



# Status of Blue Collar Workers

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## on Job Matching Platform

Summary Report August 2023

> Digital Platforms and Women's Economic Empowerment (DP-WEE)

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## **1** Executive summary

- More than six years of data (July 2016 until December 2022) comprising approximately 60,000 individuals (men and women) was sourced from a job-matching platform to understand the characteristics of job-seekers using such platforms and relative to the average labor market in urban India.
- The sample on the job search platform is relatively younger, more educated, unmarried, and urban compared to the average labor market.
- Interestingly, of the urban blue-collar Delhi-based individuals between ages 18 and 60 on the platform, the majority are female, young (18 to 35 years), unmarried, educated up to grade 10, and own a smartphone, relative to the average labor market.
- 60% of individuals on the job search platform are actively looking for work. A higher proportion of women prefer to work near their homes (within 5 kilometers), and they register for more job profiles than men do.
- Greater numbers of unemployed men are willing to look for work. However, a higher proportion of women who are unemployed on the platform are eager but not looking for work.
- The majority of job seekers on the platform prefer the day shift to the night shift or a flexible work schedule.
- Interestingly, employers placed more female job seekers than male job seekers. Similarly, the majority of job seekers who were called for job offers were female.
- Among the individuals who are not in the labor force, child care and domestic care (for women) and education (for men)- related reasons dominate.
- Men use multiple job search methods relative to women.
- The gender ratio of existing users on the platform is almost balanced, but in the case of new users, it's skewed towards male job seekers.
- In comparison to existing users, the platform experienced a rise in new users who are younger (between ages 18 and 35), married, have educational qualifications up to 10th grade, own a smartphone, and are more likely to be migrants.
- From a policy perspective, the analysis of this platform's characteristics (hyper-local job matching, smartphone ownership not essential) provide insights into the features that can be adopted by digital platforms to increase the proportion of women users of such portals.

## 2 Introduction

Labor markets in developing economies are characterized by high levels of worker absenteeism and turnover. This has adverse impacts on the productivity of firms in these settings, as firms have to bear large costs in the hiring and training of workers as well as in coping with unanticipated worker absences. One proposed explanation for the high levels of absenteeism and turnover observed in these markets is the low quality of matches between firms and workers. Recruitment processes in these settings are often highly informal; for example, firms typically rely on word-of-mouth and referrals when hiring new workers. Further, workers in these settings are often inexperienced and lack formal qualifications, which makes it difficult for them to search for jobs and credibly signal their skills and competencies to potential employers.

The recent proliferation of digital job-matching platforms provides an exciting opportunity to explore how technology can be harnessed and scaled up to improve the quality of matches in these labor markets and subsequently improve outcomes for both firms and workers. At the same time, we observe that of the individuals registered on such platforms, the proportion of women is low, about 20-30% suggesting that women job seekers may not be making full use of this technology.

In this report, our objective is to evaluate the characteristics of workers registered on a hyperlocal job-matching platform that caters to the blue-collar sector. The universe of workers registered on the platform is compared to two national, individual-level datasets, viz., the CPHS-CMIE and the PLFS.

The analysis will focus on how the demographics, labor market participation, and job search behavior of individuals on the platform differ from the CPHS-CMIE and PLFS samples. To further understand the demographics of workers on the platform, we analyse their characteristics relative to the overall labor market and from the perspective of urban blue-collar individuals between ages 18 and 60.

The labor market participation of the workers is assessed through how they engage with the market and their labor market profile. Their labor market profile includes their experience, employment arrangement, earnings, preferred distance, place of work, and expected salary. The study also aims to understand how individuals behave while searching for a job, i.e., their job preferences and their job search avenues. Their job preferences are obtained through the number of job profiles they register for, their profile status, expected salary, preferred work shift, and distance to work. Further, to understand how the existing users differ from the new users, we compare the demographics of the existing users with those of the new users.

## **3** Digital job search platform: Background

We partnered with a job-matching platform - a hyperlocal mobile and web app-based job aggregation platform - that connects potential employers directly with multiple blue-collar workers located physically close to them for permanent or temporary hiring, much like Uber.

The platform began operating in July 2016 and focused more on urban regions in India. 51% of individuals who joined the portal are women, which enables the platform to empower women economically. Once a respondent registers on the aggregator's portal, the platform's algorithm (based on location, type of work—short-term gigs or long-term contracts, wage offers, etc.) matches the requirements of employers with the profiles of the respondents. The potential employer can then call the profiled worker(s) on his or her registered phone number to make a job offer.

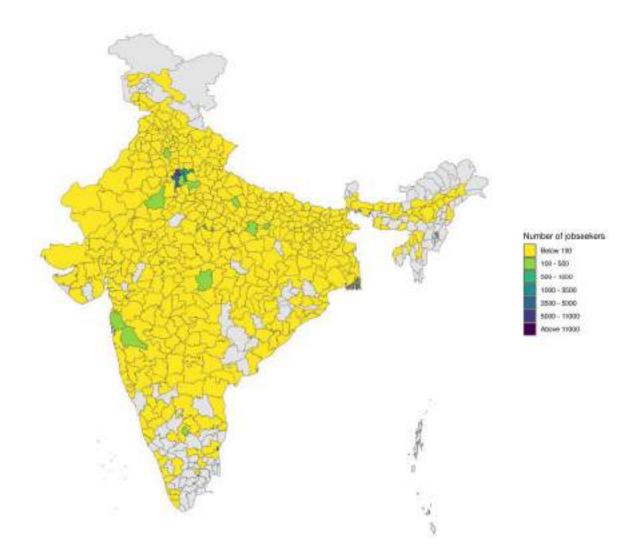
The job matching platform potentially reduces the job search costs of blue-collar workers as follows:

- The platform does not require the respondent (a potential employee) to have a smartphone; a feature phone was sufficient to receive calls from the matched potential employer.
- There is no registration fee for the respondent. They only need to provide an ID (for verification purposes) and, at the time of registration, provide information on previous work experiences and job preferences to the platform. This information would then allow the platform to match the individual with potential employers.
- Employers who obtain a match pay a service charge to the platform. No payment is required from the worker for a successful match.
- Since workers can connect with many potential nearby employers without physically looking for work or using any intermediaries or job contractors, this technology potentially reduces job search costs significantly (for both ends of the market).
- Furthermore, the worker can accept a job offer as per her preferences, including location and salary.

The data sourced from the portal for the period July 2016 until December 2022 consisted of 57,253 individuals, of whom 29,308 were women and 27,717 were men.<sup>1</sup> The sample of workers is relatively young, unmarried, and has completed a high school education. Some of the job profiles offered to job seekers on the portal are cook, driver, babysitter, maid, store helper, salesperson, pantry helper, and security guard. Figure 3.1 shows the geographical spread of job seekers who were registered on the portal as of December 2022.

<sup>&</sup>lt;sup>1</sup>Gender information is unavailable for 228 job seekers.

## Figure 3.1: Job seekers on the platform across districts



## 4 Comparison across datasets of working-age individuals

To understand how job seekers (individuals who are looking for work irrespective of their employment status) on the portal fare relative to the average labor market (which comprises the working-age population, i.e., individuals who are above age 15) in India, we compare the job seekers on the portal with individual-level data from two data sources: both from an overall labor market perspective (Section 4.1) and also from the perspective of urban blue-collar, Delhi-based individuals between ages 18 and 60 (Section 4.2).

The first data source is the Centre for Monitoring Indian Economy's (CMIE) Consumer Pyramids Household Survey (CPHS, September-December 2022, or Wave 27) (weighted), and the second is the Periodic Labour Force Survey's July 2020-June 2021 round (weighted).

Consumer Pyramids Household Survey (CPHS) is a panel survey of more than 174,000 households in India conducted by the Centre for Monitoring Indian Economy. CPHS revisits its entire sample every quarter of each year, with the longitudinal survey beginning in January 2014. However, note that the CMIE-CPHS sample is not nationally representative <sup>2</sup>

Periodic Labour Force Survey (PLFS), on the other hand, is a nationally representative survey (at the district level) conducted by the National Statistical Office (NSO) since 2017 to understand the labor market in the country.

