Marginalization of Graduate Freelancers in the Gig Economy¹

Reuben NG Paul S. H. WONG

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Similar to underemployment, a segment of graduate freelancers can marginalize into lousy and low-paying work. This paper performs a preliminary investigation on how graduate freelancers are thriving or languishing in the emerging gig economy through one of the first known survey study of freelancers in Singapore. The full-time graduate freelancers are grouped into two segments for comparison—the Optimally Utilized Freelancers (OF) and Under Utilized Freelancers (UF). The latter, given their bachelor degree qualifications, are primed for work at the professional capacity—they are underutilized when they perform work below this level as determined by the Standard Occupational Classification System. Findings show that OFs as better remunerated, using new ways of working but depending more on referrals for work, are more valued for their skills, have a higher propensity for learning new skills, possess growth mindsets and greater self-directedness, and less concerned about work security than their underutilized counterparts. This study contributes to the important topic on marginalized freelancers that is under-researched.

I. Introduction: Marginalization of graduate freelancers in the gig economy

The world is evolving at an increasing rate due to technological advances. Together with the myriad of disciplines blending with each other, new jobs emerge and old ones recede with increasing pace. The nature of work has also been changing, with a pivot from traditional employment to gig work in the recent years. This shift is attributable to three main reasons: commoditization of work via debundling of jobs into tasks that can be more readily outsourced (Drahokoupil and Piasna 2017); emergence of digital platforms which allow the brokering of labor to such tasks; and the changing concept of employment from "a job as a career" to a "career of jobs."

The rising polarization of work into "lousy and lovely jobs" (Goos and Manning 2007) and the shift of more workers into nontraditional work due to technological change (Martin and Schumann 1997) give rise to concerns of increasingly inequality. This is even more so in the gig economy era where freelancers are relatively understudied but could fall under the category of vulnerable workers (Kuhn 2016).

Whilst freelancing work is lauded by the more youthful and entrepreneurial generation, and acts as buffer during short periods of unemployment, artificially depressed employment rates as a result from lowly paid and persistent gig work can mask social costs as businesses shifts the economic risks and burdens to individuals (Friedman 2014). Freelancers with low leverage cannot bargain effectively and perform more precarious work, subjecting them to marginalization economically, socially and psychologically.

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This study investigates a potential marginalized segment of the freelancer community and its key working arrangement features, demographic attributes and psychosocial make-up. The descriptive findings provide insights on how freelancers are coping with precarious work, and elucidate some lessons on how the marginalized segment can better manage.

1. Work arrangements

A study on freelancing requires a close review on the nature of work and its arrangements. The nomenclature on work arrangements are many, such as traditional versus non-traditional employment (Rutledge et al. 2019), standard versus non-standard work (Pfeffer and Baron 1988), formal versus informal jobs (Hussmanns 2004). It is not surprising as work evolves alongside demographic, economic and business changes across the years.

The International Classification of Status in Employment (ICSE-93) defined by International Labor Organization (ILO) was adopted by the Fifteenth International Conference of Labour Statisticians in 1993 to facilitate statistical research and enhance international comparability between studies. The classification dichotomises work into two main types of jobs—employed and self-employed, where the latter includes employers, own-account workers, contributing family members and members of producers' cooperatives. The demarcation between the two main types of jobs lies in employed workers being bounded by "an employment contract that provides remuneration that is not directly dependent upon the revenue of the unit they work for." To understand the work arrangements of freelancers, we first turn to the target context in which they operate in—the Gig Economy.

2. The gig economy

The recent interest revolving around the changing nature of work is disproportionally represented by the rise of the gig economy, which is a free market system whereby short-term and usually one-off engagements are fulfilled. Heeks (2017) categorises the gig economy into physical and digital domains; the digital domain is further taxonomized into crowd work and online freelancing.

