

Assessing the Gig Economy and its Impact on Filipino Career Paths

Rianne Jill R. Motas^{1*}, Katherine Clare S. Mudlong², Marie Antoinette L. Rosete³

^{1,2,3}Department of Business Economics, College of Commerce and Business Administration, University of Santo Tomas, Manila, Philippines

Abstract: The Gig Economy and Digital Freelancing have revolutionized the labor market, creating new opportunities and challenges for workers and businesses alike. This study explored the impact of the Gig Economy on the career paths of Filipino professionals. Through the examination of the relationship between the demand for freelancers and workforce saturation in the freelancing industry, the research shed light on how these variables shape the career intentions of professionals across different generational cohorts, such as Generation X, Millennials, and Generation Z, in the dynamic labor market of the Philippines. Despite perceived challenges related to market saturation, the study showed that workforce saturation holds no sway over career intentions, while specific labor demand sub-variables have an impact. Overall, the study determined that age is the main determinant that influences interest and engagement for the freelancing industry. The study also emphasized freelancing's global accessibility and the observed shift towards full-time engagements, signaling freelancing's evolution into a lasting and prominent career path in the years ahead.

Keywords: career intentions, digital freelancing, freelancing, freelancing in the Philippines, generational cohorts, gig economy, labor demand, workforce saturation.

1. Introduction

Since the beginning of the early 2000s, new professions have emerged exponentially and continuously in today's labor market as a result of the technological progress that the world has embraced, giving rise in derivatives of notable professions across all industries under one prominent umbrella: freelancing.

The concept of the industry was introduced by the American physicist and engineer Frank M. Nilles as a means to an end of the convolution of issues that employees across the country confront daily, an example for one is the never-ending transportation dilemma. Now that digitalization paved the way for new forms of work and platforms to surface unto the mainstream, online work, or specifically digital freelancing, enabled Internet users to access this emerging labor market from the comfort of their own homes. Ultimately, as industrialization and the corporate world ushered in the 'tyranny of the clock,' the world of freelancing helped employees reclaim control over their own time.

Moreover, Singh Metha and Kumar (2020) that since the COVID-19 pandemic necessitated remote working, recognition for the e-commerce Gig Economy had unfolded so much so that it was counted as essential services during the latter part of the

year.

As discussed by Lapanjuuri, et al. (2018), the Gig Economy is defined as "involving the exchange of labor for money between individuals or companies via digital platforms that actively facilitate matching between providers and customers, on a short-term and payment by task basis." This definition was supported by Singh Metha and Kumar (202) who defined it as a "labor market characterized by the prevalence of short-term contracts, wherein it offered two types of task-based work: (1) crowded work, such as digital marketing, online tutors, content writers, graphic designers; and (2) on-demand work, such as e-commerce services of Amazon and Flipkart.

Further discussed by Bayudan-Dacuycuy et al. (2020), the hastened growth of the gig economy was empowered by improved ICT infrastructure and was heavily influenced by the COVID-19 pandemic. The popularity of the gig economy also off-set some of the economic slowdown in the country as it provided opportunities for workers and increased international remittances in the country; this was also followed by a growth in banking activity, particularly through digital channels, as the usage of e-payments skyrocketed due to the portability and accessibility of cell phones and mobile internet.

Consequently, according to Graham et al. (2017) statistics on the availability of labor in online labor marketplaces reveals that the Philippines, along with India, Bangladesh, and Pakistan are currently the principal sources of labor supply [for freelancers] in the world. Supported by Payoneer (2020), data showed that the Philippines ranks as number one among the nations with the fastest growing freelance economies. Wherein, according to the most recent figures, there are 1.5 million Filipinos employed by digital platforms including those who are involved in various project-based services or "gigs," and who are referred to as "online freelancers."

Freelancers also enjoyed the lack of restricting credentials that is required to enter the job market. According to the 2022 Philippines Freelance Market report, 55% of Filipino freelancers range from students to full-time professionals, typically ages between 21 to 35 years old. It is also noteworthy to mention that there is also a sizable proportion of freelancers aged 36 to 45 years old, indicating that a big chunk of Gen X and Boomers are also entering the gig economy aside from the usual Millennials and the Gen Z.

One could theorize that the demanding presence of the

*Corresponding author: riannemotas.work@gmail.com

freelancing industry is attractive across the different generations since it is a well-known norm that most Filipinos opt for a career that is in-demand, even if it is not on par with their skills and aptitude. Oleck (2015) elaborated this workforce culture by noting that individuals worry more about the lifestyle they want to attain rather than whether they enjoy the job; this is the reason why they chose a career that provides financial stability over the pursuit of their dream jobs. Moreover, Pacific Prime (2021) explained that Generation Z grew up to be cognizant of the economy, thus desiring financial freedom and stability for themselves.

According to Global Strategy (2022), the most in-demand profession in the Philippines for the year 2022 is a freelance virtual assistant, in which nations from all over the globe outsource their services to the Philippines. All things considered; it is evidently explicable why the different generations are inclined to dip their toes in the sphere of freelancing for its alluring quality of being “in-demand.” The given report also discussed that since this is the most in-demand job in the country, the competition is undoubtedly high, making the market highly saturated.

As reported by Sohanta (2022), even the freelancing market in the United States became highly saturated given that the number of freelancers in the U.S. is projected to sum up to over 86.5 million workers in the respective field. According to San Antonio (2022), the 2019 Global Gig Economy Index found that the pandemic accelerated the trend of Filipinos leaving corporate jobs to become full-time freelancers since most enjoyed the flexibility and earning potential that the job offers. As a result, the Philippines ranked sixth in the world's fastest-growing freelancing market, with a romping 35% growth in freelancing earnings—this ultimately begged the question whether this sudden surge of popularity created somewhat of a saturated labor market as the pandemic wanes on until now.

The purpose of this study was to assess the relationship between the labor demand for freelancers and workforce saturation in the freelancing industry, as well as its impact on Filipino freelancers' career aspirations across all generations. Moreover, the researchers aimed to discover whether the freelancing career was only a passing trend rather than something that has a significant and lasting effect on the labor market in the Philippines. Essentially, the significance of the study relied on the revolutionary transformations of the freelancing industry in the current labor market, and so the research sought to assess the industry's labor makeup and how it continued to impact the nation.

A. Statement of the Problem

This research aimed to investigate the relationship between labor demand and workforce saturation among different age groups in the Philippine freelancing industry. It sought to answer whether there was a significant relationship between labor demand and workforce saturation, and how it affected career aspirations across generations. The objectives of the study were to (1) survey freelancers in the Philippines to identify the most saturated and in-demand niches, (2) determine the factors driving the popularity and saturation of specific

niches, (3) establish the relationship between labor demand and workforce saturation in freelancing, and (4) discuss the implications of labor demand and workforce saturation on the career intentions of different generations in the freelancing industry.

To be able to achieve the objectives, the following specific questions were answered:

1. How is labor demand described in terms of:
 - 1.1. Job vacancies;
 - 1.2. Job advertisement; and
 - 1.3. Job Preference
2. How is work saturation described in terms of;
 - 2.1. Current occupation in the industry;
 - 2.2. Educational Attainment; and
 - 2.3. Position Status
3. How are career intentions of workers in the freelancing industry described in terms of:
 - 3.1. Aspired focus niche; and
 - 3.2. Career change rate
4. To what extent does the implications of labor demand on workforce saturation impact the career intentions of employees from different generations that are currently working in the freelancing industry in the Philippines?

B. Significance of the Study

The findings of this study served as an aid to understand if there is a linkage between labor demand and workforce saturation in the freelancing industry, and its impact on Filipino freelancers' career aspirations across generations. The study was deemed important to the following:

Workers in the freelance industry: This study helped the workers in the freelance industry of different generations as it helped novice freelancers traverse through the freelancing industry by discovering different demands for each freelancing niche. In addition, there was a pressing need to increase awareness of how potentially saturated the industry segment they are aiming to join is. Hence, it was useful for the workers to understand the potential risks and opportunities they may face in the business, as well as their career goals in selecting a niche.

Aspiring freelance workers: In its aim to assess the Freelancing Industry as a probable career path for succeeding generations, the study benefited those who aspired to join the industry.

Employers: This study was valuable to the employers of workers in the freelance industry as it helped them identify the supply of the workers in a specific niche and strategized how they will seek its demand from them.

Future researchers: The study was also beneficial to the future researchers who wanted to discover more about the Gig Economy and its effect on the linkage of labor demand and workforce saturation in a different angle and considered this as their foundation for further research. In addition, the conclusions drawn from the information received from the respondents led to the study's recommendations, which determined the linkage between the labor demand for freelancers and the workforce saturation in the freelancing

industry, and its effect on the career aspirations across different generations.

1) *Scope and Limitations of the Study*

This research was predictive in nature, and it considered the linkage between the labor demand for freelancers and the workforce saturation in the freelancing industry, and its effect on the career aspirations across different generations.

This study involved workers of different niches in the freelancing industry, particularly the age group mentioned by Dimock (2019) includes Generation X (born between 1965 and 1980), Millennials (born between 1981 and 1996), and Generation Z (born between 1997 and 2012). The researchers mainly focused on Filipino freelancers and the Filipino freelancing industry, thus exploring its booming popularity as indicated by Antonio (2022). Moreover, the study is also limited to assessing the freelancing industry of the Philippines in the years 2020 to 2023, mainly covering the labor market's composition starting with the COVID-19 pandemic until the current year (2023) as the researchers only aimed to investigate the period where the industry boomed in popularity. Additionally, freelance workers from other countries were not included in the data gathering.

In addition, the researchers only used three (3) indicators to evaluate labor demand, which are more appropriate to the freelancing industry: job openings, job advertisements, and job preferences. Due to the restrictions of the study's scope, the researchers omitted other measures of labor demand that might have influenced the relationship between it and workforce saturation and its effect on the career aspirations of freelance employees.

The assessment of the workforce saturation variable was primarily constrained to the years 2020 to 2023, as the researchers were only interested in determining the impact of the industry's rapid popularity. Furthermore, as part of the data collection process, Payoneer's (2022) report on the 2022 Philippine Freelance Market was employed as a primary source for estimating the total freelancing labor force. According to the report, it was indicated that the number of freelancers in the Philippines exceeded 1.5 million; this count was considered the most current and up-to-date estimate of freelancers in the Philippines within the scope of this study. The data acquired to evaluate workforce saturation was collected from the perspective of solely the employees, not the employers.

Four (4) months, from July 2023 to October 2023, were devoted to the gathering and analysis of the research's data, and so data collected on dates other than July 2023 to October 2023 were disregarded.

2. Literature Review

A. *Theoretical Framework: The Theory of Planned Behavior*

When deciding on a profession, the Theory of Planned Behavior was utilized to a significant degree as this theory predicted an individual's intention to engage in a certain behavior at a particular time and location. According to Conner (2020), behaviors of individuals were largely driven by intentions, which were defined by three variables: attitudes,

subjective norms, and perceived behavioral control; the insights were a protraction of the base theory created by Azjen (1985). Ultimately, in this theory, individuals were assumed to act rationally in accordance with their attitudes, subjective norms, and perceived behavioral control; these aspects were not necessarily actively or consciously examined throughout the decision-making process, but they served as the underlying factor of it all.

