



**Vaasan yliopisto**  
UNIVERSITY OF VAASA

**BINA TIMILSINA**

**Productivity in Remote and Hybrid Work:  
A Review of Post-Pandemic Perspectives in Kathmandu's IT Industry**

School of Management  
Master's thesis in Strategic  
Business Development

Vaasa 2026

---

**UNIVERSITY OF VAASA****School of Management**

<b>Author:</b>	BINA TIMILSINA
<b>Title of the Thesis:</b>	Title : A Review of Post-Pandemic Perspectives in Kathmandu's IT Industry
<b>Degree:</b>	Masters
<b>Programme:</b>	Strategic Business Development
<b>Supervisor:</b>	Tuire Hautala-Kankaanpää
<b>Year:</b>	2026 <b>Pages:</b> 76

---

**ABSTRACT:**

Increasing use of remote and hybrid work model has changed the dynamics of how organizations work, especially in knowledge-intensive fields like information technology. Although research in high-income nations has generally shown positive results, the effect of such work models in emerging economies such as Nepal is less known. This paper examines the determinants of productivity in remote and hybrid workplaces in the Kathmandu IT industry, and how workers perceive and experience the productivity in such arrangements.

The qualitative research design was chosen, semi-structured interviews with seven IT professionals working under remote and hybrid models. Thematic analysis was used to analyze the data in order to discover the major themes concerning individual productivity, organizational processes, and contextual conditions that influenced the working performance.

The results show that remote and hybrid work tend to favor personal productivity, especially with enhanced flexibility, less commuting time, as well as with a better possibility to concentrate on technical activities. Nevertheless, the results of productivity were different based on the type of work and the necessity of collaboration. Individual efficiency could be sustained or enhanced, but organizational productivity was more prone to the work-related challenges like communication delays, coordination problems, and ambiguous workflows. Often hybrid work was a favorite, as it meant that employees could work with a focus, but still have time to see each other face to face. Also, the contextual aspects including digital infrastructures, leadership styles, collaboration tools, and culture were critical in the determination of productivity results.

The research concludes that remote and hybrid work has the potential to increase productivity in Kathmandu IT industry, however, its efficacy relies on the success with which organizations align work models with infrastructure, management practices, and communication systems. The implications of these findings include gaining knowledge of remote and hybrid work in developing economies and providing practical knowledge to organizations that need to adopt remote and hybrid work.

---

**KEYWORDS:** Remote Work, Hybrid Work, Employee Productivity, Kathmandu IT Sector,

## Contents

1	Introduction	8
1.1	Research Gap	9
1.2	Research Problem	11
1.3	Thesis Structure	13
2	Literature Review	14
2.1	Remote and Hybrid Work	14
2.1.1	Remote Work and Hybrid Work in Developing Economics	15
2.1.2	Remote and Hybrid working in IT Industry	16
2.2	Productivity in IT Industry	18
2.3	Productivity in Remote and Hybrid Work	21
3	Methodology	27
3.1	Research Design	27
3.2	Sample Selection	27
3.3	Data Collection	28
3.4	Respondent Profile	29
3.5	Data Analysis	31
3.6	Assessment of the Quality of Data	31
4	Findings	33
4.1	Introduction to Findings	33
4.2	Work Environment and Infrastructure	33
4.3	Work Processes, Coordination, and Leadership	35
4.4	Social Dynamics and Work Experience	39
4.5	Productivity and Performance Outcomes	42
4.6	Contextual Challenges and Future Perspectives	45
4.7	Synthesis of Findings	47
5	Discussion	52
5.1	Discussion of Main Findings	52
5.1.1	Personal Productivity Under Remote and Hybrid Work	52

5.1.2	Organizational Productivity and Coordination	53
5.1.3	The Role of Digital Infrastructure in Remote and Hybrid Work Productivity	54
5.1.4	Social Dynamics and the Value of Hybrid Work	55
5.1.5	Kathmandu Context and the Long-Term Feasibility of Remote and Hybrid Work	56
5.2	Conclusion	57
5.3	Theoretical Implications	59
5.4	Managerial Implications and Recommendations	61
5.5	Limitations of the Study	65
5.6	Suggestions for Future Research	67
	References	69
	Appendices	75
	Appendix 1. Interview Questions	75

## Figures

Figure 1. Factors Influencing Productivity in Remote and Hybrid Work Model in IT ..... 25

Figure 2. Figure Illustrating key findings.....51

**Tables**

Table 1. Respondent Profile.....32

**Abbreviations**

AI/ML	Artificial Intelligence/ Machine Learning
CI/CD	Continuous Integration/ Continuous Delivery
DevOps	Development and Operations
GDPR	General Data Protection Regulation
GitHub	Code hosting and version control platform
HR	Human Resources
IT	Information Technology
Jira	Project management and issue-tracking tool
QA	Quality Assurance
SaaS	Software as a Service
Slack	Team communication and collaboration platform
VPN	Virtual Private Network
WFH	Work From Home

## 1 Introduction

The COVID-19 crisis has transformed the operation of organizations, and remote and hybrid work models have gained momentum rapidly around the world. Remote work is the term that is used to refer to employees working beyond traditional office environments, usually at home, with the help of digital communication tools (Ilag, 2021). Similarly, hybrid work is a flexible work format that enables employees to split time and work according to the needs of the organization and their personal interests (Vartiainen and Vanharanta, 2024). These models became more flexible with the pandemic, but also complicated the communication, collaboration, and engagement among employees (Ruvimova et al., 2025). Hybrid models influence employees' productivity, group cohesion and well-being in the IT sector where technology facilitates remote work particularly in developing economies such as Nepal. Problems related to infrastructure like unstable internet connection and electricity make it harder to adopt hybrid work (Ghimire et al., 2024). Moreover, socio-cultural influences in the form of organizational resistance and hierarchical organization are additional obstacles to the implementation of the hybrid work that provide obstacles to communication and trust (Kansakar and Sharma, 2023). The physical presence is an aspect of culture that makes it more difficult to switch to hybrid employment in Kathmandu (Ghimire et al., 2024). However, hybrid work models also have advantages, including a decrease in travelling time. The chronic traffic jams have traditionally slowed down the productivity of Kathmandu, and now hybrid work gives employees an opportunity not to travel to work every day, which may allow employees to reinvest time into more focused and productive work (Ghimire et al., 2024). Nonetheless, they are not evenly spread, and the rural workers experience more serious infrastructure issues (Ruvimova et al., 2025). Team dynamics are also important in the effectiveness of the hybrid work model in the IT sector of Kathmandu. In order to overcome communication and coordination difficulties, numerous organizations resort to collaboration apps such as Slack, Microsoft Teams, and Zoom (Ghimire et al., 2024). Productivity is increased with the help of such tools as Trello, Jira, and Asana, which enable better coordination of tasks, but not all workers are digitally literate (Kansakar and Sharma, 2023). This study examines the impacts of remote and hybrid models of work

on the productivity of the IT industry in Kathmandu, local technological infrastructure, and socio-cultural influences in the area. Although this research is based on the IT industry in Kathmandu, the implications of its results apply to the developed nations such as Finland. Remote and hybrid work is a trend across the globe and knowledge of how these models operate in developing nations may be applicable in solving similar issues in more developed economies. The challenges encountered in Kathmandu, including limited infrastructure and social relations, can be useful in enhancing remote working in other countries, like Finland, where the transition to hybrid work is also being made.

### **1.1 Research Gap**

Remote and hybrid work models have become an important trend in the global world especially in the wake of the COVID-19 pandemic. Although much has been done to determine their effects on the productivity of established economies, the situation of the emerging economies including the IT industry in Kathmandu has not been well researched. The existing research on productivity in hybrid and remote work has been mostly developed-country centric and therefore there exists the gap in the literature in the investigations of that model in relation to the emerging economies where technological, infrastructural, and socio-cultural factors have their own challenges (Bartik et al., 2023). Despite offering significant information on the effects of hybrid work in terms of productivity, the global studies do not sufficiently discuss the effects of these models in the countries that have different infrastructure and cultural backgrounds (McPhail et al., 2024; Pabilonia and Redmond, 2024).

In Nepal, the rate of digital development in urban areas such as Kathmandu is increasing rapidly, whereas in rural places, there are issues related to the lack of internet access, constant power outages, and the inaccessibility of more sophisticated digital tools, which complicates the process of adopting hybrid work models in the country (Kansakar and Sharma, 2023). Digital differences between urban and rural locations may also make the possibility of working hybrid even more complicated, as rural zones have even more serious connectivity challenges than cities. This gap will restrict the application of hybrid

work nationwide, and its consequences can affect employee productivity in remote and work-hybrid settings, where a smooth flow of communication and access to resources is necessary (Ruvimova et al., 2025). Although the research has demonstrated that hybrid work can improve productivity by providing more flexibility and saving overhead expenses, it also identifies problems like isolation, burnout, as well as boundaries between work and personal life, especially among remote workers (Choudhury et al., 2021). The challenge of ensuring strong team culture and establishing good coordination between remote and in-office workers is still a major challenge in Kathmandu IT sector (De Quadros et al., 2022; Ghimire et al., 2024). The work practices are still predetermined by hierarchical organizational structures and a high culture of preferring face-to-face presence, which makes the shift towards a hybrid model more challenging (Ghimire et al., 2024). All these socio-cultural difficulties coupled with the infrastructural and technological problems lead to a complicated situation which impacts the productivity performance in the Kathmandu IT industry, which is an unclear problem in the existing literature (Kansakar & Sharma, 2023).

Although studies on the hybrid work model have mostly addressed the developed economies, but with little focus on emerging economies such as Nepal, there is an urgent need to explore how the socio-cultural environment, technological infrastructure, and work culture in Kathmandu affect the productivity of remote and hybrid work within the IT sector (Choudhury et al., 2024). Also, the positive impacts of hybrid work on employee satisfaction and work-life balance may be mentioned in the global studies, yet the advantages might not strongly reflect the situation in Kathmandu, where infrastructural constraints and socio-cultural restrictions may undermine the advantages (Maity and Lee, 2025). The shortage of local research studies creates a big gap in comprehending the effects of technological access, employee involvement, and communication tools on productivity within the Kathmandu IT sector in the context of hybrid work models. Furthermore, although team collaboration tools, including Slack, Zoom, and Microsoft Teams have become indispensable when working with hybrid teams, the usefulness of these tools in ensuring that teams remain cohesive and productive in the Kathmandu IT

sector is under researched (de Souza Santos et al., 2024). Remote and hybrid environments will require effective and efficient collaboration tools, which will only succeed with digital literacy and the capacity of employees to familiarize themselves with new technological platforms (De Quadros et al., 2022). Regarding Kathmandu, where certain employees might encounter challenges using these tools, the approach to closing communication barriers and improving team dynamics is a question that has not been thoroughly investigated (Razzaq et al., 2024). The study will fill the gap by specifically discussing how hybrid and distance work models affect productivity in the Kathmandu IT industry. This research will deliver an important insight into the ways of optimizing hybrid work to achieve higher employee productivity in environments where technological, infrastructural, and socio-cultural issues are not comparable to those in developed countries. Moreover, the study will investigate how team collaboration tools, organizational culture, and communication barriers affect employee productivity in the IT sector in Kathmandu, thus providing new insights into hybrid work models in developing economies.

## **1.2 Research Problem**

In this study, productivity is mainly defined at the individual level. It is the capacity of employees to work efficiently, stay focused and use time efficiently. The organizational productivity is only perceived based on how respondents look at it especially on the aspects of coordination and efficiency in communication.

The remote and hybrid work models have changed the way organizations run across the world especially after the COVID-19 pandemic (Choudhury et al., 2024). These have brought a higher level of flexibility, autonomy, and possibly cost-efficiency but also come with the challenges of communication, coordination, accountability, and upholding productivity (Bartik et al., 2023; McPhail et al., 2024). Although these dynamics have been studied in high-income settings, there is not yet much empirical understanding of how these arrangements influence the productivity of employees in developing

economies like Nepal, where infrastructural, organizational, and social-cultural environments vary greatly (Cho et al., 2022; Maity and Lee, 2025).

There has been observable change in the IT sector in Kathmandu towards remote and hybrid work. However, current sources are more concerned with employment patterns, digital access, or HR practices and not on the practical implications of these models in terms of productivity in the context of day-to-day application (Rising Nepal, 2023; Rolling Nexus, 2024; SEED Financial, 2024). However, poor internet connection, frequent power outages and poor access to remote working applications may influence employee productivity and the effective application of the hybrid work model (Prasad et al., 2023). Further, socio-cultural aspects, such as work culture based on hierarchy and the unwillingness to adopt flexible arrangements, also make hybrid models even more challenging to implement in Nepalese organizations (Joshi, 2023; Kansakar and Sharma, 2023; Ghimire et al., 2024).

With these problems, it is essential to analyze how remote and hybrid work models influence individual productivity in the Kathmandu IT sector. This research will address this gap to understand the contribution of remote and hybrid work settings in productivity. To achieve this, it will collect firsthand information among the IT professionals within Kathmandu by conducting semi-structured interviews with the professionals on the impact of remote and hybrid arrangement on their efficiency and overall performance.

The following question will be answered by the research:

What are the effects of remote and hybrid work models on employee productivity in the IT sector of Kathmandu?

Even though the global literature discovered the possible benefits of hybrid work, including greater flexibility, shorter commute time, and improved work-life balance (Choudhury et al., 2021), these results may not be applicable in developing countries such as Nepal, where infrastructure and cultural demands are highly diverse (Kansakar

and Sharma, 2023). The results of this study will be likely to provide useful, context-specific information on how to enhance productivity in remote and hybrid work environments in the IT sector in Nepal. They will also add to the broader discourse of how remote and hybrid work systems can be tailored to the demands of new economies.

### **1.3 Thesis Structure**

This thesis has five parts. The study starts with an introduction where the contextual background and purpose of the study are reviewed. Also, this chapter defines the research questions and gives a summary of the thesis structure. It is followed by literature review that explores theoretical background of the study. It focuses on the past literature concerning remote and hybrid work model, productivity, and its use in developing economies. Chapter 3 details research methodology, which is the qualitative research design, sample selection, data collection (semi-structured interviews), and thematic analysis.. Data will include semi-structured interviews with 7 IT professionals in Kathmandu (developers, QA engineers, team leaders, HR/project managers) who are employed under a remote or hybrid model. With the support of secondary resources (company policies, job descriptions, and published reports), we will confirm the context and findings. In Results and Findings chapter, the most significant findings are presented based on the data and literature that was obtained. It identifies key elements affecting productivity in remote and hybrid work environments in the Kathmandu IT sector. The Discussion section then interprets these findings and connects them to the existing literature and provides their both practical and managerial implications. Lastly, the chapter also recognizes the limitations of the study and provides suggestions on future research to expand on the topic of productivity and adaptation to work models in the digitalized workplace in Nepal.