The rise of the gig economy is facilitated by technological advances and evolution of business models, increasingly dominated by platform economies (Todolí-Signes 2017). Laurenti et al. (2019) mapped out the sharing economy as a recent innovation disrupting the established socio-technical and economic regimes. Platform economies are the capitalistic evolution of the sharing economy, now evident with mobility (Uber), hospitality (Airbnb) and working (WeWork, UpTask), and are gaining traction in other areas such as finance. Botsman and Rogers (2010) laid down four principles that precipitated the platform revolution with increasing collaborative consumption: (1) trust between strangers—platforms becomes a neutral intermediary, (2) a belief in the commons—greater network benefits from higher participation, (3) idle capacity—excess resources that can be traded for added benefit, and (4) critical mass—sufficient volume to match supply and demand efficiently. It can be argued that platform work may first have started out as additional paid activity for workers, which in turn feeds further commoditisation of work. Drahokoupil and Piasna (2017) show work is increasingly fragmented with workers, especially high-skilled professionals, having more than one job in the recent years.

Whilst the fulfilment of gig work does not require an intermediary per se (as historically musicians are engaged directly for a single performance), the emergence of digital platforms as intermediaries accelerated the pace in the brokering of such gig engagements and extended them to more types of work. The triangular relationships of gig work (Steward and Stanford 2017) are commonplace and extensively studied in recent gig economy literature. De Stefano (2015), Farrell and Greig (2016) and Schwellnus et al. (2019) investigated platform-facilitated gig work and uncovered a great diversity in gig economy platforms' business and operating models. This makes it difficult to classify the variety of work carried out by freelancers into specific job

categories proposed by ILO.

Despite the huge attention the gig economy has attracted, Schwellnus (2019) estimates gig economy platforms engage only between 1 to 3 percent of total full-time employment in the West. In the US, workers' participation in online platform economies stands less than 2% and has peaked in 2014, due to high turnovers and reversion to regular employment (Farrell and Greig 2017). In Asia, such data are lacking and our study provides one of the first investigations of the gig workers in the region.

3. The freelancer

Given the variety of work in the context of the gig economy, how do we then define the freelancer? Broadly, we consider the following features of a freelancer before applying a reductive approach for classification: The freelancer usually maintains irregular work schedules in response to task or work demands; provides his own capital to carry out his work; is paid for tasks rather than time. From this, it is certain that the freelancer is not employed. Within the self-employed category of jobs, they most suitably fit into "own-account workers." However, it remains debatable whether taxi drivers, research assistants, insurance agents or even certain sole proprietors (e.g. one-man-show hawkers) are freelancers as they are considered relatively traditional job roles.

Globally, own-account workers contribute to 34% of labor participation. (ILOSTAT, 2020). There is a wide disparity across the globe, with developed countries having significantly lower proportion of own-account workers at 8%, and developing countries often in excess of 50%. Even so, this share is a much larger number from the 1–3% employment rate by gig economy platforms, indicating that freelancers on platform economies likely form a small subset of all "own-account workers."

Abraham et al. (2018) provides for a typology of work arrangements well-aligned with ISCE-93, incorporating gig work, though there are significant challenges in getting a consistency in reporting where such activity falls within self-employment. There are also significant challenges in quantifying the prevalence of gig employment using existing household data or admin data.

4. Economic marginalization and work precarity

It is assumed that an often long and usually expensive education through university will put individuals in a good stead for good work. Hence a study on freelancers, especially those highly educated, is essential. Within the employment sphere, there are numerous studies on unemployment and underemployment. However, there are fewer studies on the self-employed and much less on freelancers. In the same way that employed individuals can be disadvantaged (underemployed), freelancers could also be marginalized in the amount of work done and their rates of compensation. It is evident that own-account workers are more prone to marginalization, alongside contributing family workers, as these two categories constitutes the broader category of vulnerable employment (ILO 2018).

Studies on economic marginalization have focused on traditionally minority groups or in Africa. The extension of this concept to freelancers is merited as they form a growing minority. Todoli-Signes (2017) argues succinctly some form of regulatory protection may be required to mitigate market failures, inequality and unbalanced bargaining power that will give rise to worker marginalization.

Literature on vulnerable employment and freelancer work is closely linked to precarity. ILO (2005) defines precarious employment as a "work relation where employment security, which is considered one of the principal elements of the labor contract, is lacking." Cruz-Del Rosario and Rigg (2019) delves deeper into the definition of precarity and its social impact beyond economic marginalization. What is key is that some freelancers will fit into the precariat underclass.