The data used from CMIE and PLFS is a sub-sample representing the working-age population. The CMIE data comprises 186,850 working-age women and 219,002 working-age men. PLFS data includes 156,831 working-age women and 159,828 working-age men. The platform sample is much smaller, including 29,308 women and 27,717 men - 14% of the working-age individuals sampled in CMIE and 18% of the working-age individuals sampled in PLFS.

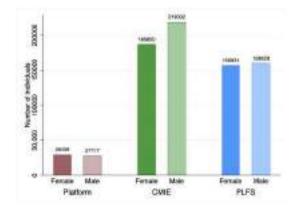


Figure 4.1: Number of individuals, by data source

<sup>&</sup>lt;sup>2</sup>See Pais, Jesim and Vikas Rawal. (2021) CMIE's Consumer Pyramids Household Surveys: An Assessment, The Indian Forum (page 16) September 3, 2021 ; and Somanchi, Anmol. (2021) Missing the Poor, Big Time: A Critical Assessment of the Consumer Pyramids Household Survey, SocArXiv.

#### 4.1 Overall

To get an overall picture of the working-age population (individuals above age 15) in each data source, we summarise their socio-economic characteristics.

The platform data come entirely from urban areas of the country, while in the CMIE, about 40% of the individuals reside in urban areas. In the PLFS data 30% of the sample is urban.

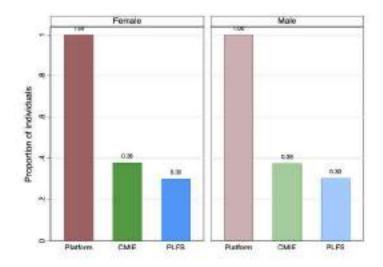
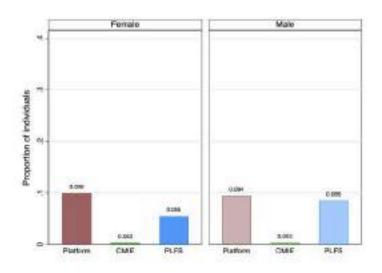


Figure 4.2: Proportion urban





In our platform sample, about 10% of women and men are migrants.<sup>3</sup> However, in CMIE,

<sup>&</sup>lt;sup>3</sup>The data on migrant individuals were derived by comparing their present and permanent addresses in the platform, based on whether they immigrated or not in CMIE and PLFS, and if they moved their place of residence since the last enumeration to take part in any economic activity.

less than 0.4% of women and men are migrants, compared to around 6% in the PLFS. The proportion of migrants on the portal is larger given that it is predominantly an urban sample. Second, we observe that the gender distribution of individuals is in favor of women on the platform and closer to that of the PLFS. The proportion of women is lower in the CMIE.

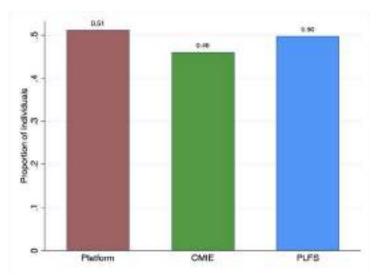


Figure 4.4: Proportion women

Figure 4.5 shows the religion followed by individuals across the three data sources. A majority of men and women identify themselves as Hindus on the platform, which is similar to the CMIE and PLFS samples.

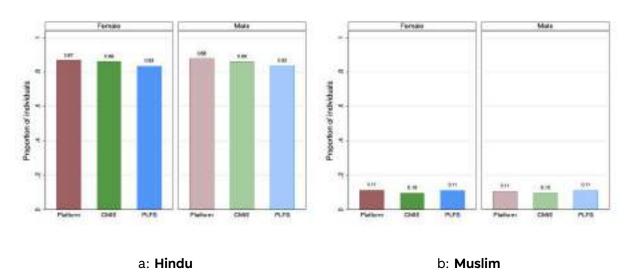
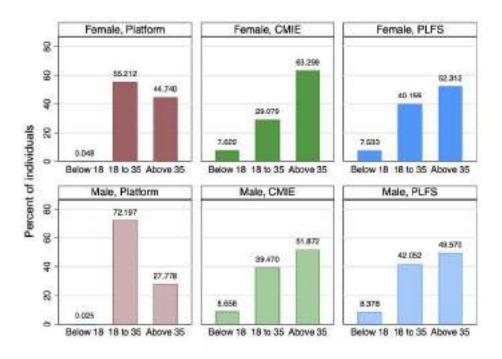


Figure 4.5: **Religion of individuals** 

Third, a larger proportion of the platform sample is between ages 18 and 35, whereas in CMIE and PLFS, the sample is relatively older, with a large proportion of men and women aged above 35.



#### Figure 4.6: Age of individuals

Not surprisingly, given the younger platform sample, around half of the women are married, but only one-third of the men are married on the portal. However, in CMIE and PLFS, more than 68% of the women and more than 58% of the men are married.

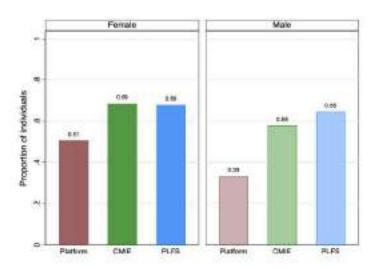
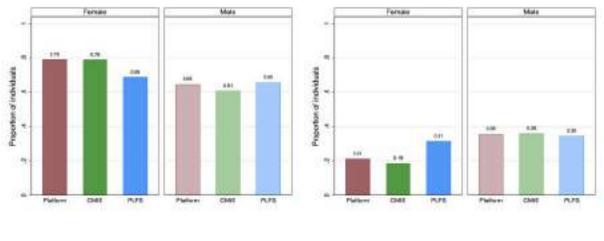


Figure 4.7: Married individuals

Around 80% of women have completed schooling up to 10th grade in the portal data, which is similar to CMIE. But in PLFS, a comparatively smaller proportion of women are educated up to the 10th standard. Around 36% of men on the platform have educational qualifications of 12th grade and above, similar to CMIE and PLFS.



#### Figure 4.8: Educational qualifications of individuals

#### a: Up to 10th standard

b: 12th standard and above

The definition of skilling across the data sources varies. On the platform, skilled individuals are classified based on NSDC certification, but in CMIE, based on whether they have a diploma or certificate course, and in PLFS, if they have formal vocational training.

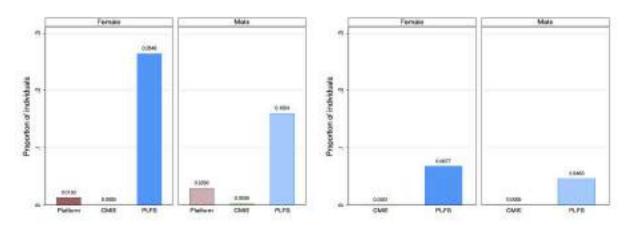


Figure 4.9: Skill level of individuals

a: Skilled Individuals



Around 1% of women and 3% of men on the platform received any skill training, but in CMIE, it is less than 0.3% for men and women. However, in PLFS, around 26% of women and 16% of men participated in skilling programs. Less than 0.05% of men and women in CMIE are skilled in Information and Communication technology, whereas in PLFS, 7% of women and 5% of men are trained in ICT.

We now turn to the ownership and usage of digital and mobile phones. Around 60% of women on the portal own a mobile phone, but only 34% of women in CMIE do, whereas 56% of men on the platform own a mobile phone, less than in CMIE (68%).

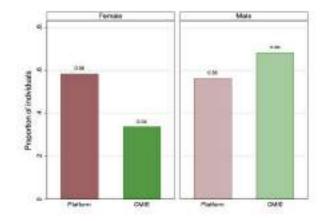


Figure 4.10: Proportion who own a mobile phone

Due to the lack of data on smartphone ownership in the data sources we used, we are relying on data from the Global System for Mobile Communications Association (GSMA) Mobile Gender Gap Report 2022 to provide a point of contrast with the platform.

