



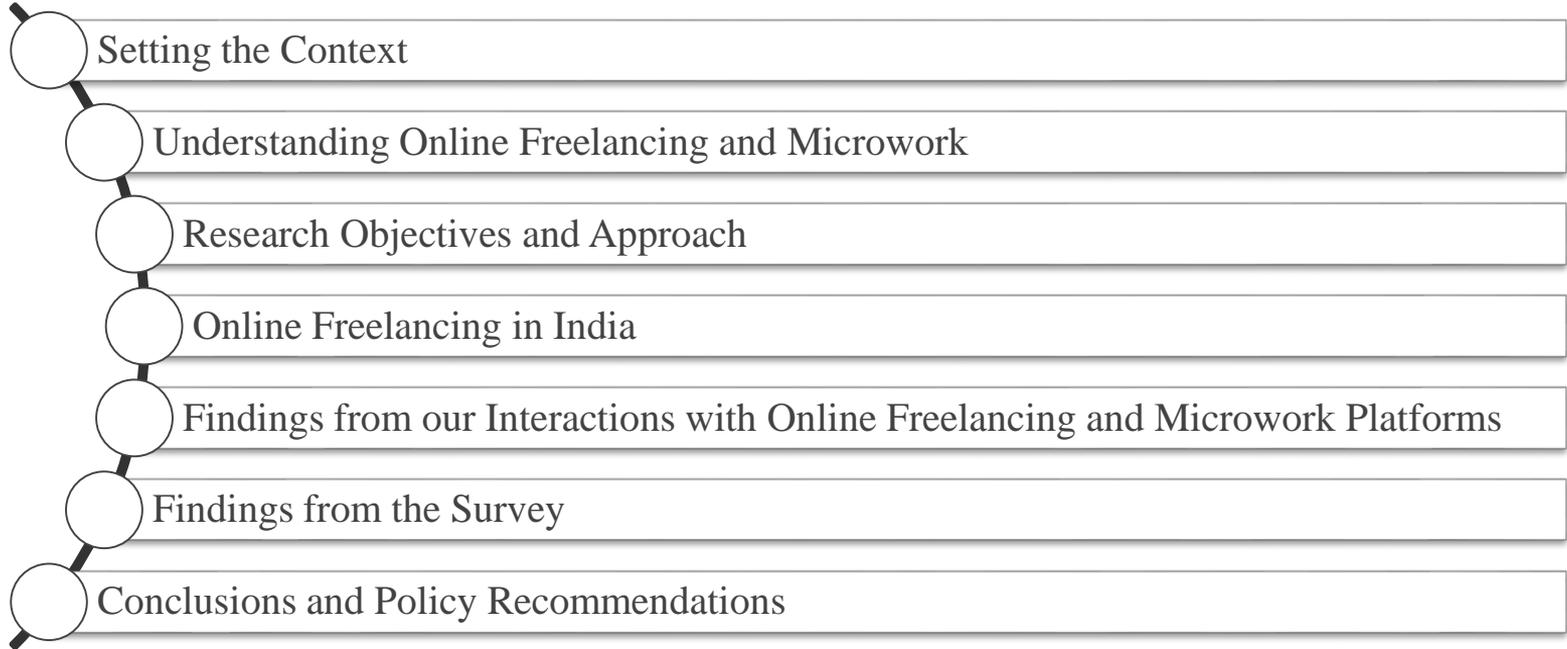
# Future of Work in a Digital Era: The Potential and Challenges for Online Freelancing and Microwork in India

Presentation by the Indian Council for Research on International Economic Relations (ICRIER)

27<sup>th</sup> December, 2017



# Roadmap





## Labour Market in India - Stylised Facts

- Employment in India has been historically dependent on agriculture.
- Structural transformation since 1990s has seen a shift away from agriculture in GVA but not employment
- Rising Informality in India's Labour Market
- India's informal sector is 75% in rural areas and 69% in urban areas
- There is also a glaring gender gap in India's labour force, with the labour force participation of women being among the lowest in the world (23.7% LFPR as reported by the 5<sup>th</sup> EUS, 2015-16)