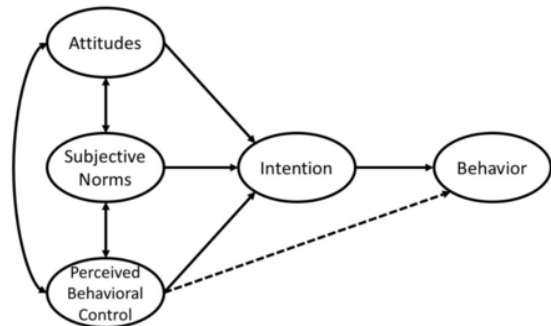


Fig. 1. The theory of planned behavior

An elaboration on the information presented in Figure 1, which can be found up above, attitudes referred to the degree to which a person evaluated the behavior of interest positively or negatively, subjective norms center on the considered societal pressures, which included the individual's perception of the expectations of others and the degree to which the individual put value on those expectations, and lastly, perceived behavioral control referred to how an individual feels about performing a specific behavior.

To align this to the research at hand, the researchers supposed that individuals across all age generations seek successful professions, and the subjective norms at present signal that Science, Mathematics, Engineering, and Technology (STEM)-integrated career routes were the most sensible option. Nevertheless, society deems a person successful so long as the monetary worth of the field is quite apparent. Individuals' perceived behavioral control must have therefore subsequently motivated them to choose careers that have led them to what society considers to be successful. Ultimately, this explained why career intentions across all age generations gravitated towards more in-demand occupations, since this is the path that provided them with more financial security.

B. *Related Literature and Studies*

1) *Gig Economy*

Roy and Shrivastava (2020) examined the significance and development of the Gig Economy in both the Indian and global contexts. They highlighted the role of digital platforms in spreading gig cultures to developing countries and remote areas worldwide, building upon previous research by Donovan et al. (2016). The authors emphasized the various opportunities available in the gig economy, such as flexible work environments, access to global job postings, and the freedom to pursue personal interests. They also discussed the major players in online marketplaces, including Freelancer.com, Upwork.com, and Fiverr.com, which boast large user bases.

However, Roy and Shrivastava (2020) also acknowledged the challenges faced by freelance workers, such as fluctuating income, lack of social benefits, and job insecurity. Lehdonvirta (2018) further explored the topic by observing that gig workers have more control over their work schedules compared to traditional employment. While they enjoy formal flexibility in scheduling, Lehdonvirta noted that factors like job availability, task assignments, and cultural-cognitive restrictions can limit their autonomy. Therefore, despite the flexibility offered by gig work, there are still inherent constraints that shape scheduling dynamics in this economy.

Anwar and Graham (2018) conducted a thorough study on online labor markets and identified an oversupply of workers, indicating high competition for gig work opportunities. This observation was supported by empirical data collected on a single day in October 2018, showing that less than 7% of applicants are successful in securing employment. Similarly, Warner (2020) identified Upwork.com, Fiverr.com, and Freelancer.com as the key players in online freelancing, boasting a combined user base of 55 million.

Table 1

Oversupply of labor on Upwork.com. Data for October 24, 2018, collected and analyzed by Anwar and Graham (2018)

Country	Potential Workforce ^a	Successful Workers ^b	Over-supply ^c	Over-supply Percentage (%)
Global	1,891,648	128,259	1,763,389	93.2 %
United States	581,717	23,845	557,872	95.9
India	249,698	22,772	226,926	90.8
Philippines	164,757	18,869	145,888	88.5
Pakistan	66,681	6,032	60,649	90.9
United Kingdom	56,644	2,924	53,720	94.8
Ukraine	55,604	8,506	47,098	84.7
Egypt	35,299	1,295	34,004	96.3
Kenya	18,508	898	17,610	95.1
Malaysia	13,385	317	13,068	97.6
South Africa	12,723	593	12,130	95.3
Nigeria	8,032	297	7,735	96.3
Vietnam	7,574	669	6,905	91.1
Ghana	1,656	50	1,606	96.9
Uganda	1,176	31	1,145	97.3

^a Total searchable worker profiles.

^b Searchable worker profiles with at least one hour worked and US\$1 earned.

^c Potential workforce minus successful workers.

Source: Anwar and Graham (2018)

Tolba's (2021) study focused on the impact of gig economy dynamics on the labor market in six Asian nations from 2000 to 2019. The results of the study revealed that middle-income countries experienced a negative impact on the availability of experts in the traditional labor market due to the prevalence of gig work opportunities. However, the impact was not statistically significant in high-income countries due to the presence of robust trade unions. This study provides valuable insights for policymakers and researchers seeking to understand the complex relationship between the gig economy, labor market conditions, and economic contexts in different income categories.

Wood et al. (2018) highlighted the influence of algorithmic control on the operation of online labor marketplaces, which has led to the emergence of "algorithmic management." While gig workers may have some degree of control over their work location due to algorithmic control, many remote workers may be limited to working from home, resulting in reduced social interaction and feelings of isolation. The broader implications of algorithmic restrictions from the gig economy on the

traditional labor market have also been anticipated by Keller (2017) and O'Corner (2016).

Overall, these studies provided valuable insights into the intricate workings of the gig economy and its impact on the labor market, particularly in different income categories and the emergence of algorithmic control.

2) Freelancing

Beerepoot and Oprins (2021) conducted a comprehensive investigation comparing online freelancing to established job fields like business process outsourcing (BPO) and impact sourcing. They found that freelancing is closely connected to the BPO industry, with BPO activities influencing the freelancing market. The study also highlighted the prevalence of freelancers in the 26-35 age group, indicating a potential career trend among millennials.

Tudy (2021) and Hong and Pavlou (2014) observed that the rise of the freelancing sector in the Philippines is a response to unemployment, particularly during economic crises. However, Beerepoot and Oprins (2021) noted that internet access quality remains a limiting factor for Filipino freelancers. The present study aimed to investigate the role of accessibility in shaping career intentions across different age groups and determine the motivating factors for individuals to enter the freelancing industry.

Riaz et al. (2021) emphasized the significance of the working environment provided by internet access in freelancing; they also highlighted the importance of English fluency and advanced computer skills. Burke and Cowling (2020) found a positive correlation between sales growth in businesses and the number of freelancers. The concept of consumer surplus, as quantified by Hong and Pavlou (2014), indicated the economic benefits generated by online labor markets. Gandini (2016) argued that freelancing has become the new standard in the knowledge economy, driven by flexibility and access to on-demand workers. Sawyer et al. (2020) observed fluctuations in employment availability during the COVID-19 pandemic, with an increased worker-to-project ratio in creative work.

Dunn et al. (2021) emphasized the importance of flexibility in online freelancing, with the ability to choose work aligned with personal interests and schedules. These studies form the foundational knowledge for the present study, which aims to examine workforce saturation and labor demand in the freelancing industry in the Philippines, considering the motivations and preferences of freelancers.

The studies by Beerepoot and Oprins (2021), Gandini (2016), Frey (2013), and Sawyer et al. (2020) provided insights into freelancing niches, origins, and labor supply patterns. The research by Dunn et al. (2021), Riaz et al. (2021), and Tudy (2021) have all shed light on the motivations behind entering the freelancing market. Together, these studies contributed to understanding the evolving landscape of freelancing as a career choice in the current labor market.

3) Generational Labor Market

Donina et al. (2021) found that university students and future graduates show a preference for freelancing as a career choice due to their dissatisfaction with traditional employment characteristics. Bielen and Kubiczek (2015) support this trend,

emphasizing the impact of technology on labor trends across generations. They argue that younger generations prioritize work-life balance and flexibility.

Lyons and Kuron (2014) suggested that generational differences in personality and work attitudes are influenced by socio-cultural factors. They found that younger generations exhibit a "live to work" mentality and value work-life balance more than older generations. Wheatly and Hibbler-Britt (2019) and Maloni *et al.* (2019) highlight the shift towards a decentralized and digitized workforce, with millennials and Generation Z gravitating towards freelancing for its flexibility and project selection. Generation Z is seen as redefining the nature of work with their emphasis on "work and play anytime, anywhere."

Andrade and Westover (2018) noted that job satisfaction is influenced by age, with stability of compensation being important to younger generations as they age. Anggarini (2022) underscores the influence of technological advancement on Generation Z's preference for freelancing, providing them with control and the potential for increased compensation.

The cited studies were relevant to the present study as they investigated the role of age generations in career choices. They demonstrated that millennials and Gen Z prioritize freedom and work-life balance, which influenced their career ambitions. These aided the present study's goal to determine the dominant age cohort in freelancing and examined the sustainability of this work culture across future generations, potentially establishing freelancing as a permanent career path.

4) *Labor Demand*

Examining job vacancies and employment fluctuations in Italy over a ten-year period, Lovaglio (2021) found that changes in employed individuals correspond to changes in job openings, suggesting weak exogeneity of vacancies. This study parallels the research of Bilka *et al.* (2022), although Lovaglio (2021) specifically focused on online job vacancies as an alternative data source. Beblavy *et al.* (2013) demonstrated that analyzing job openings on the EURES website allows for national and international labor market demand analyses, reflecting the strength and distribution of demand across occupational categories. Similarly, Beresewicz and Pater (2021) identified similarities in the relationship between online job advertisements and job vacancy statistics across nations, industries, and occupations.

Kuhn and Shen (2013) explored job advertisements as a source of labor market data and found that ads targeted younger, better-educated individuals in the private sector. This supports the value of job ad research in determining skill mix and creating position profiles, as suggested by Wade and Parent (2001). Chawla *et al.* (2017) analyzed career preferences and job engagement among three generations in India, highlighting distinct preferences and engagement levels. These findings align with previous discussions on Generation X and Generation Y's work aspirations and preferences.

These studies were relevant to the present research, as they focused on job vacancies, job advertisements, and job preferences, which are sub-variables considered in the present study. Moreover, Lovaglio (2021), Bilka *et al.* (2022), and

Kuhn and Shen (2013) examined these variables in the context of labor demand, which aligned with the main variable of the present research. Chawla *et al.* (2017) also provided insights into generational differences, which were pertinent to the present study's consideration of generation as a variable.

5) *Workforce Saturation*

From a Marxist perspective, Cornwell (2017) emphasized the significance of surplus labor in understanding the origin of profit. Surplus labor refers to labor that generates value beyond what is necessary for reproducing an individual or workforce, as explained by Marx (1997). This understanding sheds light on economic diversity, opportunity, and regional tendencies within a profit-driven business context, offering insights into various economic systems such as feudal, slave, capitalist, gift, volunteer, and community systems.

Rabi *et al.* (2015) conducted an economic trend analysis and concluded that a sustained GDP growth rate of 6.5% per year is required to create sufficient job opportunities for the surplus labor force. They also found that a higher GDP growth rate leads to increased job opportunities, potentially resulting in labor saturation. In contrast, Burke and Cowling (2020) discovered a positive correlation between the presence of freelancers in companies and higher revenues and net job creation for core employees. They identified a critical mass of around 11% freelancers in the workforce necessary to achieve these effects, providing valuable insights for managers seeking to leverage the freelance workforce.

Using an agency-driven theoretical framework, Chappin *et al.* (2023) investigated the relationship between educational attainment and salary levels in the gig economy. Their study, based on an analysis of 1,607 gig workers across 14 Western economies, revealed no statistically significant link between the two variables. Instead, they found that the platform's review system and gig workers' prior work experience are the primary signaling mechanisms that reduce information asymmetry. They concluded that advanced degrees have marginal utility for gig workers, challenging previous studies by De Wolff and Van Slijpe (1973), Mincer (1989), Card (1999), and Day and Newburger (2002) that suggested a positive relationship between formal education and salary levels in different employment arrangements.

These studies were pertinent to the research as they provided support for the main variable of workforce saturation. Cornwell's (2017) exploration of surplus labor contributes crucial concepts, while Rabi *et al.*'s (2015) findings on the impact of GDP growth rate on labor surplus added further foundation. Additionally, Burke and Cowling's (2020) identification of the optimal threshold for freelance workforce saturation was important for the examination of the relationship between freelancers and company performance. In contrast, Chappin *et al.*'s (2023) research challenged earlier studies regarding the role of advanced degrees for gig workers, which contrasted with findings on the impact of formal education on salary levels in different employment arrangements.

