Exploring the Impact of Remote Work on Organizational Outcomes A Case Study of the Lebanese Market

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Abstract

This research study explores the impact of remote work on operational performance of organizations in Lebanon investigating the effectiveness of remote work in comparison to other modes of work. The study identifies factors influencing remote work adoption, analyzes its financial impacts and examines the roles of human resource and performance management processes.

Hypotheses were formulated to explore relationships between remote work and revenue, profit, cost, and productivity performances. Data collection occurred over a five-week period, with 113 professionals from different Lebanese organizations participating in the survey. The subsequent Analysis, comprising descriptive, reliability, and regression tests, added depth to our understanding of remote work's implications, providing interesting insights for managerial decisions.

Findings reveal diverse patterns of influence, indicating remote work's potential contribution to financial gains through increased productivity and cost efficiencies. While direct associations with profit and cost changes may not be validated, the study highlights the importance of tailor-made remote work strategies, considering the long-term benefits and nuances of each situation.

Keywords: Remote work, Telework, Operational Performance, Financial Performance, Human Resources Management, Performance Management, Lebanon

1. Introduction

Due to technological advancements and "easy" access to communication platforms, remote work, like other phenomena or innovation emerged. However, due to the outbreak of the 2019 Covid pandemic, remote work witnessed widespread use as it was the only mode of work viable for businesses to continue to operate. Establishments rushed into adopting remote work as the only way to survive the pandemic. Although organizations continue to use it long after the pandemic was over, companies are increasingly faced with the managerial question of its efficiency and the decision of whether to adopt remote work mode as a standard or to go back to working from offices, or to shift to hybrid work modes. In order to choose the most optimal option, companies need to understand how these decisions affect their operations and what criteria they must consider to make the best choice.

2. LITERATURE REVIEW

Key elements that usually influence an organizations' choice of arrangements include, but are not limited, to the nature of work, industry, technological infrastructure, cost considerations, organization's culture and values, laws and regulations, talent acquisition and several other factors.

Work arrangements adoption however, can evolve over time as organizations adapt to changing internal and external factors and circumstances. Key drivers for that adoption could be communication and information technology advancements and organizations wanting to be leaner in order to be able to be more customer-focused, agile and competitive (Heerwagen, 2016).

In order for an organization to evaluate its overall standing and wellbeing as well as its position among its competitors, several elements should be monitored and measured. These elements include: Profit margins, working capital, current ratio, inventory turnover ratio, leverage, return on assets and return on equity (CFI, 2023). Organizations that effectively manage these elements and adapt to changing circumstances have a greater chance of achieving and sustaining positive financial performance.

Even though cutting costs and financial gains can be part of the benefits of remote work, there is a lack of literature on the clear and direct relationship between remote work and financial performance. There is also a lack of research on the optimal conditions and occupations from a fiscal point of view (Narayanan & Menon, 2017).

A systematic review on the available research studies related to telework and organizational economic performance was conducted by Mutiganda et al. The review aimed to investigate the relationship between telework and the Organizational economic performance indicators through available research studies. Studies related to the topic were identified through databases and registrars and after screening of the research studies, 55 studies from multiple countries addressing certain outcomes (with some studies addressing multiple outcomes) were included. Organizational economic performance indicators investigated included both financial performance (return on investments, profitability, and cost saving practices) and non-financial

performance indicators (such as quality, productivity, and turnover). The study concluded that telework indeed was associated with an increased Organizational performance. It is particularly positively associated when in homogenous samples with unique work tasks. The scholars propose that Organizations should consider remote work as a viable option for improving economic performance, but should also carefully consider the potential challenges and risks associated with remote work (Mutiganda, et al., 2022).

In another study conducted by scholar Aidar Vafin, the study indicated that altering strategy to accommodate remote work might enhance a firm's profitability. The research argued as well that remote work can increase employee productivity through factors like work-life balance and engagement, while also reducing operational expenses by adopting a work-from-home model (Vafin, 2022).

