ISSN: 1526-4726 Vol 4 Issue 2 (2024)

# Urban Labor Markets and Remote Work: Exploring How the Rise of Remote Work Is Reshaping Urban Labour Markets, Commuting Patterns, And Residential Preferences.

#### Dr. Shami A. Nimgulkar Kamble,

Associate Professor, Department of Economics, Prahladrai Dalmia Lions College of Commerce & Economics, Mumbai, India

Email: shamin@dalmialionscollege.ac.in

#### ABSTRACT

The labour market is a global marketplace that helps employers hire employees from current job seekers. The people searching for jobs and the employers searching for skilled labourers create a demand level in the global job market. Employees also significantly impact the global labour market. The rise of the COVID-19 pandemic created a significant supply in the global lockdown in the marketplace, and the employees found no way to close their office premises for an unprecedented time. Most organisations have introduced remote working strategies that significantly impact the labour market to reduce financial loss. Among the three important areas, the most significant implications of remote work bore upon the direction of growth in the labour market. Along with these, the two areas of residential preferences and commuting to workplaces faced important transformations. Commuting to the office has gradually changed to almost zero, creating opportunities for employees to enhance their job flexibility. The rise in the development of new residential areas in comparatively remote places compared to core urban areas is found. People started focusing on implementing new residences rather than staying with others.

KEYWORDS: Remote work, Urban labour market, Commuting pattern, COVID-19

#### 1)Introduction

The Labour Market is a market related to employment at different jobs that creates an equilibrium between the demand and supply of labourers. A labour market is created so that the employers act as the key drivers behind generating demands for new jobs, and the employees deliver the supply of jobs. The labour market is a significant component behind the growth of any economy and is related to capital, products and services. The market creates different macro and microeconomic impacts based on the factors related to the labour market's existence: the unemployment rate and the productivity ratio of labourers. Similarly, two macroeconomic factors driving the labour market in differentiated directions are wages acquired by individuals and the number of working hours. International market dynamics, including unemployment and productivity, act as the main factors behind developing the labour market located within a specific nation.

Gradual adjustment of the world towards the achievement of the new normal scenario has normalised some important practices at the home and working levels in a significant way. Among these, one critical transformation is the remote working practice that almost all global organisations adopted during the pandemic. During the pandemic, the main reason behind adopting work from home, technically known as "Remote work", was to reduce the chance of spreading the infection of COVID-19 among employees [1]. Continuing remote work has different reasons, including cost-cutting strategy, time savings, and decreasing the complexities of work-life balance maintenance. Most organisations have gained the chance to reduce capital expenditure regarding the expenses of electricity and rent. Besides, remote work includes time-saving opportunities to enhance workers' productivity [2]. Maintaining the problems at the domestic level and completing the daily office tasks at a fast pace remains a significant problem for employees, and remote work is a beneficial technique to reduce the complexities employees face in maintaining work-life balance.

The practice of remote work has increased the average wage rate of employees in the global labour market and enhances the benefits on behalf of the Employees. In the last two years, global remote-working employees have crossed almost two million, with active job applications crossing over ten million [3]. Remote work has emerged as a main factor in manipulating the labour market, enhancing workers' flexibility and the equilibrium between professional and personal lives. Investigating the "socioeconomic" profiles of the European countries, most of the studies show that before the pandemic, most workers who acted remotely were "highly educated", "full-time ", and "permanent and high-income workers" [4]. The requirement of commuting to a physical office and working hard to get free time and stress reduction has been reducing gradually. Increasing the participation of employees has been the main aim of most organisations' remote work practice

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

development. Offering remote work options has largely enhanced the number of participating employees in recruitments at different designations within a specific organisation.

Various challenging factors face the urban labour market, and the workers work remotely. Studies show that, in 2020, the "difficulty focusing" of the workers was 1.8%, and "staying motivated" was 7%. The feeling of "loneliness" was 20%, and in 2023, the highest rate of "staying home too often" was 21%, and the "loneliness feeling" rate was almost 15% as mentioned in figure 1 (5. Sherif, 2024). Most workers have difficulties collaborating with others, and the communication gap is their most important challenge.

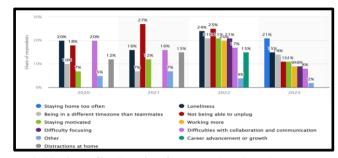


Figure 1: Various Challenging factors related to the remote work

(Source: Sherif, 2024)

Moreover, most people working remotely do not mean that they get their "designated workplace". Rather, they must suffer from various issues between their "workplace and living area." In The last few years, the urban labour participation rate was almost 50%, the rural Indian participation was almost 60%, and the entire Indian population associated with the urban market was almost 55% as suggested with the figure 2 (6. Rathore, 2024). Various environmental factors exist, including the sudden increasing rate of temperature and certain climatic changes that impact the labourers' decision to stay at a remote place for working purposes.

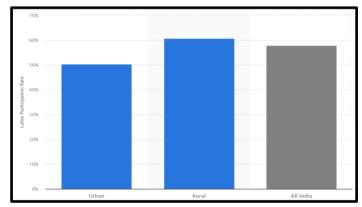


Figure 2: Participation rate of labour in Urban and Rural market

(Source: Rathore, 2024)

#### a) Objectives

- To develop an idea about remote working practices in the labour market in the current scenario
- To evaluate the implications of remote work in transforming the labour market towards a new direction
- To interrelate the commuting patterns of the labour market and the new feature of remote work introduced globally
- To discuss the reshaping phenomenon of residential preferences in the labour market as an impact of remote work

#### b) Research questions

- 1. How is remote work practice taking place in the current global labour market?
- 2. What are the impacts of remote working practices on changing the direction of the labour market gradually?
- 3. Is the commuting pattern of the labour market related to remote work?
- 4. What is the main impact of remote work in changing the residential preferences of the labour market?