# Technological transformation and the Labour Market in India



- The extraordinary rise of the Internet is both compelling and disruptive
- AKA the *Fourth Industrial Revolution (FIR)* it opens up livelihood opportunities
- Impact on the informal economy including sectors such as apparel and garments, construction, incense stick rollers, waste pickers, retail trade and distribution
- FIR can also disrupt the labour market by loosening the wedge of palpable dualism between formal and the informal.
- The exponential increase in the number of digitally driven startups is testament to the immediate impact of digitalization in India's informal labour markets

# The Digital Economy in India

## The market for online video streaming

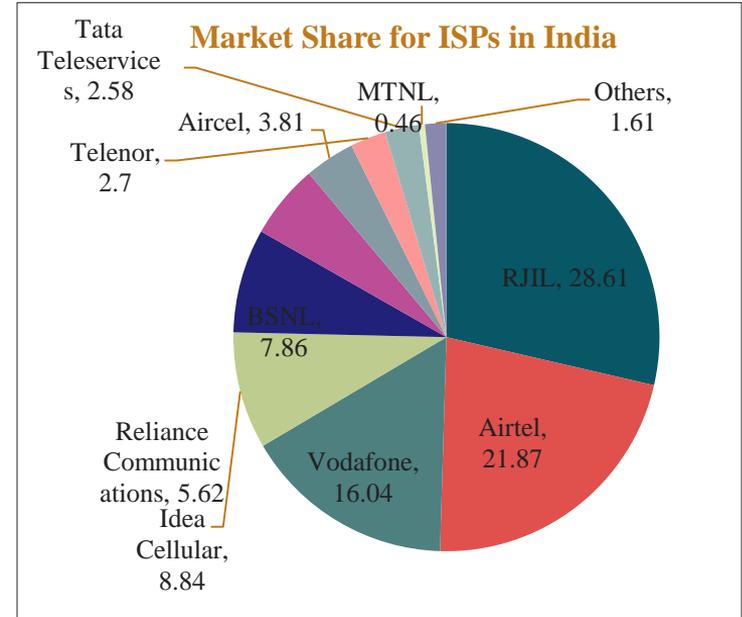
- The big market players are Netflix, Amazon Prime, Hotstar, Voot, etc.
- According to recent rankings Netflix earned the top spot for revenue earned, followed by Hotstar, ALTBalaji, Eros Now and Wynk Movies
- Netflix has over 4.2 million subscribers in India compared to 52.77 million subscribers in USA

## The market for E-Commerce

- As of FY17, the market shares were: Flipkart + Myntra – 38.5%; Flipkart (standalone) – 34%; Amazon India – 29% (the ongoing battle for dominance)

## Other components of the Digital Economy

- *Search*: Google – 97.25%; Bing – 1.83%; Yahoo! – 0.84 (November 2017)
- *Browser*: Chrome – 42.78%; UC Browser – 36.59%; Opera – 8.46%
- *Social Media*: Facebook – 86.37%; YouTube – 5.64%; Instagram – 3.76%



**HHI** – 1756.89

**C4** – 75.36



# Understanding Online Freelancing and Microwork

- *Online outsourcing* developed from the BPO model enables companies/ clients to contract with a third-party firm or individual (often in a different country) to supply products or services that are delivered and paid for via the Internet
- *Online outsourcing* can be divided into two major segments – microwork (Datahalli, Desicrew, Samasource, Amazon Mechanical Turk) and online freelancing (Fiverr, Truelancer, Guru, Upwork)
- *Microwork* and *online freelancing* often overlap, the major difference between them often being the size and complexity of the tasks, as well as the compensation offered. Both microwork and online freelancing platforms operate using different business models.