## 2 Literature Review

### 2.1 Remote and Hybrid Work

Remote work can be defined as a type of employment agreement in which employees perform their designated tasks offsite of the organization through digital communication, collaborative programs, and online project management systems (Cho et al., 2022; Ilag, 2021). This trend has become popular worldwide in the context of the COVID-19 pandemic when organizations shifted to remote work as a way to sustain business during lockdowns (Bartik et al., 2023; Bloom et al., 2015). Nevertheless, remote work is not perceived as a temporary crisis response anymore, it is now a core aspect of the contemporary workplace, at least in the IT and knowledge-driven industries (de Souza Santos & Ralph, 2022; Pabilonia and Redmond, 2024). To most professionals, it also represents a larger move to autonomy, flexibility, performance-based work over presence-based work (Vartiainen and Vanharanta, 2024).

Hybrid work is the system of employment, where an employee is able to work remotely and at the office depending on job requirements, organizational policies, or personal preference (Vartiainen and Vanharanta, 2024; Maity and Lee, 2025). This model was developed as a strategic buildup on remote work, where the flexibility of virtual working arrangements is combined with personal interaction characteristic of physical work (Matsudaira, 2023). Hybrid work has gained acceptance by many organizations, especially in areas of technology and IT due to its ability to balance operational efficiency and employee freedom (Teevan, 2022; McPhail et al., 2024). It offers the ability to work independently without losing the social capital generated by face-to-face interaction, which is crucial in the creative process and ingenious problem solving (Cho et al., 2024). The shift to the full-remote hybrid work has not been smooth sailing. As De Quadros et al. (2023) discovered, the software companies that adopted the hybrid systems also suffered coordination and quality control problems due to team members working in disparate temporal and space environments. Similarly, de Souza Santos et al. (2024a) found out that hybrid models need reformulation of managerial skills, including performance

monitoring and meeting systems to avoid miscomprehensions and workload imbalance. According to Cho et al. (2022), it is common that employees have a hard time balancing cognitive and emotional boundaries when they change their locations (home and office). To counter this, organizations are working towards formulating explicit rules on the days of attendance, communication tools, and virtual collaboration norms (Cid et al., 2023; Taugerbeck et al., 2025). In developing countries, weak digital infrastructure and poor internet access limit remote work adoption (Ghimire et al., 2024; Kansakar & Sharma, 2023).

To conclude, remote and hybrid work has increased because of technology and flexibilities. They provide freedom and productivity but demand effective infrastructure and new management habits to work successfully on the international level (McKinsey, 2022; Belzunegui-Eraso and Erro-Garcases, 2020).

### **2.1.1 Remote Work and Hybrid Work in Developing Economics**

Infrastructure conditions, local urban planning choices, and the differing organizational capabilities are the principal factors affecting remote and hybrid work patterns in the developing world (Caros and Zhao, 2024; Soroui, 2023). Unlike in high-income countries, developing countries typically have no reliable electricity, fast internet, and formalized remote working policies (Nguyen et al., 2024; Waight et al., 2022). These variations complicate and particularize the practice of hybrid work models (Webber et al., 2018; Tomy et al., 2025). The city policy is significant to support the remote working by expanding broadband, implementing digital governance, and reforming transportation (Caros and Zhao, 2024). Soroui (2023) notes that numerous economic development factors in the emerging markets have indicated uncertainty in how remote work can be incorporated in the planning of regions. The advantages of remote working, including the mitigation of congestion and decentralization of work, are not always achieved without the support of the policy (Nguyen et al., 2024; Choudhury et al., 2024). Internet connectivity and local co-working facilities at the city level are especially relevant in the developing cities like Kathmandu (Jamieson et al., 2025; Tomy et al., 2025).

Remote working is no longer regarded as a transitional solution to the pandemic. It now forms a stable component in the workplace in the IT and knowledge-based sectors (de Souza Santos & Ralph, 2022; Pabilonia and Redmond, 2024). Remote work is also a change toward autonomy and flexibility, where work output is important rather than physical attendance (Vartiainen and Vanharanta, 2024).

Hybrid work in the context of the IT sector in Nepal has become a trend as a middle ground between the conservative supervision and total liberty (Kansakar & Sharma, 2023). Hybrid work has emerged as an extension of remote work designed strategically and implementing flexibility offered by virtual working and collaboration provided by in-person communication (Matsudaira, 2023). However, unstable electricity supply and digital illiteracy of some staff usually complicate the implementation. According to Bhandari et al. (2024) and Ghalan et al. (2024) hybrid work in Nepal should be applied along with the regular use of virtual check-in, technical training, and equal access to digital resources to be effective. Therefore, the hybrid system is a practical approach to creation of economies in the transition of developing economies into modern and flexible work cultures.

The difficulty with coordination and quality control may also be encountered by companies that adopt hybrid systems since teams operate at various locations and times (De Quadros et al., 2023). Managers also require new competencies to monitor the performance and to arrange meetings in order to prevent misunderstandings and imbalance in the workload (de Souza Santos et al., 2024a). Employees might have issues with emotional and cognitive limits between work and home (Cho et al., 2022). In order to overcome these difficulties, most organizations establish explicit guidelines on attendance, communication, and collaboration standards to streamline hybrid systems (Cid et al., 2023; Taugerbeck et al., 2025).

### **2.1.2 Remote and Hybrid working in IT Industry**

Remote and hybrid work adoption has been at the leading edge in the IT sector because of its reliance on digital tools, modular project organization, and global team

constructions (Kemell and Saarikallio, 2023). IT work is work more focused on tasks than most other industries, and it is digitally mediated and usually asynchronous, which means it can be performed flexibly across space and time (Noda et al., 2023). The increased use of shared work tools, like Git, Slack, Jira, and cloud repositories, have allowed developers to connect smoothly without any physical attendance (Razzaq et al., 2024).

There are also practical advantages of remote work in the IT field, including more time to focus on tasks and less expensive commuting, which helps boost productivity (Noda et al., 2023). In the case of software developers and engineers, working at home allows further focus on coding and solving problems, not distracted by office activities (Choudhury et al., 2021). Nevertheless, remote work can be successful only under the condition of having an appropriate digital infrastructure, such as cloud computing services, communication packages, and cooperation systems (Razzaq et al., 2024).

Remote adaptation with sprints, code reviews, and continuous integration systems is assisted by software engineering workflows, especially those that are built based on Agile or DevOps models (Rot et al., 2023). These models concentrate on the iterative development, transparency, and regular communication, which can be ensured by well-organized distant ceremonies and tools (De Quadros et al., 2022).

The hybrid work model is a trend in the IT industry as it integrates the independence of the remote work system with the collaboration advantages of the physical interaction in the office (De Quadros et al., 2022). Hybrid models are more effective as they improve team coordination, communication, and creativity since teams can meet physically when needed (Choudhury et al., 2024). In order to make hybrid systems effective, there must be clear work schedules, aligned tasks, and effective utilization of collaboration platforms (Kemell & Saarikallio, 2023). In hybrids, developers tend to do a specialized coding session offsite with on-office days used to plan sprints, conduct retrospectives, or orient new employees (Choudhury et al., 2024).

Likewise, there is also a change in the social dynamics in virtual workspaces. According to Jamieson et al. (2025), the risks of cyber-hostility, exclusion, and workplace gossip

may be more frequent in team environments based on chat as compared to those that are not digitally oriented, or when team structures are not well-defined. Such risks are intensified in fully remote teams that do not have consistent norms or support systems (Waight et al., 2022). Lack of standardized procedures to support remote collaboration is another challenge that may cause communication problems and project delays (De Quadros et al., 2022). Remote employees also might not receive spontaneous communications or share of informal knowledge practiced in offices, and this slows down innovation and collaboration (Jamieson et al., 2025). It is impossible to manage hybrid teams without effective leadership and the possibility to motivate and engage employees without direct supervision (Felstead & Henseke, 2017).

As a reaction, some IT companies have also begun to employ peer mentoring, frequent check-ins, and guided workplaces, especially to assist junior developers and teams located in various places (Shahid et al., 2025). In general, remote and hybrid work in the IT industry has been associated with improved productivity. However, investments in technology, process adjustment, and team integration are needed to keep these models sustainable. Their long-term success will be determined by leadership and organizational culture.

## **2.2 Productivity in IT Industry**

The conventional definition of productivity includes the ratio of outputs to inputs over a period of time (Webber et al., 2018). In the work environment, it is the way that people or organizations transform effort, time, or resources into outcomes in the most economical way. At the employee level, productivity encompasses accomplishment of tasks, concentration, quality of work and timeliness (Razzaq et al., 2024). Organizational productivity, on the other hand, includes wider indicators, including project throughput, the level of innovation, revenue per employee, and efficiency in collaboration within a group (Choudhury et al., 2024). Technical and behavioral variables will tend to affect productivity in the IT sector. In the case of software developers, it is the speed and precision with which one can write, test, and integrate code in a larger project (Noda et al., 2023).

Soft dimensions such as sharing of knowledge, mentorship, and responsiveness are also essential in sustaining overall productivity in high collaborative professions such as IT (Rot et al., 2023).

Productivity in IT is not similar to manufacturing or service industries, as it is mostly knowledge-based and depends on mental work instead of physical performance (Noda et al., 2023). This leads to the fact that productivity cannot be quantified in terms of time spent or work done. Rather, it is an indicator of the efficacy, quality, and timeliness of digital outputs including software, systems, and services (Razzaq et al., 2024). Profiles of productivity are not easy in the IT industry. The output is measurable and quantifiable, which is not the case with knowledge work because cognitive activity, online communication, and collaborative and group work are more difficult to measure (Noda et al., 2023). An example is developers who tend to alternate between coding, debugging, video conferences, and reviewing the work of peers. These activities cannot take place independently, and their effectiveness depends on internal (concentration, motivation) and external (the quality of tools, communication in the team, etc.) factors (Razzaq et al., 2024).

A major issue of defining IT productivity is the fact that outputs are intangible (Noda et al., 2023). The outputs of IT are diverse in the measures of quality and complexity unlike manufacturing where outputs can be counted. Even a tiny fragment of well-crafted code can create a larger value than a huge amount of poorly-written code (Razzaq et al., 2024). Thus, the quality of code, system reliability, maintainability and user satisfaction is becoming the most common qualitative measures of IT productivity (De Quadros et al., 2022).

In response, industrial contributions to sustainable productivity in software engineering have taken the shape of Developer Experience (DevEx) (Noda et al., 2023). DevEx has variables that include speed of setting up the environment, reliability of the tools, feedback loops in the build/test cycle, and simple code review. All of these factors have a direct influence on the ease of developer contribution (Kemell and Saarikallio, 2023).

A key concept in IT research has been developer productivity. It is defined as how software professionals are capable of developing high-quality software with a cost-effective approach and sustainable work (Noda et al., 2023). Studies indicate that the productivity of the developer is determined by the clarity of the requirements, the availability of tools, the coordination of the team, and the organizational culture (Razzaq et al., 2024). Even highly proficient developers can be less productive due to poorly-stated work and constant interruptions (Kemell & Saarikallio, 2023).

On a larger scale, the productivity of the team or an organization in IT can be monitored using such measures as the velocity of sprints, the cycle time, the number of defects, and the user satisfaction index. However, researchers believe that these metrics must be viewed in context, with acknowledgment that productivity of individual employees can commonly be influenced by the level of cross-functional teamwork, psychological safety and specificity of objectives (Choudhury et al., 2024; Jamieson et al., 2025).

Especially in IT, team-level productivity is of great essence, as most projects are created in groups. Developers, testers, and project managers need to be properly coordinated (De Quadros et al., 2022). The Agile and iterative models of development have become common in enhancing coordination and transparency, focusing on frequent communication, feedback, and frequent delivery (Noda et al., 2023).

There are several factors that affect the level of productivity of employees, especially in a hybrid working environment. These are technological facilities, clarity of tasks, quality of communication, and social support. On the other hand, the frustration and loss of output is common due to the delays in the code reviews, the absence of the real-time feedback, or the instability of the tools (Rot et al., 2023). The working environment is also critical. According to Webber et al. (2018), even highly-performing persons might not perform well in cases where local infrastructure (e.g., internet, power supply) or institutional capacity restrains efficient operations. IT productivity is also influenced by organizational effects. Work is prioritized and performed depending on leadership practices, performance evaluation systems, and organizational structure (Razzaq et al., 2024).

Organizations focusing more on outcome-based testing than time-based monitoring are more likely to facilitate greater productivity in knowledge-based positions (Noda et al., 2023). Well-defined objectives and achievable targets add to the long-term performance within IT teams (Kemell and Saarikallio, 2023).

To counter this, companies are advised to create resilience by introducing redundancy, co-located working areas, and tools that can be used offline, particularly where their services are critical to the industry such as IT (Tomy et al., 2025). Technological support is another factor. Availability of well-connecting development tools, version control, and testing environments allow the developers to work faster, whereas poorly-integrated systems or frequent system-level failures can slow the processes and trigger a higher rate of errors (Razzaq et al., 2024; De Quadros et al., 2022). Productivity within the IT sector is a relational and technical outcome. It is influenced by digital processes, equipment performance, and the standard of social and organizational relations. With remote and hybrid models transforming the organization of work, productivity must be measured and enabled by a subtle sense of context and expectations, system design.

### **2.3 Productivity in Remote and Hybrid Work**

Remote and hybrid work have changed the conceptualization and measurement of productivity greatly. Compared to the conventional models that focused on visibility and presence, output, autonomy, and digital collaboration efficiency have become key indicators of productivity in flexible workplaces (Choudhury et al., 2024). Remote and hybrid environments enable workers to build an individual schedule and urgency of tasks, which in many cases leads to higher concentration and less time wastage (Noda et al., 2023). Productivity of developers is no longer concerned only with raw output quality, but it is also more concerned with psychological flow, usability of tools and code quality (Razzaq et al., 2024). The dimensions are especially relevant to distance and hybrid workplaces, where the performance largely relies on individual attention and efficiency of digital tools (Kemell and Saarikallio, 2023). Furthermore, productivity should be perceived as being context-dependent and multidimensional. As an illustration, Pink et al. (2022)

pointed out that hybrid working conditions require anticipatory behavior, which entails employees planning and adapting beforehand to mediate asynchronous work and the lack of proximity. Although not reflected in output measures, this proactive initiative plays a key role in sustainable performance, particularly in distributed teams.