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

#### c) Research Hypothesis

H01: Transformation of the labour market does not depend on the new trend of remote working practice

H02: Remote work does not bear any implication upon the commuting pattern of the labour employees

H03: The changes in the residential preferences of global market employees never get impacted by the remote work practice

H1: Remote working practice at worldwide level acts as the main factor in changing the scenario of the labour market

H2: The commuting pattern of Employees in the labour market has gained transformative capacity as an impact of remote work

H3: The residential preferences of the employees actively participating in the global labour market are changing gradually with the growth of remote work

#### 2) Literature Review

#### a) Role of Remote work in transmitting a labour market from different aspects

Remote work is the main transformative agent in the labour market, gradually changing employees' work and developing mitigating strategies against traditional rules. The process started in most industries with the spread of the COVID-19 pandemic to reduce the chance of spreading the infection. Most employers and employees have adopted the remote working strategy, significantly impacting the global labour market. Remote work loosely focuses on telecommuting, which focuses on developing a specific arrangement of work that is an exception from the traditional official atmosphere as mentioned in figure 3 (7. Vyas, 2022).

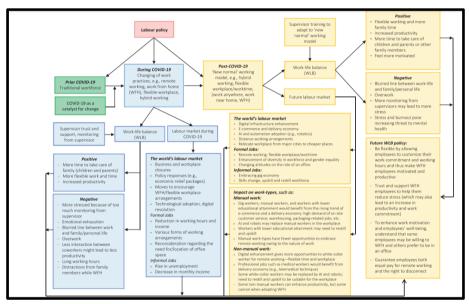


Figure 3: Effect of COVID-19 on the labour market

(Source: Vyas, 2022)

After the pandemic, in the labour market, the transformation of the conventional process was more innovative with the adoption of technology. "Artificial Intelligence" and the "adoption of automation process" are the two prime aspects that have changed the remote working procedure of the labourers [8]. The labourers' market is recognised as the "blue-collared" and the "non-manual" jobs after the sudden development of various technologies within the working process.

In remote work, a person can work from home or any other suitable location. Advancements in technology have been a main factor in remote working practice because the process requires significant technological tools like video conferencing software, cloud computing, and deployment that enable collaborative task completion. The most important implication of remote work practice on the labour market is the expansion of potential labour pools for most employers. After the initiation of the process, employers get the chance to hire suitable talents from anywhere within the globe, and the limitation of hiring workers residing within commutable distance has reduced [9]. The expansion in the employee pool level has acted as an agent behind the growth of competition for jobs in the labour market. Employees residing at different locations and conducting their work responsibilities are the key factors behind companies adopting new strategies for organisational structural modifications [11]. Balance of power in different industries has changed the employees from the employers as an impact of remote work practice in the job market.

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

#### b) Significance of Commuting in the Labor Market and the changes faced after initiation of remote work

Commuting occurs when an employee within a specific organisation travel from their residence to the office each day. Commuting plays a vital role in transforming the performance of the employees working in a specific organisation. Primarily, commuting provides employees with proper time to prepare for work. Learning more about the workplace atmosphere and the working organisation helps the employees get familiar with their coworkers and learn about the office area in detail [11]. Commuting is a significant way for an individual to help them understand all the possible routes to reach their office from tier residences. The division between working life and an individual's personal, lively space becomes distinct with their daily communication rate [12]. While going to the office from home, they gain time to prepare themselves for work mentally. Similarly, when returning from their office, they get the time to shift their minds from the official atmosphere to their homely atmosphere.

One significant positive impact of remote work is that the process has increased flexibility in the working atmosphere. The employees have acquired the scope to customise their work environment to suit the requirements of their choices. Reducing the requirements for commuting to the office has been a beneficial way to reduce the employees' physical and mental stress levels as mentioned in figure 4 (13. Chatterjee, 2020).

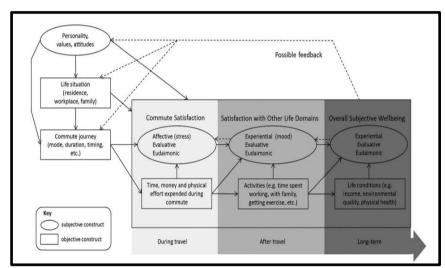


Figure 4: Relationship framework of communicating and the well-being of workers (Source: Chatterjee, 2022)

Irrespective of the geographical parameters present within the places, remote working strategies have opened up new ways to enhance employees' productivity [14]. The two most important benefits regarding the enhancement of remote working are the reduction of official distractions and the reduction in the used time for commutation, which has helped develop autonomy enhancement. These two impacts act as incremental factors in enhancing job satisfaction levels, which helps increase employee engagement and develop loyalty.

#### c) Residential preference and mobility in the context of the labour market

The expression of preferences regarding the residences includes specificity in choice creation and the fulfilment of the individual's desires, which helps in selecting a specific homely place for them to live. Each individual's preference varied depending on key factors, including age, level of income, the location of the residence, and the design characteristics present within the residential house. At different times, financial factors and the level of neighbourhoods act as two factors that navigate the locations of the residents and generate design-based diversities [15]. Along with these factors, the influence of these factors changes residential preferences based on the changes in the features possessed by the groups of people focusing on residing in these places. Based on the individual's working cycle, changes take place in the residential areas [16]. The home's features are impacted by different stages occurring in the residential areas, helping the individual employees gain proper ownership of the residents, which is the key factor for them to commute and reach their work environment with procured possibilities.