The GSM Association (GSMA), a trade body representing the interests of mobile network operators worldwide, releases the GSMA Mobile Gender Gap Report. The report aims to provide valuable insights into the gender disparities that exist in mobile phone ownership and mobile internet usage around the world.

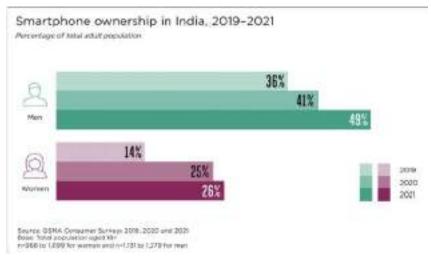
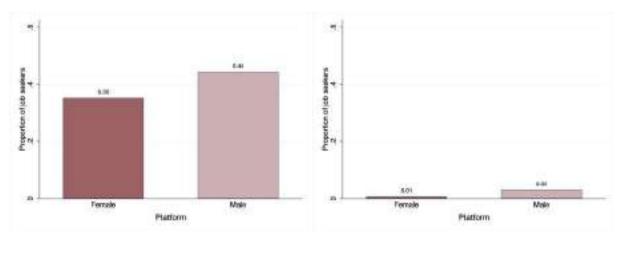


Figure 4.11: Smartphone ownership in India (2019-21)

Source: The Mobile Gender Gap Report 2022, GSMA

The 2022 report<sup>4</sup> (based on a sample of 966 to 1099 women and 1131 to 1279 men aged 18+) shows that over the years, smartphone ownership has increased across genders, with a greater percentage for men than women.

<sup>4</sup>GSM Association. (2022) The Mobile Gender Gap Report. Available on <a href="https://www.gsma.com/r/gender-gap-2022/">https://www.gsma.com/r/</a> gender-gap-2022/ In the case of smartphone usage, data from the platform shows that a higher share of men use smartphones than female workers. The data also show that men are relatively more comfortable in using a smartphone.





a: Uses a smartphone

b: Comfortable with using a smartphone

The smartphones were used by individuals on the platform for calls, WhatsApp, Google (search and voice), Facebook, Utilities (online payment, online banking, online shopping, and ticket booking), and Entertainment (YouTube, Instagram, and TikTok). Figure 4.13 shows a higher usage of smartphones by men for each of these purposes than women.

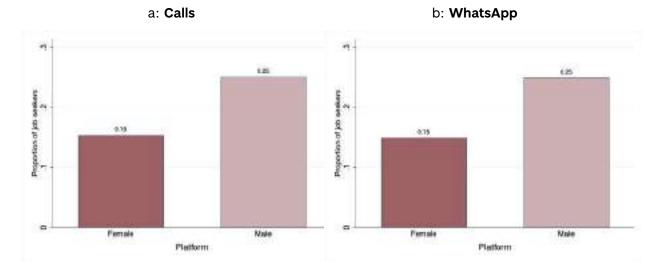
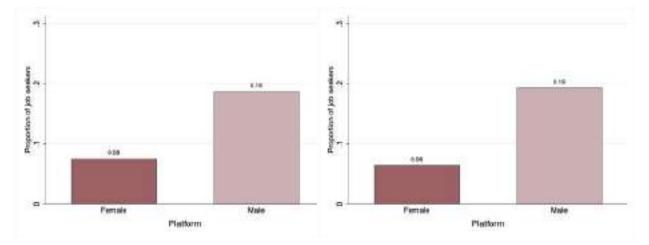


Figure 4.13: For what purpose do individuals use smartphones?

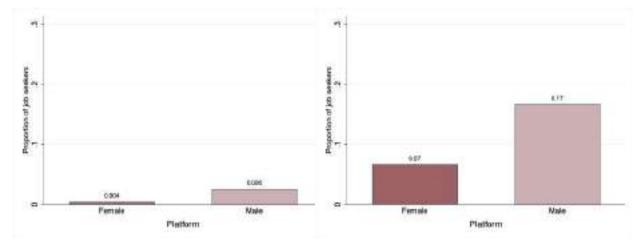
c: Google

d: Facebook





f: Entertainment



To summarise, the sample of job seekers registered on the portal is urban, younger, and more educated relative to the average labor market. They also exhibit higher ownership and usage of mobile devices.

#### 4.2 Blue-collar labor market

Even though the job seekers registered on the portal are spread across the country, a majority of them are based in Delhi (on platform - 38,708 job seekers, whereas in CMIE - 5761, and PLFS - 3067) and engaged in blue-collar jobs (the portal is more focused on blue-collar jobs).

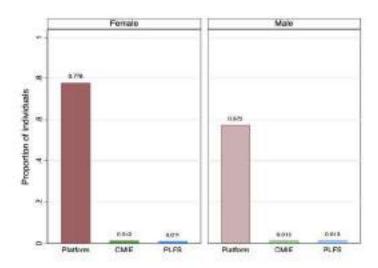


Figure 4.14: Sample based in Delhi

This constitutes 67.61% of the platform sample from Delhi (the present address of the sample is in Delhi), in contrast with only around 1.3% of men and women from Delhi in CMIE and PLFS. Thus, to make reasonable comparisons between the three data sources, in this section, we restrict the sample to individuals within the age group of 18 to 60 who are from Delhi and engaged in blue-collar jobs.

In this sub-sample, portal data includes 22,588 women and 15,661 men; CMIE data comprises 78 women and 1253 men; and PLFS data contains 107 women and 930 men.

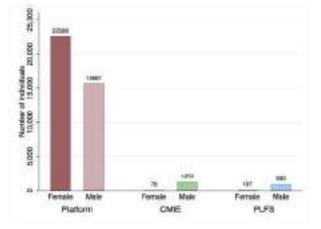


Figure 4.15: Number of individuals

## Figure 4.16: Proportion of working age population on the portal in Delhi

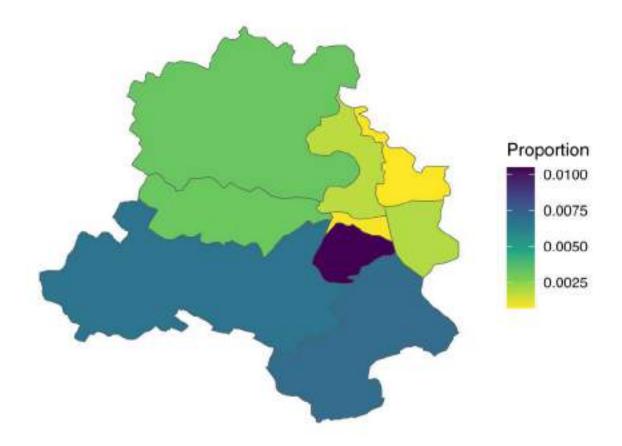


Figure 4.16 shows the proportion of the working-age population that was registered on the portal in Delhi aggregated at the district level.

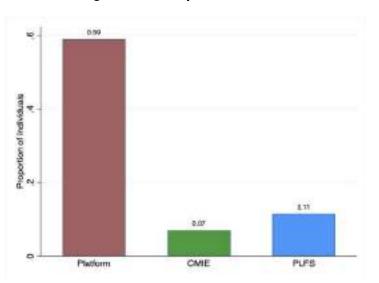


Figure 4.17: Proportion women

Interestingly, a majority of the job seekers on the portal are female, whereas in CMIE and PLFS, the proportion of women in the labor force is less than 10%.

54% of women and 70% of men belong to the age group of 18 to 35 on the portal. Whereas around 40% of women as well as men in CMIE and 50% in PLFS belong to this age group.