In order to understand how remote work can impact financial performance of an organization or how organizations can optimize their financial performance, the following theories were reviewed to provide foundation of understanding:

Goal setting theory:

This theory is a motivational theory that explores the factors that contribute to varying levels of performance in work-related tasks. The theory was developed and presented in the 1990s by Locke and Latham through extensive research spanning 25 years and drawing from nearly 400 studies. In general, the goal setting theory highlights the significance of setting clear and specific goals in driving motivation and improving performance in work-related tasks. It emphasizes the importance of understanding individual differences, contextual factors, and the role of goals in shaping behavior and outcomes (Locke & Latham, 2013).

Applying this theory in the context of remote work, goal setting can play a crucial role in driving financial output. By setting clear and measurable financial goals for remote workers, organizations can motivate individuals to achieve and even exceed their targets.

Expectancy Theory:

This theory focuses on the individual's belief that effort will lead to performance, performance will result in outcomes, and those outcomes will have value. The theory was developed by Victor Vroom in 1964. The theory concentrates on 3 relationships: Effort and performance, performance and reward and rewards/personal goals (Guide).

In the context of financial output in remote work, employees must believe that their efforts in performing tasks remotely will directly contribute to financial success. Organizations can enhance this belief by providing clear performance expectations, linking financial incentives to remote work outcomes, and offering rewards and recognition based on financial performance.

Contingency Theory:

The contingency theory is a management as well as leadership theory which proposes that the most effective leadership style and organizational practices are contingent upon the specific situation and the characteristics of the members involved. Contingency theory as well acknowledges that different situations require different approaches and that the effective leaders are those who can adapt their behavior and strategies to fit the demands of the situation at hand (Fiedler, 1958).

When it comes to the effect of remote work on financial output, organizations need to adapt their management practices to the unique challenges and opportunities of remote work. Factors such as communication strategies, performance monitoring systems, and incentives need to be tailored to the remote work context to maximize financial output.

Agency Theory:

The agency theory is an organizational as well as an economic theory. The theory explores the relationship between principals such as shareholders or owners and agents such as managers or employees within an organization. The theory also focuses on the conflicts of interest and the potential divergence of goals between principals and agents. The theory assumes that agents are self-interested and motivated by their own personal goals, which may not align perfectly with the goals of the principal. Thus the theory proposes that the principal needs to design appropriate mechanisms and incentives to align the interests of the agent with their own. These mechanisms may include performance-based incentives, monitoring systems, contracts, and accountability structures. The goal is to minimize agency costs, which are the costs associated with the principal-agent relationship, and ensure that agents act in the best interest of the principal (Zogning, 2017). In remote work, agency theory can be applied to ensure that employees are motivated to act in the best interests of the organization, including achieving financial goals. Clear performance expectations, performance monitoring mechanisms, and appropriate incentives can help align the interests of remote workers with the financial objectives of the organization.

In conclusion, even though the above theories are distinct in their focus and assumptions, commonalties include: performance and outcomes and goal orientation.

Performance and outcomes:

The theories above are concerned with performance and outcomes within organizational settings. They explore the factors that drive performance, the relationship between individual efforts and performance outcomes, and the impact of various factors on organizational effectiveness.

Goal Orientation:

The theories recognize the significance of goals in influencing behavior. They emphasize the role of specific, challenging, and achievable goals in motivating individuals and guiding their actions.

Scholars Mousa and Abdelgaffar argue that for the public sector to adapt to and adopt work from home processes the main challenge would be its ability to comply with institutional arrangements, performance management, and human resource management requirements.

Institutionalizing working from home or institutional arrangements by:

- A. Equipping employees with digital devices, software and online connectivity;
- B. Secure access to business-critical applications and networks;
- C. Set work from home guidelines;
- D. Adapt work processes and use remote communication and collaboration tools;
- E. Adjust management practices to remote working and supervision

Performance Management:

It is necessary to establish clear and consistent work from home guidelines, policies, and expectations. Strategic alignment and securing of work processes, as well as support and engagement of employees, are also essential. Measuring productivity of the remote workforce using objective metrics is an important aspect of effective performance management, which may be easier than measuring the productivity of physically present workers or "time in the work premises."