# Understanding Online Freelancing and Microwork

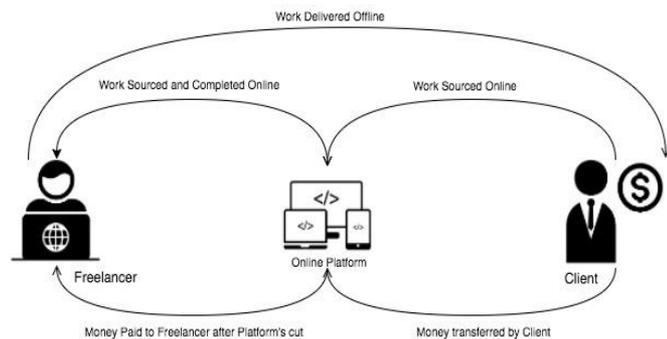
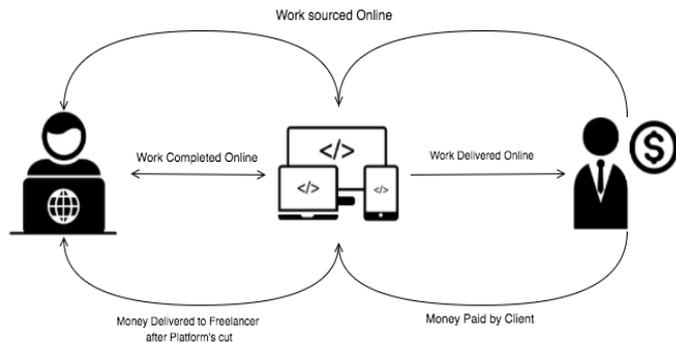
- Offline freelancing marketplace common
- In the digital paradigm, suppliers and clients come together through online platforms acting as intermediaries.
- Work thus flows from freelancers to clients and money flows from clients to freelancers
- Coasian transaction costs further reduced
- Potential of greater variety to clients, and access to increased work opportunities for freelancers.



# Understanding Online Freelancing and Microwork

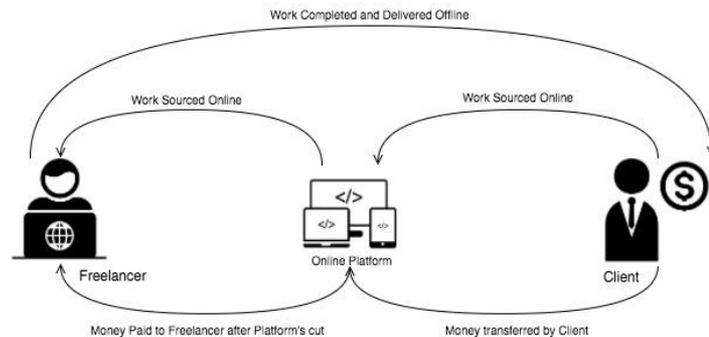
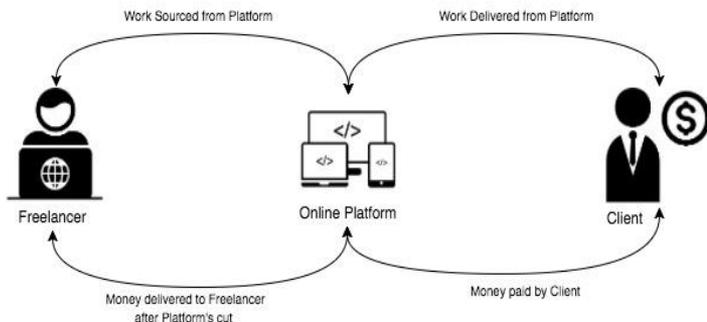
- While online freelancing is understood as a completely virtual business model, in practice varying types of interactions have created grey areas, that are organic extensions of the traditional online model.
- The freelancing ecosystem in India did not see a complete transition from an offline to an online marketplace. A large number of freelancers do not engage in what is theoretically defined as online freelancing, i.e., where **work is sourced, completed, and delivered online.**
- For the purpose of this study we use online freelancing as an umbrella terms to include all forms of interaction in which digital technologies are leveraged. We use a simple framework of the market to illustrate the flow of work and money in online freelancing, which use varying components of technology and Internet. In all four models, work is sourced online, but maybe completed or delivered off-line