Workers who work at home and in the office created more innovative work than their counterparts who worked in fixed mode (Choudhury et al., 2024). This is especially true with the IT workers such as software engineers, whose work output relies on deep-thinking when writing code and interpersonal teamwork when debugging or designing (Razzaq et al., 2024). De Quadros et al.,(2022) noted that hybrid transition when done with care enhances speed of delivery and quality of software. The teams who kept two to three days in office with each sprint addressed bottlenecks quicker, trained newcomers more efficiently, and avoided discouragement thus keeping productivity levels the same even in the long run. Similarly, Shahid et al. (2025) stated that Gen Z and Millennial employees, who are the majority in the IT sector in most developing economies, seek rapid feedback, flexibility, and online precision. These are the expectations that determine their interactions and performance under hybrid systems.

But not everything turns out to be good. Online exclusion, communication breakdown, and cyber-hostility are some of the new types of social risk that may be revealed by remote work. Jamieson et al. (2025) established that digital space might be in a position to create gossip and exclusion or passive aggression when team hierarchies are not formalized and feedback is not clear. These dynamics undermine psychological safety which is directly related to long-term productivity in software teams.

Productivity is also determined by the physical working environment and technology. In emerging markets, an unreliable internet, unreliable power, and access to high-performance devices can be a barrier to remote performance (Tomy et al., 2025). Consequently, productivity in this case is not just a product of internal organizational practices but mediated by regional conditions. In spite of these shortcomings, hybrid work is a possible

solution to productivity optimization in urban IT hubs. Companies that switch teams to work in the workspace with good internet and reserve power and keep virtual rituals even during offsite days tell that there are fewer interruptions and better delivery performance (Kemell and Saarikallio, 2023; De Quadros et al., 2022).

To ensure sustainability in productivity, the organizations need to adapt remote and hybrid models to the context under which they operate and especially where resources are limited (Webber et al., 2018). Remote and hybrid setups have tremendous potential in the IT industry, where task division and teamwork are modular and coordinated, assuming that they are anchored by robust digital infrastructure, inclusive social dynamics, and stable leadership. Although the overall results of the studies in the high-income countries point to a positive relationship between remote work and higher productivity and satisfaction (McPhail et al., 2024), the findings are not universal. Research by Felstead and Henseke (2017) concluded that the productivity gains may be compensated by the digital overload, loneliness, and lack of boundaries between the professional and personal life. Similar findings can also be made by Contreras et al. (2020) who stated that remote arrangements require more self-control and time management since employees have to pursue numerous obligations within one physical location. The IT sector in Nepal has not been left behind in this global transformation, and it has also had its own barriers. However, it has been indicated locally that remote work can be more effective in focusing and less fatigued due to commute, provided that it is well-supported by infrastructure (Bhandari et al., 2024).

Furthermore, Ghalan et al. (2024) also found that the beneficial impact of remote work on productivity in Kathmandu IT organisations is mediated by work-life balance. Therefore, global discoveries are informative, but local variations in Nepal demonstrate that the key lies in organizational flexibility, online preparedness and managerial attitude. In a general sense, there are also social and economic effects of remote work. It allows companies to seek talent in a wide geographical area, helps control office costs, and contributes to gender inclusion by enabling more women to join the workforce (Larson et

al., 2020; Belzunegui-Eraso and Erro-Garcases, 2020). However, as Bhandari et al. (2024) observed, the possible benefits might be not realized in developing economies due to lack of proper digital infrastructure and employee support. Kansakar and Sharma (2023) highlighted that organizations that have implemented hybrid concepts have an advantage in terms of employee morale and reduced infrastructure expenses.

Organizationally, numerous companies in developing economies have shifted emergency remote arrangements to hybrid ones without reworking workflows (De Quadros et al., 2022). The findings from case study of software company highlighted that the transition to hybrid with no coordination protocols resulted in quality problems and delays (Kemell and Saarikallio, 2023). The technologies used in hybrid and remote environments are known to influence the experience of employees, including their sense of purpose, technostress, and subsequent burnout (Nguyen et al., 2024). The level of inclusion determines how workers experience burnout due to the continuous connectedness and disruption of lines of communication (Jamieson et al., 2025). The challenges of purpose and work identity are also reported by employees in emerging economies when working under flexible environments (Nguyen et al., 2024). According to Waight et al. (2022), employees in Brazil valued physical closeness with families yet lacked informal face-to-face interactions, which are crucial to team building and knowledge exchange.

The success of working on hybrid model rests on the clarity and frequency of the employees working at home or at the workplace (Choudhury et al., 2024). Research indicates that the best productivity is achieved when hybrid schedules are well-organized and properly equipped with the necessary tools (De Quadros et al., 2022; Tomy et al., 2025). Razzaq et al. (2024) also observe that the hybrid work in IT works best with standardized environments, review procedures, and tools compatible with low bandwidth. These measures will be particularly beneficial in cities with limited bandwidth such as Kathmandu (Kemell and Saarikallio, 2023; De Quadros et al., 2022).

In conclusion, remote and hybrid workplaces in developing economies need to be aligned by connecting public infrastructure, organization redesign, and people-focused

policies (Choudhury et al., 2024; Webber et al., 2018). The productivity gains may be achieved when companies invest in the workflow clarity, team inclusive norms, and adaptable digital tools in the IT industry (Noda et al., 2023; Razzaq et al., 2024). Technology contributes to the flexibility in the workplace in regard to productivity. There is also a high influence of leadership that fosters trust, accountability, and prioritizes the outcomes rather than physical control (De Quadros et al., 2022; Kemell and Saarikallio, 2023). These lessons can be directly applied to the emerging tech ecosystem in Kathmandu, which can be improved with the hybrid approaches that are sensitive to local limitations and employee demands (Tomy et al., 2025; Shahid et al., 2025). Hybrid work in the IT sector of Nepal has been viewed to contribute to productivity when adjusted to the local conditions. When these models fit the needs of employees as well, they contribute to their well-being as well (Ghimire et al., 2024; Bhandari et al., 2024).

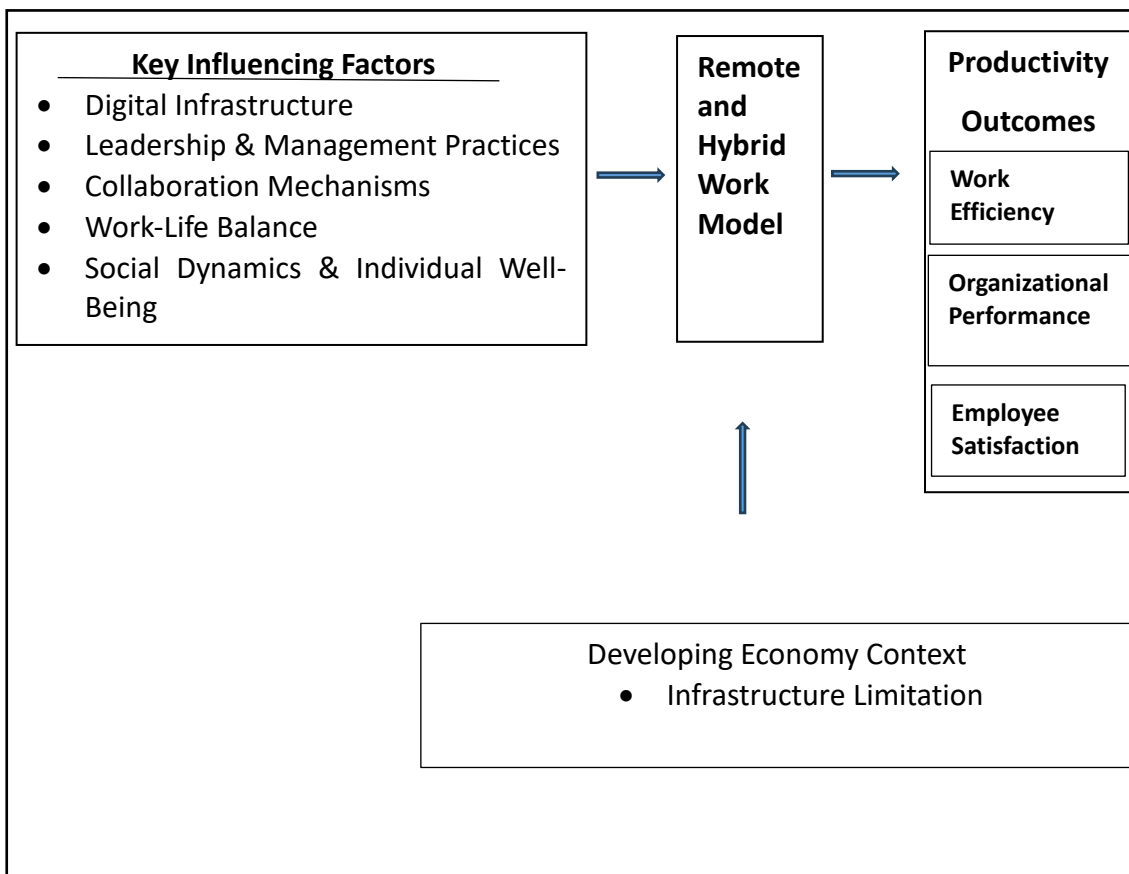


Figure 1. Factors Influencing Productivity in Remote and Hybrid Work Model in IT

The above Figure 1 is a conceptual synthesis of the reviewed literature in this chapter. The results of the literature review reveal that remote work and hybrid work productivity is not only related to tools or leadership. It is also based on the organization of tasks, communication, and routines of coordination. This framework shows how the digital infrastructure, leadership practices, collaboration mechanisms, and work-life balance influence the outcome of productivity. The figure also recognizes the role of unique contextual conditions in developing economies like infrastructure limitation. This theoretical framework informs the empirical study undertaken in Chapter 3 and it is the design of the interview questions.

### **3 Methodology**

This part of the study presents the research plan, design, sampling, data collection, and analysis of the proposed study, which is focused on investigating how remote and hybrid working models influence productivity within the IT industry in Kathmandu. The research employs the qualitative methodology to learn more about employee and organizational experiences in remote and hybrid working environments.

#### **3.1 Research Design**

The study design used is qualitative in nature, where semi-structured interviews form the main data collection technique. Semi-structured interviews are selected due to the possibility to investigate the experience and perspectives of the interviewee on the topic of remote and hybrid work and still respond to the research question (Creswell and Poth, 2018). The interviews will take place online. This research design best fits the study of individual attitudes toward the effects of remote and hybrid work model on productivity, work efficiency, and work-life balance, especially in the IT industry in Kathmandu (Noda et al., 2023; De Quadros et al., 2022).

#### **3.2 Sample Selection**

The research uses the purposive sampling method and identifies 7 respondents among Kathmandu based IT-firms. The participants will be selected under the following criteria:

- I. 6-month experience in remote or hybrid work.
- II. Roles as Software developers, IT project managers, QA engineers or team leaders.
- III. Ready to engage in a semi-structured interview.

This is a sufficient sample size when it comes to a qualitative research, in which there is no intention to generalize based on the research but to learn in-depth, descriptive information about the lived experiences of IT professionals (Saunders et al., 2007). With the purpose of obtaining different views on the issue under study, the selection of participants will be focused on the diversity in terms of size of the company, the work

experience, and the exposure to the remote/hybrid models (Ghimire et al., 2024). There was no strict size requirement. But to enable contextual interpretation of productivity differences in remote and hybrid work, company size was cited as a background variable.

### **3.3 Data Collection**

The data will be gathered by using semi-structured interviews, which will be online and through Zoom, Google Meet, or Microsoft Teams, at the discretion of the respondents.

The interviews will target the following areas as stipulated in the interview guide:

- I. Remote work productivity and hybrid work productivity.
- II. Productivity and efficiency of organization with remote and hybrid models.
- III. The work practices and coordination systems such as communication routines, collaboration patterns and task management processes.
- IV. Flexible work arrangements management, leadership and performance assessment.
- V. Digital infrastructure, availability of technological tools, and technical limitations in Kathmandu IT factor.
- VI. Social and cultural determinants of productivity, such as inclusion, isolation, team culture and work-life balance.
- VII. Suggestions on how to enhance remote and hybrid working models in Kathmandu IT sector.

The interviews will take between 30 and 45 minutes and will be audio taped (with their permission) to enable accuracy in the data transcription process. The collected data will be anonymized and safely stored to ensure privacy of the participants as per the GDPR instructions (European Parliament & Council of the European Union, (2016)). The data collection will start in January 2026 and end in February 2026.

In order to ensure confidentiality, the respondents will be identified as Respondent 1 to Respondent 7 anonymously. Thematic analysis is applied throughout the chapter. In various places, short quotes and paraphrased statements have been used to exemplify

certain repetitive themes. The results thus integrate thematic organization and also the evidence gathered using participants in such a way that they are able to give a clear view of the experiences of remote and hybrid work within the Kathmandu IT sector.

### **3.4 Respondent Profile**

Seven respondents in the IT industry in Kathmandu were included in the study. The sample size covered the various technical positions, such as quality assurance, DevOps, artificial intelligence and machine learning, full-stack development, software engineering, and mobile application development. This diversity promotes the purpose of the research, which was to capture the views of professionals in various functions under remote and hybrid work setting.

Respondent 1 was a QA engineer with over two years of experience on a hybrid model. Respondent 2 was a Devops engineer at a firm of approximately 15 workers and had been employed in a hybrid setup in a period of approximately two and a half years. Respondent 3 was a junior AI/ML engineer in a larger organization of about 65 to 70 employees and had been employed in a hybrid model within a year of experience in the company. The respondent 4 worked as an automation QA engineer in a small to mid-sized company and had worked in a hybrid set up for about one year. Respondent 5 was an associate Android and iOS application developer at an organization that has between 80 and 90 employees. This respondent had previously been employed in a hybrid arrangement and transferred to a fully remote one, his experience in the latter being approximately five months in the existing set-up. Respondent 6 was a full-stack developer and reported the structure as remote-friendly and hybrid, depending on the project. This respondent has also worked in two companies and worked in both remote and office environments. Respondent 7 was an associate software engineer in a hybrid arrangement where he came to work two days a week in the office and was approximately one year with that type of arrangement.

The respondents also represented various company sizes and work situations. Some were affiliated with smaller or middle-sized organizations and others were in larger companies where the teams were more formal. This diversity was advantageous since the company size had already been found in the methodology as a background variable that could facilitate context interpretation of productivity differences across work models. Meanwhile, the vast majority of the respondents worked in hybrid and not in fully remote environments. It is significant as it contributes to understanding why numerous findings in the subsequent sections can demonstrate the importance of flexibility and the necessity to maintain in-person communication.

Altogether, the profile of the respondents indicates that the research was based on a diverse yet meaningful sample of respondents. The seven respondents had personal experience with remote or hybrid employment in the IT industry of Kathmandu. This was feasible to produce various perspectives on productivity without any change in the overall industry environment.