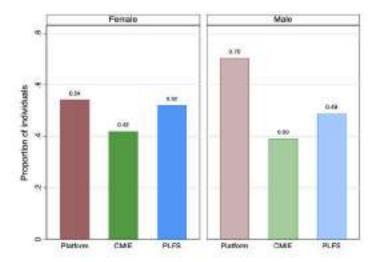
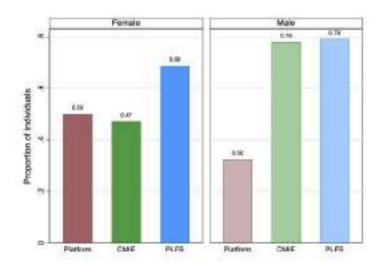


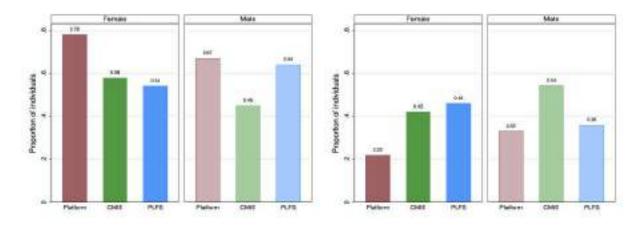
Figure 4.18: Individuals who belong to the age group 18 to 35

Roughly 50% of women are married, but only one-third of men are married in the platform sample. In comparison, in CMIE, 47% of women are married, and in PLFS 70% of women are married. In both datasets, around 80% of men are married.

#### Figure 4.19: Married individuals



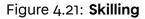
Around 80% of women are qualified up to the 10th grade on the portal. In CMIE and PLFS, the share of women and men educated up to 12th grade is less than the platform. In comparison to CMIE and PLFS, the share of women having educational qualifications of 12th grade and above is comparatively low. One-third of men on the portal have educational qualifications of 12th grade and above, similar to PLFS but less than CMIE.

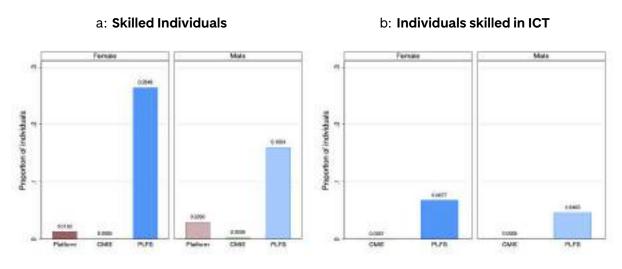


#### Figure 4.20: Educational qualifications of individuals



b: 12th standard and above





Around 1% of women and 2% of men on the portal received any skill training, but in CMIE, it is less than 0.2% for men and women. However, in PLFS, around 26% of women and 16% of men participated in skilling programs. Less than 0.04% of men and women in CMIE are skilled in information and communication technology (ICT), whereas, in PLFS, 6% of women and 4% of men are trained in ICT (Refer subsection 4.1 for the measures used by different datasets).

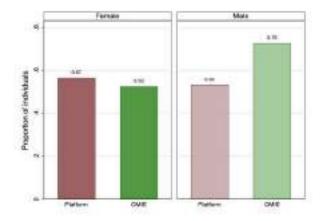
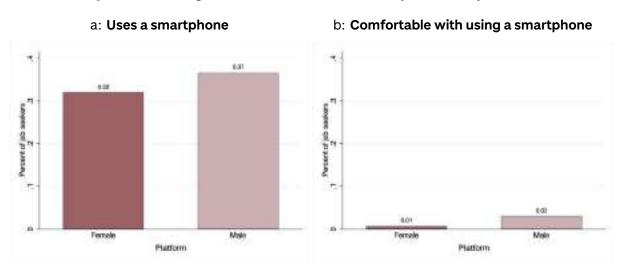


Figure 4.22: Individuals who own a mobile phone

Around 60% of women on the portal own a mobile phone, which is higher than the proportion of women in CMIE. Whereas, 53% of men registered on the platform own a mobile phone, compared to 73% of men in CMIE.



#### Figure 4.23: Usage & comfort level with smartphones on platform

In the case of smartphone usage, a higher proportion of men use smartphones than female workers. The data also shows that men are relatively more comfortable in using a smartphone.

Figure 4.24 shows a higher usage of smartphones by men for calls, WhatsApp, Google, Facebook, utilities, and entertainment than women.

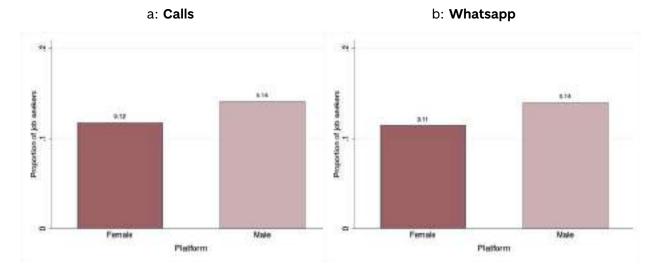
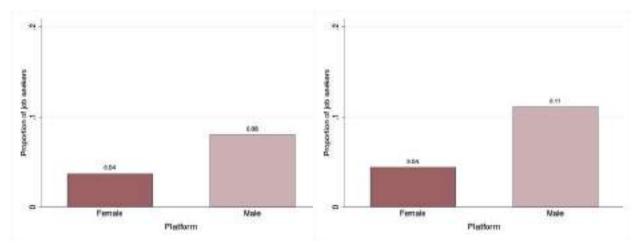


Figure 4.24: For what purposes do individuals use smartphones?

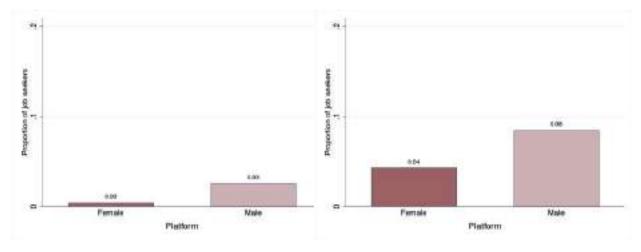
c: Google

d: Facebook









## 5 Labor market participation

There are two ways an individual can engage in the labor market: (1) Employed, and (2) Unemployed. An individual is considered employed if that person is engaged in any economic activity and unemployed if that person is not engaged in any economic activity but is looking for work. As far as looking for work is concerned, an individual may look for work in both the employed, as well as, unemployed status. If someone searches for work when employed, it is referred to as 'on job search'. And if someone is unemployed but does not look for work, they are considered to have exited the labor market. We will summarise all four combinations below.

#### 5.1 Overall

Here, the sample used is restricted to individuals within the age group of 18 to 60 who are from Delhi but not restricted to blue-collar jobs to capture individuals who are unemployed or currently not working but still part of the labor force. In this sub-sample (in terms of labor force participation), there are 22,733 women and 15,819 men on the portal; the CMIE data comprises 160 women and 1,667 men; and the PLFS data includes 176 women and 1,146 men.

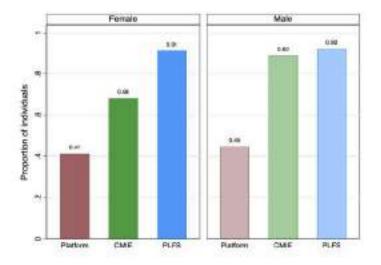


Figure 5.1: **Proportion Employed** 

We find that 41% of women and 45% of men are currently employed (engaged in economic activity) as per the portal, while around 70% of women in CMIE and 91% in PLFS are employed. In the case of men, 89% and 92% are employed in CMIE and PLFS, respectively. Around 32% of women and 11% of men are unemployed in CMIE, and 9% of women and 8% of men are unemployed in PLFS.

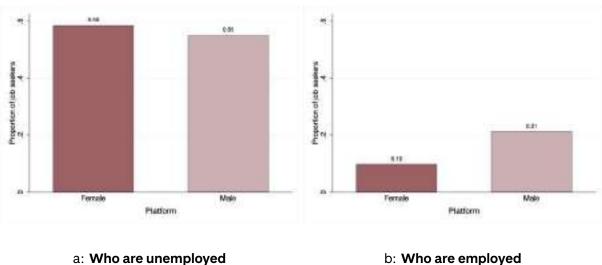


Figure 5.2: Proportion looking for work

b: Who are employed

On the portal, 59% of women and 55% of men are not working right now but are looking for work. Whereas a higher proportion of male job seekers who are employed are looking for work than female job seekers on the platform.