A number of studies, and especially by Kalleberg (2009), provides clear evidence of precarity and its

consequences. The growth in job insecurity and non-standard work arrangements, as well as risk-shifting from employers to employees, results in economic inequality, insecurity and instability beyond the individual. Beyond financial stressors, the tensions of precarity also affects the social and psychological aspects of freelancers. (Sutherland et al. 2019).

This paper contributes to the ongoing discourse on new forms of work by focusing on graduate freelancers. Instead of limiting to only platform-mediated or online digital work, all forms of freelancing work are considered as long the individuals consider themselves as full-time freelancers.

II. Methods

1. Dataset

We conducted an online survey of freelancers and received 1,298 responses. The data reveals that there are significantly more part-time than full-time freelancers, consistent with other similar studies (Abraham et al. 2018)—a total of 107 individuals identified themselves as full-time freelancers who graduated with a bachelor's degree (graduate freelancers).

This target group of full-time graduate freelancers is partitioned into two main segments defined below:

- (1) Optimally Utilized Freelancers (OF)—individuals who are working for an income, self-employed or are independent contractors or working casually/temporarily for organizations, have degree or above qualifications and working in a Professional/Managerial/Management capacity as determined by the Standard Occupational Classification System (SOCS; an internationally recognized of classifying job roles).
- (2) Under Utilized Freelancers (UF)—similar to Optimally Utilized Freelancers but working below the Professional/Managerial/Management capacity despite having a degree (or above) qualification. Given their bachelor degree qualifications, they are primed for work at the professional capacity—they are underutilized when they perform work below this level as determined by the SOCS code.

2. Measures

Demographic variables include gender, age (with year of birth as input), ethnicity, religious beliefs, marital status, number of children, housing type (a proxy measure for socio-economic status in Singapore) and highest education attainment. Working arrangement parameters are captured by first checking if one is working for an income, followed by work status coded between "employed" or "self-employed." Further categorical variables for Work Status includes employment status as "Regular Worker," "Temporary worker," "Independent contractor" and "Casual worker," as well as part-time or full-time status. Nature of work for Industry and Occupations adapts the International Standard Industrial Classification of All Economic Activities (ISIC) classifications and the ILO International Standard Classification of Occupations (ISCO) respectively. Lastly, the number of working hours per week, years of working experience and monthly income are polled.

Freelancer features include questions regarding how the individual markets one's skills and look for paid work and specifically if one is operating as a private hire or food delivery driver. In addition, this section asks if the individual utilizes a co-working space or participates in hackathons. Orientation towards employment and skills is coded on a 5-point scale, where a score of 5 denote "Agree" and a score of 1 denote "Disagree." Questions include "I want but am unable to find a full time job" and "I would like to learn new skills so that it can be helpful when I change my job/get a new job or freelance." Obstacles to learning skills are also coded similarly with questions like "I don't know what area I should be trained in." and "I'm not sure what skills are in demand for my industry."

Work-feature motivations for current work arrangements are also coded on the same 5-point scale on

factors like remuneration, flexibility of work, personal passion, job security, income security, ability to make a social impact and availability of statutory employment benefits. Work-centric motivations relating to work are also polled, with questions like "I get excited about going to work" and "I am pleased with the opportunities available to me."

Work precarity is self-reported on a 5-point scale with questions like "I am satisfied with my overall income security" and "My skills will be relevant for the long-term." General work concerns on the same 5-point scale covers retirement adequacy, redundancy from automation, inability to find work, insufficient money for medical treatments and housing. Work Marginalization is measured by using an adapted version of the Subjective Underemployment Scales (Allan et al. 2017), taking into aspects like underpayment (My pay is less than other people with my qualifications), status discrepancy (My rank at work is less than it should be for someone with my ability), field of work (I am forced to work outside my desired field), involuntary temporary work (I take short-term jobs because I have to) and poverty wage work (My job does not allow me to make a decent living). Growth mindset used a reduced version of Dweck's (2013) Implicit Theories of Intelligence (Self-Theory) Scale.

III. Results and discussion

1. Demographics

Women make up about two-thirds of all respondents across both groups. This is also comparable against the norm (total surveyed population).

Against the norm, freelancers tend to be older. Whilst the difference is small, it may be worth investigating if UFs are older than OFs statistically.

More than three quarters of the respondents in each group rated their health as good or better. OFs generally rated their health better than UFs.



Source: Created by the authors.