**Table 1. Respondent Profile**

Respondent	Role	Company Size	Work Model	Experience in Current Arrangement	Interview Duration
Respondent 1	QA Engineer	Not specified	Hybrid	More than 2 years	17 min 30 sec
Respondent 2	DevOps Engineer	Around 15 employees	Hybrid	About 2.5 years	24 min 51 sec
Respondent 3	Junior AI/ML Engineer	Around 65–70 employees	Hybrid	About 1 year	21 min 38 sec
Respondent 4	Automation QA Engineer	Small to mid-sized company	Hybrid	About 1 year	19 min 38 sec
Respondent 5	Associate Android/iOS Application Developer	Around 80–90 employees	Fully remote (previously hybrid)	About 5 months	14 min 56 sec
Respondent 6	Full-Stack Developer	Worked across two companies	Hybrid / remote-friendly	Not specified	16 min 22 sec

Respondent 7	Associate Software Engineer	Not specified	Hybrid	About 1 year	18 min 32 sec
-----------------	-----------------------------	---------------	--------	--------------	------------------

### 3.5 Data Analysis

The analysis of data will be performed through thematic analysis, which is often applied in qualitative studies to understand the presence of patterns or themes in textual data (Braun & Clarke, 2006). The information shall first be transcribed followed by inductive coding to determine the recurring themes. The thematic analysis will be presented concerning the effect on productivity based on both positive and negative experiences of remote and hybrid working models. A deductive analysis will then proceed, where the identified themes are associated with the theoretical constructs that were previously introduced in Chapter 2 and include the quality of the work environment, adaptation of the work process, and social dynamics (Noda et al., 2023; De Quadros et al., 2022).

### 3.6 Assessment of the Quality of Data

The quality of the data will be evaluated using the following criteria:

- I. **Credibility:** Relevance of findings to the real experiences of the participants, which will be ensured by adopting open, non-leading questions and member-checking (whereby the participants confirm the findings) (Saunders et al., 2007).
- II. **Transferability:** The results of the research might not be applicable to the whole population, but they will contain both contextual, deep insight into hybrid work within the IT industry in Kathmandu. The results will be contrasted with other published works on the same topic in order to determine their applicability to other emerging economies (Choudhury et al., 2024).
- III. **Reliability:** Data collection, transcription, and analysis will be well documented to make the results consistent and reliable (Saunders et al., 2007).
- IV. **Confirmability:** It is important that the findings are anchored on the responses of the people rather than the prejudice of the researcher. This will be done through

ensuring that there is an openness in the process of analysis and that the results are compared with the available literature (Saunders et al., 2007).

Participants will be informed about the privacy notice before the interview on how their data will be processed, stored, and used.

## 4 Findings

### 4.1 Introduction to Findings

This chapter introduces the results of seven semi-structured interviews with IT professionals who work in Kathmandu in a remote or hybrid or remote-hybrid friendly work setting. The aim of the chapter is to demonstrate how respondents realized the impact of remote and hybrid work on their productivity in their everyday work and in their organizations. The results are categorized by theme in accordance with the interview guide and the conceptual framework designed in Chapter 2, which had centralized on digital infrastructure, leadership and management practice, collaboration practices, work-life balance, social dynamics, and productivity outcomes.

The chapter is outlined by the major topics which were revealed during the interviews. These topics involve work environment and infrastructures, work processes and coordination, social dynamics and work experience, productivity and performance performances, and situational challenges and future visions. This chapter is not intended to explain the findings relative to theory in any detail. Rather, it shows the trends, resemblances and differences in the narrations of the respondents. More in-depth analysis and comparison with the existing literature will be done in Chapter 5.

### 4.2 Work Environment and Infrastructure

The interviews revealed that the environment and digital infrastructure were significant in developing remote and hybrid working in the Kathmandu IT industry. The level of infrastructure was, however, not equal to all respondents. Some have said that their arrangement was stable and enough to work in everyday life, whereas others mentioned internet issues and power outages that had an impact on the working process. Respondent 5 noted, “ *Effective tools and reliable communication systems are essential for us to collaborate efficiently*”. This is an indication that digital infrastructure is beneficial to

productivity when properly functioning but creates an apparent barrier to productivity when malfunctioning.

Meanwhile, there were respondents who did not experience it in the same way. Respondent 1 noted, *“Sometimes work was delayed because of internet issues and power interruptions, which interfered with meetings”*. Respondent 1 stated that sometimes, work was delayed because of internet issues and power interruptions and these issues interfered with meetings. Respondent 5 also reported that unstable internet and power interfered with activities at times, but it was controllable most of the time. Respondent 5 stated, *“The internet was not always stable, but we were able to continue working most of the time”*. Likewise, Respondent 6 explained the same problems and added that the fluctuation of internet and power blackout could disrupt meetings and deployments. Respondent 6 mentioned, *“The fluctuations in the internet and power outages could disrupt meetings and deployments”*. These responses indicate that the issue of infrastructure was not a permanent one, yet it remained significant to influence the continuity of work.

Another significant component of working environment was the collaboration tools. The majority of the respondents believed that the tools that their companies supplied were helpful and reinforced teamwork. Respondent 2 stated, *“The tools available were multifunctional and did not present serious issues”*. Respondent 2 indicated that the tools that were available were multifunctional and did not present serious issues yet. Respondent 6 also found tools like Slack and Git useful in communicating and coordinating with colleagues. Respondent 6 noted, *“Slack and git were really useful for communicating and coordinating with colleagues”*. Similarly, respondent 7 reported that Slack could be used on a daily basis to collaborate. Respondent 3 further explained that the existing tools were working adequately to the current requirements of the company, though more sophisticated systems might be required as the company expands. Respondent 3 stated, *“The tools are fine for now, but as the company expands, we might need more*

*sophisticated systems*". This indicates that the adequacy of tools was usually associated with the size of a company and the complexity of work.

The interviews also revealed that infrastructure could not be perceived solely through internet access. There were also backup systems, quality of devices and the reliability of platforms. Respondent 6 mentioned, *"Having backup internet and power systems is important, especially in the Nepali context, where power outages are frequent"*. Respondent 6 pointed out the usefulness of backup internet and power systems in the Nepalese context. Furthermore, Respondent 7 emphasized, *"Most of our work relies on internet access, and without it, tasks become impossible to complete on time"*. Respondent 7 observed that reliability on internet was needed since most of the work was to rely on internet and virtual meetings. This implies that infrastructure was strictly connected with communication, coordination, and timely completion of tasks.

In general, the results indicate that remote and hybrid work relied on the work environment and infrastructure. Majority of respondents had the access to tools and systems that enabled them to work effectively. Nevertheless, the quality of such support varied in settings. Work went well with stable infrastructure and interruptions caused delays and lower efficiency. There is no background issue of infrastructure in Kathmandu context. It was among the conditions that defined the productivity of remote and hybrid work.

### **4.3 Work Processes, Coordination, and Leadership**

In the interviews, work processes, coordination patterns, and leadership practices were the focal point of how respondents were experiencing remote and hybrid work. The majority of the respondents indicated that their organizations had accommodated their workflows to the hybrid work arrangements. For example, Respondent 4 highlighted, *"We applied sprint planning, daily stand ups, sprint reviews, and retrospectives to track progress and stay aligned"*. Nevertheless, the type of adaptation varied among companies. Others used structured sprint-based processes and task-tracking systems and some

simpler deadline-based coordination. In general, the respondents indicated that productivity was more comfortable to sustain in case the workflow was organized, communication channels stable, and the tasks were not undefined.

Several respondents noted that their firms had implemented or maintained structured work arrangements to accommodate remote and hybrid work. Respondent 4 described how the team applied sprint planning, daily stand-ups, sprint reviews, and retrospectives to track progress and stay aligned: *“We use sprint planning and daily stand ups to ensure everyone knows their tasks. Retrospectives help us improve continuously”*. The same respondent has also mentioned that task tracking and cross location collaboration were supported using Jira, version control systems, and practices related to CI/CD (Continuous Integration/ Continuous Deployment): *“We use Jira to track tasks and collaborate across locations. Version control systems and CI/CD practices make sure everything is in sync”*. Respondent 1 also mentioned that the work was managed effectively by use of digital tools like Jira, Git, and communication tools and the AI tools were also used to save time and enhance accuracy . Respondent 1 noted, *“The work was managed effectively through tools like Jira and Git, which helped track progress. Communication tools also played a vital role in team alignment. AI tools helped in automating tasks, saving time and improving accuracy, which made remote work more efficient”*. Such reports indicate that standardized digital processes contributed to the establishment of continuity between office and remote work.

At the same time, the formal procedures in all companies were the same. Respondent 2 stated that there were no strict Scrum or sprint routines observed in the company. Rather, Slack was used to manage communication, Linear was used to track task progress, and Code management was done in GitHub. Respondent 2 stated, *“We don’t have strict Scrum routines. We just use Slack to manage communication and Linear to track task progress. We use GitHub to manage our code, and that works well for tracing changes and updates”*. This respondent also explained that the current scale of the organization was not limited to the available tools to any significant extent yet. Respondent 5 also

reported being dependent on online tools, specifically Microsoft Teams to communicate, Zoho to plan and GitHub to review and update. Respondent 5 mentioned that *“We use Microsoft Teams to communicate, Zoho for planning, and GitHub for reviewing and updating”*. These reactions indicate that workflow adjustment was not based on a single model in all companies. Instead of that, companies chose those systems that suited their size, task organization, and internal work culture.

Remote and in-office workers were also described differently in terms of coordination. Respondent 4 replied that coordination was not much of an issue due to the messaging platforms and regular virtual meetings, but remote communication at times was less clear and immediate as face-to-face communication: *“Coordination wasn’t much of an issue to messaging platforms and regular meetings, but remote communication at times was less clear and immediate than in-person communication”*. Respondent 3 argued the same and added that in hybrid environments, communication became easier since they could work on a similar floor and solved problems faster, unlike remote jobs where they had to wait until responses came and sometimes there were delays . Respondent3 noted, *“In hybrid environment, communication became easier since we could work on the same floor and solve problems faster, unlike remote jobs where we had to wait for responses, and sometimes there were delays”*. Respondent 7 also explained that there was a regular morning meeting where tasks were shared among employees: *“We have regular morning meeting where tasks are shared, and it helps us stay aligned”*. However, Respondent 2 indicated that no substantial difference existed between remote and office coordination because the same tools and planning systems were applied in each scenario: *“There’s no substantial difference between remote and office coordination because we use the same tools and planning systems in both scenarios”* . This implies that the issues of coordination were there, yet they were determined by the extent to which firms were dependent on structured routines and the ability to communicate could be fixed.

Another theme of the interviews was leadership and performance evaluation. In the majority of the cases, the respondents indicated that performance was measured more in

terms of task completion and performance than through mere office visibility. Respondent 4 said that most of the progress was quantified by Jira, deadlines, and the completion of tasks in time: *“Most of our progress is quantified by Jira, deadlines, and completing tasks on time”*. Respondent 6 also said that the performance was mostly measured in terms of task completion, quality of the code, and deadline met: *“Performance is mostly measured in terms of task completion, quality of code, and meeting deadlines”*. According to respondent 2, performance appraisal within the company was more result-oriented and less based on office presence. Respondent 2 mentioned, *“ Our performance is more result oriented, and it’s less about being physically present in the office”*. These answers indicate that under remote and hybrid work, most companies had already implemented at least partially outcome-based evaluation practices.

Nevertheless, it is also indicated that this trend was not the same in all organizations. Respondent 5 reported that both work outcomes and visibility were considered in the management, though overall work performance remained more significant. As Respondent 5 stated, *“Both work outcomes and visibility were considered, but overall work performance was more significant”*. Respondent 3 provided a more mixed response and proposed that both visibility and outcomes were prized, along with a more generic feeling of individual activeness within the company: *“Visibility and outcomes were important, but it was also about being seen as active within the company”*. This means that certain companies had gone a step further than others in the transitioning between presence-based control and output-oriented management.

Trust and leadership support are also identified as important in the interviews. Some of the respondents claimed that they felt trusted and supported within the current work arrangement. Respondent 2 explained leadership as very supportive and linked that support to the role assigned by the organization: *“Leadership has been very supportive, and the tasks I’m given are aligned with what I’m best at”*. Similarly, Respondent 1 stated, *“Managers value attention to details, reporting skills, and automation work, which creates a positive feedback relationship”*. Respondent 1 also indicated that the managers

valued attention to detail, reporting skills and automation work, which indicates that there is a positive feedback relationship between the employees and the leadership. Respondent 6 also reported that the team also offered informal support through frequent check-ins and collaboration, but formal mental-health support was less available: *“We offer informal support through regular check ins and collaboration, but mental health support from the company is not as structured”*. These reactions imply that leadership was not just significant by means of formal assessment but also in everyday assistance, communication and trust.

In general, the results suggest that work processes, coordination, and leadership played a significant role in determining the effectiveness of remote and hybrid work. Overall, the productivity was characterized more positively by the respondents who also reported that workflows were organized, responsibilities were clearly defined, and collaboration tools were actively used. It was also important in leadership, particularly where performance was measured through results and employees felt trusted and not closely supervised. Meanwhile, hybrid work seemed to lessen certain delays in communication since face-to-face interaction was still accessible when required.

#### **4.4 Social Dynamics and Work Experience**

The interviews revealed that there was a mixed social experience in remote and hybrid work. Majority of the respondents were not describing intense conflict in their teams. Nevertheless, several claimed that remote working had altered their personal communication with coworkers. Overall, hybrid setups appeared to maintain the connection in teams as opposed to working fully remotely. Respondents also tended to believe that the presence in office was beneficial in ensuring that communication was smoother, stronger informal relationships, and a sense of belonging to a team were enhanced.

Some respondents indicated that they continued to feel socially connected to their teams despite remote work or hybrid setups. Respondent 2 mentioned a positive team environment and that he did not experience any severe issues with connection or

support, in part because the company provided them with informal opportunities to interact with each other in sports activities and at gatherings. Respondent 2 stated that *"The company organizes sports activities and gatherings, so I didn't experience any severe issues with connection or support"*. Respondent 5 also indicated that the work environment was supportive and that colleagues were usually helpful when one required support. Similarly, Respondent 7 stated that once a week members of the team used to meet physically, and it served as an excellent way to avoid isolation and ensure that the interpersonal connection was much more solid than in an entirely remote-based system: *"Once a week, we meet physically, and it really helps in avoiding isolation. It strengthens the interpersonal connection"*. These reactions indicate that hybrid work can help reduce some social distance commonly linked to remote work.

Meanwhile, some respondents noted that remote or hybrid work decreased informal communication. Respondent 3 noted, *"Communication in remote work is slower and feels less natural. We can't just walk to someone's desk and ask questions right away"*. Respondent 3 observed that in a remote environment communication might be slower and unnatural as employees were not on the same floor and could not solve the problems as fast due to direct communication. Respondent 4 also mentioned that confusion occasionally occurred in online communication since messages were not clarified immediately and in face-to-face situations: *"Sometimes, confusion happens because online messages aren't clarified immediately like in face-to-face conversation"*. Respondent 6 expressing a similar opinion added that sometimes online communication created a gap in communication, particularly in cases where individuals were not available or were busy at a particular time. Respondent 6 noted, *"Sometimes, there's a gap in communication because people are not always available at the same time. This causes delays in responses"*. These reactions show that communication remained effective, but it became more formal and less spontaneous.