Human Resources Management:

The human resources management of work from home is equally important for effective WFH arrangements. Advantages of flexible work arrangements at the Organizational and individual level include productivity, cost-efficiency, talent management, work climate, and well-being. However, WFH can have detrimental effects on employee productivity and well-being if telework hours are too long and opportunities for interaction are limited. Other challenges for teleworkers include reduced visibility to managers, reduced sense of belonging, and less control over work boundaries. It is important for government agencies to invest in technology, resources, managerial skills, and support mechanisms to ensure employee well-being and demonstrate more understanding of employee-family demands. WFH also poses a challenge to the ILO international standards on working time, and constant accessibility of teleworkers through remote surveillance or monitoring applications can be intrusive, intimidating, and alienating (Mousa & Abdelgaffar, 2021).

3. METHODOLOGY

The research study relied on quantifiable, measurable, and objective information. Hypothesis testing and statistical analysis were conducted to reach to conclusions. A structured questionnaire was distributed among key executives and decision makers. Once the sample sized was reached, gathered data underwent statistical analysis to uncover patterns and associations, enhancing the ability to quantify the comprehension of the research issue.

The study also involved conducting semi-structured interviews with key executives and decision makers from the same sampled organizations. These interviews aided in gaining further in-depth knowledge while investigating the challenges, opportunities and benefits of remote work taking into consideration the contextual factors that lead to the adoption of remote work in the Lebanese market. Qualitative analysis such as thematic analysis was utilized to analyze the acquired data.

Utilizing both quantitative and qualitative methodologies aimed in strengthening the consistency and credibility of the research study. By gathering data from these different approaches, we were able to employ triangulation to facilitate cross-verification and the merging of results. This triangulation process ensured that the findings produced were strong, dependable, and reflective of the complex subject matter under investigation.

The objective of this research is mainly to explore and evaluate the effectiveness of remote work in terms of organizational outcomes in comparison to other adopted modes of work. The research aims as well at:

Analyzing the impact of the mode of work in terms of outcomes financial (profit, revenue, cost and productivity) Exploring the roles of human resource management and performance management processes in influencing the outcome of Lebanese organizations.

In summary, this research aims to aid Lebanese organizations in developing strategies and best practices. The overall goal of the research is to provide insights and recommendations for organizations seeking to adopt remote work in order to improve their processes and outcome.

In order to answer the research question "What is the impact of remote work on the financial performance of organizations in Lebanon?" and to achieve the objectives set for the study, the researchers used a qualitative data collection method, coupled with a quantitative data collection method through the use of a survey that

was electronically distributed. Questions for the survey were closed-ended and "Google Forms' was primarily used to design and create the survey.

Since the research topic is considered sensitive as it taps on multiple financial indicators related to organizations, distribution of the survey started with initial participants and then continued with referrals using the "snow ball effect survey" technique.

The study is cross-sectional as the data was collected in a single point in time.

A number of statistical Analysis techniques were utilized to test the gathered data. These techniques include descriptive statistics, regression Analysis, interaction effects models and reliability and validity tests.

To test the hypotheses related to the relationship between remote work and financial performance, as well as the moderating effects of the variables, regression analysis was found to be the most appropriate technique. The following are the hypothesis suggested by the authors:

RC1: Does remote work have an effect on an organization's financial performance in Lebanon?

H1a: Remote work is associated with an organization's revenue performance in Lebanon.

H1b: Remote work is associated with an organization's profit performance in Lebanon.

H1c: Remote work is associated with an organization's cost performance in Lebanon.

H1d: Remote work is associated with an organization's productivity performance in Lebanon.

Since the study is cross-sectional, a group of organizations in Lebanon were targeted, including those that have adopted remote work and those that have not adopted it, based on their size and sector.

Due to the lack of data on Lebanon, the researchers contacted Dun & Bradstreet (an American company that provides commercial data, analytics, and insights for businesses) for a closest estimate of registered numbers of entities in Lebanon. As per the estimate from Dun & Bradstreet, the number of registered active companies in Lebanon in 2023 is estimated at 250,000 companies, the researchers employed the following typical statistical technique to determine the sample size where:

 $n = Z^2 * p * (1-p) / d^2$

Where: n = sample size

Z = the standard normal deviate (Z=1.96 for a 70% confidence level)

p = the estimated proportion of the population (p=0.5)

d = the desired level of precision (5% margin of error)

As such, the sample size is estimated to be at least 109 companies.