Figure 1. Graduate freelancers by gender





2. Earnings gap

On gross monthly income, UFs earn less than OFs. The median gross monthly income band for each group are as follows:

•OF—S\$2,500-\$2,999 (US\$1,850-US\$2,220) •UF—S\$2,000-\$2,499 (US\$1,480-US\$1,850)

The income range distributions for OF/UF are skewed towards the lower end. There are more lower paid freelancers than there are higher paid freelancers, particularly so for UFs. The median gross monthly income of Singaporeans in 2017 is S\$4,232 (Ministry of Manpower, Singapore). Comparatively, 72.5% and 82.7% of OFs and UFs respectively earn less than \$4,000 a month, indicating that graduate freelancers may not be as fully compensated as graduate employees. The median gross monthly starting salaries of a degree-holder and a diploma holder are S\$3,500 and \$2,500 respectively. In his US study on gig workers, Friedman (2014) found that most gig workers earn less than their equally educated counterparts on traditional contracts; also, younger and less educated workers do much worse in alternative contractual arrangements.

Freelancers spend significantly less time working than the norm of 44-hour work week in Singapore, for full time employed workers. The average hours per week for each group are as follows:

•OF—27.9hrs. Men and women in this category worked around the same hours. •UF—30.6hrs. Men in this category worked 10 hours more on average than women.

Computing the average hourly rate for each group reveals the following:

•OF—\$22.40 to 26.87 per hour (US\$16.58–US\$19.89) •UF—\$16.34 to 20.42 per hour (US\$12.09–US\$15.11)





OFs earn around 34% more than their underutilized freelancing counterparts. Normalizing for hours worked, OFs and UFs would have earned S\$4,336 and S\$3,234 respectively, closer to the median full time employment salary. It is surmised that the lower pay earned by graduate freelancers is likely impacted more by the amount of work than the compensation rate, similar to another study by Prudential (2017) in the US.

3. Sectoral concentration

The top three job sectors for each of the OF, and UF groups form 61% and 70% of all the respective group's sector jobs.

•OF—Education (31.4%), Professional Services (17.6%), Arts & Entertainment (11.8%) •UF—Education (43.5%), Real Estate (15.2%), Transport and Storage (10.9%)

Freelancers have high concentrations in specific fields such as education (tutoring or lecturing), real estate, insurance and transport and storage (taxis or private car hires). Women, both UFs and OFs, tend to cluster in the Education sector, with many listing their roles as private tutors and teachers. Men are generally more spread out across sectors though a significant proportion of male UFs are also in Education and Transportation (mostly drivers).

IV. Usage of technology in freelancing

Much has been said about how IR 4.0 is changing the face of work and fueling the growth of the gig economy. Singapore's Ministry of Manpower 2017 Report on Own Account Workers indicated that 8.4% of all residents are engaged in some form of freelancing work, and this proportion is within the 8%–10% ranged observed in the past decade.

It is our interest to find out if there is a significant proportion of our target group of highly educated freelancers using digital-sharing platforms or new ways of working to earn an income.



"Have you worked at a co-working space?"

Source: Created by the authors.

Figure 4. Usage of co-working spaces by graduate freelancers

1. Usage of co-working spaces

The interest on co-working spaces stem from the enormous benefits they bring to freelancers, so much so that large corporates are recently jumping onto the bandwagon on creating such spaces internally. The drivers of freelancers seeking co-working spaces are interaction with people (particularly so for those who usually operate on their own), random discoveries and opportunities, and knowledge sharing (Spreitzer et al. 2015). A significant proportion of OFs have worked at a co-working space, as compared to UFs.

2. Participation in Hackathons

Hackathons are run by organisations to foster innovations and are usually a way for them to co-opt talents to augment their workforce (Zukin and Papadantonakis 2017). For freelancers, they are excellent opportunities to secure work or prize money. In our sample, the participation rates are small, likely due to a small concentration of coding-savvy freelancers. Mentioned in verbatim are Singapore University of Technology and Design's "What The Hack" and various Infocomm Media Development Authority hackathons.



Figure 5. Hackathon participation by graduate freelancers

3. Marketing of one's skills

Referrals are still the primary means of marketing one's set of skills, a little more so for OFs than UFs. This would hint that online market places like elance.com or upwork.com are not entrenched in the Singapore's freelancing ecosystem yet.



