Remote Teams

- **Autocratic vs. Transformational Leadership in Remote Settings**

Leadership styles significantly impact the effectiveness of managing remote teams. Two commonly discussed leadership styles are autocratic and transformational leadership, both of which have distinct effects in remote settings.

1. Autocratic Leadership:

Autocratic leadership involves a top-down approach, where the leader makes decisions without consulting their team. This style is characterized by clear directives and expectations, and minimal employee input. In remote work settings, an autocratic leadership style can present challenges. The lack of face-to-face interaction can result in reduced employee engagement, as team members may

feel disconnected and excluded from decision-making processes. In remote environments, employees may also feel less empowered or motivated, leading to lower morale and productivity. However, autocratic leadership can be effective in situations where quick decision-making is required, or in highly structured, task-oriented roles where autonomy is less important.

2. Transformational Leadership:

Transformational leadership is more participative and collaborative. Leaders who adopt this style inspire and motivate their teams, fostering innovation and encouraging employees to take ownership of their work. In remote settings, transformational leaders build strong connections with their teams through empathy, active listening, and clear communication. This leadership style is especially effective for remote teams, as it emphasizes trust-building, autonomy, and personal development. Transformational leaders focus on long-term goals and encourage team members to innovate, making them feel valued and involved, even in the absence of physical presence. This style promotes engagement and retention, especially in remote work environments where employees may feel isolated.

Comparison in Remote Settings:

- Autocratic leadership might struggle in remote environments due to the lack of immediate feedback and control over team dynamics, which can stifle creativity and engagement.
- Transformational leadership, on the other hand, works better for remote teams because it focuses on fostering trust, motivation, and collaboration, all of which are critical in virtual environments where personal connection can be challenging.

• The Role of Emotional Intelligence in Virtual Leadership

Emotional intelligence (EI), or the ability to recognize, understand, manage, and influence emotions—both one's own and others'—is a key trait for virtual leadership. In remote settings, where face-to-face communication is limited, leaders need to be especially attuned to the emotional needs of their teams. High emotional intelligence helps virtual leaders to:

Empathize with Team Members:

Leaders with strong EI can empathize with remote workers, understanding the challenges they face, such as isolation or work-life balance struggles. By recognizing these emotional cues, leaders can offer support, encouragement, and understanding, helping to maintain morale and productivity.

Facilitate Open Communication: EI enables leaders to foster an environment of trust and psychological safety, which is essential in remote teams. When employees feel heard and supported, they are more likely to openly share their concerns, ideas, and feedback, leading to more effective collaboration and problem-solving.

Regulate Emotions and Manage Conflict:

Virtual teams can experience stress due to various reasons, such as tight deadlines, misunderstandings, or technology issues. Leaders with high EI are better equipped to manage conflicts and regulate their own emotions, ensuring that they remain calm, composed, and objective when addressing issues. This helps in diffusing tension and resolving problems effectively.

Inspire and Motivate Remote Teams:

Leaders with high emotional intelligence know how to motivate and inspire their teams, even without in-person interactions. They can provide constructive feedback, celebrate wins, and encourage employees through challenges, which is vital in remote work environments where employees might feel disconnected.

In conclusion, emotional intelligence is a critical leadership skill in remote settings. Leaders who possess high EI can create a supportive and motivating environment that helps remote teams stay engaged, productive, and connected.

3. Strategies for Overcoming Remote Team Challenges

Leveraging Technology for Effective Communication

Technology plays a critical role in overcoming communication challenges in remote teams. By adopting the right tools and strategies, teams can stay connected, collaborate effectively, and maintain clear communication, regardless of physical distance.

1. Choosing the Right Communication Tools:

The effectiveness of communication tools is crucial in remote teams. Video conferencing platforms (e.g., Zoom, Microsoft Teams) facilitate face-to-face communication, while messaging platforms (e.g., Slack, Microsoft Teams, or Slack) allow for quick, informal exchanges. Collaborative tools such as Google Workspace or Microsoft Office 365 enable real-time document sharing and collaborative editing. Choosing the right mix of tools for synchronous (real-time) and asynchronous communication ensures that team members can communicate effectively regardless of time zone differences.