6) *Career Intention*

Prawitasari (2018) emphasized the influence of generational values and aspirations on career decisions, work attitudes, and

personal achievements. The Traditional Generations prioritize firm loyalty, Baby Boomers value status and perks, Generation X seeks work-life balance, Generation Y values independence and creativity through technology, and Generation Z values freedom and innovation while seeking feedback. Younger generations demand quicker promotions and take a proactive approach to career planning.

Maxwell and Broadbridge (2014) found that millennials' career anticipation occurs toward the end of their university program, with a focus on technological skills and work-life balance. Dutta et al. (2021) highlighted varying motives and attitudes among individuals at different career stages, highlighting that career intention involves active interest in job applications, interviews, and job offers.

S. Lyons et al. (2015) observed changes in work culture across successive generations due to economic and social shifts. Non-traditional work arrangements and the pursuit of work-life balance have led to a "new career" paradigm emphasizing individual agency, flexible career pathways, and mobility across professional boundaries.

These studies were relevant to the present research as they considered career intention as a variable. Prawitasari (2018) provided insights into generational differences, while Maxwell and Broadbridge (2014) introduced the concept of career anticipation. Dutta et al. (2021) defined career intention in terms of actions taken, and S. Lyons et al. (2015) discussed the shift towards new forms of work. These perspectives contributed to understanding the impact of generational values and the evolving nature of careers, including the role of freelancing.

C. Research Hypotheses and Conceptual Framework

Considering the analysis methods of existing studies, the researchers have garnered eight (8) influencing factors that have been frequently quantitatively studied in the literature and classified them into three (3) categories: Labor Demand, Workforce Saturation, and Career Intentions.

The framework of influencing factors is as follows (see Figure 2).

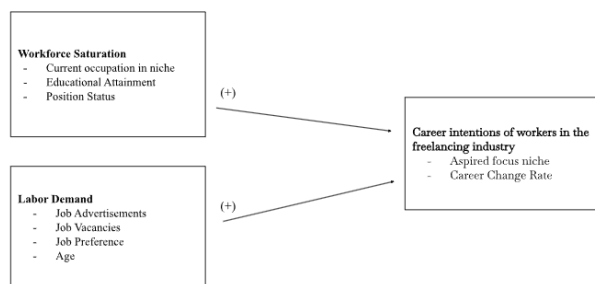


Fig. 2. Conceptual framework

Labor Demand (IV) and Workforce Saturation (IV) → Career Intentions (DV)

H0₁: The position status in a freelancing niche does not affect the aspired focus niche of workers in the freelancing industry in the Philippines.

H0₂: The position status in a freelancing niche does not affect the career change rate of workers in the freelancing industry in the Philippines.

H0₃: Current occupation in the freelancing industry does not affect the aspired focus niche of workers in the freelancing industry in the Philippines.

H0₄: Current occupation in the freelancing industry does not affect the career change rate of workers in the freelancing industry in the Philippines.

H0₅: Educational Attainment of the workers does not affect the aspired focus niche of workers in the freelancing industry in the Philippines.

H0₆: Educational Attainment of the workers does not affect the career change rate of workers in the freelancing industry in the Philippines.

H0₇: The Job Advertisements of firms do not affect the aspired focus niche of workers in the freelancing industry in the Philippines.

H0₈: The Job Advertisements of firms do not affect the career change rate of workers in the freelancing industry in the Philippines.

H0₉: The Job vacancies of firms do not affect the aspired focus niche of workers in the freelancing industry in the Philippines.

H0₁₀: The Job vacancies of firms do not affect the career change rate of workers in the freelancing industry in the Philippines.

H0₁₁: The Job Preference of workers do not affect the aspired focus niche of workers in the freelancing industry in the Philippines.

H0₁₂: The Job Preference of workers does not affect the career change rate of workers in the freelancing industry in the Philippines.

Moderating Variable

H0₁₃: Age moderates the effect of the linkage of labor demand and workforce saturation on the career intentions of workers in the freelancing industry.

D. Definition of Terms

Gig Economy: Gig economy is a new type of labor market facilitated by technology and is frequently temporary positions that are frequently available in businesses that use freelancers and independent contractors (Nagamora, 2020). In this research, the gig economy is defined as a group sub-market that, in support of on-demand commerce, matches providers with customers on a gig (or job) basis.

Freelancing Industry: Based on Liberto's (2022) study, the job industry being referred to predominantly involves a growing number of temporary contracts and the engagement of self-employed individuals by different organizations for specific assignments in exchange for an agreed-upon compensation, rather than providing permanent employment. This definition is consistent with the understanding adopted in the present study.

Labor Market: As discussed by Qiu, Y. and Sojourner, A. (2023), labor market is defined as the combination of an occupation and a commuting zone (CZ) and focus on the

relationship between changes in concentration and changes in wages within labor markets using market fixed effects and market-specific time trends. This definition is consistent with the understanding adopted in the present study.

Labor Demand: In line with the findings of Sapsford and Tzannatos (1993), labor demand, as referred to in this study, pertains to the quantity of workers that companies actively seek to hire at a specific wage rate over a specific time period. In the context of the freelancing industry, labor demand is defined as the availability of traditional employment opportunities for individuals, and it is measured by the frequency of job advertisements.

Job Vacancies: In the official Eurostat framework (2018), a 'job vacancy' is defined as a paid post that is newly created, unoccupied, or about to become vacant: (a) for which the employer is taking active steps and is prepared to take further steps to find a suitable candidate from outside the enterprise concerned; and (b) which the employer intends to fill either immediately or within a specific period of time. Filling a paid post includes: notifying the job vacancy to the public employment services, contacting private employment agencies/headhunters, and advertising in the media such as internet, newspapers, or magazines. In this study, the researchers have defined job vacancy as an indicator of labor demand in the freelancing industry, wherein the presence of vacant jobs signifies a demand for labor.

Job Advertisement: As stated by Angnakoon and Kim (2016), job advertisements are written announcements that highlight specific job openings. These announcements outline the responsibilities, hiring company, wage range, required experience, education, skills, knowledge, and other job requirements, including benefits. In this study, job advertisements on the internet serve as an indicator of labor demand for employees in the freelancing industry, as they seek jobs based on the demand for labor from companies through these advertisements.

Job Preference: Sarker (2022) defined job preference as the personal choice of profession for an individual. The researcher has characterized this as an indicator of labor demand, where the demand for labor arises from the specific niche or specialization that an employee desires to focus on within the freelancing industry.

Workforce Saturation: As described by Marx (1997), workforce saturation is characterized by surplus labor, which refers to labor that generates value beyond what is necessary for the reproduction of a single person or workforce. In the present research, workforce saturation is defined as an excessive number of workers in specific niches within the freelancing industry.

Freelancing Niche: Dalgic, T., & Leeuw, M. (1994) defined freelancing niche as a small market consisting of an individual customer or a small group of customers with similar characteristics or needs. This definition aligns with the one used in the present study.

Freelancing Labor Force: As per New Hampshire Employment Security, the labor force refers to individuals who are either employed or actively seeking employment and are

part of the civilian noninstitutional population aged sixteen or older. In this study, the labor force is defined in the same manner, but with a specific focus on the freelancing industry.

Educational Attainment: Educational attainment was defined by Champaloux, S. W., & Young, D. R. (2015) as completion of a high school degree or a Graduate Equivalency Degree by 21 years of age. In the context of this study, it is specifically defined as the highest level of education achieved by individuals working in a particular niche within the freelancing industry.

Career Intentions: In the study conducted by Dutta et al. (2019), career intention is conceptualized as a complex interplay of behaviors indicative of interest in a specific job position, including submitting applications, attending interviews, or accepting offers. This definition is likewise employed in the present study.

Career Change Rate: Career Change rate is defined by Brown, A., et al. (2012) as the ability of a person to navigate through a sequence of successful transitions in the face of significant changes in the labor market, work organization, and the knowledge foundations of occupations and organizations. In the present study, the researchers define career change rate as a measure of the likelihood of freelancers changing jobs.

Generation: According to The Center for Generational Kinetics, a generation is defined as a group of individuals who are born in a similar time period and raised in a common environment, resulting in similar characteristics, preferences, and values influenced by external factors. In the present study, the researchers utilized this classification to identify career intentions among different generations, namely, Generation X, Millennials, and Generation Z.

E. Research Method

1) Research Design

The present study employed an explanatory research design to establish cause-and-effect relationships between variables. Explanatory research, as described by Boru (2018), identifies causal relationships and deepens understanding of a subject, while George and Merkus (2021) highlight its ability to explain the causes of a phenomenon and make future predictions.

This research design was well-suited for investigating the relationship between labor demand, workforce saturation, career intention, and age among Filipino freelancers. By focusing on specific variables and examining correlations, the explanatory research design enabled a comprehensive understanding of the research question. Moreover, it is the recommended design for exploring the causal relationship between labor demand, workforce saturation, career intention, and age among freelancers in the Philippines.

2) Population and Sample of the Study

As the study's population size is determined based on Payoneer's (2022) report of the Philippine freelance market, with a total of 1,500,000 workers in the freelancing industry, finite population formula which was established by Bove (2006) as cited by Dorfman et al. (2023), $\frac{(z^2)(p)(1-p)}{e^2} / 1 + \frac{(z^2)(p)(1-p)}{(e^2N)}$, was used to determine the sample size. The

researchers used the standard values of 95% level of confidence, a z-score of 1.96, a sample proportion of 50% ($p = 0.5$), as prescribed by Mensah (2014). However, the researchers utilized a margin of error of 8% ($e = 0.08$) to be able to compute for their sample size.

Overall, this formula yielded a total sample size of 151 freelance industry respondents; however, the researchers were able to get 153 respondents during the data gathering process which went beyond the expected target sample size.

The participants were selected through a simple random sampling technique, wherein respondents were randomly chosen as they answer the online survey. According to West (2016), simple random sampling gives every member of a population an equal chance of inclusion in the sample and ensures that every possible sample of a given size has an equal chance of selection.

The following inclusion criteria was followed; participants must be Filipino citizens, must be at least 18 years old or above, should have engaged in freelancing for a minimum of three (3) months, must be currently working as a freelancer in the Philippines, and should represent a generation amongst those to be studied (Generation Z, Millennials, Generation X, and Baby Boomer).

The following exclusion criteria was followed; participants who are not currently freelancers, who have less than three (3) months of experience as freelancers, who do not represent any of the generations to be studied, and who are under 18 years old.

Moreover, to ensure that the study and researchers adhere to complete transparency, thus avoiding deception, the research team provided participants with a clear and comprehensive informed consent form, detailing the purpose and objectives of the study, as well as its expected outcomes. In line with this, the informed consent form was in layman's terms for the participants to grasp the summary of the study's essence well. Furthermore, ethical considerations were the researchers' utmost priority, ensuring the participants' confidentiality, data protection, and anonymity. Participation requirements were laid out as well as the data collection procedure was thoroughly explained, with an emphasis on voluntary participation and freedom to withdraw at any time without repercussions in case a participant would want to.

Following the completion of the study, a debriefing plan was provided for the participants, outlining the research outcomes and findings; this debriefing plan was made easily accessible to all participants through an electronic format for easier dissemination. Through the following measures, the researchers aimed to uphold transparency, foster trust, and conducted the study with respect and acknowledgement for the participants' rights and well-being.

3) *Research Instrument*

To ensure an appropriate sample size, the researchers searched for existing survey questionnaires on labor demand but found none that aligned with their study's objectives. As a result, they developed their own questionnaire to directly evaluate the variables of labor demand, workforce saturation, and career intentions in line with their research goals.