Source: Created by the authors.

Figure 6. Means of marketing by graduate freelancers

4. Business or income generation avenues

Similarly, freelancers derive their business or income largely through direct and indirect engagements with clients. Online platforms such as Grab or Uber form a small segment. Under others, freelancers list referrals by







Source: Created by the authors.

Figure 8. Graduate freelancers engaged in driving or delivery services

close contacts or agency brokering (including government) as sources of business and jobs.

Local media cited concerns over individuals entering into ride-hailing roles long term, as these roles offer little professional growth (Channel NewsAsia 2019). Surie and Koduganti (2016) in their earlier work on "The Emerging Nature of Work in Platform Economy Companies in Bengaluru, India: The Case of Uber and Ola Cab Drivers" also highlights the precarity and the lack of skills transferability into other jobs.

Our survey shows that that such roles continue to occupy a small proportion of the freelancing economy in Singapore. This still has to be watched closely as MOM's data indicates an overall increase year on year from 2016 to 2017, as ride-hailing companies continue aggressive growth plans with unsustainable incentives. What is desirable are counterforces swaying the growing number of freelancers into mushrooming fields of data sciences that are in high demand across most industries.

5. Perceptions of underutilized freelancers with college degrees

Remuneration and status perception

Whilst OFs feel that they are remunerated less than others with similar qualifications, the sentiments from UFs are more acute. This is supported by the demographics data shown earlier that UFs generally earn less monthly and on a per hourly basis. A similar result was obtained across the two groups when the respondents were polled about their remuneration given their skills and experience, instead of qualifications. With regards to their perception of status, less than half feel that their work status is lower than they deserve—for OFs, this proportion is lower, indicating they feel more recognized.



Source: Created by the authors.



Perceptions on skills and relevancy of training

Most freelancers agree training is needed for career advancement. Half are optimistic that their skills are relevant in the long term and interestingly, freelancers feel more so than the general population sampled. Three in four agree when polled if their skills were used effectively at their organizations. However, when comparing the perception of employer/buyer valuing their skills and experience, UFs have the lower score as compared to OFs.

Leighton (2016) highlights that that risk of freelancers in the increasingly knowledge-based gig economy lies not only in income precarity but also the need to maintain their skill levels to earn income. Whilst employees undergo regular training sponsored by their hiring organisations, freelancers need to self-fund, which is a dim prospect as they tussle between skills-upgrading and feeding themselves.

In this study, though there are significant agreement on the need for continuous learning, whether freelancing individuals actually do so warrant further investigation. Here, OFs overwhelmingly agree that they would like to learn new skills for advancement. Interestingly, UFs agree to a much lesser extent, possibly due to lack of opportunities or motivation to do so in their current areas of work. The perception is similar when asked about learning skills to be a better leader. On the questions on their desire learning skills for transferability or becoming a specialist, generally both OFs/UFs agree to the same extent.







Source: Created by the authors.



In the open-ended questions with regards to the skills the respondents desire to acquire, full-time employees surveyed indicated technical skills specific to their work as well as some soft skills such as leadership and management. In comparison, for OFs and UFs, desired skills revolve more around teaching, sales/marketing and networking. Across all groups, desired tech skills like IT and coding are common.

Obstacles to learning skills

Despite the recognition that skills training is desired for career advancement, a significant proportion of UFs indicate that they are unsure of what area to be trained in. OFs appear more self-directed and more aware of learning new skills as compared to UFs.

Similarly, OFs are generally more certain of the skills that are in demand for their industries. This may

have some impact on their responses with regards to the benefits of learning new skills. Across all groups, few agree that they had a previous bad experience which affects their outlook on learning new skills.

Aside from intrinsic factors like personality and motivation influencing skills upgrading, external factors can also pose as obstacles. Skills upgrading is one of the four interrelated concerns for workers in a study "Digital Labor and Development: Impacts of Global Digital Labor Platforms and the Gig Economy on Worker Livelihoods (Graham et al. 2017). The researchers uncovered that skills and capability development can be hampered by lower bargaining power to doing productive experience-building work, or isolation of work into a narrow scope such that does not provide information to gig workers to upgrade in a certain area of competency.