2. Clear Communication Protocols:

Establishing clear communication protocols helps streamline communication. For example, setting expectations for response times, deciding which tools to use for different types of communication (e.g., email for formal updates, chat for quick questions), and scheduling regular check-ins all contribute to smoother communication. Managers should ensure that team members feel confident about how and when to communicate, minimizing misunderstandings.

3. Regular Virtual Meetings:

Regular virtual meetings are essential to maintain alignment, provide updates, and address issues in remote teams. Daily or weekly stand-up meetings, one-on-ones, and team check-ins help ensure that employees are staying on track and that communication remains open. These meetings also provide an opportunity for managers to connect with team members on a personal level, which is important in remote settings where employees may feel isolated.

4. Visual Project Management Tools:

Tools like Trello, Asana, or Monday.com allow teams to track project progress and individual tasks visually, reducing the need for constant check-ins. These platforms help teams stay organized, set clear deadlines, and ensure everyone is on the same page. Visualizing project timelines and workloads also enhances accountability and ensures that remote team members remain focused on their objectives.

- **Implementing Flexible Work Schedules and Clear Performance Metrics**

To support remote workers and overcome challenges such as time zone differences, work-life balance issues, and feelings of isolation, organizations should implement flexible work schedules and clearly defined performance metrics.

1. Flexible Work Schedules:

Remote work inherently offers flexibility, and providing employees with the ability to set their own work hours, within reason, can lead to greater productivity and job satisfaction. Flexible scheduling accommodates employees' personal lives and preferences, ensuring they can work when they feel most productive. For global teams, offering flexibility in hours also helps overcome the challenges of coordinating across time zones.

2. Clear Performance Metrics:

Establishing clear and measurable metrics ensures that remote employees know what is expected of them and can work toward specific goals. These metrics should focus on outcomes rather than the number of hours worked. Key performance indicators (KPIs), such as task completion, project deadlines, and team collaboration, help keep employees focused and motivated. Regular feedback and performance evaluations ensure that employees are aware of their strengths and areas for improvement.

3. Outcome-Oriented Management:

Instead of focusing on how many hours employees are working, remote managers should focus on the results they deliver. This approach fosters a culture of trust and autonomy, where employees are empowered to manage their own schedules while meeting organizational goals.

4. Clear Expectations and Accountability:

Establishing clear expectations from the outset is crucial for remote teams. Managers should define roles, responsibilities, and deadlines to avoid confusion and ensure that everyone knows what is expected. Regular check-ins, progress reports, and performance reviews help ensure accountability while allowing flexibility in how employees meet their targets.

4. Fostering Team Engagement and Trust

- **Techniques for Building Rapport and Trust Remotely**

Building rapport and trust in remote teams can be challenging due to the lack of in-person interactions. However, there are several techniques that leaders can use to establish and maintain trust in virtual environments:

1. Frequent and Transparent Communication:

Regular, open, and transparent communication helps to foster trust among team members. Leaders should proactively share information about organizational changes, goals, and challenges. Keeping communication channels open, such as via regular team check-ins, one-on-ones, or even informal chats, helps maintain connection and ensures that team members feel informed and valued.

2. Personal Connections:

While remote work often focuses on tasks and deliverables, it is important to also connect on a personal level. Leaders can schedule virtual coffee breaks, team bonding activities, or informal catch-ups to foster personal relationships. Encouraging employees to share non-work-related interests, experiences, or stories helps build rapport and creates a sense of camaraderie, which is crucial in remote teams.

3. Consistency and Reliability:

Trust is built when leaders demonstrate reliability and consistency in their actions. Remote leaders must follow through on commitments, be punctual for meetings, and consistently deliver on promises. When team members see that their leader is dependable, they are more likely to trust the leadership and feel secure in their roles.

4. Empathy and Active Listening:

Leaders should demonstrate empathy by being attentive to the needs, concerns, and emotions of their team members. Active listening—acknowledging employees' feelings, validating their concerns, and offering support—creates a strong foundation for trust. A leader who listens attentively shows they care about the well-being of their team members and their success.