4. FINDINGS

The gender distribution of the sample has equal representation of male (48.7%) and female (48.7%) participants where majority of respondents are within the 29-39 age group (61.1%), followed by the 40-50 age group (25.7%).

As for level of positions 40.7% of participants are in first-line management positions, 28.3% in mid-level management, and 23.9% in top management.

The sample includes a diverse industry representation, with significant participation in education, financial and insurance services, and information and communication sectors. 66.4% of respondents indicate that their organizations offer remote work options.

Regarding work policy, 58.4% report a hybrid work policy, while 33.6% primarily work in-office.

To test the hypothesis which suggests that Remote Work is associated with financial performance of organizations in Lebanon, in terms of revenue, profit, cost and productivity, Regression Analysis were conducted using the SPSS software.

Revenue Changes:

Descriptive statistics revealed a mean revenue change of 2.64, with a standard deviation of 1.268, and a mean for remote work options of 1.34, with a standard deviation of 0.475. A significant positive correlation (r = 0.279, p < 0.001) was found, indicating that companies offering remote work options tend to experience higher revenue changes. The linear regression model showed an R-squared value of 0.078, with a significant coefficient (β = 0.279, p = 0.003), supporting the perception that the presence of remote work options is associated with increased revenue changes.

Profit Changes:

Descriptive statistics for profit changes showed a mean of 3.00, with a standard deviation of 1.553, and a mean for remote work options of 1.34, with a standard deviation of 0.475. A weak positive correlation (r = 0.024, p = 0.399) was observed. The linear regression model indicated an R-squared value of 0.001, with a non-significant coefficient ($\beta = 0.024$, p = 0.799), suggesting that the presence of remote work options does not significantly impact changes in company profit.

Cost Changes:

Descriptive statistics for cost changes showed a mean of 2.23, with a standard deviation of 1.150, and a mean for remote work options of 1.34, with a standard deviation of 0.475. A negligible positive correlation (r = 0.021, p = 0.414) was observed. The linear regression model showed an R-squared value close to zero (R-squared = 0.000), with a non-significant coefficient ($\beta = 0.021$, p = 0.829), suggesting that the presence of remote work options does not significantly impact changes in company costs.

Productivity Changes:

Descriptive statistics for productivity changes showed a mean of 2.50, with a standard deviation of 1.166, and a mean for remote work options of 1.34, with a standard deviation of 0.475. A significant positive correlation (r = 0.352, p < 0.001) was observed. The linear regression model indicated an R-squared value of 0.124, with a significant coefficient ($\beta = 0.352$, p < 0.001), suggesting that the presence of remote work options is associated with increased productivity changes.

Remote Work Options, HR, Performance Management Processes and Revenue:

The analysis investigated the relationship between remote work options and changes in a company's financial performance, specifically in terms of revenue. Two separate ANOVA tests were conducted, one considering the presence of at least one Human Resources (HR) process and the other considering at least one performance management process.

Remote Work Options, HR Processes and Revenue:

The ANOVA analysis, focusing on companies with at least one implemented HR process, showed a statistically significant difference in the mean scores of changes in financial performance (revenue) between companies with and without remote work options. Companies offering remote work options had a mean score of 2.46, while those without had a mean score of 3.03. The Levene's test confirmed the reasonably equal variances assumption, and the overall model was significant (p = 0.033), indicating a relationship between remote work options and changes in financial performance. The effect size (R-squared) of 0.044 suggests that approximately 4.4% of the variance in changes in financial performance can be attributed to the presence of remote work options.

Remote Work Options, Performance Management Processes and Revenue:

Similar to the HR process test, the ANOVA analysis for companies with at least one implemented performance management process revealed a statistically significant difference in mean scores of changes in financial performance (revenue) between companies with and without remote work options. Companies offering remote work options had a mean score of 2.42, while those without had a mean score of 3.03. The Levene's test for equal variances indicated reasonably equal variances. The overall model was significant (p = 0.021), suggesting a relationship between remote work options and changes in financial performance. The effect size (R-squared) of 0.051 implies that around 5.1% of the variance in changes in financial performance can be explained by the presence of remote work options.

Summary:

The analysis provides interesting evidence of a positive relationship between remote work options and changes in revenue and productivity. However, no significant relationships were found with changes in profit or costs. These results indicate that the impact of remote work options on financial performance varies across different metrics. While offering remote work options appears to contribute to increased revenue and productivity, other factors may play a more significant role in influencing profit and cost changes.