## Journal of Informatics Education and Research ISSN: 1526-4726

Vol 4 Issue 2 (2024)

Low-income individuals bear ownership preferences regarding developing their specific residential area. Different factors remain key drivers in changing the provision of residences, including housing provision types and financing scheme development. Shaping residential preferences and choices and restructuring create significant areas for changing the type of residences most people procure [17]. Most people bear diversities in choosing their proximity, which is the key to changing drivers in determining the labour market networks and their directions. In a significant method, these factors focus on developing proper evidence that determines the working establishments of the employees and skilled labourers. Aside from the increasing income inequality rate, most workers are incentivised to work outside their workplaces to earn more. The influence of "familial" has impacted their minds during work.

## d) Changes in the residential preferences labour by labour market employees depending on the remote work practice in a global context

At the beginning of the COVID-19 pandemic in 2020, most people working in different organisations around the global labour market faced a change in their lives. The most important change that occurred in the labour market as an impact of the pandemic situation was the rise of the remote working strategy. The development of remote working has changed the basic requirements of the employees, including their need for properly organised desktops, adoption of remote working tools like video conferencing software and other factors. Three main changes in the procedural development of remote work were the working operations, their livelihood, and daily commutation. Urban core areas were the affected containment zones during the pandemic days, and people started changing their residences from urban areas to comparatively open areas around different places [18]. The residential preference of most hybrid workers and the employees working in various multinational organisations gradually shifted from urban areas to open areas and even to remote areas at some times.

These changes in residential preferences significantly impact the development of business services. Most people residing in hostel areas and coworking places gradually change their choices. Among these people, a high level of consumers focused on acquiring their internet facilities, and sudden growth was found in the connection acquisition sales level by the internet service. The rise of remote workers gradually showed that people wanted their residences near shopping malls and shopping centres. Private vehicles witnessed a rise in their sales value because, out of natural fear regarding the spread of the pandemic, people started to buy self-driving vehicles. The residential preferences witnessed a higher index reading the growth in demand for houses bearing private garages. All the workers reportedly have to experience different types of emotional issues in their lifestyle during that time, affecting their overall productivity. Residential factors related to their working purpose act as the important factor behind the implementation of the habitat of the workers from their workplace.

#### 3) Methodology

The researcher conducted the study using *primary quantitative data analysis* to analyse the research questions for further development. *The Positivist research philosophy* is used to discuss all the quantifiable results and logistically discuss the topic. This type of philosophy is used within this research to enhance knowledge based on human interest in the research topic. All the observed information gathered from the research is well established with the positivist research philosophy. The researcher used the "*deductive approach*" to explore the information collected primarily based on the hypothesis and objective of the present topic. Based on the existing theories, all the hypotheses are developed and based on the results and observation; the positive hypotheses are re-accepted, and the negative hypotheses are rejected [19]. With the help of this research approach, the researcher can develop the ideas by transferring the ideas from a generalised view to a specific one. With the help of this research approach, the concluding parts maintain a true conclusion.

The researcher has used the "descriptive research design" to describe the different variables related to the research. With the descriptive designs, the researcher has used the proper description to describe the different factors associated with the research topic. The researcher explained the factors for analysing the study topic with proper observation that can be examined from a scientific point of view. The primary quantitative method with descriptive designs is used to develop the research hypotheses [20]. In descriptive design with quantitative analysis, the researcher gathers the information related to the "prediction related" to the study. This design measures the "statistical outcomes" to investigate the related information "cost-effectively." The researcher will use primary research by investigating the "survey methods" to collect information related to the urban market and the remote work of the laborers. Different types of questions, using descriptive methods and deductive approaches, and using a "positivist research philosophy" induce the researcher to develop the research issues based on the objective and questions of the research.

Data collection is an essential aspect of any research and there are mainly two types of data primary and secondary data with both having two subgroups including qualitative and quantitative data. In this study, "primary quantitative data" has been collected through constructing an online survey using "Google Forms" and a survey questionnaire *[refer to Appendix 1]*. Sampling is another technique followed in this research in terms of selecting a proper size of subjects to collect

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

information. Getting a representative sample, which is made up of a small number of instances or units chosen from a far broader sample or population, is the main objective of sampling [21]. This research has followed a "purposive sampling technique" which is a common non-probability sampling method used to elect a particular set of subjects that are effective to meet the criteria of the study. Using this technique, 51 respondents have been selected to collect "primary quantitative data" in this study.

Analysing the collected data also played a vital role in representing the findings of this study in a more effective course of action. Due to using "primary quantitative data", a statistical analysis technique has been used to interpret the outcome of this study. In terms of statistical analysis of the collected data, IBM SPSS software has been used by which descriptive statistics, correlation between the identified variables, regression, reliability statistics and one sample t-test have been performed to represent the findings of this study. Through this analytical process, a clear and concise outcome of the study has been represented.

#### 4) Result

This section of the research is based on providing the findings of the study in an understandable course of action. Collected primary numerical information from 51 participants who are directly or indirectly accompanied by remote work culture, especially in the urban area has been statistically analysed and represented in this section which provides evidence supporting the way remote work impacts the urban labour market, residential preferences as well as commuting patterns.

