

# Employee Commute Experience post COVID Era

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## ABSTRACT

Employee Commutes offered by Companies ensure Safety and Security of employees but traditional transportation security methods are no more sufficient in making employees convinced to commute to their Office where organizations are working on RCE (Risk, Cost, and Employee satisfaction) based modules. The problem with this model is that employees do not feel safe in today's situation because of which current module should be upgraded with COVID based user experience. This paper proposes the upgradation in the employee safety and security policies while specially for the corporates who travels using offices commuting services. To understand the major criterion thoroughly from the employee's perspective and the organizations offerings. This paper is consisting of willingness and eligibility of employees to come to the office, Sanitization Status of both drivers and cabs, Containment zones information where the driver and employee resides and allow the facility team to plan their safe commute to increase the lagging productivity of the firms. This module has provided a very efficient and safe way for employees to commute to their offices.

## Keywords

Safety, Employee Commute, RCE, COVID based user experience, Contactless Sign-in, Containment Zone.

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## 1. Introduction

India as a country has witnessed a tremendous increase in the number of organizations offering Commutes from Home to Office and back to their employees and according to a report published by Bangalore based employee transport startup MoveInSync Technology Solutions Private Limited, Indians spend 7% of their day in office commute, but the safety and security of an employee is still suffering from inefficiencies due to lack of technological advancement.

Organizations have always invested in human resources for safety and security. But the initiatives were more focused on the inside rather than taking into account the external factors like employee transportation and it became worse when COVID-19 has hit the market. Today, all the organizations are looking for one big answer: How to convince their employees to travel to the office? Employees do not want to go out from their house due to COVID-19 pandemic fear and from the past 4 months, organizations offered work from home facility to their employees but they have to travel in the upcoming months. Also, we have to adopt the new normal and work according to it.

Safety of employees should be the highest priority of organizations whether employees are present in the office or outside the office premises, some

organizations have come up with an idea to provide security services to their employees and prepared a centralized tracking tool accessible by Security command center or Control rooms. This technology helps in tracking cab's real time location and if the employee feels unsafe, he/she can inform the security team using the mobile application and the security team can act accordingly.

Previously organizations used RCE (Risk, Cost, and Employee Satisfaction) module. This module was working fine with the pre-COVID era. But at present, COVID has scared the entire world because of which the scenario has been changed and employees are not willing to travel to their offices using office commutes.

In this research paper a detailed proposal of the RCE + COVID based user experience has been suggested. A Survey was performed on around 250+ employees from different sectors. This paper has discussed about different safety measures that can be adopted by the companies and how these adoption helps in changing employee sentiment.

RCE Model consists of Risk reduction, Cost reduction, and increase in Employee Experience.

Risk Reduction is ensured by providing security features like SOS alerts from Mobile App, over speeding alerts, single woman travelling alert, real time Tracking of that cab which makes the

employee feel comfortable and safe during the commute. Cost Reduction is achieved by optimizing the routes as per the employees travelling on the routes, Fleet Mix Capability gives the flexibility of reduction of routes by using larger vehicles, audit of cab movement by providing actual vs planned movement. Employee Experience is increased by giving employees a single app for scheduling and tracking of cabs, feedback of employees, security features in the app, direct call facility to transport helpdesk & drivers, share their trip to their family members, reduction in travel time.

Employee Commute Industry works on this model where the technology company provides the services to their client where they ensure optimization of cost & services which brings Transparency, Accountability, Digital Solutions, Audit friendly Workflow for the companies. Presently, most of the companies have adopted this workflow to make the system digitized. Companies like MoveInSync, Safetracs, Routematic provides the commute solutions to the corporates from the last decade. Employees are taking the company driven cab services for commute which ensure safety and time management to the employees which according to a survey increase their productivity.

## 2. Literature Review

Organizations around the world are working on the best possible solutions to make their Employees feel safe during their office hours. Some of the Organizations are working on automating food courts, meeting rooms, desk booking for their employees. While in Employee transportation currently RCE (Risk, Cost, and Employee Satisfaction) modules are running and few organizations are searching for upgraded modules. As per the current scenario we are proposing a new module RCE + COVID based user experience using which organizations can convince their employees to travel to the office using safe office commutes.

A study by (Bennett & Little, 1990) shows that to avoid commuting difficulties flexible scheduling was being adopted. In this study most of the firm authors considered expanding in both the band of hours during which employees could begin and end their work and number of employees using alternative schedules. Also, Employees started adopting Carpooling mode of transport with

positive impressions of public transit as a result of the natural disaster.