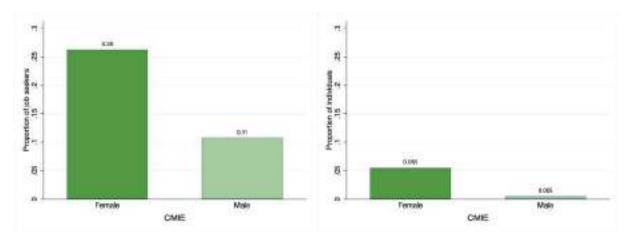


Figure 5.3: Proportion unemployed

a: Proportion looking for work



A greater share of men who are unemployed in CMIE are willing and looking for work than women. However, a higher proportion of unemployed women are willing but not looking for work than men.

#### **Blue-collar** 5.2

The sample used for the rest of the section is restricted to individuals within the age group of 18 to 60 who are from Delhi and engaged in blue-collar jobs. Summary of the sample: In the portal data, there are 22,588 women and 15,661 men. The CMIE data comprises 78 women and 1,253 men, while the PLFS includes 107 women and 930 men.

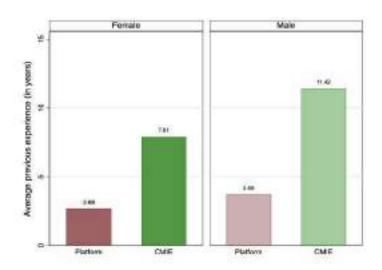


Figure 5.4: Average experience of individuals (in years)

The average years of work experience of individuals on the platform, across genders, ranges from 2 to 4 years, but in CMIE it is higher at 7 to 12 years.

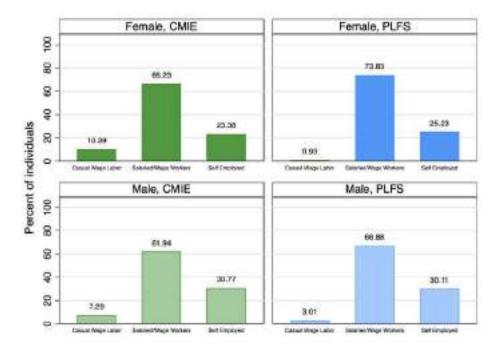


Figure 5.5: Type of employment of individuals

A significantly larger share of women, as well as men in the CMIE and PLFS datasets, are salaried or fixed-wage workers.

Table A.1 summarises the average work experience across job profiles. On the platform, women who are looking for a salesperson, office helper, or other helper jobs on average have the least experience, and those women who are looking for other jobs have on average 6 years of experience. In the case of men, those looking for office helper positions have the least experience, and those looking for driving and other jobs have experience of more than 9 years.

Whereas in the CMIE data, women looking for medicinal helper positions have the least experience, and women who are looking for maid or domestic helper positions have experience of more than 20 years. Men looking for other technician positions have the least experience, and those looking for beautician positions are more experienced in comparison.

Table A.3 shows how much each individual earned in a month. CMIE data shows that women and men earned more when they were employed as office helpers but earned less when employed as cooks. And in PLFS, women earned less when employed for 'other helper' positions, men earned less when employed as beauticians, and men earned more when employed as office helpers.

Women looking for babysitter jobs expected a higher salary in comparison to those for other job profiles. In the case of men, those looking for driver jobs expected a higher salary than those who were looking for other job profiles. (see Table A.2)

Table A.4 shows occupations in which more than 2.5% of individuals are employed across datasets. On the platform, the largest proportion of individuals are employed as domestic maids, cleaners, and helpers. In CMIE, most of the sample is employed as industrial and machine workers, while in PLFS, most are sales representatives, sales executives, and store managers.

<sup>&</sup>lt;sup>5</sup>The experience of an individual is calculated based on their experience for each profile and the number of profiles they are interested in for each job profile in the case of the platform and based on the number of years an individual engaged in a job in case of CMIE.

<sup>&</sup>lt;sup>6</sup>Job profiles are clubbed into 11 categories for ease of comparison, like Cook, Driver, Other, etc. "Other Helper" includes those who are involved in activities other than domestic help, medicinal, and office help. "Other Technician" comprises technicians in areas other than electronics. The "Other" category includes job profiles that could not be classified under the other 10 categories.

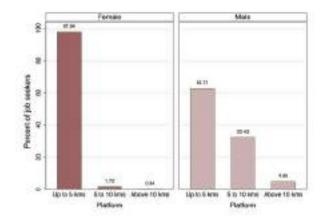


Figure 5.6: Preferred distance of job seekers from employers

A higher proportion of women prefer the distance from their employer to be within 5 kilometers, whereas only 62% of men prefer their employer to be within 5 kilometers.

Individuals who are currently engaged in economic activity identify their place of work as one of these options: company (private or public limited), government employee, marketplace, own enterprises (small-scale businesses, shops, etc.), other enterprises (small-scale businesses, shops, etc.), other enterprises (small-scale businesses, shops, etc.), and home or no physical place of work.

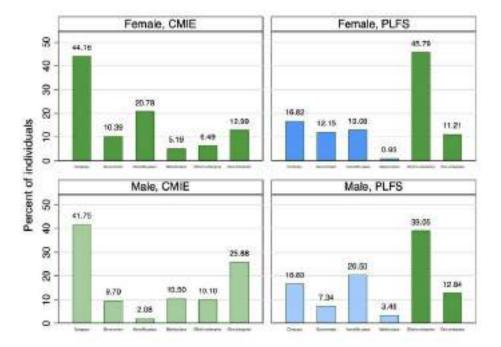


Figure 5.7: Place of work

More than 40% of women and men in CMIE work at a company. In PLFS, a significant share of women and men work in other people's enterprises.

## 6 Job search behavior

In this section, we look at how job seekers behave while searching for jobs. Here, the sample used is based on the full December 2022 portal data.

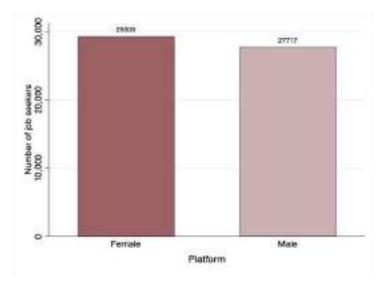


Figure 6.1: Number of registered job seekers on the portal

Once registered on the portal, a job seeker can (a) actively search for jobs classified as an 'Active' profile, (b) go into a dormant 'DND' (Do Not Disturb) state, or (c) have an 'Incomplete' profile if all details are not supplied to the portal. The DND and incomplete statuses imply that they were not matched to potential employers via the portal's matching algorithm. People go into the DND state if they have found a job, and are no longer looking for jobs, or if they are looking for jobs but don't want to continue getting calls from the platform. And the incomplete registrations are mainly due to the unavailability of documents to verify the identity of the job seeker.

Only 33% of female profiles are in active status, compared to 46% of the male profiles. Thus, a majority of female profiles are in 'do not disturb' status.

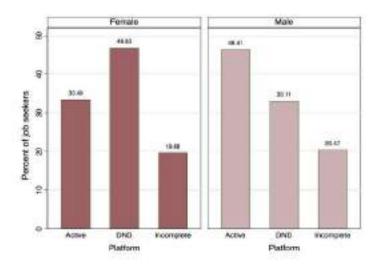


Figure 6.2: Profile status of job seekers on the portal

The average female job seeker is registered for 1.79 job profiles, and the average male job seeker is registered for 1.64 job profiles.

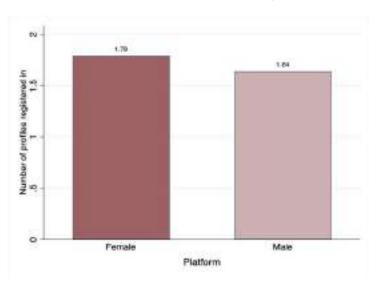


Figure 6.3: Number of profiles job seekers registered on the portal

Less than 10% of female job seekers are working and looking for a job, compared to around 20% of male job seekers. Further, half of the male and female job seekers on the portal are not working at the moment.

Table A.5 depicts the job preferences of job seekers across job profiles. Among male and female job seekers, those looking for home-based office helper jobs have the lowest average expected salary. Female job seekers looking for babysitter jobs have a higher average expected salary than those looking for other profiles, and in the case of male job seekers, those looking for driver jobs.