# The Models for Online Freelancing



**Sourced Online, Completed Online, Delivered Online**

**Sourced Online, Completed Online, Delivered Offline**



**Sourced Online, Completed Offline, Delivered Online**

**Sourced Online, Completed Offline, Delivered Offline**



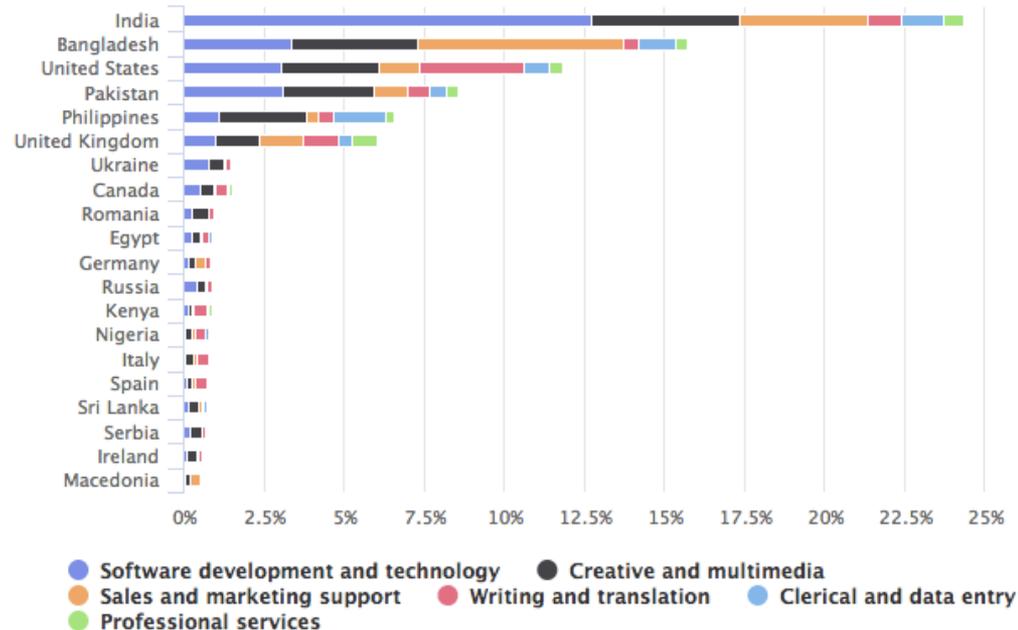
# Research Objectives and Approach

- This study assesses the potential and challenges of Online Freelancing and Microwork in India by evaluating
  - The existing business models for microwork and online freelancing
  - Profile of existing microworkers and freelancers
  - Challenges and perceptions related to online freelancing and microwork in India
- Literature Review
- One-on-one interactions with microwork organisations and online freelancing platforms that helped us understand both the demand and supply side of the industry
- Understanding the supply side – profiling of microworkers and freelancers, their perceptions and challenges through an online survey
- Outline challenges and policy recommendations



# Online Freelancing in India

- The rapidly rising digital penetration has helped fuel the online freelancing trend in India,
- The Online Labour Index (OLI) developed under the iLabour project at Oxford University is the first economic indicator that provides data related to the gig economy which is equivalent to conventional labour market statistics
- India is the largest supplier of online labour (comprising 24% of the workers observed). The index reports the top occupational category in India is software development and technology. India commands 55 % of the market share in this category
- A study on diasporas and outsourcing (Ghani et al 2014) finds that members of the Indian diaspora are more likely to place an outsourcing contract into India, compared to non-Indians, and have some important differences as to how these contracts are structured



Source: Online Labour Index, Oxford University



# Interaction with Online Platforms and Microwork Organisations

- Created a list of 50 firms that belonged to the online freelancing and microwork sector. We managed to establish contact with 18 of these over a period of two months.
- While not exhaustive, the list is representative of the variety inherent in the ecosystem that make up clients, platforms (service providers) and freelancers and how they interact with each other
- We compared these firms across nine characteristics to summarise their objective, operation and impact. These are – *Primary Objective, Type of Organisation, Task Complexity, Skill/Applicable Sector, Revenue Model, Target User Groups, Level of Intermediation by Platform, Availability of Job Seeking Options, Provisions for Training and Upskilling*