There was some sense of isolation, yet not among all respondents. Some of the participants replied that they did not feel lonely since they were in constant contact with their

teammates by using the chat tools or during meetings or visiting the office. Respondent 2 mentioned, *“I don’t feel isolated because we stay connected through Slack, and we have regular meetings”*. Others remarked that isolation might be more evident as work remained entirely remote over a more extended time. For example, Respondent 7 stated, *“A completely remote model would create a stronger sense of disconnection, but hybrid work allows for personal contact to be preserved”*. Respondent 7 highlighted that a completely remote model would have created a more potent experience of disconnection, though hybrid work allowed personal contact to be preserved. This is an indication that isolation was not a general state but a threat that existed depending on the work model and the communication patterns of the team.

It was also evident in the interviews that peer support and informal support systems were important. Respondent 6 stated that colleagues were mostly supportive and that the team made contact when necessary, despite the absence of any particularly formal support mechanisms: *“Colleagues were mostly supportive, and the team made contact when needed, even though there were no formal support mechanisms in place”*. Respondent 2 also characterized the culture of the team as sociable and easy-going, highlighting, *“The team is very sociable and friendly, which makes it easier to communicate and stay connected”*. Respondent 1 also mentioned that there was no problem with interactions at work since reporting systems and communication routines have already been established, and it is simpler to keep in touch with the team members. Respondent 1 stated, *“There’s no issue with interactions because we already have established reporting systems and communication routines, so it’s easier to stay in touch with the team”*. These results demonstrate that emotional and peer support frequently appeared during the day-to-day communication and not in the well-being programs.

Altogether, the results indicate that social dynamics were still a significant element of remote and hybrid working experience in the Kathmandu IT industry. Hybrid work seemed to facilitate team connection better than fully remote set-ups as it retained some face-to-face engagement. Meanwhile, online communication occasionally

introduced delays, confusion, and lack of informal interaction. It was the quality of social experience that was not only based on the work model itself, but also on how communication, support, and connection opportunities were upheld by teams.

#### **4.5 Productivity and Performance Outcomes**

Based on the interviews, respondents did not measure productivity using formal metrics. Instead, they rated their productivity subjectively, which was based on their ability to complete tasks, meet deadlines, how focused they were, and how effectively they worked on the job. In this research, productivity thus is a perceived result as opposed to a quantitatively measured outcome.

At the personal level, some of the respondents indicated that remote or hybrid working enhanced their efficiency at work. Respondent 1 described that productivity was a little better with the current hybrid model due to the flexibility provided in commuting and the ease of handling work with increased concentration: *“Productivity is a little better with the current hybrid model because I save time on commuting and I can focus more on tasks”*. A similar opinion was expressed by respondent 4 who indicated that remote and hybrid work gave them more time to concentrate on technical work, particularly in comparison to the distraction of a full office-based environment: *“Remote and hybrid work allowed me to focus on technical work better, especially when compared to the distraction of a full office-based environment”*. Respondent 7 also implied that the hybrid model was helpful in supporting personal efficiency as it allowed concentration in working at home and the possibility to communicate directly when being in the office. Respondent 7 noted, *“The hybrid model supports personal efficiency because I can concentrate better at home, when I’m in the office, I can communicate directly with my colleagues”*. The answers demonstrate that flexibility and commuting less were also a significant factor in individual productivity.

For example, Respondent 3 said, *“working from home helps me focus more and finish tasks on time”*. This indicates that individual productivity was evaluated in terms of

concentration and completion of tasks. Similarly, Respondent 4 noted, “ *remote work allows me to focus deeply on my tasks without office distractions*”.

But not every respondent explained productivity gains in similar terms. Respondent 2 replied that there was no significant difference in the current productivity and the previous office-based work, indicating that individual productivity had not significantly changed with the work arrangements. He noted that, “*my productivity is the same whether I work from home or office*”. Likewise, Respondent 5 also provided a more balanced opinion and stated that productivity relied on the task and the situation and not only on the work model. These reactions indicate that the advantages of remote and hybrid work could not be automatic. They differed depending on personal tastes, job design and organizational backup.

It was a common finding that various types of work were better suited to different settings. Some of the respondents also suggested that technical work that was more focused was usually simpler to work on at home, whereas more communicative work could be done in a workplace or a hybrid setup. Respondent 3 indicated that hybrid work was more effective in general since workers could still work closely in real-time when they needed to meet, particularly to deliberate on more complex matters: “*Hybrid work is more effective because we can meet in person when we need to discuss complex matters in real time*”. Similarly Respondent 4 reported that remote and hybrid work facilitated focus, but face-to-face interaction was still applicable in addressing urgent or complicated issues effectively: “*Remote and hybrid work help with focus, but face to face interaction is still needed to solve urgent or complicated problems*”. This implies that the model of work alone did not determine productivity but also the nature of work being undertaken.

At the organizational level, more respondents provided mixed answers. Some respondents perceived that remote and hybrid work led to improved operational efficiency as some people thought that it saved time, lowered employee fatigue, and enabled more

flexibility in tasks completion. Respondent 1 linked the existing model with improved utilization of working time and easier implementation of tasks: *“The current model allows for better utilization of working time and makes it easier to complete tasks”*. Respondent 6 was also surprised to add that remote and hybrid work were also beneficial to efficiency when coordination systems and tools were performing well: *“I was surprised at how remote and hybrid work benefited efficiency, as long as the coordination systems and tools were working well”*. Yet, other respondents indicated that the efficiency of a company would drop at the company level when the speed of communication was reduced or coordination among remote and in-office employees was lacking. Respondent 3 pointed out that hybrid work was operationally more effective than a completely remote work since face-to-face communication could help eliminate delays and misunderstanding: *“Hybrid work is operationally more effective than fully remote work because we can clear up misunderstandings quickly in person”*. This implies that organizational efficiency was more reliant on the quality of collaboration than the individual efficiency was.

Factors that assisted the respondents to remain productive were also identified in the interviews. These were flexible working hours, reduced commuting time, well-defined task distribution, consistent collaboration technologies, and supportive leadership. The increased flexibility and lowered travel time were noted by the respondent 1 among the key productivity supports: *“The flexibility and the reduced time spent on commuting have definitely helped my productivity”*. Respondent 4 also highlighted structured project tools and sprint systems as some of the major aids in keeping on track: *“Structured project tools and sprint systems keep us organized and on task”*. According to Respondent 2, productivity was supported by the use of trustworthy instruments and clear tasks despite the change in the work environment: *“The tools we use are trustworthy, and the clear task distribution helps me stay productive”*. These reactions demonstrate that productivity was frequently maintained where work structures minimized uncertainty and encouraged attention.

The obstacles to productive work were also outlined by respondents. The most frequent obstacles were unstable internet, power outages, delays in communication and inability to address a problem instantly when parties were not in the same physical location. Respondent 6 answered that unstable internet, and power outage may disrupt work at a crucial time like deployments or meetings: *“Unstable internet and power outages can disrupt work, especially when we’re deploying or in meetings”*. Respondent 4 indicated communication misunderstandings as another difficulty that might lower efficiency in remote interaction: *“Misunderstandings occur sometimes when we can’t clarify things immediately in online communication”*. Respondent 5 also indicated that productivity might be decreased when digital communication substituted quicker face-to-face clarification: *“Productivity can decrease if we don’t get quick clarification face-to-face and have to rely on digital communication”*. Those results suggest that the productivity barriers were commonly related to the coordination and infrastructure and not exclusively to remote work.

Overall, the interviews indicate that remote and hybrid work was perceived productive under certain conditions. Some respondents reported improved personal efficiency, which was largely attributed to enhanced flexibility and less time spent commuting. Meanwhile, respondents also perceived that organizational productivity was more reliant on how well organizations were communicating, coordination practices, and how well organizations had dependable infrastructure. The results indicate that hybrid work patterns may facilitate productivity, although their usefulness depends on the processes of work, the tools, and coordination of teams.

#### **4.6 Contextual Challenges and Future Perspectives**

This part explores the opinion of the respondents regarding the long-term viability of remote and hybrid work. Although the sustainability concept was not explicitly mentioned in the interview protocol, respondents were questioned about their future expectations, which gave details of how they considered the further existence of these work arrangements.

The interviews also give clear ideas on how the remote and hybrid work could be more productive in the IT sector in Nepal. One of the most frequent recommendations was that digital infrastructure should be improved. Respondent 1 suggested improved internet connectivity reduced unnecessary meetings and effective team communication: *“Better internet and fewer meetings would really help productivity”*. Respondent 4 also suggested improved internet dependability, enhanced digital infrastructure, more organized communication practices, and more favorable support for remote working arrangements: *“We need more reliable internet, better infrastructure, and clear communication to make hybrid work more effective”*. Respondent 6 has highlighted that the internet infrastructure, power backup systems, and favorable policies towards remote and hybrid working should be improved: *“Improved internet, power backups, and support for remote work are crucial for long-term success”*. Respondent 5 also observed that the remote and hybrid productivity could be enhanced further by good company culture, team-to-team communication, and good internet and devices accessibility: *“A strong company culture and better team communication tools make remote work more productive”*. These suggestions align with the trends observed in previous parts of the findings chapter.

The other recommendation was on organizational attitudes and management culture. Respondent 2 claimed that, in certain organizations, leadership is still too attached to physical presence and might not necessarily see physical distance work as equivalent to work in the office. Respondent 2 stated, *“Some managers still believe that you need to be in office to be productive. That’s an issue”*. The same respondent proposed that the management attitudes should be changed to enable remote work to be evaluated based on quality and deadlines and not presence in office: *“Remote work should be evaluated by the quality of work and meeting deadlines, not by physically present in the office”*.

The last interview question has also shown what respondents would want to retain permanently in the current work models. The most popular response was flexibility.

Respondent 4 responded that they would prefer to maintain the flexibility of hybrid work, including the possibility of working remotely when tasks demand deep concentration and minimal distractions. Respondent 4 stated, *“Hybrid work is good because I can focus more at home when I need to concentrate, but I also appreciate being able to meet in person when necessary”*. Respondent 1 also indicated that they would like to keep hybrid working, flexible working hours, and the usage of digital technology: *“I would like to keep hybrid work, flexible hours, and use of digital technology, as it really helps my productivity”*. Respondent 6 claimed that the flexible working hours and the possibility of working remotely should be included in the model: *“Flexible hours and the ability to work from home are essential for me”*. Respondent 2 liked the hybrid model more than fully remote and fully on-site work since face-to-face interaction with colleagues remained important. In comparison, Respondent 7 was more interested in a more distant setup and added that they would rather be given the liberty to work more comfortably in the comfort of their home without having to commute to work each day. Respondent 7 noted, *“I prefer working from home because I don’t have to commute every day, and I get more comfortable working in my space”*. These reactions indicate that flexibility was highly desired, but preferences varied.

In general, the interviews suggest that remote and hybrid work are sustainable in Kathmandu, but not without conditions. Their responses indicate that they would have a model that will operate effectively with the help of good communication, stable infrastructure, proper management practices and realistic expectations of clients. There is also a strong desire among the respondents to maintain flexibility in one form or another, either by hybrid or remote work. This implies that the future of remote and hybrid work in the IT sector of Kathmandu will not be determined by the existence of the model but the ability of organizations to adapt the model to the realities in the area.

#### **4.7 Synthesis of Findings**

The results of the study indicate that the impact of remote and hybrid work on employees’ productivity in the Kathmandu IT industry was both positive and varied. Majority of

the respondents did not refer to remote work as negatively affecting employee productivity. Rather, they tended to consider it favorable under specific conditions. These requirements were consistent digital infrastructure, distinct coordination systems, facilitating leadership, and practical communication patterns. This implies that productivity was not solely decided on work model. It was influenced by the way work model was introduced and promoted in any organization.

The significance of flexibility to individual work effectiveness was one of the most powerful trends through the interviews. Respondent 4 provided explanations that remote or hybrid work allowed them to be more focused and spent less time on commuting as well as managing their tasks: *“Hybrid work helps me balance concentration and communication. I can focus more on my work and still have quick access to my team when needed”*. Meanwhile, this was not an unconditional advantage. For example, Respondent 3 stated, *“I can be more productive when I’m physically present with the team, especially when collaboration is needed”*. Respondent 3 believed that productivity was determined by the quality of work and the fact that there is an opportunity of working together when required. This indicates that individual efficiency was best reinforced when hybrid work allowed employees to balance between focused work and timely communication and problem-solving support.

A second key trend was that productivity in organizations was more reliant on coordination than on individual productivity. Respondents frequently noted that their individual work efficiency had increased or remained the same in remote and hybrid setups. But company-level operational efficiency proved to be more vulnerable to communication delays, unclear roles and impaired coordination in teams. Respondent 5 stated, *“Hybrid work made me more efficient, but organizational challenges like delays and miscommunications did slow things down”*. This implies that hybrid work might facilitate productivity at the individual level despite the fact that the organizational processes had to be adjusted. This was the reason why hybrid work was considered positively more often, as it did not deny the opportunity to interact directly but also allowed some flexibility.

It is also found that infrastructure was also a critical situation in Kathmandu work setting. Majority of the respondents received adequate access to internet, devices and collaboration tools to be able to work, although the quality of the support was unequal. Respondent 4 stated, *“The internet and devices provided were good enough to get my job done, but there were occasional issues with the connection”*. However, some cases still involved internet instability, electricity, and little backup systems. As Respondent 6 noted, *“Sometimes, internet fluctuations and power cuts cause delays, especially during deployments or meeting”*. Due to this, infrastructure was not an issue in the background. It had a direct impact on communication, meeting, and technical reliability. This turns out to be one of the most obvious contextual factors that define the employee productivity in remote work in Nepal.

The role of leadership and work practices was another pattern. The respondents were more likely to report improved experiences when workflows were managed, work tasks were well-defined, and performance was measured using results and not visibility. Respondent 6 stated, *“It’s not about being physically present in the office but about getting tasks done on time and with good quality”*. Supportive leadership and trust-based management seemed to contribute to maintaining productivity in a lot of cases. Simultaneously, the respondents also proposed that communication and support was to be upheld intentionally: *“Our leadership focuses on results and deadlines, not on whether we’re at the office or working remotely”*. A remote work was not necessarily generating powerful coordination. It needed systems, routines, and management practices capable of helping people to work across locations.