Moreover, the combined results from both HR and Performance management processes analyzed consistently demonstrate a statistically significant relationship between the presence of remote work options and changes in financial performance (revenue). The effect sizes indicate that approximately 4.4% to 5.1% of the variance in financial performance changes can be attributed to remote work options. This aligns with the broader analysis, reinforcing the positive association between remote work options and higher revenue changes. The presence of HR and performance management processes appears to further emphasize and enhance this relationship, emphasizing the potential impact of comprehensive organizational practices on financial outcomes.

5. CONCLUSION AND RECOMMENDATIONS

While the available literature lacked direct exploration of the relationship between remote work and financial performance, our study contributed in bridging this gap by integrating relevant theoretical frameworks. Investigating factors and indicators that affect operational performance of organizations in Lebanon while building upon goal setting theory (Locke & Latham, 2013), expectancy theory by Victor Vroom (Guide), contingency theory (Fiedler, 1958), and agency theory (Zogning, 2017), where our analysis examined how remote work can impact financial performance depending on the set up of performance and human resources processes.

Our investigation unveiled diverse patterns of influence on financial performance indicators, revenue, profit, cost, and productivity changes associated with the presence of remote work options. The findings highlighted the potential of remote work to contribute to financial gains mainly through increased productivity. This resonates with Vafin's recent research (Vafin, 2022), which suggested that remote work strategies can positively influence productivity by leveraging engagement and work-life balance.

While our results did not reveal substantial evidence to support a significant relationship between remote work options and changes in company profit or costs, the analysis revealed that the presence of remote work options is positively associated with revenue changes, indicating that companies offering remote work tend to experience higher revenue gains. The lack of significant association between remote work options and changes in company profit or cost may be attributed to the complex interaction of factors that influence profit and cost, such as the industry characteristics, cost structures, and the unique nature of remote work implementation. When considering impact of remote work on profits and costs organizations are encouraged to consider the broader context and potential long-term benefits of remote work.

A significant positive impact of remote work options on changes in company productivity emerged from our analysis. This highlights the pivotal role of remote work in enhancing organizational productivity, resonating with the literature's emphasis on improved work-life balance and reduced commuting time.

The connection between remote work options, HR management processes and financial performance in terms of revenue further underscored the positive association between remote work and financial outcomes. Notably, the connection between remote work options, performance management processes, and financial performance changes highlighted the potential positive association between remote work and financial outcomes. The findings suggest that organizations with remote work options are more likely to engage performance management practices that enhance employee engagement and contribute to favorable financial performance.

6. RESEARCH LIMITATIONS AND FUTURE STEPS

This study is constrained by several limitations that should be addressed in future research endeavors. The primary constraint lies in the sample size, which is relatively modest when compared to the extensive scope of the target population. Consequently, the reliability of this study is limited due to the constraints posed by the sample size.

The analysis of remote work's impact on financial performance and organizational dynamics revealed valuable insights for managerial decision-making. To leverage remote work for enhanced financial outcomes organizations in Lebanon should focus on cultivating a culture of clear goal setting and performance expectations, drawing from goal setting theory (Locke & Latham, 2013). While the study did not establish significant associations with changes in profit or costs, organizations are advised to consider the long-term benefits and tailor strategies based on industry, cost structure, and remote work implementation characteristics.

Future research possibilities can build upon these findings to deepen the understanding of the complex relationship between remote work and financial performance. Exploring the potential moderating effects of industry characteristics and cost structures on the relationship between remote work and profit or costs can provide more nuanced insights. Additionally, investigating the role of leadership styles and communication strategies in enhancing remote work's impact on communication improvements and meeting deadlines can offer practical guidance for effective remote work implementation. Studies examining the evolution of remote work's influence on financial performance over time can provide insights into its sustainability and long-term implications. Finally, further exploration of the unique challenges faced by different ownership types and strategies for overcoming these challenges can offer practical insights for organizations operating in diverse contexts.