Once seen as a lifelong badge of professional competency, qualifications in the forms of diplomas and degrees have shorter half-lives and weaker signalling power in the labour market. To play catch up, many people continue to invest more time in "qualification accumulation." This qualification inflation poses several trade-offs for the economy. First, productive years of youth are spent acquiring increasing amount of knowledge, which could be otherwise spent on value creation in the market economy, echoed by Yi and Mcmurtrey (2013). Second, a significant portion of the knowledge acquired are not used as inputs when many of these highly qualified individuals enter the workforce. Our current education system has built a lot of knowledge redundancy to ready our labour workforce, but this knowledge acquired may not be optimally utilized especially in the long run where we expect rapid knowledge obsolescence and multiple job changes in each individuals' career lifetime.

The focus on skills instead of qualifications is pertinent as economic value-add is not contingent on knowledge acquired, but instead on tasks being done. As jobs are increasingly deconstructed into tasks (from which the gig economy is based on), the ability of an individual to complete tasks should be measured via the skill competency possessed. The emphasis on skills is fuelling a demand for micro-credentials as they are more quickly acquired and are more relevant contextually. The challenge would be to incorporate this into the existing education system so that the labour market participants such as UFs can consider the most optimal pathway to successfully contribute in the market economy as quickly as they can. Eventually, it is also important to reframe freelancers' skillsets to be applied to adjacent jobs requiring similar skills; this will expand freelancers' universe of roles they can perform.



Source: Created by the authors.

Figure 12. Obstacles to learning skills

Concerns

OFs are the least pessimistic that their roles will be obsolete in the future. However, when polled about automation, OFs opined to a larger extent that their jobs will likely be taken over a robot or automatic process.

Social safety nets provided in full-time jobs such as medical benefits, sick leave and employer's Central Provident Fund contribution are non-existent for freelancers. Coupled with fluctuating income, setting aside funds for retirement or up-skilling themselves can be low on the ladder of priorities. The key concerns of freelancers in this survey are job obsolescence, insufficient work, retirement and healthcare inadequacy.

The relationship between precarity and economic and other forms of insecurity will vary by country depending on its employment and social protections, in addition to labor market (Kalleberg 2009). However, policy interventions can facilitate a "flexicurity" system where there are flexible employment rules but a robust social security system, permitting work precarity with smaller impact on security on livelihoods. In Singapore, SkillsFuture and its varied initiatives serves to tackle skills retraining, job placement or improved task-to-skills matching can alleviate concerns regarding lack of work. To address concerns of healthcare, the Singapore government is currently mulling over a "contribute as you earn" model as well as an insurance scheme to protect freelancers from loss of income due to protracted sick leave. More can be done, either through policy implementations or financial education, in helping freelancers even out their earnings and better save for their retirement.

Flexibility of work schedule and passion are rated most highly as motivations for freelancers. The former may be driven by life stages or personal circumstances, whilst the latter is driven by self-fulfilment. However the reality is that the freelancer's choice is not dichotomised so cleanly between these two ends but rather a midway compromise in this spectrum (Adom 2014). The segment of greatest concern would be those underutilized freelancers who need some flexibility in their life and are structurally displaced. In addition to social protections mentioned earlier, this segment would likely need support in managing around their life stages and circumstances, whilst ensuring the longevity of their employability. As such, help would not only come in upskilling or reskilling efforts, but also from greater collective bargaining and communal assistance. Freelancers in the gig economy would be best suited for sectorial bargaining and regulation to achieve a democratic and progressive evolution to the future of freelancing work (Johnston and Land-Kazlauskas 2018).



Source: Created by the authors.

Figure 13. Perception of obsolescence by graduate freelancers

Growth mindset and career planning

More than half of OFs have a career plan spanning the next 3–5 years compared to UFs at around one third. This may have an impact on their attitudes towards skills training and management around employability.

The following two charts related to Dweck's theory of intelligence as a predictor of success. Generally, both OF/UF groups adopt growth mindsets where individuals are open to learning and development, with OFs agreeing slightly more. The better score by OFs is also indirectly affirmed by the higher self-direction in knowing what skills to be trained in and where to go for such training. OFs also generally know what skills are in demand and their benefits.

