

The future of online-enabled 'gig' work

February 13, 2019

Why do the world's young people...



Sell freelance services globally



Sell crafts or other products online



Use online apps (e.g., Uber, Airbnb) to make money



- *RIWI introduces a leading indicator to anticipate the future of online-enabled 'gig' work globally.*
- *The 43-country signal includes a broad range of young people's experiences, including those not typically included in workforce data.*
- *Most young adults globally do this kind of work because they view it as an opportunity, not because they have no alternatives.*
- *Online-enabled 'gig' work is not yet mainstream but it is more than a marginal income source for one in five of the world's young people online.*

Anticipating the future of work

With the arrival of new technologies, policymakers, business leaders, researchers, and the global public are wrestling to understand how the nature of work is changing. Why, for example, do people sell their freelance graphic design services online? Do they do it instead of or as a replacement for traditional work? Despite numerous efforts to measure these kinds of changes, there is no clean, current, globally comparable data signal that anticipates how work is changing. A reliable signal is critical to provide both an evidence basis for labor market and other policies and to predict future workplace and economic trends.

One way to preview the future is to understand how the world's young people are or aren't adopting new online-enabled 'gig' work and why. The experiences of young people can also predict whether and when online platform work reaches an adoption tipping point. Reliable data on young people's behavior can also challenge or confirm our assumptions about such work. For example, common wisdom has it that online-enabled freelance work is marginal relative to traditional jobs, and that it is unstable and precarious.

Data becomes noisy without diverse set of young people

To get clean, reliable signals of how the nature of work is changing, we need data on a diverse group of young adults. Yet those using traditional methods of data collection struggle to hear from young people.¹ This cohort tends not to answer surveys. Survey researchers consider young people, particularly young men, to be a hard-to-reach population group.

Without a broader set of young perspectives, it is not clear if traditional survey results would provide a reliable signal of the future of work. Moreover, as official surveys become more complex to take into account new forms of work, response rates are likely to drop further. The result is noisier workforce data from which it is harder to draw a meaningful signal about work today or in the future.

A new global leading indicator of online-enabled work

We created a new signal of online-enabled 'gig' work to address these issues. We randomly engaged people of all ages in 43 countries in all global regions². Between November 2018 and early February 2019, we collected observations from more than 32,000 people globally, including a very significant share of younger people - about 12,000 people aged 18-24, and another 12,000 aged 25-34.

¹ The US Bureau of Labor Statistics has discussed the difficulty of recruiting young people, particularly young men, for its surveys. This is also a common issue in panel-based surveys.

² RIWI randomly engaged a roughly similar number of respondents in Algeria, Argentina, Australia, Belgium, Brazil, Canada, China, Colombia, Denmark, Egypt, France, Germany, Greece, Hungary, India, Iran, Iraq, Ireland, Italy, Japan, Jordan, Kenya, Mexico, Morocco, Nigeria, Norway, Philippines, Poland, Russia, Rwanda, Saudi Arabia, Senegal, South Africa, South Korea, Spain, Tunisia, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, and Vietnam.

Unlike traditional surveys, RIWI's method broadens the potential respondent pool to **all** Internet users. All Internet users have the potential to be randomly exposed to and engaged with the survey from any device or browser. We focus on Internet users - including those with mobile phones - since they could potentially use online platforms for work.³

We asked separate questions about three broad types of online-facilitated 'gigs'⁴:

- selling freelance services (writing, graphic design, coding, etc) into the global marketplace,
- selling crafts or other products online,
- using online apps such as Uber or Airbnb to make money driving people, delivering food, or renting out property.

Inclusive data approach enhances signal quality

Not only does RIWI's randomized approach result in reaching a high number of younger respondents, it also reaches typically disengaged, under-surveyed young people.⁵ Half of RIWI's global respondents aged 18-34 have **never** answered a survey of any kind before.⁶ Independent academic studies of RIWI leading up to the Brexit vote on June 23, 2016 found that the RIWI method is more effective at reaching disengaged young people compared to standard methodologies.⁷ Reaching disengaged populations is particularly important for understanding the future of work.