REFERENCES

- CFI.(2023,May10).corporatefinanceinstitute.com.Retrieved https://corporatefinanceinstitute.com/resources/accounting/financial-performance/
- Fiedler,F.(1958). Fiedler's contingency theory. Retrieved from https://d1wqtxts1xzle7.cloudfront.net/55344169/Fiedlers_contingency_theory-libre.pdf?1513822150=&response-content-disposition=inline%3B+filename%3DFiedlers_contingency_theory.pdf&Expires=1684155028&Signature=HctcPN
 - disposition=inline%3B+filename%3DFiedlers_contingency_theory.pdf&Expires=1684155028&Signature=HctcPN UrJtSjQDqR0LaDsJfuKBFueTZE8mykEDTLtlZiGz4
- Guide, M. S. (n.d.). *Expectancy Theory of Motivation*. Retrieved from https://www.managementstudyguide.com/expectancy-theory-motivation.htm
- Heerwagen, J. (2016). *The Changing Nature Of Organizations, Work, And Workplace* . Retrieved from https://www.wbdg.org/resources/changing-nature-organizations-work-and-workplace
- Ipsen, C., Veldhoven, M. v., Kirchner, K., & Hansen, J. P. (2021, February). Six Key Advantages and Disadvantages of Working from Home in Europe during COVID-19. Retrieved from https://www.mdpi.com/1660-4601/18/4/1826
- Kłopotek, M. (2017). The advantages and disadvantages of remote working from the perspective of young employees.

 Retrieved from http://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.baztech-ed42d0c6-5898-4b3b-a46e-f3ded21414c4
- Locke, E. A., & Latham, G. P. (2013). Goal setting theory, 1990. Retrieved from https://psycnet.apa.org/record/2013-00428-001
- Mousa, M., & Abdelgaffar, H. A. (2021). Work from Home in the Public Sector Context Post-Covid 19: Challenges and Barriers. Retrieved from https://www.researchgate.net/profile/Mohamed-Mousa-19/publication/350810365_Work_from_Home_in_the_Public_Sector_Context_Post-Covid-19_Challenges_and_Barriers/links/60bd438aa6fdcc22eae3d456/Work-from-Home-in-the-Public-Sector-Context-Post-Covid-19-Challeng
- Mutiganda, J. C., Wiitavaara, B., Heiden, M., Svensson, S., Fagerström, A., Bergström, G., et al. (2022, December 21). *A systematic review of the research on telework and organizational economic performance indicators.* Retrieved from https://www.diva-portal.org/smash/get/diva2:1716887/FULLTEXT01.pdf
- Narayanan, L., & Menon, S. (2017, November). *Telecommuting: The Work Anywhere, Anyplace, Anytime Organization in the 21st.* Retrieved from https://gsmi-ijgb.com/wp-content/uploads/JMM-V8-N2-P04-Lakshmi-Narayanan-Telecommuting.pdf
- Qu, J., & Yan, J. (2022, September 5). Working from home vs working from office in terms of job performance during the COVID-19 pandemic crisis: evidence from China. Retrieved from https://onlinelibrary.wiley.com/doi/abs/10.1111/1744-7941.12353
- Sigmund, T., & Sladek, P. (2021, January 13). *The Perception of Teleworking by University Students Before and During the COVID-19 Crisis.* Retrieved from https://www.shs-conferences.org/articles/shsconf/abs/2021/03/shsconf_glob20_04023/shsconf_glob20_04023.htm
- Thorstensson, E. (2020). The Influence of Working from Home on Employees' Productivity. Comparative document analysis between the years 2000 and 2019-2020. Retrieved from https://www.diva-portal.org/smash/get/diva2:1446903/FULLTEXT01.pdf
- Vafin, A. (2022, May). The Impact of Remote Work on Firm's Profitability: Optimizing Virtual Employee Productivity and Operational Costs. Retrieved from https://www.researchgate.net/publication/360672212_The_Impact_of_Remote_Work_on_Firm's_Profitability_Optimizing_Virtual_Employee_Productivity_and_Operational_Costs
- Zogning, F. (2017). *Agency Theory: A Critical Review.* Retrieved from European Journal of Business and Management: https://www.researchgate.net/profile/Felix-Zogning/publication/364812853_Agency_theory_A_critical_review/links/635b26578d4484154a3df176/Agency-theory-A-critical-review.pdf

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