Another study by (Sila, Eneja & Sirok, 2018) shows the importance of employee satisfaction in the job. In this study authors proposals are based on mutual relations and development of both employees and employers. With the proper use of motivational incitation for employee's management can get the desired results. It has been observed that the professionalism in drivers and their performance increased along with the safety of travelers.

Another study by (Vanoutrive, Van De Vijver, Malderen, Jourquin, Thomas, Verhetsel & Witlox, 2012) shares the information regarding requirement of carpooling and how organizations are adopting this option to run full occupancy cab. (Velmurugan, Shruthi & Rajkamal, 2019) in their research showed that if OLA upgrades their technology further including security services can attract and increase their customer base.

The millennials requirements for commuting and their comfort level including reduced waiting time, ride sharing was explored by (Dhawan & Yadav, 2018).

(Pandya, Rungta & Iyer, 2017) shows that customers are looking for safety and securities while commuting using cab services and this is the reason behind the major chunk for people are preferring cab services having GPS tracker, payment mode, etc.

One more study done by (Kadam, Nimje, Kode, Talegaonkar & Sangle, 2017) shows how effectively carpooling concept is running and increasing day by day.

Research conducted by (Hussain, Knapen, Bellemans, Janssens & Wets, 2015) shows big organizations' requirement to optimizing the employee commute operations which can be fulfilled by carpooling concepts.

(Kumar & Ramesha, 2017) in their research shows that employee transportation has grown tremendously resulting in issues with respect to traffic management, Employees spending time in-cab and pollution. Implementation of PPP model of operation in terms of risk liability can solve the raised problems including employee safety measures, digitized mode of operations, cluster of multiple employees from different companies, and many more but without local authorities' consensus, organizations will not take a single step towards PPP model, for this government

should intervene and make amendments in the norms so that principle employer will take responsibility for their employee safety.

PPP (Public-private partnership) model is the offering by the government for Businesses to come together on the ground and provide the services to the people. This model is been used in multiple countries to provide facilities like Schooling, Medical fields, transport sector, etc.

(Wachs & Giuliano, 1992) in their research shows that the initial phase of XV regulations implementation in employee transportation coordinators to be started and shared the roles and responsibility of employee transportation coordinators including performance of their organization.

Also (Bhargava, 2020) shows that Organizations looking for perceiving risks and challenges should think about centralized command centers or control rooms for better response to any type of road emergency such as car breakdown/accidents as a business continuity plan. Also, Employee safety and security tracker should be installed along with the Control room.

### 3. Research Methodology

For understanding the office commuter’s sentiment regarding their willingness to use office commute in current situation with COVID safety features, a Survey on approximately 250+ people were conducted and hypothesis testing has been performed on their response. This paper has

focused on employee’s willingness to use office commute in current situation if their organization provides safety features against COVID. Survey has total ten questions with different goals to capture employees’ sentiment.

A survey was conducted to get the responses from working professionals. Paired two sample T-test was performed on the received responses to find if the change in opinion is statistically significant.

#### 3.1 Dataset:

Both primary and secondary data were collected. Primary data were collected with the help of research tool, structured questionnaire. The survey conducted on several employees from different sector as IT, FMCG, manufacturing etc. Total number of responses received was 264. Which were analyzed to predict these employees’ willingness to use office commute. Secondary data were collected through several reports, journals, employee transport service provider company’s website (MoveInSync, Routematicetc).

#### 3.2 Exploratory data analysis:

We have asked several questions to the targeted population of office commute employees in a sophisticated Likert scale survey. These sets of questions were critical in nature to draw inferences by collecting both qualitative and quantitative observations. The observations and inference of the parameters are:

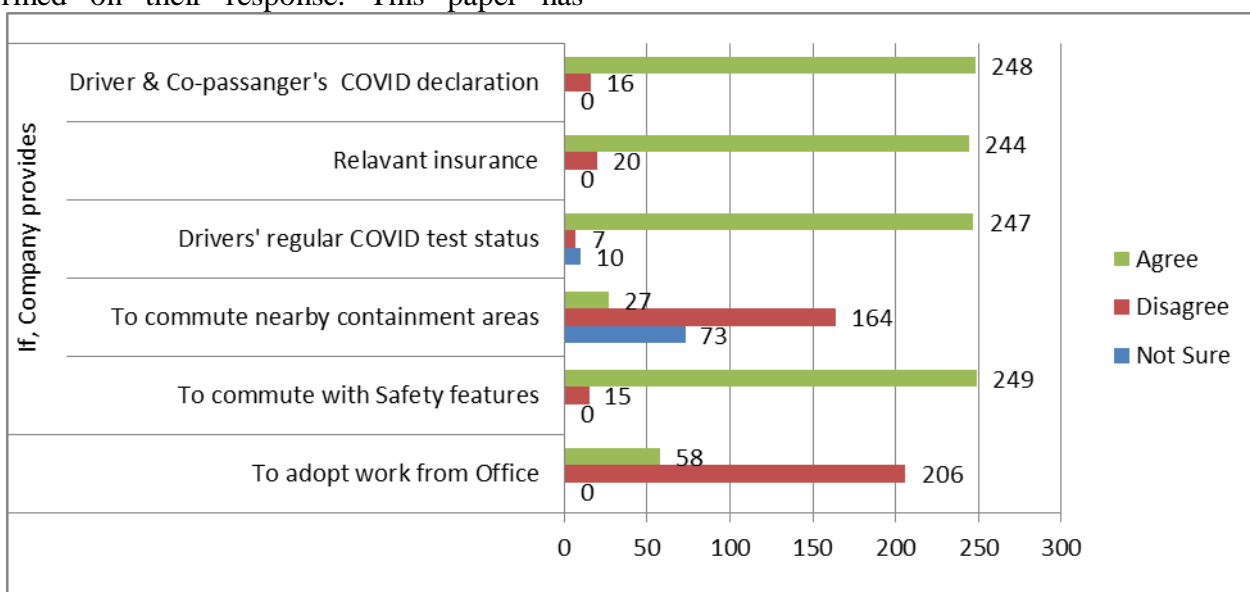


Figure 1: Number of employees (Source: Author’s Compilation)

- It is observed that out of 264 sample responses, 206 corporate employees

wanted to adopt work from a home facility, 164 corporate employees do not want to take risk at all and disagreed to use office commute in current pandemic which is COVID-19, whereas 27 corporate employees agreed to use office commute and 73 respondents were not sure regarding their situation which can be elaborated as they can travel if urgency level of task or work is high, 247 corporate employees agreed and willing to use office commute in current pandemic COVID-19 if company promise to provide driver's COVID test status on a regular basis, 244 corporate employees agreed with the offering if company offers the facility and willing to use office commute in current Pandemic COVID-19, 249 corporate employees strongly disagreed to travel or use office commute in current pandemic COVID-19 without COVID safety features & 248 corporate employees strongly agreed and showed their willingness to use office commute if their company offers COVID declarations status of cab, bus driver and fellow passengers.

- This observation accounted for 78.03% of the sample population showing inclination towards work from home. Only 21.97% of the population had the courage to come to the office in regular hours. 62.1% of the sample population were negative that showing inclination towards strongly disagreement in using office commute if fellow passenger is staying nearby COVID containment zone. Only 10.2% of the population agreed to use office commute in regular hours. More than 90% of people are willing to travel using office commute even in current pandemic COVID-19. Some of the corporate employees are still not convinced and showed their

disagreement in willingness of using office commute. 96% percentage people are willing to use office commute if their organizations are ready to provide the insurance facility plus COVID package. Whereas 7.5% percentage people are still not convinced with this offering. 94 percent respondents are willing to use office commute. Whereas 6 percent people have showed negative response to use office commute if their company offers one of the safety features as COVID declaration status of in-cab people

### 3.3 Method:

Paired T test has been carried out for hypothesis testing. Generally, a paired T test is performed to check the difference between two variables for the same subject before and after certain events or changes. This research has tried to test the employee sentiment before after adopting the safety measures in commutation. The difference in Mean and standard deviation of two samples is the output of analysis for the recorded observations. The structured data developed is to test the status quo based on hypothesis testing. The Assumptions taken as per the survey are consolidated to get results. The null hypothesis is assumed here as an existing situation and alternate hypothesis to track the developments. T-test analysis is performed on the sample of the dataset where we try to reject the null hypothesis by justifying that there is no significant difference in the means of each sample. This leads us to the observation that people are more willing to use office commute if their organizations provide safety features like a sanitized cab, sanitizer availability in-cab, real-time drivers IR thermometer status, COVID declaration form from a cab/bus driver and fellow passenger, all the important information of office like desk allocation, etc. drivers COVID test status on regular basis, Health care camp setup in office premises, employee insured with COVID.



t-Test: Paired Two Sample for Means		
	Variable 1	Variable 2
Mean	2.86	7.59
Variance	2.86	3.63
Observations	264.00	264.00
Pearson Correlation	-0.12	
Hypothesized Mean Difference	0.00	
df	263.00	
t Stat	-28.44	
P(T<=t) one-tail	0.00	
t Critical one-tail	1.65	
P(T<=t) two-tail	0.00	
t Critical two-tail	1.97	

**Figure 2: Output of Paired T test (Source: Author's Compilation)**

The survey was done on 264 employees from working in several companies to test the willingness of employees to use office commutes if all the safety features are incorporated with the existing process.