³ This generally reflects the vast majority of the population in developed economies, and over half the population in the emerging world, including the world's two largest Internet-using populations (India and China), according to data from the International Telecommunications Union.

⁴ Since our goal is to develop an initial signal, we simplify the concept of online-enabled 'gig' work. We include all freelance work enabled by Internet platforms. We ask separately about location-based (e.g., Uber) from global work such as selling services online into global markets, allowing us to analyze each type independently as well as together, since the two types of work may have different labor market impacts. We recognize that this approach does not capture all of the nuances of online-enabled 'gig' work.

⁵ See [Appendix A](#) for a description of the other ways in which RIWI technology enhances data quality.

⁶ Half of all global respondents 18+ also have not taken a survey before. Only 25% of respondents aged 18-34 and 30% of those 18+ have taken a survey in the past month.

⁷ See Prosser and Mellon article [here](#).

When RIWI respondents aged 18-34 last answered a survey

Within the last month | **Over a month ago** | Never



Most young adults pulled by (not pushed into) online 'gigs'

Why people participate in online-facilitated 'gig' work



Source: RIWI data, continuous global tracking, Nov 1, 2018-Feb 2, 2019, 32,730 observations. RIWI asked respondents in all global regions whether any of their money came from online-facilitated activities. Separate questions asked about the share of income from each of selling products online, selling services online, or transporting people or food/renting property via online apps. RIWI then asked those 6,057 respondents who answered yes to any of the types of online-based work why they participate.

The term 'gig' economy suggests a marginal, precarious existence, but this

	Opportunity	Necessity	
	I like the work	I need the money	
	I like the extra money	I have no other alternatives	
	I like the flexible hours		



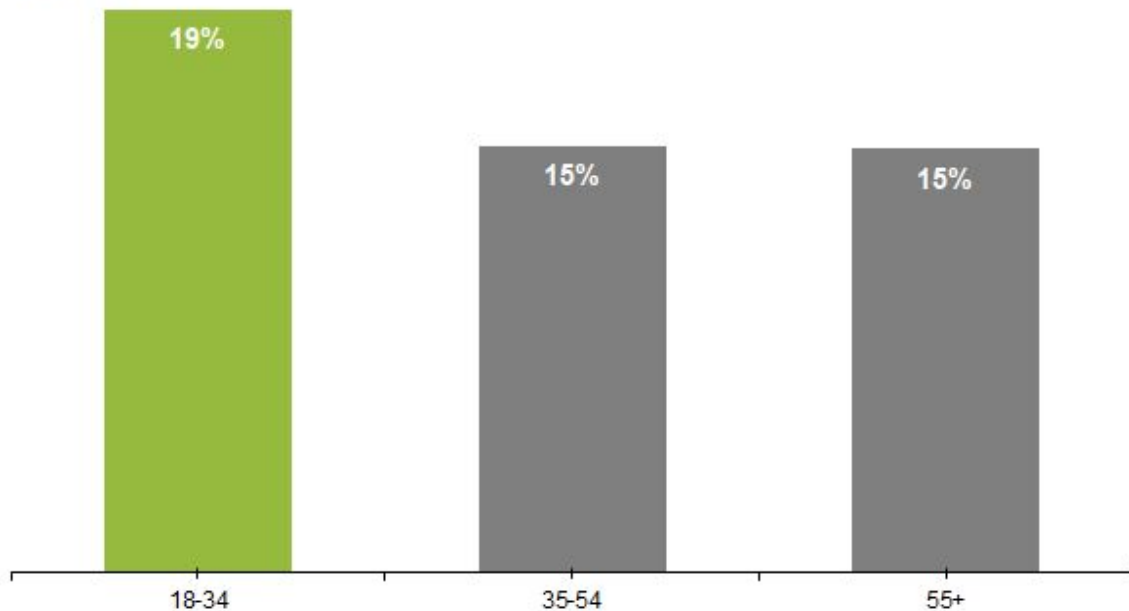
signal reported here suggests a possible alternative narrative. *Young adults globally don't take on online-enabled 'gigs' because they have to, but because they want to.* We find that about 60 percent of those 18-24, and also a similar share of those aged 25-34 who are engaged in online-enabled 'gig' work, do so because *they like the work or flexibility or the extra money.* Still, a sizeable share is doing it in lieu of better options.