Collectively, the results sustain the idea of Chapter 2. Digital infrastructure, collaboration mechanisms, leadership practices, work-life balance, and social dynamics also proved to be relevant factors to productivity. The interviews also confirm that the contextual conditions, particularly the infrastructure and organizational climate in Kathmandu, informed us of the functioning of remote and hybrid work in practice. Altogether, the data

indicates remote and hybrid work can support productivity in case of proper organizational and infrastructural conditions, yet their effectiveness relies on organizational maturity, local infrastructure, and flexibility of work to fit particular work and communication demands.

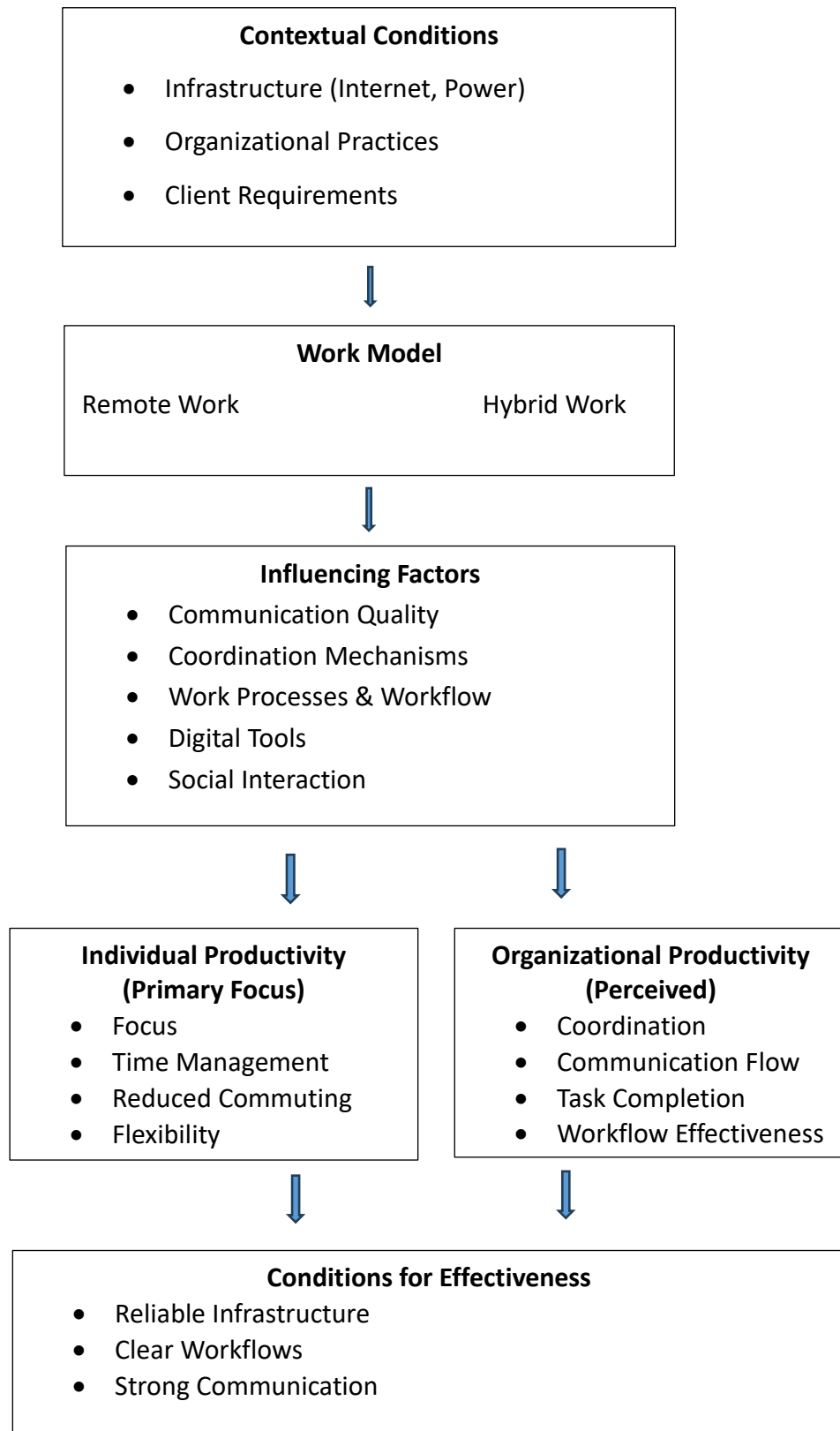


Figure 2. Figure Illustrating key findings in IT

## 5 Discussion

### 5.1 Discussion of Main Findings

This paper has discussed the effects of remote and hybrid work arrangements on productivity in the Kathmandu IT sector, as experienced by employees. Individual-level productivity and organizational-level productivity are distinctly made. Individual productivity is the capacity of employees to accomplish tasks effectively, stay focused and manage time. The aspect of organizational productivity is only discussed as perceived by respondents, especially coordination, communication, and effectiveness of workflow.

The results indicate that remote and hybrid work was broadly linked to a positive experience in productivity on the individual level, which did not apply uniformly to all the respondents. Simultaneously, organizational productivity was seen to be more influenced by the quality of communication, coordination practices and workflow design.

#### 5.1.1 Personal Productivity Under Remote and Hybrid Work

The strongest finding was the fact that remote and hybrid work tended to enhance or sustain personal productivity. According to many respondents, they could better concentrate and manage their time and spend less time commuting. This agrees with past studies that flexi-work may enhance focus and lessen the time that is wasted to travel and office distractions (Choudhury et al., 2024; Noda et al., 2023). These benefits were particularly evident during technical activities that involved prolonged concentration, e.g., in the coding, testing, or development work.

For example, Respondent 4 noted, *“Remote work allows me to focus more on technical tasks because there are fewer interruptions from coworkers”*. Respondent 6 also noted that *“The time saved from commuting is crucial, and I can use that extra time for deep work like coding or testing”*. This aligns with current literature, which indicates that remote and hybrid work model facilitate tasks that need deep focus.

However, every respondents did not experience an increase in productivity. Some respondents reported that their productivity remained almost unchanged despite the work model. For example, Respondent 1 stated, *“My productivity is same whether I work from home or office”*, indicating that productivity outcomes depended on individual work habits and task requirements. This aligns with Pink et al. (2022), who suggest that hybrid work demands employees to change their work patterns based on the nature of the task and the degree of collaboration needed. Similarly, Respondent 3 mentioned that difference in individual productivity was more noticeable only when tasks required immediate collaboration.

Overall, the findings suggest that remote and hybrid work support individual productivity, especially when task completion requires concentration. However, this only comes into effect depending upon the nature of work and individual preferences. As Respondent 5 stated, *“I can do focused work better when I’m working from home, but collaborative tasks are better in the office”*.

### **5.1.2 Organizational Productivity and Coordination**

At the company level, the respondents explained the concept of productivity more indirectly and smoothly. Instead of appraising the organizational productivity in terms of measurable results, they measured it on the basis of communication effectiveness, coordination efficiency, and clarity of the workflow.

For example, Respondent 3 explained that *“In hybrid everything works fast and effectively because we can communicate face to face”*. Similarly, Respondent 6 highlighted that *“Teamwork is the most important factor, as it drives productivity more than individual effort”*. These responses suggest that organizational productivity is perceived through collaborative efforts rather than individual task completion.

However, Respondent 2 mentioned that remote work sometimes led to coordination challenges. Respondent 2 stated that, *“Remote communication sometimes lacks clarity and can lead to misunderstanding”*. Likewise, Respondent 4 also noted that delays in communication often results in longer time for task completion. This indicates that organizational productivity is sometimes hindered by lack of immediate feedback and miscommunication.

Furthermore, the quality of digital tools and infrastructure was often discussed in the context of organizational productivity. For instance, Respondent 5 stated that *“Effective tools and reliable communication systems are essential for us to collaborate efficiently”*. These responses suggest that organizational productivity relies on the tools and communication systems.

Lastly, it was evident through the responses that leadership practices are also important in ensuring organizational productivity. Respondent 5 emphasized that *“Management focuses more on results and timely completion, rather than just physical presence, which helps us work more efficiently”*.

### **5.1.3 The Role of Digital Infrastructure in Remote and Hybrid Work Productivity**

The results confirm that digital infrastructure is among the key conditions influencing remote and hybrid work in Kathmandu IT industry. A number of respondents indicated that they had consistent digital arrangements, whereas some indicated internet instability, electrical issues, and disruptions during virtual meetings or deployments. This helps Nepal-specific research, which determines infrastructure as one of the primary challenges in remote and hybrid work arrangements (Kansakar and Sharma, 2023; Ghimire et al., 2024).

The current study is more detailed since it demonstrates how the respondents felt these constraints in their day-to-day work. The issue of infrastructures did not merely cause inconvenience. Respondent 2 stated that *“Internet instability and power cuts can delay*

*my tasks and affect workflow*". Similarly, Respondent 4 also noted that interruptions caused by power fluctuation require extra time. They disrupted coordination, slackened technical work, and decreased the smoothness of team communication.

This is consistent with the larger body of developing-economy literature that suggests that the productivity implications of remote and hybrid work cannot be explained outside the context of regional and technological circumstances (Tomy et al., 2025; Webber et al., 2018). In this sense, infrastructure in Kathmandu's IT sector is not a secondary issue. It is among the factors that determine whether remote and hybrid work will be productive or disruptive.

#### **5.1.4 Social Dynamics and the Value of Hybrid Work**

The results further show that social dynamics are significant in determining work experiences and productivity perceptions. The conflict and exclusion were not reported by most of the respondents, although they noted a decrease in informal interaction in remote working environments.

Respondents highlighted that the absence of casual communication made interactions more formal and sometimes less effective. Respondent 3 stated that "*When we communicate through text, it can lead to misunderstanding sometimes*". This aligns with existing literature that emphasizes reduced social interaction as a potential challenge in remote work (Jamieson et al., 2025).

Simultaneously, hybrid work was frequently considered a means of striking a balance between these issues. According to the respondents, face-to-face interaction enhanced communication and team relationships. This implies that hybrid work provides a more balanced solution, as it combines flexibility with chances to have direct interaction. Considering the IT industry of Kathmandu, the hybrid work seems to be not only appreciated due to its productivity benefits but also because it allows keeping social connection and the team intact.

### 5.1.5 Kathmandu Context and the Long-Term Feasibility of Remote and Hybrid Work

The responses indicate that the quality of remote and hybrid work in Kathmandu is conditional on local contextual factors. The general view of the respondents was that these work arrangements are feasible in the long run, but their effectiveness is determined by the infrastructure, communication systems, management practices, and client needs.

For example, Respondent 2 explained that the viability of remote work is determined by the nature of the clients, with some local clients physically demanding, whereas international clients are more adaptable. Respondent 2 said, “*For local clients, like banks, remote work is harder because they require physical presence while with international clients remote work is much easier as it’s already arranged around distance*”. This shows that the long-term feasibility of remote and hybrid working arrangements can largely depend on the client base, particularly in the context of Nepal.

Likewise, Respondent 4 stated that remote and hybrid work might be sustained over time provided infrastructure is enhanced and the management practices are supportive. Respondent 4 said, “*Remote work could definitely work long term, but only if infrastructure like better internet and power, along with supportive management, are in place*”. It highlights the importance of digital infrastructure and management support as one of the enablers of long-term feasibility.

Also, Respondent 6 mentioned that the growing flexibility of local organizations towards remote and hybrid work patterns is a factor that will make them long-term viable. Respondent 6 explained, “*As long as the company keeps improving infrastructure and adjusting work practices to accommodate remote or hybrid work, it can continue for the long term*”. This response represents a larger optimistic view of the future of hybrid work, as long as there are ongoing advances in organizational preparedness and infrastructure.

In general, the results show that remote and hybrid working may enable productivity in the IT industry in Kathmandu, but only in a favorable environment. The most effective

combinations of digital readiness, well-coordinated organizations, trust-based organizations, and social support resulted in hybrid work. Hybrid work was especially promising as it balanced the autonomy and collaboration. The results thus confirm a conditional and context-sensitive view of hybrid work productivity instead of the generalized one.

## 5.2 Conclusion

This study analyzed the impact of remote working and hybrid work on the productivity of the Kathmandu IT industry. The results indicate that these work arrangements were perceived to have a positive effect on productivity generally, although the impact was not universal and automatic among all respondents. Remote and hybrid work supported productivity provided that employees were provided with a reliable digital infrastructure, well-defined workflows, efficient collaboration tools, and enabling leadership. Under such circumstances, flexible work frequently enhanced concentration, reduced exhaustion related to communication and allowed employees to spend their time more wisely.

At individual level, respondents by far expressed that remote and hybrid work offered more flexibility in the scheduling of the tasks, which led to increased focus and improved time management. Respondent 1 stated, *“Remote work allows me to focus deeply on tasks without office distraction”*. The results aligned with the literature indicating that work schedule flexibility, as well as fewer disruptions, has a potent impact on improving the productivity of a person (Choudhury et al., 2024; Noda et al., 2023).

However, the results also indicate that not every respondent had an improved productivity. Respondent 2 noted that *“My productivity is the same whether I work from home or office”*, implicating that individual work habits and types of tasks were determinants of productivity outcomes. Respondent 3 also stated that the difference between personal productivity was more pronounced only when the tasks needed urgent cooperation. Respondent 3 stated that *“I find that hybrid work makes a difference when we need to quickly solve problems together, like debugging in teams. But when working alone, my productivity is the same”*.

Although there is a positive view of hybrid work, the respondents did not deny the negative aspects of remote work, especially communication breakdowns and the absence of social interaction. Respondent 2 stated that “*Remote communication sometimes lacks clarity and can lead to misunderstanding*”, indicating the possible dangers of online teamwork. This issue highlights the importance of effective communication practices on the effectiveness of remote and hybrid work models.

When it comes to infrastructure, the respondents highlighted that good internet and power connection were the essentials to the productivity of remote work. Respondent 5 emphasized, “*effective tools and reliable communication systems are essential for us to collaborate efficiently*”. This aligns with the existing literature claiming infrastructure to be one of the significant obstacles to effective remote working in developing economies (Kansakar and Sharma, 2023; Ghimire et al., 2024).

The results also indicate that hybrid work model was perceived as more balanced and sustainable than all-remote work model. Hybrid work model was likely favored by the respondents as it offered flexibility and face-to-face interaction. That assisted in maintaining communication, group bonding and problem-solving ability and even enabled the advantages of less travel and increased freedom. Hybrid work was thus seen as the most viable long-term model among several IT professionals in the Kathmandu context.

In general, the study finds that remote and hybrid work could contribute to productivity under proper conditions in the Kathmandu IT industry, although it requires an appropriate organizational and infrastructural environment. Productivity in hybrid work settings is not determined by work location alone. It is based on the extent to which firms can change their management practices, communication systems, and technological support to the reality of their workers and environment. The study emphasizes the role of the contextual implementation of understanding and enhancing productivity in remote and hybrid work.