# Online Platforms and Microwork Organisations

- The number and type of online freelancing platforms and microwork organisations have increased over time. These models have evolved both in scale and scope.
- Platforms vary by the level of intermediation and services offered. Established ones such as Upwork and Truelancer support a very wide network of freelancers and clients across a range of skills. The relatively new ones - Flexing It, Croogster and Gaia curate quality talent and handhold both freelancers and clients in the process of engagement.
- The newer platforms generally have a focused target audience. Some platforms focus only on women freelancers (Ghar se Naukri, V-Pact, JobsForHer and Sheroes), people with disabilities (Vindhya), experienced professionals (Flexing It), etc.
- Platforms help freelancers by providing other support services such as counselling, training, upskilling and permanent job seeking options.
- The sample included 5 rural BPOs (direct microwork models) - *Desi Crew*, *HarVa*, *Data Halli*, *Vindhya* and *IndiVillage*. Each of these organisations provide training to their employees. Level of task complexity varied from low to medium. Apart from these five, Hansa Cheetah is a microdistribution based microwork model.



# Findings from our Interactions with Online Platforms and Microwork Organisations

- Stickiness in mindset both on the demand and supply side:
  - Indian companies are still unwilling to see the benefits of outsourcing to freelancers. Freelancing platforms stated that around 70-80% of jobs in the economy could be potentially outsourced given the right infrastructure
  - Freelancers treated “second grade” to individuals with permanent jobs in the Indian society. The stability and security of a traditional “9 to 5” job is still seen to be superior
- Reluctance is reinforced by the lack of recognition of freelancing as a legitimate means of employment - The long-established belief that informal work is mostly “unskilled” and unproductive continues to resonate with the idea of freelancing
- The need for platforms to innovate on payment mechanisms, promotion of new freelancers on their platform and clarity on payment of taxed especially when foreign parties are involved.
- The online freelancing space is likely to evolve along side an existing efficient offline network.
- The direct models for microwork are usually small-scale. Organisations have pointed a need to reinvent and train their workers as artificial intelligence and technology are quickly drying up traditional low skilled microwork activities
- Micro-distribution platforms such as Hansa Cheetah and Amazon’s Mechanical Turks are increasingly becoming popular



# Survey on current and potential freelancers in India

- Collected data from 1976 respondents using a structured questionnaire on an **online survey platform**. The survey remained open for over 2 months on Survey Monkey. We also sought the help of Frapp for feedback from student freelancers
- Survey results capture general trends and perceptions related to online freelancing in India along with a comparison of student and non-student freelancers.
- Responses were received largely from the states of Delhi, Karnataka, Maharashtra and Telangana –
  - States with cities that traditionally host the highest number of IT companies, under the presumption that basic training in Computers and Information Technology is necessary for online freelancing. These are also states with better network infrastructure and higher Internet penetration
- The number of male respondents in the survey is significantly higher than female respondents. This is especially true for states like Bihar, Andhra Pradesh, Rajasthan and Gujarat. With several opportunities for women in this sector, if there is in fact a gender divide, we hope to see it addressed soon.



## Online freelancing – Something for Everyone

- In our sample 38% students and 49 % non-student respondents were already freelancing
- While the average age for students was 20 and that for non-students 22, the oldest freelancer in the sample was 61 years old.
- Data entry, online marketing, writing and translation are reported the most popular engagements among both student and non-student freelancers
- Not every field is receptive to freelancing – freelancer journalists for instance, are reported to be very poorly paid. However, the variance in time committed and skill required for a freelancing task, makes it an opportunity for anyone and everyone
- Students have also reported to offer free services, which largely add to their experience portfolio
- Freelancing assignments vary in time , skill and compensation offered. For example, students offering data entry services could charge in the range of Rs. 0 - 20000 and spend anywhere between 1 to 50 hours to complete a task. For writing and translation the range is Rs 0 – 10000 and the time committed is 1 to 70 hours. *(More details in the appendix slides)*