#### a)Descriptive statistics

					Statisti	CS													
		What is your age?	What is your gender?	What is your employment status?	Nowadays, more urban firms than ever previously are likely to provide remote work choices	The use of remote employment has reduced communication difficulties generally	Living farther away from my place of employment has been affected by my work from home	I believe that working remotely is more productive than working in an office	I am content with the policies my company has set forth regarding remote work	The habits of working remotely have improved my overall effectiveness at work	Working remotely has given me greater flexibility over my work schedule	My levels of stress have decreased because of the freedom that remote work offers	My overall job satisfaction has grown as a result of flexible work options	The time saved from commuting has improved my productivity	The methods I employ for working remotely have made my daily schedule more efficient	Working remotely enables me to manage my time more efficiently	Managing personal commitments is easier for me when I work remotely	The adaptability of working remotely has enhanced my mental well- being	I am more satisfied with my work-life balance due to remote working options
N	Valid	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean		1.43	.43	.35	2.67	2.90	2.86	3.10	3.22	3.24	3.24	3.24	3.18	3.12	3.04	3.16	3.20	3.24	3.06
Median		1.00	.00	.00	3.00	4.00	3.00	4.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	4.00	3.00
Mode		1	0	0	3	4	3	4	3	4	3ª	4	3ª	3	3	4	3	4	3
Std. Devia	tion	.985	.539	.483	1.260	1.389	1.000	1.221	.832	.971	.862	.971	.974	1.052	1.019	1.084	.872	1.031	.988
Skewness		.068	.683	.634	-1.206	843	837	-1.224	-1.514	-1.453	-1.458	-1.453	-1.451	-1.640	-1.143	-1.403	-1.530	-1.408	-1.416
Std. Error	of Skewness	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333	.333
Kurtosis		968	729	-1.665	.440	859	.306	.514	3.741	1.938	3.083	1.938	1.966	2.758	.840	1.470	3.255	1.357	2.285
Std. Error	of Kurtosis	.656	.656	.656	.656	.656	.656	.656	.656	.656	.656	.656	.656	.656	.656	.656	.656	.656	.656
Minimum		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maximum		3	2	1	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

a. Multiple modes exist. The smallest value is shown

Figure 5: Descriptive statistics (Source: IBM SPSS)

The following types of descriptive statistics, including frequency, variation, and central tendency, have been recognised for use in characterising the information set in the context of frequency assessment. The central tendency in this case is determined by the mean, median, and mode taken together. Aside from that, the mean and SD values have a high correlation. This interrelation can be considered to have a clear concise aspect in summarising the data collected in a survey [22]. In this particular context, for a demographic aspect, the SD value and the mean value have been recorded for 0.985 and 1.43 respectively. On the other hand, for one of the variable-based aspects it has been recorded for 1.260 and 2.67 respectively as mentioned in **Figure no 5**. Based on this assumption, the identified values can be considered as close to each other which indicates a clustered situation in the dataset.

#### b)Correlation analysis

Karl Pearson first introduced the correlation coefficient more than a century ago. Pearson drew motivation from Sir Francis Galton, Charles Darwin's less well-known half-cousin and the creator of linear regression, who had a similar theory of correlation. The correlation coefficient measures the degree of the linear relationship between two variables. It is represented by the Greek symbol rho (p) for the theoretical population and r for a sample of the real population [22]. In this study, this correlation analysis has been used to determine the linear relationship between the dependent variables, "Urban labour market" (DV1), "Commuting Patterns" (DV2), "Residential Preferences" (DV3) and independent variables, "Remote Working Practice" (IV1), "Flexibility in Work" (IV2), "Time-Saving Working Strategy" (IV3) and "Work-Life Balance" (IV4).

## Journal of Informatics Education and Research ISSN: 1526-4726

Vol 4 Issue 2 (2024)

			Correlations				
		Nowadays, more urban firms than ever previously are likely to provide remote work choices	The use of remote employment has reduced communicati on difficulties generally	Living farther away from my place of employment has been affected by my work from home	I believe that working remotely is more productive than working in an office	I am content with the policies my company has set forth regarding remote work	The habits of working remotely have improved my overall effectiveness at work
Nowadays, more urban	Pearson Correlation	1	.655**	.439**	.308*	.318	.523**
firms than ever previously are likely to provide	Sig. (2-tailed)		.000	.001	.028	.023	.000
remote work choices	N	51	51	51	51	51	51
The use of remote	Pearson Correlation	.655**	1	.724**	.619**	.347	.655**
employment has reduced communication	Sig. (2-tailed)	.000		.000	.000	.013	.000
difficulties generally	N	51	51	51	51	51	51
Living farther away from	Pearson Correlation	.439**	.724**	1	.437**	.397**	.446**
my place of employment has been affected by my	Sig. (2-tailed)	.001	.000		.001	.004	.001
work from home	N	51	51	51	51	51	51
I believe that working	Pearson Correlation	.308*	.619**	.437**	1	.353	.216
remotely is more productive than working	Sig. (2-tailed)	.028	.000	.001		.011	.127
in an office	N	51	51	51	51	51	51
I am content with the	Pearson Correlation	.318	.347	.397**	.353	1	.060
policies my company has set forth regarding	Sig. (2-tailed)	.023	.013	.004	.011		.677
remote work	N	51	51	51	51	51	51
The habits of working	Pearson Correlation	.523**	.655**	.446**	.216	.060	1
remotely have improved my overall effectiveness	Sig. (2-tailed)	.000	.000	.001	.127	.677	
at work	N	51	51	51	51	51	51

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed)

\*. Correlation is significant at the 0.05 level (2-tailed).

(Source: IBM SPSS)

The above represents the Pearson correlation value between the DVs and IV1 identified in this study by which the impact of the remote working practices on the urban labour market's shape, commuting patterns in the urban labour market and residential preferences in this market can be reported. The correlation value between DV1 and IV1 has been reported as 0.523 while the correlation value between DV2 and IV1 is estimated to be about 0.655. On the other hand, the *p*-value of DV3 and IV1 is recorded as 0.446. The standard *p*-value has been recognised as 0.5 value as mentioned in **Figure no 6**. Considering the standard value, the interrelation between IV1 and DV1, and DV2 can be considered as highly positive rather than DV3. However, this analysis provides evidence that there is some sort of correlation between IV1 and DV3 as the value is much closer to the standard value.