Notably, the 'opportunity' signal is broad-based and stable. The 60-40 breakdown is largely consistent across developed and developing economies, genders, age cohorts, and even across the type of work (location-based such as Uber or Airbnb versus selling services or products online in a global marketplace).

Individuals who report enjoying such work are more likely to have it account for a larger share of their income. The data show that those who use online platforms for all of their income are happy to be doing it. Those who use online platforms to supplement their income, by contrast, are mainly doing it because they haven't been able to find a better alternative.

Online-enabled 'gigs' are changing work

Share with more than half of income from online-facilitated 'gig' work



Source: RIWI data, continuous global tracking, Nov 1, 2018-Feb 2, 2019, 32,730 observations.
 Note: RIWI asked respondents whether any of their money came from online-facilitated 'gig' work (selling products/services online or transporting/renting property via online apps). Other options include 'no' and 'yes, about one-quarter of my money'. We removed respondents who identified as students to focus on the adult workforce.

Evidence to date seems to support the view that online-enabled 'gig' work is mostly supplemental.⁸ RIWI data confirm that this type of work is not the dominant income source for most global young adult Internet users. However, the data show that for many young adults, it is an important income source. One in five global Internet users aged 18-34 say they perform one or more of the three online-enabled 'gig' work options as their main way of earning money.⁹

RIWI data show that some countries have more participants in this type of work than others. For example, a greater share of people in China, Nigeria, Canada, India and the

⁸ See p. 31 in Abraham et al 2016 [paper](#).

⁹ It's possible this is an overstatement so needs to be interpreted with caution, as some respondents may incorrectly answer that selling freelance services online represents a share of their income online if, say, they use graphic design in their traditional job.

United States report that they sell their freelance services globally than in other countries.

Leading indicator complements traditional jobs data

Leaders need both to track traditional measures while developing new, globally-comparable digital economy signals to anticipate changing workforce norms.

Standard employment measures ask people whether they are employed full-time, part-time, or have looked for work in the past month. They do not capture flexible jobs mediated through various online platforms. Government agencies and researchers have made early attempts to measure the adoption of online platform tasks and the changing nature of work, mostly in developed economies.¹⁰ The focus has largely been about which questions to ask, and learning about which questions not to ask.¹¹

The RIWI indicator complements and builds on these efforts by:

- engaging diverse young adult voices, including the typically disengaged
- providing real-time data to anticipate shifts
- providing a global picture on global online labor markets

This type of indicator provides a starting point for the development of economic, trade, social and labor market policies globally. If young adults turn to online-enabled freelance work because they don't have better alternatives or rely on it for an important share of their income or if it significantly increases their stress levels, then we need to adjust public policies accordingly. And global labor markets - such as the online market for software development tasks - require global, not national approaches. It also goes beyond labor market policy to help us think about future mobility, health, and other needs as workforce norms change.

¹⁰These include the 2018 Bureau of Labor Statistics contingent workforce survey, and 2016 academic work on US alternative work arrangements by Alan Krueger and Lawrence Katz. There have been several other efforts, including the Oxford Internet Institute's Online Labour Index, which tracks the filling of online task vacancies in the English-speaking world in real-time.

¹¹ The issue is so complex that the Bureau of Labor Statistics followed up its survey results with a critical analysis of the questions themselves, and Krueger and Katz also issued a 2019 paper that backtracked on their earlier findings.