### 5.3 Theoretical Implications

This study contributes to the existing literature about remote and hybrid work by demonstrating that productivity in flexible work settings can be most accurately described as a mediated and situational phenomenon. Earlier research has emphasized the benefits of productivity through flexibility, autonomy, and reduced communication which is particularly in developed countries (Choudhury et al., 2024; McPhail et al., 2024). This study supports that, yet it also demonstrates that productivity was determined by additional factors in the IT sector of Kathmandu, such as digital tools, teamwork habits, leadership style, communication, and experience. This implies that remote and hybrid work cannot be theorized as an immediate result of productivity improvement. It is rather to be understood in terms of the processes that facilitate it or limit it.

The first theoretical implication is about the role of digital infrastructure. The results indicate that infrastructure is not a mere background context. It has a direct impact on the possibility of remote and hybrid work to work in practice. This confirms the work of other developing economies that find internet reliability, power stability, and access to appropriate tools as key circumstances of hybrid work (Kansakar and Sharma, 2023; Ghimire et al., 2024; Tomy et al., 2025). The current research contributes to this literature by demonstrating how the respondents were exposed to these circumstances under regular IT related work. It thus reinforces the claim that infrastructure must be considered as a central explanatory variable in studies on remote and hybrid work productivity in emerging contexts.

A second implication relates to the concept of productivity in the IT industry. The results support the idea that productivity is an attribute that cannot be measured in terms of observable output or in straightforward terms of tasks accomplished. The respondents defined productivity in terms of focus, continuity of the working process, quality of the code, the time factor, and the convenience of working together. This supports studies, which consider developer productivity as multidimensional and influenced by technical

and human aspects (Noda et al., 2023; Razzaq et al., 2024). The study thus demonstrates that remote and hybrid work impacts not only the amount of work performed, but also the nature of work, its coordination, and its maintenance.

The third implication is the difference between personal productivity and organizational productivity. Among the most evident results were that respondents were willing to define their performance in a positive way more than the efficiency of their organization. This implies that organizational productivity and individual productivity cannot be considered the same in remote and hybrid work studies. Organizational performance may also rely on communication, coordination, and management systems, whereas personal efficiency can be enhanced by flexibility and less commuting. This difference is a valuable addition to the literature and could explain why mixed results are sometimes observed in research on productivity in hybrid work settings.

The fourth implication will be on adaptation of leadership and management. The results indicate that hybrid work would function better when managers are results oriented, and not office-oriented. This confirms the arguments that trust-based leadership, expectations, and result-oriented assessment are relevant in remote and hybrid work environments (De Quadros et al., 2022; Kemell and Saarikallio, 2023). At the same time, the study shows that organizational maturity differs across firms. In some organizations, the management practices were already adjusted whereas in others, the traditional aspects of supervision remained. This implies that the effectiveness of hybrid work is partly determined by the adaptability of management systems to the changing work arrangements.

The fifth implication is related to the hypothetical worth of the hybrid work as a moderate model. The results show that hybrid work was frequently perceived to be more practical than fully remote work due to the fact that social interaction was maintained and facilitated a quicker problem-solving process despite maintaining flexibility. This supports the literature that hybrid work is more effective at integrating the advantages of autonomy and direct collaboration than fixed work models (Choudhury et al., 2024).

Hybrid work seems to be especially valuable in Kathmandu IT since it lessens some of the social and coordination issues of fully remote work and still provides the flexibility benefits. The context-specific result is an addition to the literature, as it demonstrates why hybrid work can be particularly applicable in urban developing-economy contexts.

Lastly, the research supports the idea of the conceptual framework of Chapter 2. The framework postulated that productivity during remote and hybrid work is mediated by the factors including digital infrastructure, leadership and management practices, collaboration mechanisms, work life balance and social dynamics and mediated by contextual conditions. This structure is widely confirmed by the findings. All these were seen in the interviews as factors that were quite significant in the productivity results. This implies that the framework is explanatory and can provide a good foundation for future studies conducted in related contexts.

Overall, the research is theoretical as it contributes to a more conditional and context-specific understanding of productivity in remote and hybrid work. The productivity of IT sector in Kathmandu was not reliant on the work model only. It was a product of the interaction between technological conditions, organizational practices, leadership and local work realities. This supports the importance of future studies to investigate remote and hybrid work as not a universal construct, but a context-specific system that is influenced by various interacting factors.

#### **5.4 Managerial Implications and Recommendations**

The results of this research have some practical implications on both managers and organizations in the Kathmandu IT industry. One of the implications is that remote work and hybrid work cannot be perceived as mere scheduling measures. The success lies in the ability of organizations to establish the circumstances that facilitate productivity. In this paper, such conditions were credible digital infrastructure, transparent processes, credible leadership, effective communication channels, and encouraging social

conditions. This implies that organizations must strategically handle hybrid work and not informally.

One significant implication is related to the digital infrastructure and technical support. It was found that the instability of the internet, power outages, and the unequal availability of efficient tools may disrupt the work and decrease performance. Infrastructure should be seen by managers as an essential productivity resource. The IT industry organizations of Kathmandu need to invest in reliable internet connections, backup power systems, appropriate hardware, and reliable working collaborative systems. Respondent 5 noted that *“Effective tools and reliable communication systems are essentials for us to collaborate efficiently”*. Such investments are especially crucial in the environment where technical failures might postpone the meetings, deployments, and the completion of tasks. This fact aligns with previous research that indicated that infrastructure is a significant factor regarding remote and hybrid work which is also true in Nepal and other developing economies (Kansakar and Sharma, 2023; Ghimire et al., 2024; Tomy et al., 2025).

The second implication is connected to the workflow design and coordination practices. Respondent 6 stated, *“Teamwork is the most important factor, as it drives productivity more than individual effort”*. The results indicate that productivity is enhanced as teams have clear tasks, routine communication, and clear tracking systems. Work processes in remote and hybrid teams should therefore be formalized by the managers. This involves the application of project management tools throughout, assigning roles, eliminating uncertainties in taking up duties, and specifying deliverables timelines. Strategic use of office days should also be used in the hybrid work. They are expected to facilitate meetings, working together to solve problems, onboarding, and activities that are more effective with in-person engagement. This aligns with studies that indicate hybrid work in the software sector works well when workflows and collaboration systems are redesigned instead of being left to spontaneously adapt (De Quadros et al., 2022; Kemell and Saarikallio, 2023).

The third implication is leadership style and performance evaluation. The overall reaction of the respondents was more favorable to those work arrangements, where the managers concentrated on the results rather than on the visibility in the office. Respondent 4 explained that *“What works for me is when my manager is clear about the expectations and trusts me to complete the tasks without needing to supervise me physically”*. Similarly, Respondent 6 stated, *“The focus should be on the outcome, not on the physical presence in the office”*. It implies that managers need to abandon the system of supervision through presence and reinforce outcome-based leadership behaviors. Practically, performance must be measured in terms of task accomplishment, quality of work, due dates, and contribution towards team targets. Managers are expected to set expectations, give timely feedback and trust employees to handle their work responsibly. This strategy will probably reinforce the productivity and the motivation of the employees. Respondent 3 noted, *“Clear expectations and timely feedback help me stay on track and perform better in hybrid environment”*. The research aligns with the studies that highlights outcome-based leadership and trust as a key to effective remote and hybrid work (Noda et al., 2023; Razzaq et al., 2024).

The other practical implication is that it is necessary to promote work-life balance. The flexibility of work was appreciated by many respondents as it helped to save time on commuting and concentrate more. Respondent 4 stated, *“Time saved from commuting could be used for work tasks, which made me more productive”*. Simultaneously, remote and hybrid work may also lead to the blurring of the boundary between work and personal life in case of rising expectations. Managers are therefore advised not to hold too many meetings, promote reasonable availability and promote healthier workload limits. Respondent 6 mentioned, *“Working from home can be isolating, but if I had the option to work from the office, I would feel more motivated”*. Flexibility at work is greater when the employees are given the trust to manage their time, without having to be on call all the time. Such a recommendation can be substantiated by the literature that work-life

balance is directly associated with the beneficial impact of hybrid work on productivity and well-being (Ghalan et al., 2024; McPhail et al., 2024).

The research further proposes that companies must not take a single model to fit every circumstance. The work model choices have to be adjusted to the company size, team composition, and client demands. Respondent 1 stated that “ *In smaller firms, we have more flexibility, and we don’t need as many formal processes. But in bigger firms, having clear structures and coordination is essential for smooth operation*”. Smaller firms might have the capacity to operate on more relaxed systems whereas larger firms might need a more formal coordination. Similarly, firms serving local clients may still need greater physical presence than firms working mainly with international clients. Respondent 4 mentioned that “ *For local clients, especially in sectors like banking, we need to be physically present more often. But working with international clients has fewer of these constraints because the work is often digital and asynchronous*”. The managers should thus formulate remote and hybrid policies that suit their operation context rather than just adopting global trends. This concept supports previous studies that warn about the danger of viewing hybrid work as a one-size-fits-all. It is successful based on local and organizational influences (Caros and Zhao, 2024; Webber et al., 2018).

On the basis of these implications, a number of recommendations can be made. First, the IT companies in Kathmandu are recommended to enhance digital infrastructure through investing in improved internet support, backup systems, and stable software. As Respondent 5 stated that “ *Effective tools and reliable communication systems are essential for us to collaborate efficiently*”. These upgrades will guarantee uninterrupted communication and enhanced cooperation in distant and hybrid workplaces. Second, managers ought to work out more transparent workflows of hybrid teams, such as assigned roles, frequent coordination processes and robust documentation. As Respondent 3 highlighted, “ *Managers should provide clear structures and regular check-ins to avoid misunderstandings*”. Third, companies would need to implement outcome-based evaluation systems and minimize undue attention to physical visibility. Respondent 4 noted,

*“Remote work allows me to focus better, and my manager trusts me to meet deadlines without needing constant check-ins”*. Fourth, companies must encourage team bonding by communicating, mentoring, and providing team-building experiences, as Respondent 7 explained, *“We need opportunities to connect as a team, even virtually, to maintain a strong bond”*. Lastly, work flexibility should be maintained over time as a long-term characteristic of the work, but the ratio of remote and in-office work should be adjusted by the type of tasks and the necessity of the business. Respondent 3 mentioned, *“The flexibility is great, but some tasks, like brainstorming or team debugging, are better done in person”*, strengthening the need to balance the two work modes depending on the nature of tasks.

Overall, the paper indicates that remote and hybrid working can be a productive part of the Kathmandu IT industry provided that organizations establish appropriate managerial and technical bases. The best suggestion would hence not be to embrace hybrid work but to control it. Any combination of flexibility and well-defined structure, stable infrastructure, and enabling leadership will allow firms to maintain their productivity and employee well-being.

## **5.5 Limitations of the Study**

There are some limitations of this study which one should take into consideration when interpreting the findings. First, the study was based on a small qualitative sample of seven respondents. It suited well into an in-depth interview study, but it limits the scope at which the results can be generalized to the entire IT industry in Kathmandu, or Nepal. The study was intended to provide a detailed investigation of experiences and perceptions as opposed to generating statistically representative findings. Respondent 1 quoted, *“My productivity has stayed the same, working from home or the office”*, presenting the diverse personal experiences in the small sample.

Second, the research was limited to Kathmandu IT professionals. This implies that the results are indicative of a single urban technology environment. Remote and hybrid

working might be less productive in other regions of Nepal and more so in those areas with poorer infrastructure, organizational capability, and access to digital devices. Respondent 4 stated, *“In Kathmandu, the internet is decent for remote work, but in other areas, the connection is too unstable”*. The findings should therefore be understood as context-specific.

Third, the study relied on self-reported experiences and perceptions. The respondents explained their perception of productivity, efficiency, communication, and work experience in remote and hybrid settings. Respondent 5 mentioned, *“I feel more productive working remotely, but it’s hard to measure it objectively”*. Such records are useful, although they lack objective productivity indicators like actual output logs, project completion indicators, or system performance indicators. Thus, the results are based on perceived productivity instead of verified productivity results.

Fourth, the respondents belonged to various positions, size of companies and work arrangements. This heterogeneity made the study stronger because it made it more diverse in terms of perspective. Simultaneously, it also brought variation which complicates direct comparison. For example, some respondents worked mainly in hybrid models, while one respondent had a more fully remote arrangement. Remote 2 stated, *“I mainly work remotely, and its been great for my focus”*. Similarly, some worked in smaller firms and others in larger organizations. The differences could have influenced the experience of the respondents in terms of productivity and work conditions.

Fifth, the research was done at a specific moment when remote and hybrid work practices in the IT sector of Kathmandu are still developing. Technological arrangements, management attitudes, and organizational policies can be subject to further changes. Respondent 6 stated, *“It’s still early, and we’re figuring out how to make hybrid work sustainable long term”*. Thus, the results reflect a time-specific picture and not a final or permanent view of hybrid work within the industry.

However, the research remains helpful in understanding the impacts of remote and hybrid work on the productivity of the IT sector in Kathmandu despite these limitations. It offers context-specific evidence based on professionals who have first-hand experience with remote and hybrid work and can be used to explain why the arrangements are more or less effective.

## **5.6 Suggestions for Future Research**

This paper provides a number of avenues to future research. First, a bigger sample in the future can be used to test whether the trends observed here can also be observed in a greater number of IT firms in Kathmandu and Nepal. It could have been a bigger sample as well to make a greater comparison between the size of the company, the job position and the work model.

Second, a mixed-method approach could be used in future research. The combination of interviews and surveys, organizational records, or performance indicators would assist in linking the perceptions of employees to more quantifiable results. This would particularly be helpful in investigating the distinction between personal productivity and organizational productivity that became evident in this study.

Third, the comparison of various regions in Nepal could be made in future studies. As this study was based on Kathmandu, it would be interesting to consider that remote and hybrid work may work differently in smaller cities or less connected areas. These comparisons would enhance the comprehension of the role of infrastructure and local context in influencing flexibility of work productivity.

Fourth, the differences in industries could be examined in future research. The current research limited itself to the IT sector, which is already central to digital work. Remote and hybrid work may have a different effect on other sectors. Thus, industrial comparison would assist in differentiating between those findings that are unique to IT and those that are more general.

Fifth, an additional study in the future can focus on the size of the company and the type of client. The interviews in this study suggest that these factors may shape whether remote or hybrid work is sustainable and productive. Larger companies, smaller companies and companies with local and international clients might have dissimilar expectations and work requirements. This is the area that should be explored more closely.

Lastly, a longitudinal approach may be adopted in future studies. Kathmandu IT industry is still evolving with remote and hybrid work. A longitudinal study would assist in demonstrating whether the existing practices become more stable, whether management attitudes remain in a transition process, and whether the ratio between remote and hybrid employment evolves in the future.