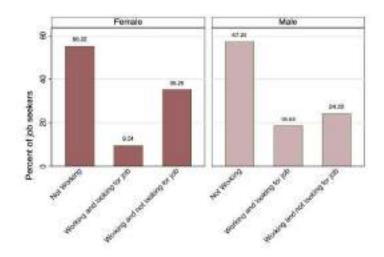


Figure 6.4: Current job status of job seekers on the portal

Across job profiles, female job seekers prefer jobs to be within 7 kilometers and male job seekers within 15 kilometers. Except for the medicinal helper position, job seekers don't prefer flexibility in their work shifts. A higher proportion of male and female job seekers prefer day shifts across job profiles. Preferences for the night shift are less than 1% among female job seekers and less than 3% among male job seekers.

Table A.6 shows the characteristics of job seekers featured in job orders and called for job orders by employers on the portal. More female job seekers are featured in job orders than male job seekers. Female job seekers who featured were more likely to be married, educated up to 10th grade, Hindu, based in Delhi, own a mobile phone, and use it for calls or WhatsApp.

Male job seekers who featured in job orders were more likely to be between ages 18 and 35, married, educated up to 10th grade, Hindu, based in Delhi, own a mobile phone (more likely a smartphone), and be comfortable with using it, particularly for calls, WhatsApp, and Facebook.

70% of job seekers who called for a job order were female. A female worker who was called was more likely to be married, educated up to 10th grade, Hindu, based in Delhi, own a mobile phone, and use it for calls and WhatsApp. On the other hand, a male worker who was called for the job order was more likely to be younger.

PLFS 20-21 shows that most of those who are not in the labor force cite child care and domestic care reasons (for women) and education-related reasons (for men).

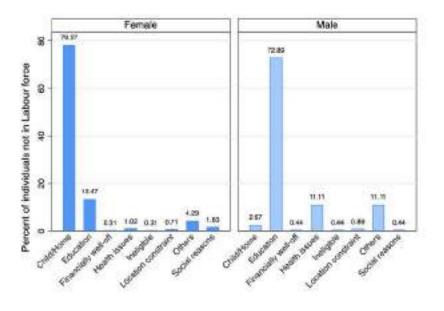


Figure 6.5: Reasons for not being in the labor force

Although both female and male job seekers use offline or worksite visits as a method of job search, interestingly, the data indicate that men use multiple job search methods relative to women.

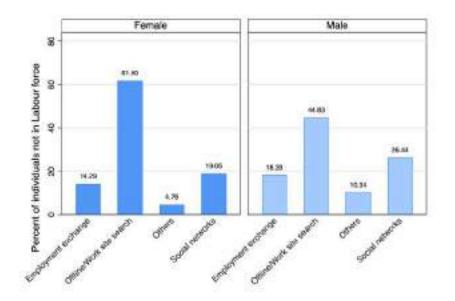
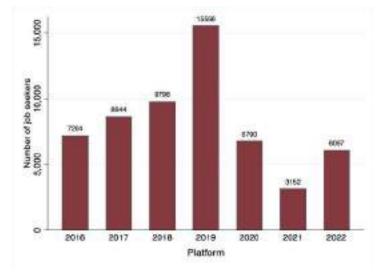
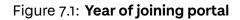


Figure 6.6: Job search avenues

## 7 Existing and new job seekers

In this section, we seek to understand how the characteristics of job seekers have evolved over time, specifically based on the year they joined the portal, which started in 2016. Here, the sample is based on all registered workers who joined the portal between July 2016 and December 2022 on the portal. In the sample, there are 29,308 female job seekers and 27,717 male job seekers.





Of the sample of registered workers in December 2022, most job seekers joined the job portal in 2019 (just before the pandemic in 2020), compared to other years. 7

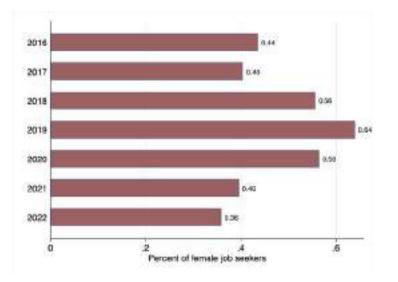


Figure 7.2: Female job seekers

Of the registered female job seekers, most joined the portal in 2019.

<sup>7</sup>For 2016, the data are available from July onwards.

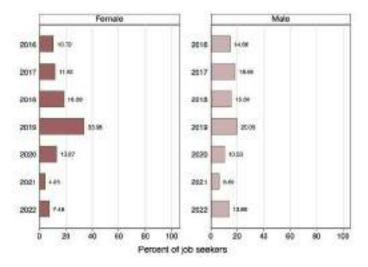


Figure 7.3: Year of joining portal, by gender

Around 55% of female job seekers who had joined the portal belong to the age group 18-35 across all years except 2022 (67%). Around 70% of male job seekers belong to that age group across the years they joined.

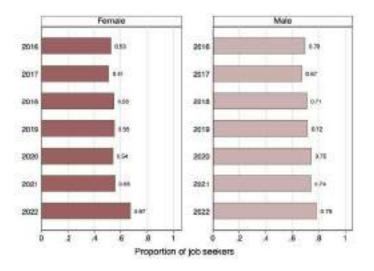
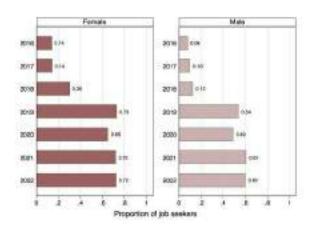


Figure 7.4: Job seekers who belong to the age group 18 to 35





The portal saw substantial growth in married job seekers across genders over the years. Around 80% to 85% of female, as well as male job seekers who joined each year, were educated up to 10th grade, except for female job seekers who joined in 2016 (67%). Around 50% to 65% of male job seekers who joined each year were educated up to the 10th standard, except for female job seekers who joined in 2019 (74%). 15% to 25% of females who joined each year had education qualifications of 12th and above, except in 2016. In the case of men, around one-third of those who joined each year had completed high school, except in 2016 (49%).

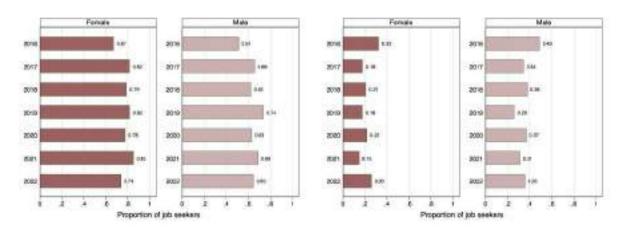


Figure 7.6: Educational qualification of job seekers



b: High school and above

A higher proportion of male and female job seekers with NSDC certification joined in 2019 and 2020.

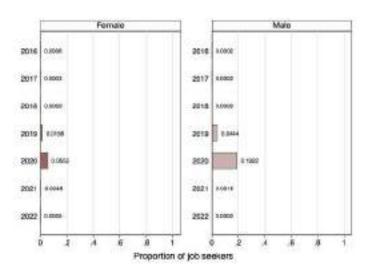


Figure 7.7: Job seekers with NSDC certification

Across all years, a significantly larger proportion of job seekers identify themselves as Hindu.

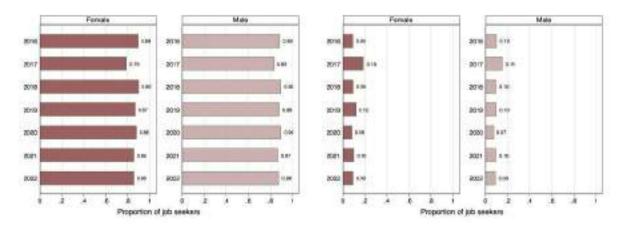


Figure 7.8: Religion of job seekers

a: **Hindu** 

b: Muslim

The portal had a substantial influx of job seekers who own a mobile phone over the years, which remained skewed in favor of male workers in comparison to female job seekers.