## The will to freelance – Advantages of freelancing

- Potential freelancers are students and non-students who are willing to freelance whether or not they are aware of opportunities to freelance.
- The percentage of students in our sample who are not aware of freelancing opportunities but willing to freelance is 37% and those who are aware and willing to freelance are 63%. The corresponding numbers for the non-students category are 29% and 71% respectively
- At best, these numbers suggest that students are more flexible and open-minded about freelancing opportunities, even when they are not aware of its existence
- From a list of seven advantages of freelancing the **flexibility to work from home** is the highest reported advantage among both student and non-student freelancers. It also appears to be the highest rated advantage for potential freelancers in the student category. Among non-student potential freelancers, the **ability to make extra income** is reported as the highest rated advantage of online freelancing
- The advantage of work hour flexibility is significantly higher for non-students as is for the opportunity to earn extra income.

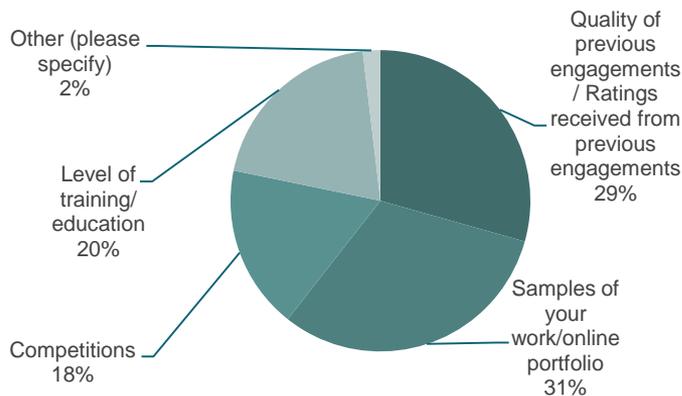


## The will to freelance – Disadvantages of freelancing

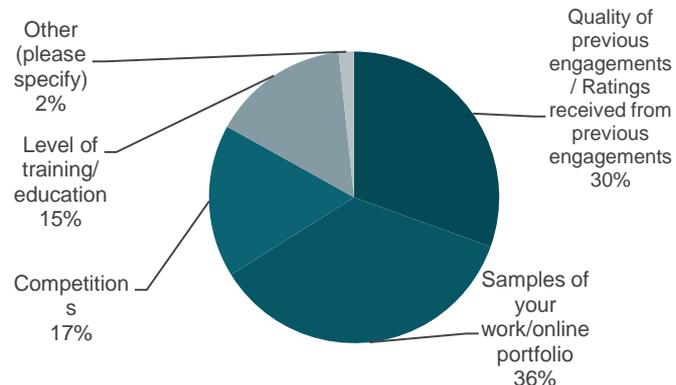
- The top rated disadvantages by current student freelancers are **fear of job security, inadequate income and issues related to the platform.**
- Among students who are not freelancers the perceived disadvantages are **fear of job security, lack of approval from friends and family and issues related to payment on an online platform.**
- For the non-student category of freelancers the top rated disadvantages are similar to students with the addition of not having **enough time given their current occupation.**
- **The disadvantage of inadequate income from freelancing** is significantly higher for non-students than students
- **In adequate skills/ training, hiccups in payment mechanisms on platforms, lack of interest in online freelancing and unavailability of opportunities** are significantly higher disadvantages for students when compared to non-students.