			Correlations				
		Nowadays, more urban firms than ever previously are likely to provide remote work choices	The use of remote employment has reduced communicati on difficulties generally	Living farther away from my place of employment has been affected by my work from home	Working remotely has given me greater flexibility over my work schedule	My levels of stress have decreased because of the freedom that remote work offers	My overall job satisfaction has grown as a result of flexible work options
Nowadays, more urban	Pearson Correlation	1	.655**	.439**	.534**	.654**	.522**
firms than ever previously are likely to provide	Sig. (2-tailed)		.000	.001	.000	.000	.000
remote work choices	N	51	51	51	51	51	51
The use of remote	Pearson Correlation	.655**	1	.724**	.537**	.655**	.486**
employment has reduced communication	Sig. (2-tailed)	.000		.000	.000	.000	.000
difficulties generally	N	51	51	51	51	51	51
Living farther away from	Pearson Correlation	.439**	.724**	1	.456**	.384***	.436**
my place of employment has been affected by my	Sig. (2-tailed)	.001	.000		.001	.005	.001
work from home	N	51	51	51	51	51	51
Working remotely has	Pearson Correlation	.534**	.537**	.456**	1	.386**	.593**
given me greater flexibility over my work schedule	Sig. (2-tailed)	.000	.000	.001		.005	.000
*	N	51	51	51	51	51	51
My levels of stress have	Pearson Correlation	.654**	.655**	.384**	.386**	1	.632**
decreased because of the freedom that remote	Sig. (2-tailed)	.000	.000	.005	.005		.000
work offers	N	51	51	51	51	51	51
My overall job satisfaction	Pearson Correlation	.522**	.486**	.436**	.593**	.632**	1
has grown as a result of flexible work options	Sig. (2-tailed)	.000	.000	.001	.000	.000	
	N	51	51	51	51	51	51

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed)

Figure 7: Correlation between DVs and IV2

(Source: IBM SPSS)

The above-represented figure is critically reflecting the interrelation between the aforementioned dependent variables and commuting patterns. The *p* value of DV1 and IV2 is reported as 0.654 whereas the value for DV2 is identified as 0.655. The *p*-value of DV3 and IV2 has been reported as 0.456 as mentioned in **Figure no 7**. This analysis also provides evidence regarding a highly positive correlation between DV1 and DV2 with IV2 rather than a correlation between DV3 and IV2. However, the value identified for DV3 is also much closer to the standard ones.

Figure 6: Correlation between DVs and IV1

# Journal of Informatics Education and Research ISSN: 1526-4726

Vol 4 Issue 2 (2024)

			Correlations				
		Nowadays, more urban firms than ever previously are likely to provide remote work choices	The use of remote employment has reduced communicati on difficulties generally	Living farther away from my place of employment has been affected by my work from home	The time saved from commuting has improved my productivity	The methods I employ for working remotely have made my daily schedule more efficient	Working remotely enables me to manage my time more efficiently
Nowadays, more urban	Pearson Correlation	1	.655**	.439**	.453**	.525**	.391**
firms than ever previously are likely to provide	Sig. (2-tailed)		.000	.001	.001	.000	.005
remote work choices	N	51	51	51	51	51	51
The use of remote	Pearson Correlation	.655**	1	.724**	.583**	.596**	.595**
employment has reduced communication	Sig. (2-tailed)	.000		.000	.000	.000	.000
difficulties generally	N	51	51	51	51	51	51
Living farther away from	Pearson Correlation	.439**	.724**	1	.548**	.594**	.260
my place of employment has been affected by my	Sig. (2-tailed)	.001	.000		.000	.000	.065
work from home	N	51	51	51	51	51	51
The time saved from	Pearson Correlation	.453**	.583**	.548**	1	.667**	.527**
commuting has improved my productivity	Sig. (2-tailed)	.001	.000	.000		.000	.000
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	N	51	51	51	51	51	51
The methods I employ for	Pearson Correlation	.525**	.596**	.594**	.667**	1	.574**
working remotely have made my daily schedule	Sig. (2-tailed)	.000	.000	.000	.000		.000
more efficient	N	51	51	51	51	51	51
Working remotely	Pearson Correlation	.391***	.595**	.260	.527**	.574**	1
enables me to manage my time more efficiently	Sig. (2-tailed)	.005	.000	.065	.000	.000	
	N	51	51	51	51	51	51

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Figure 8: Correlation between DVs and IV3 (Source: IBM SPSS)

This represented figure indicates a strong and positive correlation between the identified DVs and IV3. In this particular context, the *p*-value of IV3 with DV1, DV2 and DV3 is recorded for 0.525, 0.596 and 0.594 respectively as mentioned in **Figure no 8**. The identified values critically reflect the strong and positive correlation between the identified DVs and IV3. Considering these findings it can be considered that the saving working strategy followed in the remote work practices is directly correlated with the reshaping of the urban labour market, commuting patterns along residential preferences in the urban labour market.