The questionnaire utilized a 4-point Likert Scale, which

required respondents to provide an opinion rather than remain neutral. It consisted of three sections, each focusing on one of the research variables: workforce saturation, labor demand, and career aspirations. The questionnaire included open-ended questions based on the researchers' criteria, allowing for the assessment of workforce saturation levels in the freelancing sector, its labor demand, and its impact on respondents' career intentions across different generations.

For the questionnaire's distribution, a random selection of freelance workers was targeted through Facebook groups. This approach enhanced the validity of the data collection process as the questionnaire was designed to measure respondents' labor demand and career intentions accurately.

4) *Data Gathering Procedure*

The researchers employed simple random sampling, a method in which individuals are randomly selected from a population with equal probability of being chosen. This sampling technique ensured the sample's representativeness, thus enhancing the accuracy and applicability of the study. By using simple random sampling, the researchers aimed to minimize sampling bias, to avoid biased results due to unequal participant selection. This approach reduces the influence of individual biases and allows for obtaining an accurate and representative sample.

For data collection, the researchers utilized Google Forms (G-Forms), an online platform for data collection and analysis. The G-Forms survey link was shared across multiple Facebook groups for freelancers, which enabled access to a diverse pool of potential respondents and ensured a wide range of perspectives.

To avoid confusion or misunderstandings, the researchers provided clear instructions regarding the purpose and procedure of the survey before its administration. A separate section of the G-Forms survey was dedicated to this purpose, which participants will need to complete before proceeding with the actual examination.

The research spanned for five (5) months which included two to three months for data gathering [through survey] and two to three months for data analysis and interpretation as well as its completion. Also, the researchers received an ethical clearance provide by Philippine Normal University last August 10, 2023 deeming the survey tool fit for distribution. The researchers employed a survey as the primary data-gathering method chosen, which only took 10 to 15 minutes for all participants; there were no additional interviews nor follow-up questionnaires to be distributed afterward.

5) *Data Analysis Procedure*

After data collection, the researchers categorized the questionnaires based on respondents' age and recorded the scores for each section using the Gretl Statistical software. The distribution of age, educational attainment, current freelancing niche, and position status within the freelancing industry was presented using percentages and frequencies.

Pie graphs were used to display the frequency distribution of age and the sub-variables of workforce saturation, including educational attainment, current freelancing niche, and position status. Tables were utilized to summarize the findings on the

relationship between age, labor demand, workforce saturation, and career intentions. The statistical results from multiple regression analysis were presented in a model format.

To determine the impact of labor demand on workforce saturation and career intentions among different generations of freelancers in the Philippines, multiple regression analysis was conducted. Multiple regression analysis predicts the value of a dependent variable based on two or more independent variables. In this case, labor demand and workforce saturation will serve as the independent variables to predict career intentions.

Adjusted R-squared values were examined to assess the goodness of fit of the variables to the model. Previous studies in the literature review were referenced to determine if the multiple regression analysis results were consistent or contradictory.

Mean and standard deviation were calculated based on respondents' age. Standard deviation captures data variability and discrepancies, while the mean integrates answers for specific questions, as highlighted by Barbosa et al. (2017).

Overall, the multiple regression formula analyzed the relationship between career intentions (dependent variable) and workforce saturation and labor demand (independent variables).

The formula is represented by the following equations:

$$\begin{aligned} \text{Career Intention} = & a + \beta_1JA + \beta_2JV + \beta_3JP \\ & + \beta_4EA(\text{DEA}_1, \text{DEA}_2, \text{DEA}_3, \text{DEA}_4) \\ & + \beta_5PS(\text{DPS}_1, \text{DPS}_2) + \beta_6FN(\text{DFN}_1, \text{DFN}_2, \text{DFN}_3, \\ & \text{DFN}_4, \text{DFN}_5, \text{DFN}_6, \text{DFN}_7) \end{aligned}$$

Where,

Career Intention= dependent variable = constant

β_1JA = Job Advertisement

β_2JV = Job Vacancies

β_3JP = Job Preference

β_4EA = Educational Attainment

- DEA_1 = Dummy for “Some College or Associate Degree”
- DEA_2 = Dummy for “Bachelor’s Degree”
- DEA_3 = Dummy for “High School Graduate”
- DEA_4 = Dummy for “Postgraduate Degree (Master’s Degree)”

β_5PS = Position Status in the Freelancing

- DPS_1 = Dummy for “Full Time”
- DPS_2 = Dummy for “Part Time”

β_6FN = Freelancing Niche

- DFN_1 = Dummy for “Virtual Assistance (VA)”
- DFN_2 = Dummy for “Content Writing/ Copywriting”
- DFN_3 = Dummy for “Others”
- DFN_4 = Dummy for “Social Media Management”
- DFN_5 = Dummy for “Digital Marketing”
- DFN_6 = Dummy for “Web Development and Design”

- DFN_7 = Dummy for “Graphic Design”

3. Research and Discussion

A. Results and Interpretations

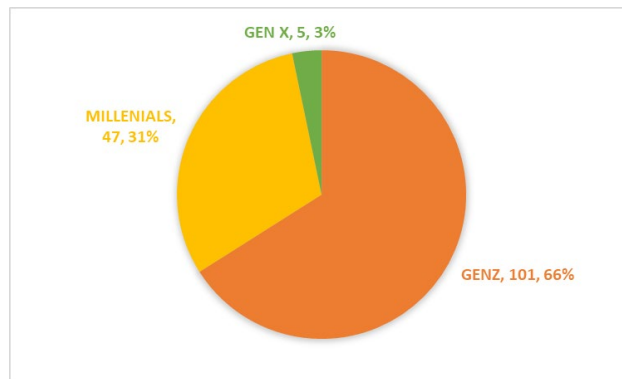


Fig. 3. Respondent's age group

The data in Figure 3 shows the percentage of respondents based on the age group they belong to. Generation Z has the highest percentage of respondents, at 66%. On the other hand, the age group with the least respondents is Generation X at 3%.

The researchers were able to deduce that Generation Z was the age group that was primarily active in various freelancing Facebook groups. In line with this, only a few respondents were extracted from Generation X since most of the Facebook group members were from Generation Z and Millennial age groups.

The prevalence of Generation Z and Millennial cohorts within freelancing Facebook groups serves as empirical support for the findings posited by Wheatly and Hibbler-Britt (2019) as well as Maloni et al. (2019) as their studies delineate the appeal of the freelancing profession, characterized by its inherent flexibility, which finds resonance particularly within the demographic of Generation Z and Millennials. Additionally, the tech-savvy nature often associated with Generation Z appears to be a defining feature of today's digital freelancers, a point reinforced by Anggarini's (2022) study, which highlights Generation Z's preference for freelancing due to the influence of technological advances.

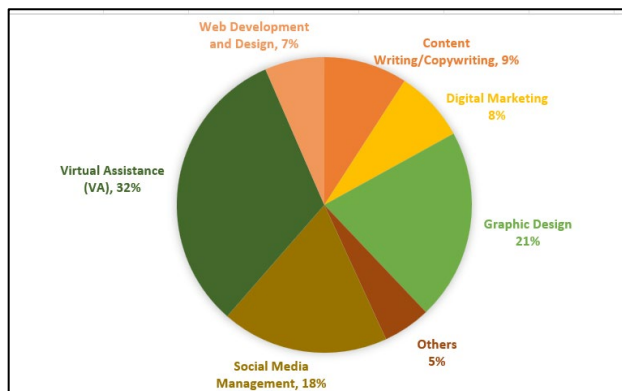


Fig. 4. Respondent's freelancing niche

The data presented in Figure 4 offers insights into the distribution of respondents based on their current niches within the freelancing industry. Notably, the Virtual Assistance (VA)

niche commands the highest percentage, with 32% of respondents identifying it as their primary field. Following closely are Graphic Design, Social Media Management, Content Writing/Copywriting, Digital Marketing, and Web Development and Design, representing 21%, 18%, 9%, 8%, and 7%, respectively. The residual 5% of respondents pursue a freelancing niche that falls outside the predefined categories provided by the researchers in their survey.

The findings substantiate the widespread popularity of Virtual Assistance in the Philippines, a trend highlighted in the analysis by Global Strategy (2022). This resonance can be attributed to the inherently task-based nature of virtual assistant roles, typically devoid of rigid schedules, aligning closely with the proclivity of Generation Z and Millennials for a "work and play anytime, anywhere" ethos, as elucidated by Maloni et al. (2019).

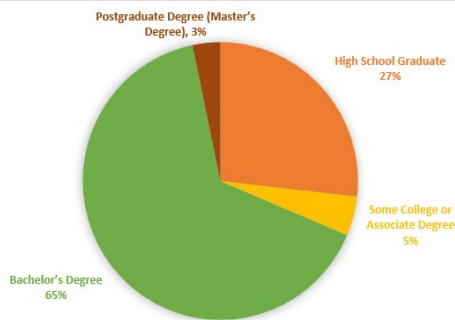


Fig. 5. Respondent's educational attainment

The provided chart illustrates the distribution of educational attainment among the respondents. A substantial majority, comprising 65% of the researchers surveyed freelancers, hold a Bachelor's Degree. High School Graduates constitute the second-largest group, with 27% of responses. In contrast, individuals with Some College or an Associate Degree represent 5% of the total, while those with a Postgraduate Degree (Master's Degree) account for the smallest proportion at 3%. The researchers also included an option for a Doctoral Degree (PhD), although it received no responses from the participants.

The significant representation of individuals holding a Bachelor's Degree, comprising 65% of the respondents, suggests that freelancing roles often demand a considerable level of academic attainment. This academic foundation appears pivotal in enabling freelancers to execute their tasks effectively, encompassing areas such as writing, data management, and collaboration. This result also gave valuable insight into the cognitive capabilities of freelancers, underscoring the indispensability of the skills and educational background typically associated with a bachelor's degree in order to excel within their respective roles.

Overall, while the conclusions drawn by Chappin et al. (2023) are indeed valid in asserting that there exists no direct

link between educational attainment and freelancers' earnings, the present study offers corroborating evidence that a specific level of education is perceived as an indirect prerequisite for freelancing occupations, primarily owing to the foundational skills honed throughout years of formal education, such as research, data management, collaboration, and more.

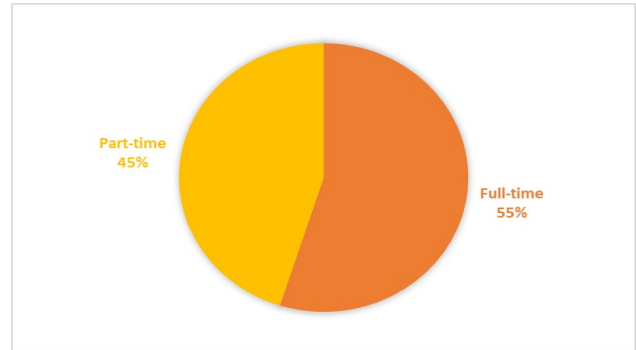


Fig. 6. Respondent's position status

Figure 6 delineates the distribution of respondents' Position Status, illustrating that 55% of the participants are actively engaged in full-time roles within the freelancing industry, while the remaining 45% are pursuing part-time engagements. This observation points toward a notable shift in the freelancing landscape, as freelancers increasingly opt for full-time career trajectories, in contrast to the earlier norm of engaging in freelancing as a part-time endeavor, often perceived as a hobby or a supplementary "side hustle."

The average career intention among freelancers in the industry stands at 2.8617, while the median value for career intention is 2.8600. The range of career intentions spans from a minimum value of 2.1450 to a maximum value of 3.6400. Notably, the relatively low standard deviation of 0.26921 indicates that the data points pertaining to career intention are closely clustered around the mean, suggesting a relatively low degree of variability within the dataset.