Overall, future studies may develop this study by increasing the sample, extending the context, and incorporating qualitative insight with more solid comparative or quantitative data. This kind of work would also enhance the understanding of the influence of remote and hybrid work on productivity in Nepal and other developing-economy contexts.

## References

- Bartik, A. W., Cullen, Z., Glaeser, E. L., Luca, M., & Stanton, C. (2023). *The rise of remote work: Evidence on productivity and preferences from firm and worker surveys*. Harvard Business School. [https://www.hbs.edu/ris/Publication%20Files/20-138\\_eca954c7-dde8-4154-8d7b-5688fd5caf94.pdf](https://www.hbs.edu/ris/Publication%20Files/20-138_eca954c7-dde8-4154-8d7b-5688fd5caf94.pdf)
- Belzunegui-Eraso, A., & Erro-Garcés, A. (2020). Teleworking in the context of the Covid-19 crisis. *Sustainability*, *12*(9), 3662. <https://doi.org/10.3390/su12093662>
- Bhandari, A., Bhattarai, U., & Timsina, S. M. (2024). Unveiling the productivity paradox: Remote work and employee performance in the IT Sector through the lens of work stress. *Quest Journal of Management and Social Sciences*, *6*(1), 45–58. <https://nepjol.info/index.php/qjmss/article/view/72490>
- Bloom, N., Liang, J., Roberts, J., & Ying, Z. J. (2015). Does working from home work? Evidence from a Chinese experiment. *Quarterly Journal of Economics*, *130*(1), 165–218. <https://doi.org/10.1093/qje/qju032>
- Bryant, L., Garnham, B., Tedmanson, D., & Diamandi, S. (2018). Tele-social work and mental health in rural and remote communities in Australia. *International Social Work*, *61*(1), 143-155. <https://doi-org.proxy.uwasa.fi/10.1177/0020872815606794>
- Caros, N. S., & Zhao, J. (2024). The need for an interdisciplinary approach to remote work and urban policy. *Nature Cities*, *1*(9), 547-554. <https://doi.org/10.1038/s44284-024-00103-y>
- Cho, J., Beck, S., & Volda, S. (2022). Topophilia, placemaking, and boundary work: Exploring the psycho-social impact of the COVID-19 work-from-home experience. *Proceedings of the ACM on Human-Computer Interaction*, *6*(GROUP), 1-33. <https://doi-org.proxy.uwasa.fi/10.1145/3492843>
- Choudhury, P., Foroughi, C., & Larson, B. Z. (2021). Work-from-anywhere: The productivity effects of geographic flexibility. *Strategic Management Journal*, *42*(4), 655–683. <https://doi.org/10.1002/smj.3251>

- Choudhury, P., Khanna, T., Makridis, C. A., & Schirmann, K. (2024). Is hybrid work the best of both worlds? Evidence from a field experiment. *Review of Economics and Statistics*, 1-24. doi: [https://doi-org.proxy.uwasa.fi/10.1162/rest\\_a\\_01428](https://doi-org.proxy.uwasa.fi/10.1162/rest_a_01428)
- Contreras, F., Baykal, E., & Abid, G. (2020). E-Leadership and teleworking in times of COVID-19 and beyond: What we know and where do we go. *Frontiers in Psychology*, 11, 590271. <https://doi.org/10.3389/fpsyg.2020.590271>
- De Quadros, E. L. L., Lisboa, A. S., Souza, M. Q. B., Prikladnicki, R., & Chaves, M. S. (2022, November). The migration from forced remote work to hybrid work and its impacts on software quality: the case of a multinational company. In *Proceedings of the XXI Brazilian Symposium on Software Quality* (pp. 1-10). <https://dl-acm-org.proxy.uwasa.fi/doi/pdf/10.1145/3571473.3571498>
- de Souza Santos, R. E., & Ralph, P. (2022). A grounded theory of coordination in remote-first and hybrid software teams. In *Proceedings of the 44th International Conference on Software Engineering* (pp. 25-35). <https://doi-org.proxy.uwasa.fi/10.1145/3510003.3510105>
- European Parliament & Council of the European Union. (2016). *Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (General Data Protection Regulation)*. Official Journal of the European Union, L 119, 1–88. <https://eur-lex.europa.eu/eli/reg/2016/679/oj>
- Felstead, A., & Henseke, G. (2017). Assessing the growth of remote working and its consequences for effort, well-being and work-life balance. *New Technology, Work and Employment*, 32(3), 195–212. <https://doi.org/10.1111/ntwe.12097>
- Ghalan, U., Shrestha, S., Thapa, S., Bhatta, S., & Sushan, K. C. (2024). Remote Work and Productivity: Analyzing the Mediating Effect of Work-Life Balance. *Education, Management, and Technology*. ResearchGate. <https://www.researchgate.net/publication/388436822>

- Ghimire, B., Dahal, R. K., & Joshi, S. P. (2024). Factors affecting virtual work arrangements and organizational performance: Assessed within the context of Nepalese organizations. *Intangible Capital*, 20(2), 98–112. <https://www.intangible-capital.org/index.php/ic/article/view/2513>
- Ilag, B. N. (2021). Tools and technology for effective remote work. *International Journal of Computer Applications*, 174(21), 13-16. <https://doi.org/10.5120/ijca2021921109>
- Jamieson, J., Akahori, W., & Yamashita, N. (2025, April). Understanding Cyber Hostility, Gossip, Exclusion, and Social Support in Remote and Hybrid Work Settings: Benefits and Challenges of Remote Work. In Proceedings of the 2025 CHI Conference on Human Factors in Computing Systems (pp. 1-23). <https://dl-acm-org.proxy.uwasa.fi/doi/pdf/10.1145/3706598.3713684>
- Joshi, D. R., Khanal, J., & Dhakal, R. H. (2023). Teachers' adaptation process to mediating digital devices in Pre-COVID-19, during COVID-19, and Post-COVID-19 classrooms in Nepal. *Education Sciences*, 13(5), 509. <https://www.mdpi.com/2227-7102/13/5/509>
- Kansakar, P., & Sharma, A. K. (2023). Work from home (WFH) and related technical challenges for software companies in Kathmandu: Lessons from COVID-19. *LBEF Research Journal of Science, Technology and Management*, 5(3), 140–160. <https://www.lbef.org/journal/5-3/download/5-3-140-160.pdf>
- Kemell, K. K., & Saarikallio, M. (2023). Hybrid work practices and strategies in software engineering-emerging software developer experiences. *IEEE Access*, 11, 112861-112876. <https://ieeexplore-ieee-org.proxy.uwasa.fi/stamp/stamp.jsp?tp=&arnumber=10274083>
- Larson, B. Z., Vroman, S. R., & Makarius, E. E. (2020). A guide to managing your (newly) remote workers. *Harvard Business Review*, 18(1), 67–75. <https://hbr.org/2020/03/a-guide-to-managing-your-newly-remote-workers>
- Maity, R., & Lee, K. L. (2025). The impact of remote and hybrid work models on small and Medium-sized enterprises productivity: a systematic literature review.

*SN Business & Economics*, 5(10), 158. <https://doi.org/10.1007/s43546-025-00931-7>

- McPhail, R., Chan, X. W., Maya, R., & Wilkinson, A. (2024). *Post-COVID remote working and its impact on people, productivity, and the planet: An exploratory scoping review*. *The International Journal of Human Resource Management*. <https://www.tandfonline.com/doi/pdf/10.1080/09585192.2023.2221385>
- Nguyen, P. N. D., Nguyen, H. H., Giang, T. T., Duong, H. C., & Nguyen, L. D. Y. (2024). Linking new ways of working to employee performance in emerging countries: the interplay of technostress, and meaningful work. *Sage Open*, 14(4), 21582440241289988. <https://doi-org.proxy.uwasa.fi/10.1177/21582440241289988>
- Noda, A., Storey, M. A., Forsgren, N., & Greiler, M. (2023). DevEx: What Actually Drives Productivity: The developer-centric approach to measuring and improving productivity. *Queue*, 21(2), 35-53. <https://spawn-queue-acm-org.proxy.uwasa.fi/doi/pdf/10.1145/3595878>
- Pabilonia, S. W., & Redmond, J. J. (2024). *The rise in remote work since the pandemic and its impact on productivity*. U.S. Bureau of Labor Statistics. <https://www.bls.gov/opub/btn/volume-13/remote-work-productivity.htm>
- Pedersen, A., Kirchner, K., Larson, B. Z., Hasle, M., Edwards, K., & Ipsen, C. (2025). Does distance disrupt helpfulness? Questioning the relationship between extent of remote work and organizational citizenship behavior. *Journal of Organizational Effectiveness: People and Performance*, 1-19. <https://doi-org.proxy.uwasa.fi/10.1108/JOEPP-01-2025-0068>
- Pink, S., Ferguson, H., & Kelly, L. (2022). Digital social work: Conceptualising a hybrid anticipatory practice. *Qualitative Social Work*, 21(2), 413-430. <https://doi-org.proxy.uwasa.fi/10.1177/14733250211003647>
- Prasad, K. D. V., Vaidya, R., & Anil, K. (2023). Remote working and occupational stress: Effects on IT employees. *Frontiers in Psychology*, 14, 1069402. <https://doi.org/10.3389/fpsyg.2023.1069402>

- Razzaq, A., Buckley, J., Lai, Q., Yu, T., & Botterweck, G. (2024). A systematic literature review on the influence of enhanced developer experience on developers' productivity: Factors, practices, and recommendations. *ACM Computing Surveys*, 57(1), 1-46. <https://dl-acm-org.proxy.uwasa.fi/doi/pdf/10.1145/3687299>
- Rising Nepal Daily. (2025, July 11). The Global shift toward remote work. *The Rising Nepal Daily*. <https://risingnepaldaily.com/news/64926>
- Rolling Nexus. (2024). Remote and hybrid work arrangements: HR issues and remedies. Rolling Nexus Blog. <https://rollingnexus.com/blog/7/Remote-Work-and-Hybrid-Work-Models--Challenges-and-Solutions-for-HR>
- Rot, A., Sobinska, M., & Busch, P. (2023, September). Programming teams in remote working environments: An analysis of performance and productivity. In 2023 13th International Conference on Advanced Computer Information Technologies (ACIT) (pp. 376-381). IEEE. <https://ieeexplore-ieee-org.proxy.uwasa.fi/document/10275614>
- Ruvimova, A., Lill, A., Howe, L., Huang, E., Murphy, G. C., & Fritz, T. (2025). Remote Workplace Interactions and Extraversion: A Field Study on Wellbeing and Productivity Among Knowledge Workers. *Proceedings of the ACM on Human-Computer Interaction*, 9(2), 1-26. <https://doi-org.proxy.uwasa.fi/10.1145/3710915>
- Saunders, M., Lewis, P., and Thornhill, A. (2007 or newer edition). *Research Methods for Business Students*. Financial Times Prentice Hall, Harlow.
- Seed Financial Education. (2024). Remote work emergence and future. Seed Financial. <https://seedfinancial.edu.np/rise-of-remote-work/>
- Shahid, A., Mulla, T., & Munir, S. (2025). Emerging Trends in Hybrid Work Environment—A Study Investigating the Needs and Expectations of Gen Z and Millennial Employees. <https://doi-org.proxy.uwasa.fi/10.1108/978-1-83708-808-920251007>

- Soroui, S. T. (2023). Encountering weak signals: Economic development practitioners' perceptions of remote work arrangements. *Local Economy*, 38(1), 3-21. <https://doi-org.proxy.uwasa.fi/10.1177/02690942231180283>
- Tomy, T., Manoharan, G., Ramakrishnan, S., Selvaraj, F. J., Ashtikar, S. P., & Muppidi, S. (2025, April). Sustainability in the Context of Remote Work in IT Sector. In 2025 12th International Conference on Computing for Sustainable Global Development (INDIACom) (pp. 1-6). IEEE. <https://ieeexplore-ieee-org.proxy.uwasa.fi/stamp/stamp.jsp?tp=&arnumber=11115610>
- Vartiainen, M., & Vanharanta, O. (2024). True nature of hybrid work. *Frontiers in Organizational Psychology*, 2, 1448894. <https://doi.org/10.3389/forgp.2024.1448894>
- Waight, C. L., Kjerfve, T. N., Kite, A., & Smith, B. (2022). Connecting and relating in Brazil: Implications of remote work. *Human Resource Development International*, 25(2), 231-253. <https://doi-org.proxy.uwasa.fi/10.1080/13678868.2022.2048435>
- Webber, D. J., Webber, G. A., Berger, S., & Bradley, P. (2018). Explaining productivity in a poor productivity region. *Environment and Planning A: Economy and Space*, 50(1), 157-174. <https://doi-org.proxy.uwasa.fi/10.1177/0308518X17735103>

## Appendices

### Appendix 1. Interview Questions

#### 1. Background Questions

1. Can you briefly describe your current role and responsibilities?
2. How many people are in your team and how large is your company?
3. Are you currently working in a fully remote, hybrid, or office-based model?
4. How long have you been working under this arrangement?
5. What does a typical workday look like for you under this model?

#### 2. Work Environment & Infrastructure

6. How would you describe the quality of your digital infrastructure (internet speed, power backup, device access) while working remotely or in a hybrid setting?
7. Have you faced any regular interruptions or limitations while working from home or outside the office? How do these affect your ability to complete tasks?
8. Do you feel that the collaboration tools used by your company are sufficient for effective teamwork? Why or why not?

#### 3. Work Process & Collaboration

9. How has your organization or team adapted project workflows (e.g., sprint planning, code review, communication tools) for remote or hybrid work?
10. How are coordination and task responsibilities managed between remote and in-office workers?
11. How is your performance evaluated under the current model? Does management focus more on outcomes or visibility?
12. Do you feel trusted and supported by leadership in your current work arrangement?

#### 4. Social Experience & Psychological Factors

13. Do you feel socially connected to your team or isolated in your current work model? Can you share examples?
14. Have you ever experienced communication breakdowns, misunderstandings, or exclusion while working remotely or in hybrid settings?

15. Does your team or organization provide any form of emotional or peer support (check-ins, team bonding, mentoring)?

#### **5. Productivity & Performance Outcomes**

16. How do remote and hybrid work models affect your personal work efficiency?
17. How do remote and hybrid work models influence your company's overall operational efficiency?
18. How would you compare your productivity now to when you worked fully in the office (if applicable)?
19. What factors help you stay productive in your current setup?
20. What challenges reduce your ability to deliver work efficiently?

#### **6. Contextual & Future Perspective**

21. Do you think remote or hybrid work is sustainable in Kathmandu's IT sector? Why or why not?
22. What changes or improvements would you recommend to make remote/hybrid work more productive in Nepal's IT sector?
23. What aspects of your current model would you like to retain permanently?