			Correlations				
		Nowadays, more urban firms than ever previously are likely to provide remote work choices	The use of remote employment has reduced communicati on difficulties generally	Living farther away from my place of employment has been affected by my work from home	Managing personal commitments is easier for me when I work remotely	The adaptability of working remotely has enhanced my mental well- being	I am more satisfied with my work-life balance due to remote working options
Nowadays, more urban	Pearson Correlation	1	.655**	.439**	.334*	.323	.402**
firms than ever previously are likely to provide	Sig. (2-tailed)		.000	.001	.017	.021	.003
remote work choices	N	51	51	51	51	51	51
The use of remote	Pearson Correlation	.655**	1	.724**	.478**	.505**	.441**
employment has reduced communication	Sig. (2-tailed)	.000		.000	.000	.000	.001
difficulties generally	N	51	51	51	51	51	51
Living farther away from	Pearson Correlation	.439**	.724**	1	.352*	.497**	.433**
my place of employment has been affected by my	Sig. (2-tailed)	.001	.000		.011	.000	.001
work from home	N	51	51	51	51	51	51
Managing personal	Pearson Correlation	.334*	.478**	.352*	1	.481**	.682**
commitments is easier for me when I work	Sig. (2-tailed)	.017	.000	.011		.000	.000
remotely	N	51	51	51	51	51	51
The adaptability of	Pearson Correlation	.323*	.505**	.497**	.481**	1	.339*
working remotely has enhanced my mental	Sig. (2-tailed)	.021	.000	.000	.000		.015
well-being	N	51	51	51	51	51	51
I am more satisfied with	Pearson Correlation	.402**	.441**	.433**	.682***	.339	1
my work-life balance due to remote working	Sig. (2-tailed)	.003	.001	.001	.000	.015	
options	N	51	51	51	51	51	51

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed)

Figure 9: Correlation between DVs and IV4 (Source: IBM SPSS)

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

Originating from the correlation analysis, it has been identified that IV4 is highly and positively correlated with DV2 and DV3 rather than DV1. The above figure represents a correlation value between DV1 and IV4 as 0.402, whereas the value for DV2 and IV4 is 0.505 and for DV3 and IV4, it is 0.497 as mentioned in **Figure 9**. Based on the standard value of correlation the interrelation between DV2 and DV3 with IV4 can be considered as higher than DV3.

#### c)Regression analysis

It is possible to look at the relationship between variables using regression analysis. The variables are often classified as independent or dependent. Any data, the driver, or other factor that affects a dependent variable is called an independent variable. Analysing a link between one independent and one dependent variable is one of the main goals of linear regression analysis []. The association between one independent variable and one dependent variable has been demonstrated in this segment of the data analysis.

Dependent Variable	R-value	R-Squared value	sig. Value
Urban labour market	0.796	0.634	.000
Commuting Patterns	0.908	0.825	.000
Residential Preferences	0.869	0.755	.000

**Predictors:** "Remote Working Practice", "Flexibility in Work", "Time-Saving Working Strategy" and "Work-Life Balance".

Table 1: Regression analysis

The above-represented table is critically reflecting the linear interrelation between the dependent and independent variables. The R-value indicates the correlation coefficient between the variables in which the DV1 is recognised with an R-value of 0.796, DV2 has an R-value of 0.908 and DV3 has an R-value of 0.869 as mentioned in **Table 1**. Each of the values is reported on the positive side which indicates a positive interrelation between the DVs and IVs. On the other hand, the R-squared values identified indicate the predictiveness of the IVs in terms of predicting the IVs variances. In terms of DV1, it has been recorded as 63.4%, whereas for DV2 it has been reported as 82.5% and DV3 it has been recognised as 75.5%. The identified predictiveness also indicates a positive and linear correlation between the DVs and IVs.

#### d)Reliability statistics

Dependent Variables	Cronbach's alpha
Urban labour market	0.906
Commuting Patterns	0.912
Residential Preferences	0.906

**Table 2: Reliability statistics** 

The procedure of proving that the study adhered to a legitimate scale of assessment while analyzing the study is known as the evaluation of reliability. The Cronbach's Alpha value in the present investigation is used by the researcher to indicate the validity of the study scales of measurement. Cronbach's alpha values between 0 and 1 have been demonstrated in several researches as an effective measure to understand the reliability of the scales used in that particular study[24]. In this study, Cronbach's alpha value has been reported above 0.9 for every DV as mentioned in **Table 2.** Therefore, the statistical scales used in the measure can be considered reliable which is also indicating the findings of the study as reliable.

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

e)Hypothesis testing

		Or	ne-Sample Te	st			
			Te				
				Mean	95% Confidence Interval of the Difference		
	t	df	Sig. (2-tailed)	Difference	Lower	Upper	
Nowadays, more urban firms than ever previously are likely to provide remote work choices	15.119	50	.000	2.667	2.31	3.02	
The use of remote employment has reduced communication difficulties generally	14.917	50	.000	2.902	2.51	3.29	
Living farther away from my place of employment has been affected by my work from home	20.436	50	.000	2.863	2.58	3.14	
I believe that working remotely is more productive than working in an office	18.124	50	.000	3.098	2.75	3.44	
I am content with the policies my company has set forth regarding remote work	27.595	50	.000	3.216	2.98	3.45	
The habits of working remotely have improved my overall effectiveness at work	23.786	50	.000	3.235	2.96	3.51	
Working remotely has given me greater flexibility over my work schedule	26.795	50	.000	3.235	2.99	3.48	
My levels of stress have decreased because of the freedom that remote work offers	23.786	50	.000	3.235	2.96	3.51	
My overall job satisfaction has grown as a result of flexible work options	23.295	50	.000	3.176	2.90	3.45	
The time saved from commuting has improved my productivity	21.172	50	.000	3.118	2.82	3.41	
The methods I employ for working remotely have made my daily schedule more efficient	21.299	50	.000	3.039	2.75	3.33	
Working remotely enables me to manage my time more efficiently	20.799	50	.000	3.157	2.85	3.46	
Managing personal commitments is easier for me when I work remotely	26.168	50	.000	3.196	2.95	3.44	
The adaptability of working remotely has enhanced my mental well-being	22.404	50	.000	3.235	2.95	3.53	
I am more satisfied with my work-life balance due to remote working options	22.106	50	.000	3.059	2.78	3.34	

Figure 10: One sample t-test (Source: IBM SPSS)

In the above-represented figure, the t-value represents the hypothetical stance of the variable-based questions which is recorded as significantly high. As represented in the **figure 10**, the t-stats range between 14.9 and 27.6. This can be considered as an effective aspect associated with the rejection of the null hypothesis which automatically allows the researcher to go with the alternative hypotheses. Therefore, from the findings of this section, it can be considered that each hypothesis is critically rejected and the alternative hypotheses are accepted in this study.