The particular mention on growth mindset and having a career plan serves to underscore the importance of self-awareness, the belief of positive change, and having a clear direction. It is not uncommon to hear anecdotes of many individuals constantly "searching for what they can do best and be fulfilled," exacerbated by the ballooning plethora of job options. Singapore's Career Support Services do a good job in providing timely and critical information in matching supply to demand. But perhaps what could supplement this would be elements of career coaching for self-awareness and self-fulfilment. Individuals should be able to formulate concrete career plans on their own so as to plot success pathways and anticipate issues as they progress in their career. Without clarity and direction, it is highly likely that working individuals, especially freelancers, will be subjected to buffeting market forces and drift along, instead of progressing. The nation's messaging and support services can do more to help individuals especially the UFs to plan better for their own future.



Source: Created by the authors.

Figure 14. Growth mindset by graduate freelancers

Limitations and future study

While it is clear that freelancers are not employed, survey participants may be subjective interpretation whether some work roles are considered freelancing. In the study, a reductive approach was taken to set apart the target segment by first filtering those who are earning an income, are graduates, are self-employed and finally self-reported as freelancers. Within the self-employed group, it is noted that there are a fair number who did not indicate that they are freelancers share similar work with those who declared as freelancers, such as drivers and financial consultants. A refined criterion for freelancers can be adopted before deeper analysis can be made.

Earnings are polled into categorical ranges with only the main source of income is used, with the assumption full-time freelancers declare freelancing earnings as their only source of income. Categorical ranges were used for more accurate responses, with the disadvantage of lacking precise income data points for benchmarking. Future work could also consider comparing the responses of freelancers earning the first and last quartile, instead of the current approach by job-type, to identify correlations with economic marginalization.

The study presented only descriptive findings. Future studies can attempt to model demographic and psychosocial attributes that may predict successful freelancers. This can serve to educate individuals to develop essential characteristics before taking the plunge to be full-time freelancers.

V. Conclusion

The emergent gig economy brings about new challenges to new ways of working. Capitalistic evolution of the sharing economy without sufficient regulation causes polarization of good and bad work. Freelancers, disadvantaged by circumstance or a lack of self-direction, may end up increasingly marginalized as they struggle with precarious work.

This study identified full-time graduate freelancers from a nation-wide survey, and dichotomized them into two distinct groups of graduate freelancers: The optimally utilized who engage in professional work that match their qualifications, and the underutilized group who engage in associate-professional/technical work that they are over-qualified for.

It is found that 1 in 2 graduate freelancers in the gig economy are underutilized. In comparison to the optimally utilized, the underutilized group is paid 34% less and works 10% more. They work mainly in education, real estate and transport. Gender has no bearing on median earnings but does influence sectoral concentration. Most freelancers continue to offer their services through traditional means; their leverage on online platforms is still currently low and generally limited to delivery or ride-hailing apps. More than half are acquainted with co-working spaces. Graduate freelancers reported that nearly 60% of clients do not value their skills and experience. Three factors further differentiate the optimally and underutilized graduate freelancers. One, the information gap is wider in the underutilized group where they are less knowledgeable of the indemand skills and where to acquire them. Second, underutilized graduate freelancers expressed a greater fear of obsolescence, accelerated by technology and AI. Third, they evidenced a weaker growth mindset.

Underutilized freelancers can be better supported by: (1) creating a supportive labor market for freelancers to thrive; (2) shifting society's focus from qualifications to skills for quicker labor supply speed-to-market; (3) nurturing the growth mindset and encouraging career planning of individual freelancers; (4) closing the information gap of in-demand skills through the timely provision of relevant insights for upskilling decisions, pushing freelancers to areas of greater demand and likelihood of jobs such as data science and software development; and (5) strengthening social safety nets for freelancers.

This study adds to the body of knowledge on the gig economy and potentially marginalized freelancers. Marginalized freelancers are like their counterparts, the underemployed employees, with the added job and income precarity as the lack of unionized support. It is imperative that more research be done in this area to advancing the future of work transition smoothly into a new era, without leaving anyone behind.

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AUTHORS

Reuben NG

Ph.D., Head, Data Innovation Group, Lee Kuan Yew School of Public Policy, and Lloyd's Register Foundation Institute for the Public Understanding of Risk, National University of Singapore.



Paul S. H. WONG

Research Assistant, Lee Kuan Yew School of Public Policy, National University of Singapore.