The average career intention among freelancers is approximately 3, signifying that a significant proportion of freelancers express moderate satisfaction with their freelance careers and exhibit no strong inclination to transition to a different occupation. This observation reflects a prevailing sense of permanence within the freelancing profession, characterized by favorable wage levels, working arrangements, and work-life balance.

Furthermore, the median value closely aligns with the mean, indicating a symmetric distribution of the data, with no discernible outliers or skewed values that would unduly influence the average. In addition to that, the range of career intentions is relatively narrow, signifying minimal variation among freelancers in terms of their career intentions. This suggests a prevailing consensus among them in terms of their levels of satisfaction and intent to persist in their freelancing careers.

Table 2
Career intentions descriptive statistics

	Mean	Median	Standard Deviation	Minimum	Maximum
Career Intentions	2.8617	2.8600	0.26921	2.1450	3.6400

Table 2
Career intentions descriptive statistics

	Mean	Median	Standard Deviation	Minimum	Maximum
Job Advertisement	3.684	3.800	0.4076	2.400	4.000
Job Preference	3.069	3.000	0.2516	2.200	3.800
Job Vacancy	3.061	3.000	0.3335	2.400	4.000

Table 3
Workforce saturation descriptive statistics

	Mean	Median	Standard Deviation	Minimum	Maximum
High School Graduate	0.2680	0.0000	0.4444	0.0000	1.0000
Some College or Associate Degree	0.04575	0.0000	0.2096	0.0000	1.0000
Bachelor’s Degree	0.6536	1.000	0.4774	0.0000	1.0000
Postgraduate Degree (Master’s Degree)	0.0326	0.0000	0.1784	0.0000	1.0000
Virtual Assistance (VA)	0.3203	0.0000	0.4581	0.0000	1.0000
Content Writing/Copywriting	0.0915	0.0000	0.2893	0.0000	1.0000
Others	0.05229	0.0000	0.2233	0.0000	1.0000
Social Media Management	0.1830	0.0000	0.3879	0.0000	1.0000
Digital Marketing	0.07843	0.0000	0.2697	0.0000	1.0000
Web Development and Design	0.06536	0.0000	0.2480	0.0000	1.0000
Graphic Design	0.2092	0.0000	0.4080	0.0000	1.0000
Full-time	0.5490	1.000	0.4992	0.0000	1.0000
Part-time	0.4510	0.0000	0.4992	0.0000	1.0000

Additionally, the remarkably low standard deviation reaffirms that the data points are tightly clustered around the mean. This underscores a high level of consistency and minimal uncertainty regarding freelancers' career intentions, further reinforcing the notion of a cohesive and stable collective outlook in this regard.

The labor demand variable encompasses three sub-variables: Job Advertisement, Job Preference, and Job Vacancy, with corresponding average values of 3.684, 3.069, and 3.061, respectively. The medians for these sub-variables are 3.800 for Job Advertisement and 3.000 for both Job Preference and Job Vacancy. The range for these sub-variables spans from a minimum of 2.400 to a maximum of 4.000 for Job Advertisement, 2.200 to 3.800 for Job Preference, and 2.400 to 4.000 for Job Vacancy.

Additionally, the standard deviations for all three sub-variables are relatively small, measuring 0.4076, 0.2516, and 0.3335, indicating that the data points are in close proximity to the respective means. This implies a high degree of consistency and little variability in the data, underscoring the reliability of the results.

The labor demand variable has a relatively high average value of 3.605, suggesting a strong demand for freelancers in the industry. This is supported by Global Strategy's findings in 2022, which identified freelancing as one of the most sought-after professions in the Philippines. Additionally, the average value of 3.684 for Job Advertisements indicates that there are numerous job postings for freelancers, underscoring the high demand for their services. Beblavy et al.'s (2013) method of using job vacancies as an alternative data source for understanding demand stands as a substantiated approach, as it aligns with the observed connection between demand and the frequency of job postings for freelancers.

The average values of 3.069 and 3.061 for Job Preference and Job Vacancy, respectively, suggested that there is a moderate preference and availability of jobs for freelancers in the industry. This means that freelancers have a decent amount of choices and opportunities to find suitable jobs, but they may also face some challenges and competition given the demand.

The second independent variable, workforce saturation, encompasses three sub-variables: Educational Attainment, Freelancing Niche, and Position Status. Given their categorical nature, these sub-variables require the utilization of dummy variables to facilitate meaningful data interpretation.

For Educational Attainment, specifically, High School Graduate, Some College or associate degree, Bachelor’s Degree, and Postgraduate Degree (Master’s Degree) exhibit average values of 0.2680, 0.04575, 0.6536, and 0.0326, respectively. In a similar vein, Freelancing Niche sub-variables, including Virtual Assistance (VA), Content Writing /Copywriting, Others, Social Media Management, Digital Marketing, Web Development and Design, and Graphic Design, yield average responses of 0.320, 0.0915, 0.05229, 0.1830, 0.07843, 0.06536, and 0.2092, respectively. Lastly, Position Status sub-variables, encompassing full-time and part-time, exhibit average values of 0.5490 and 0.4510, respectively.

The data pertaining to these sub-variables employs values of zero (0) and one (1) as they represent dummy variables, solely capable of registering these two values. Their standard deviations, amounting to 0.4444, 0.2096, 0.4774, 0.1784, 0.4581, 0.2893, 0.2233, 0.3879, 0.2697, 0.2480, 0.4080, 0.4992, and 0.4992, collectively tend towards zero (0), indicating the proximity of data points to the mean.

The workforce saturation variable has a low average value of 0.323, which means that there is a low level of competition among freelancers in the industry. This suggests that freelancers have distinct qualifications, diverse specializations, and flexible work arrangements that make them stand out from the crowd, attracting more clients. This also implies that the freelancers have high bargaining power and high-income potential in the industry.

However, the workforce saturation variable may vary depending on the specific category of the sub-variable; for example, the Educational Attainment sub-variable has a high average value of 0.6536 for bachelor’s degree as their highest educational level, which indicates a high level of competition or low level of differentiation among freelancers based on their education background. Conversely, the Freelancing Niche sub-

variable reveals a considerably lower average value of 0.05229 for the category of "Others," signifying the relatively limited presence of freelancers in niches beyond those examined in this study. This observation implies that the more specialized one's freelancing role is, the greater the income potential, as niches with lower saturation levels typically offer enhanced income prospects.

Table 5
OLS Model, using observations 1-153

Dependent variable: Career Intention Omitted due to exact collinearity: DEA_4 DPS_2 DFN_7				
	Coefficient	Std. Error	t-ratio	p-value
Const	1.82322	0.364313	5.005	1.67e-06 ***
JA	-0.0166740	0.0573255	-0.2909	0.7716
JV	0.0722176	0.0816710	0.8842	0.3781
JP	0.164699	0.0632202	2.605	0.0102 **
DEA_1	0.261065	0.152355	1.714	0.0888 *
DEA_2	0.228162	0.120858	1.888	0.0611 *
DEA_3	0.253762	0.128691	1.972	0.0506 *
DPS_1	-0.0773008	0.0587263	-1.316	0.1902
DFN_1	0.259921	0.0671220	3.872	0.0002 ***
DFN_2	0.303345	0.0834544	3.635	0.0004 ***
DFN_3	0.0289657	0.110626	0.2618	0.7938
DFN_4	0.268904	0.0650602	4.133	6.15e-05 ***
DFN_5	0.301811	0.0870822	3.466	0.0007 ***
DFN_6	0.0306114	0.0929771	0.3292	0.7425

Mean dependent var	2.861699	S.D. dependent var	0.269215
Sum squared resid.	8.214174	S.E. of regression	0.243094
R-squared	0.254372	Adjusted R-squared	0.184638
F(13, 139)	3.647704	P-value(F)	0.000057
Log likelihood	6.632520	Akaike criterion	14.73496
Schwarz criterion	57.16109	Hannan-Quinn	31.96916

Model 1 presents the Ordinary Least Squares (OLS) Regression analysis, focusing on the relationship between the dependent variable, Career Intention, and the independent variables, Labor Demand and Workforce Saturation. However, it is important to note that due to exact collinearity issues involving DEA_4 (Dummy for Postgraduate Degree or Master's Degree), DPS_2 (Dummy for Part-time), and DFN_7 (Dummy for Graphic Design), Gretl has excluded these variables from the Model 1 dataset as these variables are perfectly correlated with the other variables in the model, which can cause multicollinearity issues and possibly distort the results if not excluded. Therefore, these variables are dropped from the model to avoid redundancy and bias.

The p-values for JA, JV, DPS_1, DFN_3, and DFN_6 are calculated to be 0.7716, 0.3781, 0.1902, 0.7938, and 0.7425, respectively. All these p-values are deemed insignificant since they exceed the 0.01 alpha threshold. This indicates that these variables do not have a significant effect on Career Intention as they have no causal relationship with Career Intention. For an instance, Job Advertisement has no effect on Career Intention as freelancers do not care about the number of job postings in the industry as they base their career intentions on other factors, such as their personal preferences, skills, or goals.

Conversely, the p-values pertaining to the constant term, DFN_1, DFN_2, DFN_4, and DFN_5 are revealed to be 1.67e-06, 0.0002, 0.0004, 6.15e-05, and 0.0007, respectively. These p-values establish statistical significance at the 0.01 alpha level.

The significance of these variables implies a strong causal relationship between these factors and Career Intention. For instance, the presence of DFN_1, denoting Virtual Assistance (VA), exerts a positive influence on Career Intention. This suggests that freelancers specializing in this niche exhibit a high level of job satisfaction and commitment to their chosen field, predisposing them to continue their career in this specific niche.

Furthermore, it is noted that DEA_1, DEA_2, and DEA_3 yield p-values of 0.0888, 0.0611, and 0.0506, respectively, establishing statistical significance at the 0.10 alpha level. Educational attainment levels of Some College or Associate Degree, Bachelor's Degree, and High School Graduate are all significant to career intentions as freelancers actively seek out freelancing roles that match with their given skillset in accordance with their level of education.

Moreover, JP exhibits statistical significance at the 0.05 alpha level, with a p-value of 0.0102. Job Preferences has a significant effect on Career Intentions as freelancers are actively seeking out career paths [in freelancing] that are aligned with their personal skills, goals, and interests. As their job preferences shift or retain, their career intentions follow.

Additionally, the R-squared value of 0.2544 holds significance as it serves as an indicator of the explanatory power of the regression model. This indicates a measure of goodness-of-fit of the regression model as it signals that the model can account for a quarter of the changes in Career Intention as observed in the data. This also suggests that the model can predict Career Intention with a moderate degree of accuracy based on the values of Labor Demand and Workforce Saturation.

1) *White's Test*

White's Test for Heteroskedasticity

Null hypothesis: heteroskedasticity not present

Test statistic: LM = 51.0065

with p-value = $P(\text{Chi-square}(64) > 51.0065) = 0.880384$

The heteroskedasticity test using White's test resulted in a p-value of 0.880384 which is greater than 0.05 alpha, wherein the researchers will accept the null hypothesis that there is no heteroskedasticity error in model one (1) output.

2) *Test for Normality of Residual*

Test for Normality of Residual

Null hypothesis: error is normally distributed

Test statistic: Chi-square(2) = 3.0588

with p-value = 0.216665

The test for normality of residual resulted in a p-value of 0.216665 which is greater than 0.05 alpha, wherein the researchers will accept the null hypothesis that there is no non-normality. Meaning, the researchers achieved the normality of the residual of model one (1) output.