# Factors driving payments to freelancers

## Factors Driving Payment to Student Freelancers

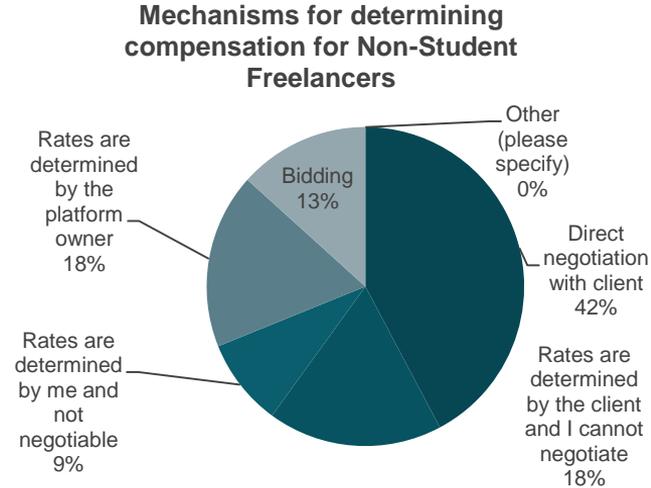
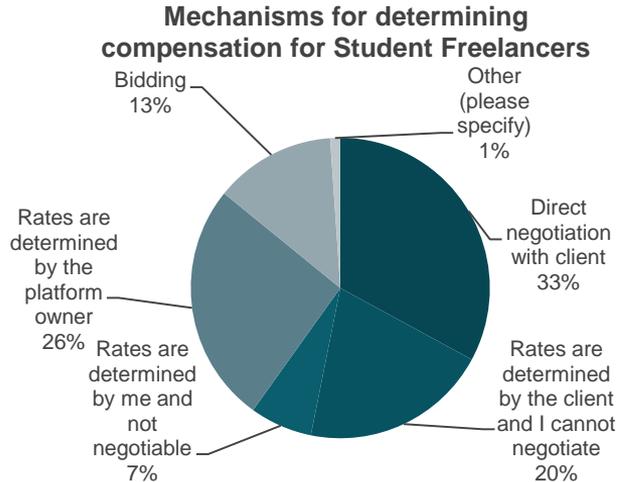


## Factors Driving Payment to Non-student Freelancers



Quality of previous experience is the highest rated determinant of payment to freelancers in both categories. While freelancers themselves are responsible for the quality of their work, platforms must also invest in design of algorithms to improve the selection and rating of freelancers. (e.g. Croogster)

# Mechanisms for determining compensation



- Ability to negotiate with clients is much higher in the non-student category;
- Proportion of non-student responses directly negotiating with clients is higher than that for students
- Proportion of students working with platform determined rates is much higher than that in the non-student category.



## Microworkers in the sample

- Microworkers rate flexibility of working from home and the opportunity to simultaneously pursue an educational program/another job as the top benefits of microwork
- Demographics of microworkers are not limited to rural areas and vulnerable groups as is the case with the impact sourcing organisations we interviewed for the first section of the study
- The most popular jobs across microworkers are data entry, content writing and online marketing jobs
- Respondents working with microwork organisations reported a mix of online and offline training, ranging from 2- 26 hours. Training was both paid and free, depending on the organization/ platform they were empanelled with
- The primary barrier to microwork is inadequacy of income, for some microworkers costly and slow internet connectivity is also the top rated barrier. Barriers related to network infrastructure or connectivity don't show up in the case of online freelancing



## Conclusions and Policy Recommendations

- Our research highlights the expanding scope and scale of the online freelancing ecosystem to incorporate a wider variety of skills, work type and commitment to freelancing
- It affords an opportunity to the vast pool of informal labour in the country, especially women. The flexibility offered by the platforms could fit in well with the demands of an evolving society that is looking for fulfilling and independent opportunities of livelihood that involve working some of the time
- Including online freelancing within the labour policy design – a focus on acknowledging online freelancing. Efforts in this direction will help mitigate perceptions related to the unreliability of online freelancing as the only/ full-time means of livelihood. This shift in perspective will be interlinked to the definitional choices for formal and informal employment in India.
- Need to build awareness and correct perceptions through concerted efforts of multiple stakeholders. Policy corrections will help enforce the idea of a mixed labour work force that picks between full time and contractual work based on personal preferences. Government efforts under the Digital India platform to provide freelancing opportunities to computer literates in India is a great example towards battling perceptions



## Conclusions and Policy Recommendations

- Improving network infrastructure, especially in smaller cities for online freelancing to benefit the larger pool of informal workers
- As bots take over a wide range of low skill repetitive tasks, skill development programs should focus beyond computer literacy for individuals to sustain the growth of online freelancing and microwork. In addition to the technical training, surviving online freelancing jobs also requires soft skills training which include people skills, communication skills and social intelligence
- Create a database that helps better understand the composition of this market. It will also help direct policies on formalization and re-skilling of the labour force in India.