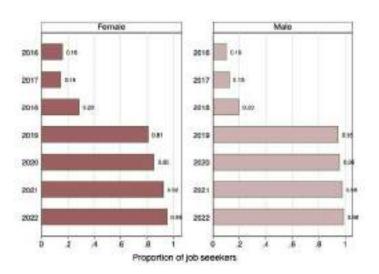


Figure 7.9: Job seekers who own a mobile phone

The proportion of job seekers who used smartphones increased each year, with significant growth in female and male job seekers after 2019. Each year, male job seekers are more comfortable using a smartphone in comparison to female job seekers.

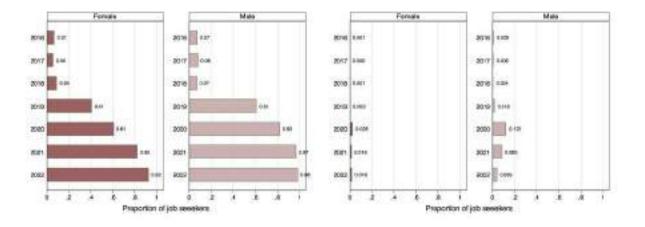
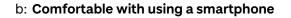
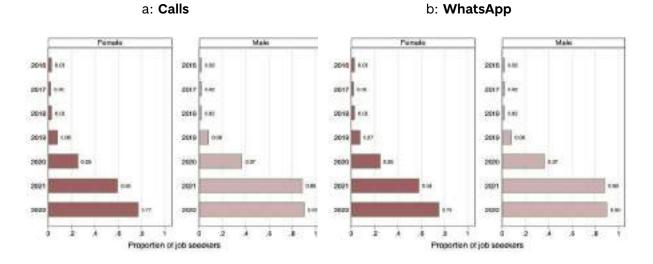


Figure 7.10: Usage & comfort level of smart phones



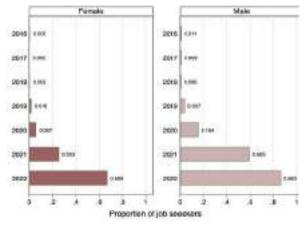


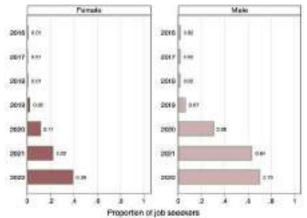
Over the years, across genders, job seekers who used smartphones for calls, WhatsApp, Google, Facebook, utilities and entertainment increased in significant proportion.



#### Figure 7.11: Purpose of using smartphone

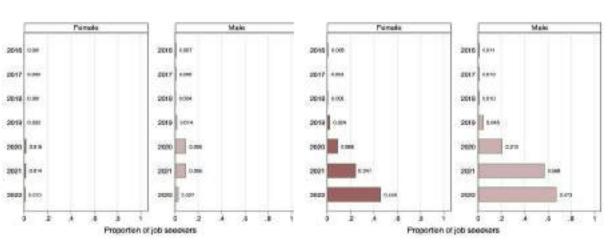






f: Entertainment





#### d: Facebook

36

Among female and male job seekers, the % of migrant job seekers who joined across years increased between 2019 and 2021.

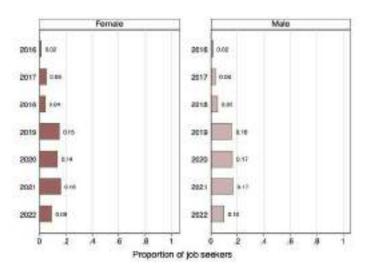


Figure 7.12: Migrant job seekers

The portal saw a substantial fall in male as well as female job seekers from Delhi in 2017, 2021, and 2022, the last two being the pandemic years.

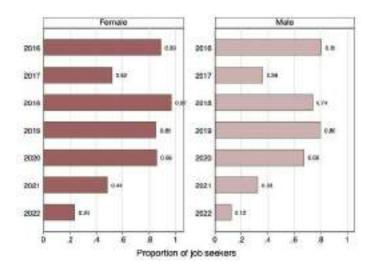


Figure 7.13: Job seekers from Delhi

To understand how the existing users of the platform differed from new users, we compared the characteristics of the sample in platform data from July 2016 to December 2022 with the sample from January 2023 to March 2023 (restricted to new users). In the sample from July 2016 to December 2022, there are 29,308 female job seekers and 27,717 male job seekers. Whereas, in the sample from January 2023 until March 2023, there are 605 female job seekers and 1223 male job seekers.

The data show that the gender ratio of existing users is almost equal, but in the case of new users, it's skewed towards male workers. The platform saw a rise in female as well as male job seekers who are between the ages of 18 and 35, married, with educational qualifications up to 10th grade, own a smartphone, and know how to use it compared to existing users. The job seekers who joined the portal recently were mostly from outside of Delhi (see Table A.7). The new users were significantly more likely to use their smartphones for calls, WhatsApp, Facebook, Google, and entertainment compared to those registered as of December 2022.

## 8 Conclusion

Analysing data from the universe of individuals registered on a job search platform, we find that job seekers on the portal are relatively younger, more educated, unmarried, and urban residents in comparison to the average labor market in India.

The primary reason for registering on the portal is job search - 60% of the individuals are actively looking for work on the portal. A greater share of unemployed men are willing to look for work than women. However, a higher proportion of unemployed women are willing but not looking for work.

The average years of work experience of individuals across genders range between 2 and 4 years on the portal. A higher proportion of women prefer the distance from their employer to be within 5 kilometers. On average, female job seekers registered for more job profiles than male job seekers. Across job profiles, female job seekers prefer jobs to be within 7 kilometers and male job seekers within 15 kilometers. Except for medical assistant positions, job seekers don't prefer flexibility in their work shifts. A higher proportion of male and female job seekers prefer day shifts across job profiles.

Interestingly, more female job seekers are featured in job orders than male job seekers on the platform. 70% of job seekers who called for a job order were female. When comparing the portal's existing users and new users, the gender ratio of existing users is almost equal, but in the case of new users, it's skewed towards male workers. The portal witnessed a rise in job seekers who are relatively younger, married, have a high school education, and own a smartphone.

## Acknowledgements

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DP-WEE project team members **Nikita Sangwan** and **Rohan Regi Varghese** have contributed to this document under the guidance of **Farzana Afridi** (Indian Statistical Institute, Delhi) and **Yogita Shamdasani** (National University of Singapore).

## 9 Appendix

	Experience of workers (in years)					
Job Profiles	Pla	tform	CMIE			
	Female	Male	Female	Male		
Beautician	2.41	3.68	.75	18.88		
Cook	3.47	2.54		7.81		
Driver	4.43	9.93		12.16		
Electronic Technician	1.25	5.77		10.88		
Maid/Domestic Helper	5.32	4.66	20.42	15.75		
Medicinal Helper	2.21	2.77	1.44	10.30		
Office Helper	.82	1.43	6.73	12.60		
Other	6.33	10.87	10.76	16.03		
Other Helper	.75	2.62	3.16	7.50		
Other Technician	1.60	9.26		5.21		
Salesperson	.43	1.58	8.84	5.89		

Table A.1: Experience of job seekers by job profiles<sup>a</sup>

Table A.2: Expected salary of job seekers by job profiles

Job Profiles	Expected Salary		
JOD PTOTILES	Female	Male	
Babysitter	13508.08		
Beautician	12350.90	15906.25	
Cook	7752.91	14091.25	
Driver	18000	18190.97	
Electronic Technician	8200	12192.30	
Home-Based Office	410		
Helper			
Maid/Domestic Helper	6702.73	13454.34	
Medicinal Helper	13392.36	14033.98	
Office Helper	10568.66	12269.17	
Other	13516.41	11914.26	
Other Helper	9946.42	11549.04	
Other Technician	12387.87	9981.54	
Salesperson	11250.75	13015.57	

<sup>&</sup>lt;sup>a</sup>Based on platform data (July 2016 to December 2022) and CMIE CPHS data (September to December 2022). Number of observations: 64,119 (Platform) and 1,331 (CMIE). Missing values are attributed to the absence of female respondents in that specific job profile within the CMIE sample.