3) *Chow Test for Structural Break*

Chow test for Structural Break

Null hypothesis: no structural break

Test statistic: F(14, 125) = 1.41901

with p-value = $P(F(14, 125) > 1.41901) = 0.153722$

The Chow Breakpoint test resulted with 0.153722 p-value which is greater than 0.05 alpha, wherein the researchers must accept the null hypothesis that there is no structural breakpoint.

4) *RAMSEY RESET for Specification*

(squares and cubes)

Test statistic: $F = 0.272462$,
with $p\text{-value} = P(F(2,137) > 0.272462) = 0.762$

(squares only)

Test statistic: $F = 0.082719$,
with $p\text{-value} = P(F(1,138) > 0.0827195) = 0.774$

(cubes only)

Test statistic: $F = 0.071624$,
with $p\text{-value} = P(F(1,138) > 0.0716241) = 0.789$

The Ramsey RESET test resulted with a p-values of 0.762, 0.774 and 0.789 for squares and cubes, squares only, and cubes only, respectively. In which the researchers will accept the null hypothesis that there is no specification error in model one (1) output since the p-values are greater than 0.05 alpha.

Table 6
Regression model interpretation and discussion

Variable	Coefficient	Effect on Career Intentions
JA (Job Advertisement)	-0.0167	Negative effect; no impact on freelancers' Career Intentions Results indicated that a higher number of job postings have no effect on the freelancers' career intentions, may it be willingness to stay in their respective niches or shift to a new one. According to Roy and Shrivastava (2020), Donovan et al. (2016), and Anwar and Graham (2018), freelancers, with access to global job postings, can find opportunities in the global labor market. Despite the high demand for freelancing roles, suggesting a potentially saturated workforce, their global access ensures that there is room for everyone in the freelancing industry.
DPS_1 (Dummy for Full-time)	-0.0773	Negative effect; indicates full-time freelancers have no desire to shift careers in the near future On the other hand, the negative coefficient tied to the Full-Time Variable suggests that individuals engaged in full-time freelancing are less likely to consider a career change in the near future. This finding contradicts the perspective presented by Roy and Shrivastava (2020), challenging the idea that freelancers avoid full-time employment due to challenges like income fluctuations and a lack of benefits.
JV (Job Vacancy)	1.82	Positive impact; an upsurge in job openings corresponds to an uptick in freelancers' Career Intentions Job Vacancy emerges as a notable contributing factor, indicating that a surge in job openings aligns with an increase in freelancers' Career Intentions. This suggests that a rise in job opportunities may signal heightened demand, subsequently motivating freelancers to deepen their commitment to their respective career paths.
JP (Job Preference)	0.0722	Positive impact; a heightened level of preference for a specific freelancing niche influences Career Intentions positively A heightened preference for a specific freelancing niche indicates a positive influence, denoting the presence of compelling motivators within that particular domain.
DEA_1 (Dummy for Some College or Associate Degree)	0.165	Positive impact; having some college or associate degree influences Career Intentions positively
DEA_2 (Dummy for Bachelor's Degree)	0.261	Positive impact; having a bachelor's degree influences Career Intentions positively
DEA_3 (Dummy for High School Graduate)	0.228	Positive impact; being a high school graduate influences Career Intentions positively
DFN_1 (Dummy for Virtual Assistance)	0.254	Positive impact; being involved in virtual assistance influences Career Intentions positively
DFN_2 (Dummy for Content Writing)	0.260	Positive impact; being involved in content writing influences Career Intentions positively
DFN_3 (Dummy for Others)	0.303	Positive impact; being involved in other freelancing areas influences Career Intentions positively
DFN_4 (Social Media Management)	0.0290	Positive impact; being involved in social media management influences Career Intentions positively
DFN_5 (Digital Marketing)	0.269	Positive impact; being involved in digital marketing influences Career Intentions positively
DFN_6 (Dummy for Web Development and Design)	0.302	Positive impact; being involved in web development and design influences Career Intentions positively

5) *Career Intentions, Labor Demand, and Workforce Saturation*

$$\begin{aligned} \text{Career Intention} = & 1.82 - 0.0167\text{JA} + 0.0722\text{JV} + \\ & 0.165\text{JP} + \text{EA}(0.261\text{DEA}_1 + 0.228\text{DEA}_2 \\ & + 0.254\text{DEA}_3) - 0.0773\text{DPS}_1 + \text{FN}(0.260\text{DFN}_1 + \\ & 0.303\text{DFN}_2 + 0.0290\text{DFN}_3 + 0.269\text{DFN}_4 + \\ & 0.302\text{DFN}_5 + 0.0306\text{DFN}_6) \end{aligned}$$

In summary, the researchers found that career intentions are significantly influenced by labor demand in freelancing, while workforce saturation plays a lesser role; this distinction arises because, despite the competitive nature associated with high labor demand, freelancing operates beyond the constraints of a specific country or economic system. As highlighted by Roy and Shrivastava (2020), Donovan et al. (2016), and Anwar and Graham (2018), freelancers enjoy the advantage of accessing job opportunities on a global scale.

B. *Discussion*

The study reveals that a predominant portion of respondents falls within Generation Z, followed closely by Millennials. Both age groups are drawn to the inherent flexibility associated with freelancing. Their proclivity towards freelancing is further underscored by their general tech-savvy disposition, a characteristic hallmark of individuals engaged in freelance work. Virtual Assistance emerges as the most popular freelancing niche, trailed by Graphic Design and Social Media Management. Conversely, less popular and relatively obscure niches are perceived to have a lower likelihood of saturation, indicating an elevated income potential within those domains.

Educationally, the surveyed freelancers predominantly hold a bachelor's degree, followed by a High School Diploma. These educational attainments are perceived as instrumental in furnishing freelancers with the requisite skills and knowledge for effective performance within their respective freelancing roles. Most respondents actively pursue freelancing on a full-time basis, signifying a perceptible shift in the freelancing landscape towards full-time career engagements, ostensibly influenced by the perceived benefits of freelancing, including flexibility, income prospects, and work-life balance.

Analysis of career intentions reveals that freelancers, on average, express moderate satisfaction with their freelance careers and exhibit no strong inclination towards transitioning to alternative occupations. The low range and standard deviation of career intentions suggest a relative consensus among freelancers, indicative of prevailing satisfaction with their chosen career paths.

In terms of labor demand, the study identifies a robust demand for freelancers, aligning with broader industry trends and corroborating Global Strategy's (2022) identification of freelancing as a sought-after profession in the Philippines. Further scrutiny into sub-variables of labor demand reveals varying average values, with Job Advertisement exhibiting the highest average value, indicating a prolific presence of job postings for freelancers and, consequently, heightened demand for their services. Conversely, Job Preference and Job Vacancy

display comparatively lower average values, signaling a more moderate preference for freelancing and a moderate availability of jobs, respectively, implying a correspondingly moderate demand.

Exploratory factors such as workforce saturation came out to be a low average value, suggesting a limited level of competition among freelancers. This finding suggests that freelancers possess distinctive qualifications, diverse specializations, and flexible work arrangements that set them apart, enhancing their appeal to clients. This heightened differentiation also implies an elevated bargaining power and income potential for freelancers within the industry.

The model's explanatory power, denoted by the R-squared value of 0.2544, indicates a moderate capacity to elucidate 25.44% of the variance in Career Intention through the variations in Labor Demand and Workforce Saturation. While the model demonstrates a moderate predictive ability for Career Intention based on these variables, the acknowledgement of unaccounted factors, such as personal, psychological, or environmental considerations, underscores the inherent complexity of the freelancers' career decision-making process.

Distinctive variables within the model exhibit discernible effects on Career Intention. Notably, Job Advertisement and the Full-Time Variable wield negative effects, diminishing freelancers' Career Intentions, potentially suggestive of heightened competition, diminished demand, and increased stress levels. Conversely, variables such as Job Vacancy, Job Preference, as well as various dummy variables representing Educational Attainment and Freelancing Niche, exert positive effects, augmenting freelancers' Career Intentions. These positive effects may be indicative of an increased demand, heightened motivation, and a greater sense of satisfaction and loyalty within their freelance careers.

Overall, the freelancing population in the Philippines is dominated by young and tech-savvy generations, namely Generation Z and Millennials, who value the flexibility and autonomy that the freelancing industry offers. These generations are most likely to adapt to the fast-changing demands and opportunities of the freelancing industry as they have both knowledge and access to various online platforms and resources, confirming S. Lyons et al. (2015)'s conclusion that mobility and new work arrangements have allowed for this to happen.

While freelancing roles are getting steadily popular, especially in niches like Virtual Assistance, Graphic Design, and Social Media Management, low entry barriers for these roles remain. However, educational attainment has no direct correlation to potential earning income. Most freelancers acquire the essential skills for their roles through years of learning, whether in high school or college. The freelancing profession is notably not constrained by educational levels, given that a significant majority hold either a bachelor's degree or a High School Diploma; this implies that success in freelancing relies more on the practical skills and competencies freelancers possess rather than formal educational qualifications.

On the other hand, unpopular niches, such as Data Science,

Web Development, and Accounting reflect low supply but high demand, indicating that these niches have a higher potential income compared to popular niches.

Donina *et al.* (2021)'s study, which denoted that university students and future graduates preferred freelancing as their main career path due to their dissatisfaction with traditional employment setups, has been proven true, as freelancing is not only a trend nowadays but a permanent career choice or an emerging job role given the post-pandemic era, especially for younger generations (Generation Z and Millennials). This result also reflects a sense of satisfaction and stability among freelancers, as they have no strong intention to switch to a different occupation, as indicated by the average and median values of career intention.

The findings of the study also indicate that freelancers exhibit a preference for remaining within their respective areas of specialization, consistent with their individual aptitudes and preferences, as opposed to pursuing niches that offer higher compensation but demand advanced competencies such as accounting and data analysis.

Furthermore, the results of the study support the hypothesis that labor demand has a significant impact on career intention, while workforce saturation has a negligible influence in the context of freelancing; this stems from the unique nature of freelancing, which, unlike traditional employment, is not restricted to a particular country or economic system but thrives in a global and digital marketplace. Freelancers have the flexibility to explore job opportunities from various countries and regions, allowing them to tailor their work arrangements to align with personal and professional objectives, achieving a desired work-life balance.

In conclusion, the findings suggest that the benefits associated with freelancing outweigh the potential drawbacks, including industry saturation and heightened competition. The concept of freelancing retains its allure for both current and prospective freelancers, given the persistent strength of labor demand. These results are consistent with the tenets of Conner's (2020) and Azjen's (1985) Theory of Planned Behavior, which posits that individuals are more likely to pursue employment opportunities that are in high demand, based on the perception that these roles offer better income opportunities than traditional corporate jobs.

4. Summary, Conclusion, and Recommendations

A. Summary

Propelled by the advancements in technology and in the digital space, freelancing has cemented its position in the pandemic and post-pandemic labor market, offering diverse and global opportunities to Filipinos, in which turned Philippines' labor market into a significant force in the gig economy with over 1.5 million individuals engaged in various online freelance services.

The study delved into the demographic panorama of freelancers, encompassing students to professionals, spanning specific age groups: Generation Z, Millennials, and Generation X. Despite the absence of stringent credentials, the industry

confronts perceived challenges related to market saturation, a phenomenon previously observed in the United States. In line with this, the researchers sought out to determine whether this was the same case for the Philippines.

The researchers investigated the intricate relationship between labor demand and workforce saturation in the Philippine freelancing industry across different age groups. The primary goal was to discern if a significant correlation exists between these factors and how they influenced career intentions across generations.

Through regression analysis, the researchers established that while workforce saturation does not wield influence over freelancers' career intentions, specific sub-variables of labor demand—namely, job advertisement and full-time position status—exert an indifferent impact. In contrast, other sub-variables, such as Job Vacancy, Job Preference, and Educational Attainment, significantly influence career intentions.