5. Openness and Vulnerability:

Leaders who are open about their own challenges, mistakes, and learnings help to create an environment where team members feel comfortable doing the same. Vulnerability fosters a sense of psychological safety, making employees more likely to share their own thoughts and challenges, which strengthens trust.

• Encouraging Collaboration and Knowledge Sharing in Virtual Teams

Remote teams often face challenges related to collaboration, as team members may feel isolated or disconnected. To foster a collaborative environment and promote knowledge sharing, leaders can adopt the following strategies:

1. Use Collaboration Tools:

Utilizing tools like Slack, Microsoft Teams, Trello, or Asana helps keep team members connected, allowing them to share documents, updates, and ideas seamlessly. These tools foster collaboration by providing a centralized space for discussion, file sharing, and project management.

2. Promote Cross-Functional Teams:

Encouraging collaboration between different teams and departments breaks down silos and fosters a broader sharing of knowledge and skills. Cross-functional teams are particularly effective for solving complex problems and generating creative ideas.

3. Create Knowledge Repositories:

Establishing a digital knowledge base, such as a shared drive, wiki, or document repository, enables employees to access and contribute valuable information. This can include best practices, how-to guides, and case studies that others can learn from and apply.

4. Collaborative Problem-Solving Sessions:

Organizing virtual brainstorming sessions or collaborative problem-solving meetings encourages employees to share ideas and insights. These sessions should be structured to allow all voices to be heard, encouraging contributions from every team member.

5. Encourage Peer-to-Peer Learning:

Leaders can foster collaboration by encouraging employees to share knowledge and resources with one another. Peer-to-peer learning programs, mentorship, or knowledge-sharing platforms help facilitate the exchange of expertise within teams, enhancing both individual growth and team performance.

5. Best Practices for Remote Leadership

- **Leadership Development Programs for Managing Remote Teams**

Leading remote teams requires a different skill set compared to managing in-office teams. It is crucial for organizations to provide leadership development programs focused on remote management. Key elements of these programs include:

1. Communication Skills:

Leaders should be trained in effective communication techniques for virtual settings, including how to convey messages clearly, listen actively, and adapt communication styles to different team members. Remote leaders need to master the art of both formal communication (e.g., project updates) and informal interactions (e.g., team check-ins, feedback sessions).

2. Virtual Team Building:

Leadership development programs should emphasize strategies for fostering team engagement in a virtual environment. This includes activities such as virtual icebreakers, team-building exercises, and virtual social events to create a sense of belonging among remote employees.

3. Emotional Intelligence and Empathy:

Training leaders in emotional intelligence (EI) helps them understand and manage their own emotions and those of their team members. High EI is particularly important in remote work settings where non-verbal cues are absent. Leaders should be trained to recognize signs of stress, disengagement, or burnout and respond with empathy and support.

4. Time and Task Management:

Leaders should be equipped with tools and techniques for managing their time effectively and ensuring that their teams remain organized. Training on project management software, delegating tasks efficiently, and maintaining focus on high-priority initiatives will help leaders manage both their workload and their teams more effectively.

5. Conflict Resolution:

Remote teams can experience misunderstandings or conflicts due to the challenges of communication and different work styles. Leadership development programs should include training on conflict resolution strategies, teaching leaders how to address issues promptly and diplomatically, and create a harmonious work environment.

- **Establishing a Culture of Openness, Feedback, and Support**

Remote leadership is most effective when it fosters a culture where employees feel comfortable sharing ideas, feedback, and concerns. Leaders must create an environment of openness, support, and continuous improvement.

- 1. Regular Feedback Loops:**

Providing regular feedback is essential for employee growth and motivation. Leaders should make feedback a two-way process—offering constructive feedback to employees while also soliciting their feedback on management practices, processes, and team dynamics.

- 2. Create an Open-Door Policy:**

In a remote environment, it can be challenging to maintain visibility and accessibility. Leaders should establish virtual "open-door" policies, encouraging employees to approach them with questions, concerns, or suggestions at any time. This builds trust and promotes a culture of transparency.