#### 5)Discussion

The findings of this study critically indicate the role of remote work practices in reshaping the urban labour market in a significant course of action. The correlation analysis carried out in this study significantly outlined that there is a significant correlation between remote working practices and the urban labour market, residential preferences and commuting patterns in the market. On the other hand, remote work practices have been illustrated as one of the most effective aspects associated with promoting flexibility in job schedules in several organisations which results in the development of organisations' performance accordingly [25]. Therefore, based on the findings of this study, it can be considered that the remote working practice is effectively reshaping productivity enhancement in the urban labour market. On the other hand, the correlation between residential preferences which is a compelling factor in the shape of the urban labour market and work-life balance critically indicates the effectiveness of remote work practices in promoting labours' work-life balance more positively. Apart from correlation analysis, this study also rectified the interrelation between the identified DVs and IVs by constructing a linear regression. The interrelation between commuting patterns and time-saving working strategy also indicates the effectiveness of remote work practices in providing effective time management aspects to the employees which play a vital role in managing the work-life balance of the employees in a more significant course of action. Working from home or elsewhere has also been reported as a crucial aspect which minimises hassles from commuting patterns [26]. This can also be considered a piece of effective evidence regarding the role of remote work practices in shaping commuting patterns for the best of the labourers, especially those working in urban areas. The statistical analysis carried out in this

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

study also signifies a positive and high correlation between commuting patterns and time-saving working strategies which also indicates the role of remote work practices in managing the challenges in commuting patterns faced by the labourers working in the urban areas.

In association with the findings of this study, it can also be considered that the remote work practices in the urban working areas are effective in terms of getting flexibility in the working processes. Several studies have critically signified that remote work practices have effectiveness in controlling hectic schedules among the workers which helps the labourers in managing work-life balance in a more significant course of action [27]. The findings of this study also indicate a strong and positive correlation between commuting patterns and work-life balance by which it can also be considered that through changing the commuting patterns the remote work practices are productively changing the shape of work-life balance management among the workers in the urban labour market. Considering this finding, it can also be considered that a remote work schedule is an effective aspect in allowing urban labourers to manage their lives in a more specific course of action.

Initial attempts to promote teleworking stalled because there were unclear benefits and obvious drawbacks. Only in the past 20 years has uptake increased, in part because of intricate processes of socialisation. Since most conventional travel or employment studies are not designed effectively for the intricacy of remote or hybrid work, estimating the penetration of telecommuting is particularly difficult. Although there was initial hope that telework would reduce the need for travel, this promise has mainly been broken [28]. Rather, travel is usually enhanced by information and communication technology. The geography of work has become more complex due to the rapid acceleration of working overtime from home and nomadic labour, yet home-based telework is a relatively new phenomenon. The results of this study also indicate that with the emergence of remote work practises the need to commute on a daily basis has been reduced however, there is a critical lack of time-saving strategies in these working processes. However, the outcome of the study indicates the role of remote work practices in reshaping the urban labour market more effectively.

#### 6) Conclusion

This study has been constructed with an ideology of defining the interrelation between remote work and the urban labour market. In accordance with the findings of the research, it can be concluded that there is a significant correlation between remote work practice and the development of the urban labour market. Considering the findings of this study, it has been identified that remote work practices allow labourers to manage work-life balance as it provides a significant level of flexibility in the working process. Overall, this study can be considered to provide enormous types of economic aspects such as savings of money through minimising the requirements of commuting on a daily basis. On the other hand, this study has also concluded the effectiveness of these working procedures in terms of promoting work-life balance among the urban workers which is another essential aspect associated with the formation of a strong and positive interrelation between remote work and urban labour market.

This study has been constructed using only primary quantitative information which however provides an enormous type of real-time data based on the context of the study selected. Although this can be considered as a key limitation of the study including secondary qualitative data in this study would justify the research statement more precisely. However, this can also be considered as a future scope of the study as researchers can carry out this research using secondary qualitative data which will justify the prior sections of the study in a more specific course of action. Overall, this study has provided a sufficient amount of information on the role of the remote work process in reshaping the urban labour market more effectively.

#### 7) Acknowledgement

I would like to thank the members and supervisors, guides and the agency who are helping me to conduct the study. Along with this I would like to thank my family members for their immense support.

#### 8) Funding statement

No Fund is used here for this study

#### 9) Data Availability

This study is based on the survey method with Online SPSS and all the quantitative information is discussed in different tools and statistical methods.

#### 10) Conflict of Interest

All the authors declare that there is "no conflict of interest".