Moreover, the model's R-Squared value corroborated its moderate predictive accuracy. The study also revealed that Generation Z dominates the freelancing industry in the Philippines, which aligned with previous studies highlighting the appeal of freelancing to this demographic due to the setup's flexibility and allowance for work-life balance. Furthermore, the study elucidated that the niche of Virtual Assistance (VA) took the spot of the most popular niche, reflecting a high demand for task-based roles.

The researchers also determined that there is a shift towards full-time employment, challenging the traditional view of freelancing as a part-time endeavor. Meanwhile, the career intention analysis had revealed a cohesive outlook among freelancers, with a moderate satisfaction level and a commitment to their respective freelancing careers. Overall, these results indicate a sense of permanence in freelancing as a full-time career path.

In conclusion, the study reaffirmed that labor demand significantly impacts career intentions, while workforce saturation does not, emphasizing the global nature of freelancing and the ability to access opportunities beyond geographical constraints. Moreover, given the shift to full-time engagements, the researchers deduced that freelancing is an emerging permanent career path that will continue to rise in popularity in the coming years.

B. Conclusion

The results yielded the following conclusions for the following hypotheses:

H0₁: The position status in a freelancing niche does not affect the aspired focus niche of workers in the freelancing industry in the Philippines.

- H0₁ is accepted as the position status yielded with an insignificant p-value of 0.1902, which implies that position status of a freelancer does not affect their aspired focus niche in the industry.

H0₂: The position status in a freelancing niche does not affect the career change rate of workers in the freelancing industry in the Philippines.

- H_{02} is accepted since the insignificance of position status, having a p-value of 0.1902, indicates that it does not affect the career change rate of the freelancers in the industry.

H_{03} : Current occupation in the freelancing industry does not affect the aspired focus niche of workers in the freelancing industry in the Philippines.

- H_{03} is accepted as the current occupation or the current freelancing niche that the respondents are in, yielded with an average p-value of 0.2563, which is insignificant as it is greater than 0.10 alpha; this indicates that the current occupation of the freelancer in the industry will not affect further in their aspired focus niche.

H_{04} : Current occupation in the freelancing industry does not affect the career change rate of workers in the freelancing industry in the Philippines.

- H_{04} is accepted for the same reason that the average p-value of the current occupation of the freelancer yielded an insignificant value; this points to that fact that the freelancers' current occupation in the industry does not affect their career change rate.

H_{05} : Educational Attainment of the workers does not affect the aspired focus niche of workers in the freelancing industry in the Philippines.

- H_{05} is not accepted as Educational Attainment resulted with a significant p-value of 0.0668. This only means that educational attainment of a freelancer will affect their aspired focus niche in the industry.

H_{06} : Educational Attainment of the workers does not affect the career change rate of workers in the freelancing industry in the Philippines.

- H_{06} is not accepted due to the significant result of the p-value of Educational Attainment, meaning that the freelancers' educational attainment affects their career change rate within the industry.

H_{07} : The Job Advertisements of firms do not affect the aspired focus niche of workers in the freelancing industry in the Philippines.

- Given that job advertisement yielded with a p-value of 0.7716, which is insignificant, the H_{07} is accepted. This explains that Job Advertisements will not affect the aspired focus niche of the freelancer in the industry.

H_{08} : The Job Advertisements of firms do not affect the career change rate of workers in the freelancing industry in the Philippines.

- H_{08} is accepted since Job Advertisement resulted in an insignificant p-value, which explains why the freelancers' career change rate is not affected by job advertisement of the roles.

H_{09} : The Job vacancies of firms do not affect the aspired focus niche of workers in the freelancing industry in the Philippines.

- H_{09} is accepted because similarly to Job Advertisement, Job Vacancies resulted to an

insignificant p-value of 0.3781, denoting that freelancers' aspired focus niche is not affected by the job vacancies of firms.

H_{10} : The Job vacancies of firms do not affect the career change rate of workers in the freelancing industry in the Philippines.

- As the job vacancies resulted with an insignificant value, H_{10} is accepted. This indicates that job vacancies of firms do not affect the career change rate of the freelancer within the industry.

H_{11} : The Job Preference of workers do not affect the aspired focus niche of workers in the freelancing industry in the Philippines.

- Job Preference is the only sub-variable in the labor demand variable that is not accepted (H_{11}). This is since it yielded a significant p-value of 0.0102 which means that freelancers' aspired focus niche is affected by their job preference.

H_{12} : The Job Preference of workers does not affect the career change rate of workers in the freelancing industry in the Philippines.

- Consequently, H_{12} is also not accepted in lieu of the significance of the p-value of job preference, indicating that the freelancers' job preference affects their career change rate.

Moderating Variable

H_{13} : Age moderates the effect of the linkage of labor demand and workforce saturation on the career intentions of workers in the freelancing industry.

- H_{13} is accepted as age reflects different levels of experiences, skills, and preferences of workers in the freelancing industry. In the context of this study, the freelancers' age group is ultimately deemed the main determinant influencing their level of interest and engagement within the freelancing industry.

C. Recommendations

This study offers suggestions to the following: Workers in the Freelance Industry, Aspiring Freelance Workers, Employers, and Future Researchers.

Workers in the freelance industry: The outcomes of this study offer valuable insights to freelancers, enabling them to adopt a more analytical approach to understanding their career intentions. By exploring the trends, labor demand, and saturation within their specific niche, freelancers can make informed decisions about their professional trajectory. Notably, the study suggests that targeting less popular niches may present more opportunities for higher earning potential. This insight encourages freelancers to assess their suitability for such niches and consider upskilling if necessary. Moreover, the researchers recommend that freelancers utilize this study to cultivate a critical perspective, mitigating the potential impact of workforce saturation and labor demand fluctuations on their career intentions.

Aspiring Freelance Workers: The significance of the variables can empower individuals to make informed decisions when selecting their specific niche within the industry.

Furthermore, the data presented in this study serves as a valuable guide for individuals seeking a nuanced understanding of the saturation and demand dynamics within their preferred niche, aiding in strategic decision-making for a more successful professional trajectory.

Employers: Employers of freelancers can leverage the study's data to gain a comprehensive understanding of trends and relationships pertaining to workers' career intentions. This insight can serve as a foundation for devising targeted strategies to enhance freelancer preferences. Furthermore, an assessment of workforce saturation offers employers an opportunity for nuanced analysis, aiding in informed decisions regarding recruitment and identifying niches with substantial potential for securing prospective employees.

Future Researchers: To enhance the depth of future research, one additional consideration should be the inclusion of the high school dropouts as a variable; for this to be feasible, future researchers should consider replacing the measure of highest educational attainment with current occupation instead. This revision may offer a more nuanced perspective on the dynamics at play within the freelancing industry. Additionally, future researchers may find it valuable to investigate longevity patterns exhibited by freelancers in the industry, studying potential transitions back to the corporate sector; this investigation could possibly shine a light on the fluidity of career trajectories and the factors influencing freelancers' decisions to re-enter the traditional workforce. Lastly, the current researchers suggest focusing on lifestyle repercussions experienced by freelancers in the Philippines; this would encompass the examination of mental health and the broader aspects of their way of living.

References

- [1] Abaye, D. A., et al. (2019, Sep.). A review of the logistic regression model with emphasis on medical research. *Journal of Data Analysis and Information Processing*.
- [2] Andrade, M. & Westover, J. (2018). Generational differences in work quality characteristics and job satisfaction. Evidence-Based HRM.
- [3] Anggarini, D. (2022). Generation Z And Millennial Perspectives To Become Entrepreneurs In The Era Of The Gig Economy. *Jurnal Ekonomi Dan Manajemen*.
- [4] Angnakoon, P., & Kim, J. (2016). Research using job advertisements: A methodological assessment.
- [5] Antonio, J. S. (2022). The 2022 Philippines freelance market. Blog.payoneer.com [Online]. Available: <https://blog.payoneer.com/freelancers/philippines-freelance-market-2022-report/>
- [6] Anwar, M. & Graham, M. (2019). The global gig economy: Towards a planetary labour market? *First Monday*, 24(4).
- [7] Arthur, M.B., Khapova, S.N., & Wilderom, C.P.M. (2005). Career success in a boundaryless career world. *Journal of Organizational Behavior*, 26(2), 177–202.
- [8] Australian Bureau of Statistics. (2021). Job vacancies. ABS [Online]. Available: <https://www.abs.gov.au/statistics/detailed-methodology-information/concepts-sources-methods/labour-statistics-concepts-sources-and-methods/2021/concepts-and-sources/job-vacancies>.
- [9] Bayudan-Dacuycu, C., Orbeta, A. C., Serafica, R. B., & Bajje, L. K. C. (2022). Online Work in the Philippines: Some Lessons in the Asian Context. *Philippine Institute for Development Studies*.
- [10] Beerepoot, N., & Oprins, J. (2021). Online freelancing and impact sourcing: Examining the inclusive development potential of online service work in the Philippines. *The Electronic Journal of Information Systems in Developing Countries*, 88(2) [Online]. Available:
- [11] Bieleń, M. & Kubiczek, J. (2020). Response of the labor market to the needs and expectations of Generation Z. *New Trends in Management*.
- [12] British Library. (n.d.). Frederick Taylor. British Library [Online]. Available: <https://www.bl.uk/people/frederick-winslow-taylor#:~:text=Taylor's%20work%20The%20principles%20of%20his%20places%20of%20employment>.
- [13] Broadbridge, A. & Maxwell, G.A. (2014). Generation Y graduates and career transition: *Perspectives by gender*. *European Management Journal*.
- [14] Brown, A., et al. (2012). The role of career adaptabilities for mid-career changers. *Journal of Vocational Behavior*, 80(3), 754–761.
- [15] Burke, A. & Cowling, M. (2019). The relationship between freelance workforce intensity, business performance and job creation. *Small Business Economics*, 55(2), 399–413.
- [16] Card, D. (1999). The causal effect of education on earnings. In: *Handbook of Labor Economics*, 3, pp. 1801–1863. [Online]. Available: https://davidcard.berkeley.edu/papers/causal_educ_earnings.pdf.
- [17] Chawla, D., Dokadia, A., & Rai, S. (2017). Multigenerational Differences in Career Preferences, Reward Preferences and Work Engagement among Indian Employees.
- [18] Champaloux, S. W., & Young, D. R. (2015). Childhood Chronic Health Conditions and Educational Attainment: A Social Ecological Approach. *Journal of Adolescent Health*, 56(1), 98–105.
- [19] Conner, M. (2020). Theory of Planned Behavior. In Tenenbaum, G., Eklund, R. C. (Eds.), *Handbook of Sport Psychology*, pp. 1-18.
- [20] Cornwell, J. (2017). Surplus Labor.
- [21] Dalgic, T., & Leeuw, M. (1994). Niche Marketing Revisited: Concept, Applications and Some European Cases. *European Journal of Marketing*, 28(4), 39–55.
- [22] Day, J.C. & Newburger, E.C. (2002). The Big Payoff: Educational Attainment and Synthetic Estimates of Work-life Earning. US Census Bureau, P23-210, pp. 1–14. [Online]. Available: <https://www.census.gov/content/dam/Census/library/publications/2002/demo/p23-210.pdf>
- [23] De Wolff, P. & Van Slijpe, A.R.D. (1973). The relation between income, intelligence, education and social background. *Eur. Econ. Rev.* 4, 235–264.
- [24] Dimock, M. (2019). Defining Generations: Where Millennials end and Generation Z begins. [Online]. Available: <https://pewrsr.ch/2szqtJz>.
- [25] Donina, I., Vodneva, S., Klets, T., Dagaeva, I., & Donina, E. (2021). Outsourcing and Freelancing as Modern Labor Market Trends: Professional Requests of Youth. Proceedings of the International Scientific and Practical Conference Strategy of Development of Regional Ecosystems “Education-Science-Industry” (ISPCR 2021).
- [26] Donovan, S.A., Bradley, D.H., & Shimabukuru, J.O. (2016). What does the gig economy mean for workers?. pp.1-20. [Online]. Available: <https://ecommons.cornell.edu/handle/1813/79155>.
- [27] Dunn, M., Stephany, F., Sawyer, S., Munoz, I., Raheja, R., Vaccaro, G., & Lehdonvirta, V. (2020). When motivation becomes desperation: Online freelancing during the COVID-19 pandemic.
- [28] Dutta, D., Mishra, S. K., & Varma, A. (2019). Predictors of job pursuit intention across career stages: A multi-phase investigation. *The International Journal of Human Resource Management*, 32(20), 4215–4252.
- [29] Eurostat: Job vacancy rate (2018) <https://ec.europa.eu/eurostat/web/products-datasets/-/teilm310> (2018). Accessed 13 May 2023.
- [30] Fishbein, M., & Ajzen, I. (1975). Belief, attitude, intention, and behavior: *An introduction to theory and research*. Addison-Wesley.
- [31] Gandini, A. (2016). The Rise of a Freelance Economy. *The Reputation Economy*, 13–25.
- [32] Garvin, D.A. (2013). How Google sold its engineers on management. *Harvard Business Review*, 91(1), 74–82. [Online]. Available: <https://www.hbs.edu/faculty/Pages/item.aspx?num=45892>.
- [33] Graham, M., Hjorth, I. & Lehdonvirta, V. (2017). Digital labour and development: impacts of global digital labour platforms and the gig economy on worker livelihoods. *Transfer: European Review of Labour and Research*, 23(2), pp.135-162.
- [34] Herrmann, A., Zaal, P., Chappin, M., Schemmann, B., & Lühmann, (2023). “We don't need no (higher) education” - How the gig economy challenges the education-income paradigm. *Technological Forecasting and Social Change*. 186. 122136.
- [35] Hong, Y. & Pavlou, P. (2013). Online Labor Markets: An Informal Freelancer Economy. *IBIT Report*.