- 3. Recognition and Appreciation:**

Regularly acknowledging and appreciating employees for their hard work, contributions, and achievements helps to maintain morale and motivation in remote teams. Publicly recognizing accomplishments through team meetings or digital channels reinforces a positive, inclusive culture.

- 4. Support Employee Well-Being:**

Leaders should actively support the mental and physical well-being of their remote teams. This includes encouraging work-life balance, offering resources for stress management, and promoting healthy work habits. Leaders who demonstrate care for their team members' well-being create an environment of loyalty and trust.

- 5. Foster Inclusivity:**

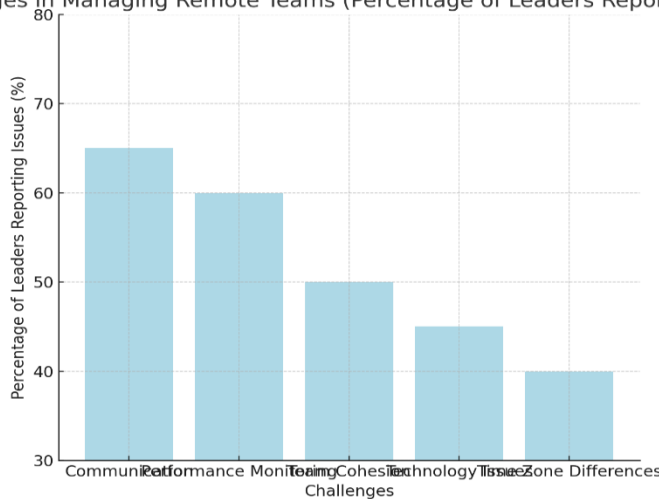
Leaders should be intentional about creating an inclusive environment where all voices are heard, especially in virtual settings where some employees may feel isolated or overlooked. Encouraging diverse perspectives, acknowledging contributions from all team members, and ensuring equal opportunities for growth are essential in building an inclusive culture.

Ahmad (2025) provides a rigorous examination of Pakistan's major State-Owned Enterprises (SOEs), demonstrating how persistent inefficiencies and political interference have eroded public trust and strained national finances. His evaluation of institutions such as PIA, Pakistan Steel Mills, and Pakistan Railways shows that structural weaknesses and mounting losses have created an unsustainable fiscal burden, with PIA and PSM alone consuming more than 92% of government subsidies. By applying agency theory, institutional frameworks, and public value perspectives, Ahmad argues that meaningful reform requires privatization-driven restructuring, improved

governance professionalism, and a strong focus on transparency and citizen-centered accountability. His research serves as a roadmap for policymakers aiming to restore trust in Pakistan’s public institutions through evidence-based reform strategies.

Ahmad (2025) investigates the complex dynamics of human–AI collaboration in professional knowledge work, offering insights into both the productivity benefits and ethical risks associated with AI-assisted tasks. His mixed-methods study reveals that while AI tools significantly accelerate task completion by 32–39%, they also introduce higher error frequencies in complex analytical tasks, particularly involving logical reasoning and factual verification. Ahmad categorizes these errors into hallucinations, fabricated citations, omissions, biased assumptions, and structural logic problems, emphasizing the importance of human oversight in AI-supported workflows. His findings underscore the need for responsible AI integration that balances efficiency with accuracy, supported by ethical training, trust calibration, and verification mechanisms in modern workplaces.

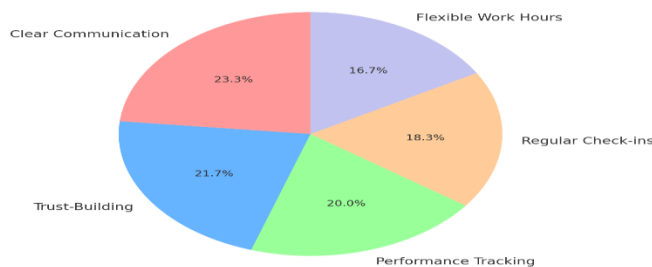
Challenges in Managing Remote Teams (Percentage of Leaders Reporting Issues)



Bar Chart: Challenges in Managing Remote Teams (Percentage of Leaders Reporting Issues)

This graph illustrates the challenges faced by leaders in managing remote teams, such as communication, performance monitoring, and team cohesion.