<sup>&</sup>lt;sup>b</sup>Based on platform data (July 2016 to December 2022). Number of observations: 64,119. Missing values are attributed to the absence of male respondents in that specific job profile within the platform sample.

	Earnings (in Rupees)					
Job Profiles	CI	MIE	PLFS			
	Female	Male	Female	Male		
Beautician	15000	24046.46	21308.58	13466.77		
Cook	7000	15158.95		25713.23		
Driver		17965.05		18845.95		
Electronic Technician		21150.62	26049.61	23805.2		
Maid/Domestic Helper	7400	17275.29	17950.35	16011.9		
Medicinal Helper	10744.76	19666.67	18633.24	22874.35		
Office Helper	26106.87	28708.49	24177.87	33411.05		
Other	13150.53	25994.89	34424.66	23364.41		
Other Helper	18660.18	18002.22	12180.74	18478.58		
Other Technician		18337.26	18105.28	17672.62		
Salesperson	14200	21008.7	20602.67	18817.32		

Table A.3: Earnings of individuals by job profiles <sup>c</sup>
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<sup>&</sup>lt;sup>c</sup>Based on CMIE-CPHS December 2022 earnings data and PLFS 2020-21 data. Number of observations: 1,012 (CMIE) and 927 (PLFS). Missing values are attributed to the absence of female respondents in that specific job profile within both data source samples.

Occupation	%
Platform	<b>64119</b> (Total)
Bus/ Car and Van Drivers	3.50
Call Centre Salespersons/Operators/Workers	3.23
Chefs and Cooks	4.31
Child Care Maids, Ayahs, Governesses	2.91
Domestic Maids, Cleaners, Helpers	24.81
Front Office Associates, Customer Service Desk Persons	2.61
Kitchen Helpers, Fast Food Preparers	7.93
Liftmen, Watchmen, Security Guards	3.37
Mazdoor/Helpers	9.7
Peons, Cleaners and Helpers	19.38
Sales Representatives, Sales Executives, Store Managers	7.76
CMIE	<b>1331</b> (Total)
(Organised crop farmers) Crop cultivators, vegetable	5.93
cultivators, fruit growers, Floriculturists	
Accountants and Auditors	9.91
Bus, Car and Van Drivers	2.77
Industrial and Machine Workers	18.18
Mazdoor/ Helpers	5.55
Peons, Cleaners and Helpers	2.55
Police, Hawaldars, Constables, Sub-Inspectors	2.85
Sales Workers/ Assistants, Shop Attendants/ Medical Representatives	7.21
Small Business Owner (smaller shops or offices), Shopkeepers, Small Dhaba Owners	15.02
PLFS	<b>1037</b> (Total)
Accountants and Auditors	2.89
Bus/ Car and Van Drivers	8.48
Dhobi/ Laundry/ Dry Cleaning Services	3.95
Electrical Mechanics and Fitters	3.27
Fire-fighters/Security Officers	3.85
Industrial and Machine Workers	7.23
Insurance Agents	2.60
Mines, Quarrymen, Related Workers	3.95
Plant and Machine, Industrial Machine Operators	2.98
Sales Representatives, Sales Executives, Store Managers	21.79
Tailors, Dressmakers, Dress Designers	5.40
Waiters, Butlers (chief waiter), Barperson, Bartender	2.50

Table A.4: Occupation of the sample that has above 2.5% people employed<sup>d</sup>

<sup>&</sup>lt;sup>d</sup>Based on platform data (July 2016 to December 2022), CMIE CPHS data (September to December 2022) and PLFS 2020-21 data. Number of observations: 64,119 (Platform), 1,331 (CMIE) and 1,037 (PLFS).

Job Profiles	Expecte	d Salary	Pref. distance		Any shift		Day Shift		Night Shift	
	Female	Male	Female	Male	F	М	F	М	F	М
Babysitter	13420.85		3.09		.004		.99		.002	
Beautician	12283.54	14553.57	4.24	8.80	0	0	1	.97	0	.029
Cook	7766.72	13849.20	3.05	8.04	.001	.005	.99	.98	.0007	.005
Driver	17466.66	17750.60	6.93	9.71	0	.007	1	.98	0	.003
Electronic	4312.5	9079.24	6.75	11.82	0	0	1	1	0	0
Technician										
Home-Based	348.95	300	4.09	15	0	0	1	1	0	0
Office Helper										
Maid/	6736.80	12969.70	3.10	7.84	.005	.019	.98	.97	.006	.004
Domestic										
Helper										
Medicinal	13112.46	13837.93	5.01	10.57	.051	.054	.94	.93	0	.007
Helper										
Office Helper	10554.36	12224.15	3.59	9.65	.0002	.0003	.99	.99	.0002	.0007
Other	13363.21	13610.72	4.05	10.37	0	.001	1	.99	0	0
Other Helper	10079.84	12188.66	3.49	9.87	.0001	.007	.99	.98	.0001	.011
Other	12060.52	9402.18	3.84	10.07	0	.004	1	.99	0	0
Technician										
Salesperson	11257.17	12895.02	4.23	9.57	0	.006	1	.99	0	.001

Table A.5: Job preferences of job seekers by job profiles

<sup>&</sup>lt;sup>e</sup>Based on platform data (July 2016 to December 2022). Number of observations: 96,620. Missing values are attributed to the absence of male respondents in that specific job profile within the platform sample.

Characteristics	Feat	ured	Called		
Characteristics	Female	Male	Female	Male	
Number of workers	6003	2789	4944	2115	
Female	.682	0	.70	0	
Age between 18 and 35	.415	.63	.416	.628	
Married	.661	.54	.683	.539	
Education: up to 10th	.938	.76	.943	.764	
Education: 12th &	.061	.24	.056	.235	
above					
NSDC certified	.004	.011	.005	.009	
Hindu	.837	.879	.851	.90	
Muslim	.139	.102	.123	.085	
Migrant	.165	.198	.172	.206	
Based in Delhi	.779	.601	.781	.597	
Based outside Delhi	.22	.398	.218	.402	
Owns a mobile phone	.718	.745	.745	.744	
Uses a smartphone	.443	.624	.468	.622	
Comfortable with	.007	.078	.007	.079	
smartphone					
Calls	.305	.468	.332	.476	
WhatsApp	.297	.465	.324	.472	
Facebook	.102	.368	.111	.369	
Google	.10	.31	.109	.314	
Utilities	.004	.072	.004	.072	
Entertainment	.105	.307	.114	.312	

Table A.6: Characteristics of job seekers featured in job orders and called for job orders

<sup>&</sup>lt;sup>f</sup>Based on platform data (July 2016 to December 2022). Number of observations: 8,792 (job seekers featured in) and 7,059 (job seekers called for).

Characteristics	Existing Users		New Users	
Characteristics	Female	Male	Female	Male
Number of workers	29308	27717	605	1223
Female	.51	0	.32	0
Age between 18 & 35	.551	.72	.72	.785
Married	.505	.332	.646	.589
Education:up to 10th	.788	.644	.619	.577
Education:12th &	.21	.353	.38	.422
above				
NSDC certified	.013	.029	0	0
Hindu	.86	.87	.83	.85
Muslim	.113	.105	.109	.093
Migrant	.099	.094	.142	.098
Based in Delhi	.778	.573	.186	.062
Based outside Delhi	.221	.426	.813	.937
Owns a mobile phone	.583	.563	.993	.998
Uses a smartphone	.353	.444	.976	.989
Comfortable with	.007	.030	.011	.012
smartphone				
Calls	.153	.25	.895	.925
WhatsApp	.149	.249	.876	.91
Facebook	.064	.193	.446	.626
Google	.075	.187	.743	.851
Utilities	.004	.025	.001	.004
Entertainment	.066	.166	.452	.616

Table A.7: Comparison between job seekers already on the portal and new users  $^{g}$ 

<sup>&</sup>lt;sup>g</sup>Based on platform data from July 2016 to December 2022 and data from January 2023 to March 2023. Number of observations: 57,025 (Existing Users) and 1,828 (New Users).

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