- [36] Insight: Philippines freelance market 2022 report identifies uphill trend of Filipino freelancers with overseas clients. Adobo Magazine Online. (2022). Retrieved February 21, 2023, from <https://www.adobomagazine.com/insight/insight-philippines-freelance-market-2022-report-identifies-uphill-trend-of-filipino-freelancers-with-overseas-clients/>
- [37] Is the freelancer market saturated after Covid? (2022). [Online]. Available: <https://www.ndash.com/blog/freelancer-market-saturated#:~:text=According%20to%20data%20from%20Statista,saturad%20with%20diverse%20skill%20sets>.
- [38] Keller, S. (2017). The influence of Uber ratings is about to be felt in the hallways of one of the world's largest banks. [Online]. Available: <https://qz.com/930080/jp-morgan-chase-is-developing-a-tool-for-constant-performance-reviews/>
- [39] Kurekova, L., Beblavý, M., & Thum-Thysen, A. (2013). Online job vacancy data as a source for micro-level analysis of employers' preferences. A methodological enquiry.
- [40] Lee MK., Kusbit D., Metsky E., & Dabbish L. (2015). Working with machines: the impact of algorithmic, data-driven management on human workers. In: *Proceedings of the 33rd Annual ACM SIGCHI Conference, Seoul, South Korea*, 18–23 April. New York: ACM Press, 1603–1612.
- [41] Lehdonvirta, V. (2018). Flexibility in the Gig economy: Managing Time on Three Online Piecework Platforms. *New Technology, Work and Employment*, 33(1), 13–29.
- [42] Lapanjuuri, K., Wishart, R., & Cornick, P. (2018). The Characteristics of Those in the Gig Economy. *Institute for Employment Studies*.
- [43] Lovaglio, P. (2021). Do job vacancies variations anticipate employment variations by sector? Some preliminary evidence from Italy.
- [44] Lyons, S. & Kuron, L. (2013). Generational differences in the workplace: A review of the evidence and directions for future research. *Journal of Organizational Behavior*, 35(S1).
- [45] Lyons, S., Schweitzer, L., & Ng, E. (2015). How have careers changed? An investigation of changing career patterns across four generations. *Journal of Managerial Psychology*.
- [46] Maloni, M., Hiatt, M., & Campbell, S. (2019). Understanding the work values of Gen Z business students. *The International Journal of Management Economics*.
- [47] Marx, K. (1977, January). Capital, vol. 1. *Vintage Books*. [Online]. Available: <https://www.marxists.org/archive/marx/works/download/pdf/Capital-Volume-I.pdf>
- [48] Mincer, J. (1975, April). Education, Experience, and the Distribution of Earnings and Employment: An Overview. In: Education, Income, and Human Behavior, F. T. Juster (Ed.). *National Bureau of Economic Research, Cambridge, MA*. [Online]. Available: <https://www.nber.org/system/files/chapters/c3693/c3693.pdf>.
- [49] Nagamora, J. (2020, May). Spared by the virus: The rise of the gig economy during the COVID-19 pandemic. [Online]. Available: <https://aasyp.org/2020/05/06/spared-by-the-virus-the-rise-of-the-gig-economy-during-the-covid-19-pandemic/>.
- [50] New Hampshire Employment Security. (n.d.). The Labor Force. New Hampshire Employment Security. [Online]. Available: <https://www.nhes.nh.gov/elmi/products/ug-labor-force.htm>.
- [51] O'Conner, S. (2016, September). When your boss is an algorithm. *Financial Times*. [Online]. Available: <https://www.ft.com/content/88fdc58e-754f-11e6-b60a-de4532d5ea35>.
- [52] OECD. (2016). Educational Attainment. *OECD Factbook 2015-2016*. [Online]. Available: <https://www.oecd-ilibrary.org/docserver/factbook-2015-72-en.pdf?expires=1679841416&id=id&accname=guest&checksum=2AC846C9CAC8816C78E467E7D85BEC88>.
- [53] Oleck, A. (2019, July). Choosing an in-demand career. Professional Degrees & Certificates. [Online]. Available: <https://pdce.wisc.edu/blog/choosing-in-demand-career/>.
- [54] Payoneer. (2020, January). "Freelancing in 2020: An Abundance of Opportunities." [Online]. Available: <https://pubs.payoneer.com/docs/2020-gig-economy-index.pdf>.
- [55] Pop, D. and Pop, M.T. (2020, January). Approaching the labor market from a generational perspective. *IOP Conference Series: Materials Science and Engineering*, vol. 568, no. 1, pp. 012084.
- [56] Popiel, P. (2017, June). "Boundaryless" in the Creative Economy: Assessing freelancing on upwork. *Critical Studies in Media Communication*, vol. 34, no. 3, pp. 220-233.
- [57] Prawitasari, G. (2018, April). The Influence of Generations on Career Choice (Social Cognitive Career Theory Perspective). *Universitas Negeri Yogyakarta*.
- [58] Qiu, Y., & Sojourner, A. (2023, May). Labor-Market Concentration and Labor Compensation. *ILR Review*, vol. 76, no. 3, pp. 475-503.
- [59] Raihan, S., Rabi, Md., Rabiul I., and Saleh, S. (2015, May). Utilization of Surplus Labor in the Economy of Bangladesh. *International Journal of Business and Management Study – IJBMS*, vol. 2, no. 2, pp. 1-9.
- [60] Riaz, M., Syed, N., Bhatti, Z., Noureen, A., Ur-Rahman, S., & Abbas, S. (2021, May). FREELANCING: A novel opportunity for youth amid Corona Pandemic. *Ilkogretim Online*, vol. 20, no. 5, pp. 2931-2937.
- [61] Rosenblat, A. and Stark L. (2016, June). Algorithmic labor and information asymmetries: a case study of Uber's drivers. *International Journal of Communication*, vol. 10, pp. 3758-3784.
- [62] Roy and Shrivastava. (2020, January-March). Future of Gig Economy: Opportunities and Challenges. *ImiKonnnect*, pp. 18.
- [63] Sapsford, D., Tzannatos, Z. (1993). Labour Demand: The Basic Model. In: *The Economics of the Labour Market. Texts in Economics*. Palgrave, London.
- [64] Sawyer, S., Munoz, I., Dunn, M., Stephany, F., Raheja, R., Vaccaro, G., and Lehdonvirta, V. (2020). Freelancing Online During the Covid-19 Pandemic (thesis). *Department of Management & Business, New York*. [Online]. Available: <https://www.microsoft.com/en-us/research/uploads/prod/2020/07/NFW-Sawyer-et-al-Freelancing-COVID19.pdf>.
- [65] Singh Mehta, B., & Kumar, A. (2020, October). Future of Work: Rhe Emerging Gig Economy. *Journal of Development Policy Review*, pp. 10-16.
- [66] Shen, K., and Peter K. (2013, January). 'Do Chinese Employers Avoid Hiring Overqualified Workers? Evidence from an Internet Job Board'. *Research in Labour Economics (forthcoming)*.
- [67] Stefanik, M., Lyócsa, ., and Bilka, M. (2022, February). Using online job postings to predict key labour market indicators.
- [68] Strategic, G. (2022, August 3). 10 in-demand jobs Philippines 2022 - No experience needed. *Global Strategic Business Process Solutions*. [Online]. Available: <https://www.globalstrategic.com/in-demand-jobs-philippines-2022-no-experience-needed/>
- [69] Suphanida. (2021, January). What different generations want from their jobs. *Pacific Prime's Blog*. [Online]. Available: <https://www.pacificprime.com/blog/what-different-generations-want-from-their-jobs.html>.
- [70] The Center for Generational Kinetics. (n.d.). Generational breakdown: Info About all of the generations. *The Center for Generational Kinetics*. [Online]. Available: <https://genhq.com/the-generations-hub/generational-faqs/>.
- [71] The Economic Times. (2023). What is 'Niche Marketing'. *The Economic Times*. [Online]. Available: <https://economictimes.indiatimes.com/definition/niche-marketing>.
- [72] Totempool. (n.d.). Career Change: 8 Tips to Successfully Shift Careers. Totempool. [Online]. Available: <https://totempool.com/blog/shift-careers/#:~:text=Carrer%20shift%20means%20changing%20the,in%20your%20type%20of%20employment>.
- [73] Tudy, R. A. (2020, January). From the corporate world to freelancing: The phenomenon of working from home in the Philippines. *Community, Work & Family*, vol. 24, no. 1, pp. 77-92.
- [74] Valliant, Richard & Dorfman, Alan & Royall, Richard. (2000). *Finite Population Sampling and Inference*. John Wiley & Sons, Inc.
- [75] Wade, M., and Michael P. (2001, Spring). 'Relationships Between Job Skills and Performance: A Study of Webmasters'. *Journal of Management Information System*, vol. 17, no. 4, pp. 139-155.
- [76] Warner, A. (2020, October). 30+ Freelance Stats – Why the Gig Economy is Growing in 2020. *Website Planet*. [Online]. Available: <https://www.websiteplanet.com/blog/freelance-stats/>.
- [77] Wheatley, A. and Hibbler-Britt, L. (2019). The Long Tail of Generation Z and the Future of a Freelance Economy. *Advances in the Technology of Managing People: Contemporary Issues in Business*. Wood, A. J., Graham, M., Lehdonvirta, V., & Hjorth, I. (2019, February). Good gig, bad gig: Autonomy and algorithmic control in the global gig economy. *Work, Employment and Society*, vol. 33, no. 1, pp. 56-75.