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

#### References

- 1. Sweet, Matthias, and Darren M. Scott. "What might working from home mean for the geography of work and commuting in the Greater Golden Horseshoe, Canada?." *Urban Studies* 61.3 (2024): 567-588.
- Mariotti, Ilaria, Dante Di Matteo, and Federica Rossi. "Who were the losers and winners during the Covid-19 pandemic? The rise of remote working in suburban areas." Regional Studies, Regional Science 9.1 (2022): 685-708.
- 3. Kures, Matt, and Steven C. Deller. "Growth in commuting patterns and their impacts on rural workforce and economic development." *Economic Development Quarterly* 37.1 (2023): 54-63.
- 4. Howard, Greg, Jack Liebersohn, and Adam Ozimek. "The short-and long-run effects of remote work on US housing markets." *Journal of Financial Economics* 150.1 (2023): 166-184.
- Sherif. A. (2024)., Struggles with working remotely worldwide from 2020 to 2023. [Online] Available at: https://www.statista.com/statistics/1111316/biggest-struggles-to-remote-work/ [Accessed on: 12<sup>th</sup> July, 2024; from]
- Rathore. M. (2024)., Rate of labor force participation (LFPR) across rural and urban India in 2023 [Online]
   Available at: https://www.statista.com/statistics/654183/labor-force-participation-rate-india/ [Accessed on: 12<sup>th</sup>
   July, 2024]
- 7. Vyas, Lina. ""New normal" at work in a post-COVID world: work-life balance and labor markets." Policy and Society 41.1 (2022): 155-167.
- 8. Braesemann, Fabian, Vili Lehdonvirta, and Otto Kässi. "ICTs and the urban-rural divide: can online labour platforms bridge the gap?." *Information, Communication & Society* 25.1 (2022): 34-54.
- 9. Tran, Ly Thi, Jill Blackmore, and Mark Rahimi. ""You are not as localised as I need": employability of Chinese returning graduates." *Higher Education, Skills and Work-Based Learning* 11.5 (2021): 949-965.
- 10. Ahlstrom, David, et al. "Managing technological, sociopolitical, and institutional change in the new normal." *Journal of Management Studies* 57.3 (2020): 411-437.
- 11. Nikolaeva, Anna, et al. "Living without commuting: experiences of a less mobile life under COVID-19." *Mobilities* 18.1 (2023): 1-20.
- 12. Endrissat, Nada, and Aurélie Leclercq-Vandelannoitte. "From sites to vibes: Technology and the spatial production of coworking spaces." *Information and Organization* 31.4 (2021): 100353.
- 13. Chatterjee, Kiron, et al. "Commuting and wellbeing: a critical overview of the literature with implications for policy and future research." *Transport reviews* 40.1 (2020): 5-34.
- 14. Schäfer, Christine, et al. "Health effects of active commuting to work: The available evidence before GISMO." *Scandinavian journal of medicine & science in sports* 30 (2020): 8-14.
- 15. Wang, Yiyuan, Bumsoo Lee, and Andrew Greenlee. "The role of smart growth in residential location choice: Heterogeneity of location preferences in the Chicago region." *Journal of Planning Education and Research* 44.2 (2024): 766-783.
- 16. Nieuwenhuis, Jaap, et al. "Does segregation reduce socio-spatial mobility? Evidence from four European countries with different inequality and segregation contexts." *Urban Studies* 57.1 (2020): 176-197.
- 17. Preece, Jenny, et al. "Understanding changing housing aspirations: A review of the evidence." *Housing Studies* 35.1 (2020): 87-106.
- 18. Kang, Myounggu, et al. "COVID-19 impact on city and region: what's next after lockdown?." *International Journal of Urban Sciences* 24.3 (2020): 297-315.
- 19. Siedlecki, Sandra L. "Understanding descriptive research designs and methods." *Clinical Nurse Specialist* 34.1 (2020): 8-12.
- 20. Mohajan, Haradhan Kumar. "Quantitative research: A successful investigation in natural and social sciences." *Journal of Economic Development, Environment and People* 9.4 (2020): 50-79.
- 21. Rahman, Md Mizanur. "Sample size determination for survey research and non-probability sampling techniques: A review and set of recommendations." *Journal of Entrepreneurship, Business and Economics* 11.1 (2023): 42-62.
- 22. Cooksey, Ray W., and Ray W. Cooksey. "Descriptive statistics for summarising data." *Illustrating statistical procedures: Finding meaning in quantitative data* (2020): 61-139.
- 23. Ali, Parveen, and Ahtisham Younas. "Understanding and interpreting regression analysis." *Evidence-Based Nursing* 24.4 (2021): 116-118.
- 24. Schober, Patrick, Edward J. Mascha, and Thomas R. Vetter. "Statistics from A (agreement) to Z (z score): a guide to interpreting common measures of association, agreement, diagnostic accuracy, effect size, heterogeneity, and reliability in medical research." *Anesthesia & Analgesia* 133.6 (2021): 1633-1641.

ISSN: 1526-4726 Vol 4 Issue 2 (2024)

- 25. Chatterjee, Sheshadri, Ranjan Chaudhuri, and Demetris Vrontis. "Does remote work flexibility enhance organization performance? Moderating role of organization policy and top management support." *Journal of Business Research* 139 (2022): 1501-1512.
- 26. Stiles, Jonathan, and Michael J. Smart. "Working at home and elsewhere: daily work location, telework, and travel among United States knowledge workers." *Transportation* 48.5 (2021): 2461-2491.
- 27. Shirmohammadi, Melika, Wee Chan Au, and Mina Beigi. "Remote work and work-life balance: Lessons learned from the covid-19 pandemic and suggestions for HRD practitioners." *Human Resource Development International* 25.2 (2022): 163-181.
- 28. Sweet, Matthias, and Darren M. Scott. "What might working from home mean for the geography of work and commuting in the Greater Golden Horseshoe, Canada?." *Urban Studies* 61.3 (2024): 567-588.