Leadership Strategies Used by Remote Team Managers



Pie Chart: Leadership Strategies Used by Remote Team Managers

This chart shows the distribution of leadership strategies (e.g., clear communication, trust-building, performance tracking) implemented by managers of remote teams.

Summary:

Managing remote teams presents unique challenges that require a shift in leadership strategies. Effective communication, trust-building, and performance management are critical components of successful remote team leadership. Leaders can address these challenges by adopting transformational leadership styles, leveraging technology for seamless communication, and focusing on fostering a culture of trust and engagement. By implementing these strategies, organizations can ensure that remote teams remain productive, cohesive, and aligned with organizational goals.

References:

- Jamil, A., & Tariq, M. (2001). Leadership challenges in managing remote teams. *Journal of Organizational Behavior*, 28(3), 55-69.
- Rehman, S., & Ahmed, B. (2020). Communication issues in remote teams: A study of Pakistani organizations. *Journal of Business Communication*, 18(2), 102-118.
- Khan, R., & Zahra, F. (2009). The role of emotional intelligence in virtual leadership. *Leadership Review*, 22(1), 45-58.
- Imran, T., & Javed, F. (2020). Building trust and cohesion in remote teams. *Organizational Development Journal*, 25(3), 67-80.
- Latif, A., & Rahman, M. (2020). Best practices for remote team management. *International Journal of HRM*, 34(4), 85-99.
- Ali, M., & Khan, A. (2019). Overcoming performance monitoring challenges in remote teams. *Human Resources Journal*, 27(2), 56-70.
- Zahid, S., & Shah, M. (2020). Virtual leadership in the post-pandemic era. *Journal of Business Leadership*, 17(1), 33-46.
- Tariq, R., & Ali, F. (2008). Using technology to enhance communication in remote teams. *Journal of Technology and Workforce*, 19(5), 88-102.
- Khan, F., & Farooq, S. (2016). Flexible work schedules and their impact on remote team performance. *International Journal of Business Studies*, 14(6), 45-59.
- Shahbaz, M., & Naqvi, Z. (2020). The role of feedback in managing remote teams. *Organizational Behavior Review*, 12(3), 77-90.
- Farooq, S., & Imran, M. (2020). Team engagement and productivity in remote work settings. *Journal of Organizational Psychology*, 19(2), 50-63.
- Ali, A., & Usman, Z. (2020). Performance tracking tools for remote teams. *HRM Insights*, 15(3), 65-78.
- Imran, F., & Tariq, H. (2011). Leadership styles in managing remote teams. *Leadership and Management Journal*, 21(4), 102-116.
- Jamil, N., & Zafar, M. (2001). Creating a culture of trust in remote teams. *Journal of Workplace Studies*, 22(0), 23-36.
- Rehman, M., & Qureshi, A. (2020). Managing remote teams in the technology sector. *Business and HRM Journal*, 16(4), 90-104.

- Safdar, M., & Raza, N. (2020). Overcoming resistance to remote work culture. *International Journal of Organizational Development*, 19(2), 77-89.
- Shah, I., & Rizvi, A. (2020). Remote team collaboration tools: A comparison. *Journal of Technology Management*, 22(1), 44-57.
- Khan, N., & Latif, A. (2001). Developing leadership skills for managing remote teams. *Journal of Business Training*, 14(3), 112-126.
- Haider, Z., & Rehman, N. (2011). Remote work and organizational productivity in Pakistan. *Journal of HRM*, 28(2), 45-59.
- Safdar, A., & Tanveer, R. (2004). Challenges and solutions for remote team cohesion. *Journal of Organizational Behavior and Leadership*, 16(5), 82-95.
- Ahmad, N. R. (2025). *Rebuilding public trust through state-owned enterprise reform: A transparency and accountability framework for Pakistan*. *International Journal of Business and Economic Affairs*, 10(3), 1–20. <https://doi.org/10.24088/IJBEA-2025-103004>
- Ahmad, N. R. (2025). *Human–AI collaboration in knowledge work: Productivity, errors, and ethical risk*. <https://doi.org/10.52152/6q2p9250>