- From figure 1 it is seen that mean rating value of employee's willingness to use office commute without COVID safety features is 2.86 whereas mean value of willingness of employees to use office commute with COVID safety features is increased to 7.59
- Variance is used to measure how much the set of data is spread out. If the variance is zero, then it can be said that all the values are identical in the dataset. A high variance indicates that the data points are very spread out from the mean, and from one another. Variance is the average of the squared distances from each point to the mean. Variance in willingness to use the office commute without safety measure is 2.86 whereas with safety measure is 3.63. It can be said that there is not very much difference in opinion for not using office commutes without safety measures. Even few people do not want to use the office commute even after adopting all the safety measures. Many employees want to come to the office but they are not very sure whether these safety measures will be enough. More than 75% people are at least 70% sure about using office commutes with safety measures.
- Pearson correlation coefficient measures the strength and direction of the linear relationship between two [continuous variables](#). Its Values range from -1 to +1. Value -1 or +1 denotes a perfect linear relationship. Here for this t test value of Pearson Correlation is (-0.12) which denotes there is not much relationship between employee's willingness to use office commute without COVID safety features and with safety features and the negative sign denotes that employees are willing to use office commute with embedded safety features. So employee's willingness to use office commute without COVID safety features is completely opposite to the willingness of employees to use office commute with COVID safety features
- Degree of freedom is 263. Higher degree of freedom indicates higher sample size, in turn higher chance to reject null hypothesis. Degree of freedom is calculated by (n-1). Where n is the sample size. This defines the number of values that are free to vary.
- The t-value measures the relative difference to the variation in sample data. T is the calculated difference represented in units of standard error. A T value 0 indicates that the sample result is equal to null hypothesis. Larger value to T provides large evidence against the null hypothesis. For our test T value is -28.44, which is high. This negative value does not

contribute anything to the significance of the difference between groups.

- In this output P (T <= t) two tail (0.000) gives the probability that the absolute value of the t-Statistic (28.44) would be observed that is larger in absolute value than the Critical t value (1.97). Since the p – value is less than our alpha, 0.05, we reject the null hypothesis that there is no significant difference in the means of each sample.

#### 4. Findings:

- Work from home is believed to be much safer in comparison to work from the office.
- People are unaware of COVID related safety provided in their commute
- Corporate employees have a lack of trust in management for taking COVID related measures in the working environment which indirectly impacts the commute acceptance.
- Office commuters do not want to take risk and are not willing to use office commute at all if allocated cab or bus runs even nearby area of containment zone.
- Corporate people know the touch points are critical hence wanted COVID test results of drivers on regular basis.
- Few of the corporate employees are not satisfied with drivers COVID test status in the current environment which indirectly impacts the commute acceptance.
- Insurance cover attracts corporate employees and can change their mind.
- There are people who think stays at home are safer than travelling.
- Organizations can start thinking on attracting their employees to stay with the company by providing added COVID insured top-up to already existing insurance policies.
- People are completely terrified with the current pandemic COVID-19.
- Corporate people can work from office if their company provides them better facilities as one of the assurances of their safety.

- Organizations should start work on the advancement in information system through which they can convince their work force.

#### 5. Conclusion

This study proposes and elaborates Corporate employees' sentiment regarding using Office commute in Pandemic like COVID – 19. Based on the above observations we can clearly state that People around the India can use office commute to travel to their office if organizations are ready to offer RCE + COVID user experience facilities to their employees. But Question arises that should the organizations work on the proposal offered in the research?

This will be depending on the work culture of organizations and varies accordingly. As we can say most IT organizations are adopting work from home culture in that scenario the above scenario will not going to work.

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**Question 6.** Do you agree or disagree to commute if the company provides: “COVID declaration status of Cab driver and Fellow passenger”?

## **APPENDIX A**

**Question 1.** Which facility do you want to adopt between Work from home or office?

**Question 2.** On a scale from 1 to 5, with 1 being not at all likely and 5 being extremely likely, how likely are you to commute if your fellow passenger stays near the Containment zone but not COVID infected?

**Question 3.** On a scale from 1 to 5, how likely are you to commute if your company provides driver’s COVID test status on a regular basis?

**Question 4.** On a scale from 1 to 5, how likely are you to use office commute if the company provides COVID insurance?

**Question 5.** On a scale from 1 to 5, how likely are you to travel to your office using office commute in the current situation without COVID safety features?