Thank You

# Freelancers by Type of Work, Average Compensation and Average Time on a Job

Online Freelancers	Data entry (Typing in Word/entering in Excel)	Graphic design (Logo design, Photoshop Editing, Banner ads design, Web design, and development etc.)	Video and Animation (Animation and 3D, puppets, commercials)	Music and Audio (Mixing and mastering, sound effects, songwriters, composers)	Programming and software technology (Coding, WordPress, web programming, convert files, mobile apps)	Online marketing/advertising (Search Engine Optimization (SEO), keyword research, social marketing)	Writing and translation (Content Writing, Translation, Transcription, copy writing, proofreading, Editing)	Business (Career advertising, business plans, financial planning)
Students	180	89	32	40	87	147	172	38
Average Compensation	Free to Rs. 20000	Below Rs. 100 to Rs. 50000	From Rs. 10 to Rs. 10000	From Rs. 10 to Rs. 45000	From Rs. 25 to Rs. 50000	Free to Rs. 10000	Free to Rs. 10000	From Rs. 400 to Rs. 10000
Average time on a job	From 1 hour to 50 hours	Largely 1 hour to 30 hours. One respondent reported 2 weeks	From 1 hour to 20 hours	Largely 1 hour to 150 hours.	Less than 1 hour to 72 hours	Less than 1 hour to 3000 hours	From 1 hour to 70 hours	Less than 1 hour to 36 hours
Non-Students	12	7	2	4	3	11	27	2
Average Compensation	From Rs. 100 to Rs. 30000	From Rs. 500 to Rs. 30000	Rs. 30000 for a single task	From Rs. 10000 to Rs. 30000	From Rs. 100 to Rs. 30000	From Rs. 100 to Rs. 30000	Below Rs. 100 to Rs. 30000	From Rs. 500 to Rs. 5000
Average time on a job	From 2 hours to 6 hours	From 2 hours to 72 hours	72 hours for a single task	From 4 hours to 72 hours	From 2 hours to 5 hours	From 2 hours to 48 hours	From 1 hour to 72 hours	From 3 hours to 6 hours



## Significance of Difference in Scores Assigned to Advantages of Freelancing

Difference in Scores (Between Students and Non-Students)	Offers work hour flexibility	Offers an opportunity to pursue an educational program/ another job simultaneously	Offers flexibility to work from home	Offers opportunity to make additional income alongside primary income	Offers independence and choice of assignments/projects to work on	Average pay for work done online is higher than what one would earn in a comparable full-time job with a private/ public organization	More and easily accessible options for work are available
Current freelancers	Significantly lower mean score for students	Significantly higher mean score for students				Significantly higher mean score for students	
Potential freelancers who are aware of opportunities				Significantly lower mean score for students			
Potential freelancers who are not aware of opportunities				Significantly lower mean score for students			



# Significance of Difference in Scores Assigned to Disadvantages of Freelancing

Difference in Scores (between students and non-students)	Fear of job security	Income is inadequate	Online work platforms lack smooth payment mechanisms	My friends and family don't approve of such jobs	I don't have enough time, given my current occupation	I'm not interested in online freelancing	I'm not skilled enough to engage in such jobs	Tried, but didn't get jobs/ orders	Tax payments for online jobs is unclear/ complicated	My internet connectivity is too slow to work online	My internet connectivity is too costly to work online	Power cuts in my area affects my ability to work online
Current freelancers			Significantly higher mean score for students				Significantly higher mean score for students	Significantly higher mean score for students				
Not freelancing, currently, are aware of opportunities but don't want to freelancer		Significantly lower mean score for students				Significantly higher mean score for students						
Not currently freelancing, not aware of opportunities and don't want to freelance		Significantly lower mean score for students				Significantly higher mean score for students						