Ongoing signal to anticipate tipping point

This brief only scratches the surface of what's possible, even within the existing dataset. Further analysis might examine:

- The experiences of those engaged in different types of digital work. For example, those who are primarily engaged in providing local services such as driving Uber versus those that are competing against workers globally.
- What degree of stress, insecurity, and happiness do digital 'gig' workers face and how are lower skilled workers doing compared with higher skilled ones?
- What are the deeper reasons for engaging in digital-facilitated 'gig' work? Are young mothers doing it to remain in the workforce while raising children? Are some doing it as a temporary step as they plan for a new start-up?

This leading indicator on the future of online-enabled 'gig' work shows that the nature of work is starting to change globally. The indicator is an important first step. It can be made more powerful by improving and refining the questions further and adding additional dimensions regarding people's motivations. The questions used here provide important signals of which types of questions work and which do not. RIWI technology allows for rapid testing of new questions, allowing for quick feedback and improvements with the aim of converging on best-practice questions that reflect and anticipate new work realities across the world.

RIWI could also turn its global technology on continuously and scale up the number of observations to enable a robust, ongoing tracker. This would allow policymakers to anticipate and predict how the nature of work will change and impact the world's younger people and spread across the age spectrum. Even if online-enabled 'gig' work is not mainstream now, a shift could happen anytime, and we need robust, inclusive, continuous signals to be able to capture these changes.

RIWI is looking for partners to refine the questions used in the indicator and develop an ongoing signal on the future of work across the world. To learn more about RIWI's work in this area, please contact Danielle Goldfarb, Global Head of Research, at: daniellegoldfarb@riwi.com, or 1-416-205-9984 Ext. 4.

About RIWI Technology

RIWI technology draws randomly from the entire Web-using population in any country. Respondents include not just those that are engaged and regularly share their opinions, but also those who do not regularly take surveys and are disengaged. This creates a randomly recruited, representative set of respondents and a large ongoing number of respondents. In addition, RIWI tracks new respondents daily, allowing an assessment of whether views are stable or changing.

RIWI has met the highest levels of security clearance, research ethics approvals, and data privacy protocols (see [here](#) for more information). The technology is used extensively and under long-term agreements by the US State Department and other G7 government agencies, the World Bank, UN agencies, academics at universities such as Harvard and Oxford, and by global financial institutions.

RIWI emerged to solve a public policy challenge. A government agency found existing methods to track the public's response to pandemics unreliable, lagging reality, and not globally comparable. RIWI's technology responded with a highly reliable signal, available in real-time, that can be compared across countries simultaneously. Since then, RIWI's proprietary technology has continued to track epidemics including Zika and Ebola, and has been extended far beyond to track a broad range of social and economic issues in almost all countries and territories of the world.

For more on RIWI's award-winning technology and its applications, see: <https://riwi.com>

Appendix A

Asking about 'earning money' brings more youth into measured workforce

In addition to data more inclusive of disengaged young people, RIWI further enhanced data quality by:

- a) Asking about ways of earning money rather than traditional employment questions¹²
- b) Not paying or otherwise incentivizing respondents (unlike in panel-based surveys)
- c) Guaranteeing respondent safety and anonymity, minimizing the chance that respondents will not answer questions truthfully
- d) Ensuring privacy by not collecting any personally identifiable information (exempting the resulting data from global data privacy regulations and eliminating privacy risk)
- e) Not conducting quota-based sampling or *post-hoc* data manipulation, since RIWI's technology reflects the Internet-using population without additional human manipulation
- f) Using a common method and set of questions in all 43 countries
- g) Translating questions into key local languages (rather than gathering data primarily on English speakers globally as in social media scraping or other big data approaches)

¹²In addition to more traditional questions about whether people are employed or looking for work, we asked people both how they earn money and about specific types of online platform work. This approach is based in NBER research from Abraham and Amaya on Amazon Mechanical Turk workers which finds that asking about other ways of earning money increased the number of people participating in the workforce and the number of multiple job-holders. Probing encourages respondents to mention informal and alternative work activities in their employment-related responses, and suggests current measures likely do not accurately capture the range of ways in which people work. <https://www.nber.org/papers/w24880>