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Global

Core Skill Sectors and Industry Segments

The Gig Economy and Human Cloud Landscape: 2018 Update

6/8/2018 | David Francis, Research Manager | dfrancis@staffingindustry.com

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Contents

The Gig Economy and Human Cloud Landscape: 2018 Update 4
Defining the human cloud 5
Workforce solutions ecosystem 6
The three business models of the human cloud 7
The human cloud versus the gig economy 8
The gig economy in context 9
Global human cloud market size estimates 10
Largest human cloud platforms – business focused (B2B): 1 of 2 11
Largest human cloud platforms – business focused (B2B): 2 of 2 12
Largest human cloud platforms – consumer focused (B2C): 1 of 2 13
Largest human cloud platforms – consumer focused (B2C): 2 of 2 14
The human cloud from the 90s to today 15
Human cloud companies by country 16
Human cloud demographics, growth and trends 17
Mergers and acquisitions 19
Online staffing (definition and examples) 20
Freelancer management systems 21
Just-in-time staffing – thinning the line between the human cloud and staffing 22
Signs of convergence between human cloud and staffing 23
Online work services 24
Crowdsourcing 25
Enterprise use of human cloud services 26

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Why don't human cloud solutions have more traction in large enterprises? 27
Partnerships between VMS and human cloud vendors 28
What is driving use of human cloud applications at large organizations? 29
Do workers really want to be independent? 30
The "Uber" effect on taxi employment 31
Temporary worker plans regarding online staffing 32
Distribution of human cloud income for temporary workers 33
The legal environment for the human cloud 34
Where does the human cloud go from here? 36
Appendix: List of business-focused human cloud firms 37
Appendix: List of consumer-focused human cloud firms 50

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The Gig Economy and Human Cloud Landscape: 2018 Update

Key Findings

- The “human cloud” is an emerging group of technology companies that connect workers to (typically contingent) work through a website or some other digital platform. SIA has defined three human cloud business models: online staffing, crowdsourcing and online work services.
- In 2017, firms processed $82.4 billion in spend associated with the human cloud on a global basis. Human cloud companies that primarily sell to consumers (B2C), such as Uber, Lyft, Handy, Ele.me or Instacart, accounted for the vast majority of human cloud spend, generating $76.0 billion in spend, by our estimates. Human cloud companies selling primarily to businesses (B2B) generated $6.4 billion.
- Total global human cloud revenue grew approximately 65% in 2017, driven primarily by the B2C segment, which makes up more than 90% of human cloud spend. The B2B segment of the human cloud grew 19% year-over-year, by our estimates.
- Most B2B human cloud companies, while clearly internet technology companies, are also talent suppliers. Seeming hybrid models, such as just-in-time staffing, have thinned the line between online staffing and traditional temporary staffing. Furthermore, some consulting firms and traditional staffing firms have built their own human cloud applications.
- Small to medium-sized businesses continue to comprise the majority of demand in the B2B segment, though interest and adoption at large, enterprise clients is outpacing that of smaller firms, a favourable sign for B2B-focused firms. Recently, some vendor management systems (enterprise tech for managing staffing suppliers and procure temporary workers) have built integrations with human cloud vendors as part of their offering. Also, a new “breed” of online staffing, the “direct sourcing” platform, has emerged as an alternative to marketplace-driven online staffing models.
- In this report we refer to “independent workers”, “contingent workers”, “freelancers”, and “talent”, which, in the context of this report, are terms all used to describe the same thing: individuals who complete work through human cloud platforms, regardless of their tax classification.
- Unless noted otherwise, all currency in this report is presented in US dollars.

This is the fourth iteration of SIA’s annual “bottom-up” look at the state and evolution of the human cloud. It includes a list of the largest players by spend, as well as estimates for various categories, such as by human cloud segment, work completed onsite/remotely, and spend on B2B/B2C. Firms not on the largest lists who feel they should be are encouraged to contact Staffing Industry Analysts.

The second half of the report is an Appendix that contains a list of the 350+ companies used to make the estimates you’ll find herein, along with the websites and a brief description of each.

Many thanks to the providers who offered their data, encouragement and assistance in this year's report process.

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Defining the human cloud

- The term “human cloud” describes all manner of companies that facilitate direct, digitally-enabled work arrangements, from sourcing a worker through payment. It is a purposely broad term, and we use it to describe all types of online, digital worker marketplaces and related business models. Similar to how the term “social media” can be used to describe Facebook, LinkedIn, Twitter, or Reddit (vastly different businesses with some common characteristics), “human cloud” is used to describe hundreds of businesses such as Uber, Upwork, Wonolo, Hired, Work Market, Talmix, Applause and Genesys.
- Human cloud companies, as discussed in this report, are distinguished by the fact that they generally[1]:
  - Facilitate peer-to-peer transactions through the internet or internet-enabled devices (e.g. smartphone “apps”)
  - Rely on user-based ratings
  - Offer workers flexibility in deciding working hours or times
  - Typically expect workers to supply their own equipment to complete work (e.g. computer, software, car, tools, etc.)
  - Manage the relationship from sourcing through payment via the platform[1]

  These five characteristics capture an incredibly diverse array of companies and business models. The focus of this report is companies that sell to businesses (B2B), rather than companies with a consumer-focused application (such as Uber, Instacart, Rover or Deliveroo), even though these are also, by our definition, part of the human cloud.
- Recently, a number of firms in related industries (such as staffing, management consulting, etc.) have experimented in various forms with a human cloud-like business model (see page 22 for a further discussion of this trend). For example, the US-based global industrial staffing giant Trueblue has upwards of $450 million of revenue running through its just-in-time staffing mobile application called Jobstack. This has created a bit of difficulty in measuring human cloud revenue, as firms in some cases with existing business might merely “reclassify” revenue as “online”. We have opted to exclude revenue in cases we believe firms are merely “reclassifying” *pre-existing* revenue from a staffing or consulting “bucket” to an “online staffing” bucket. However, we have included revenue in cases where the brand or initiative is treated as its own startup or was built/grown organically, i.e. where the initiative was started independently from a parent firms’ existing book of business, or in cases where a firm is acquired but continues to operate independently.

1. There are nearly always exceptions to every rule. For example, while human cloud companies generally pay the workers working through their platform, that is not always the case. For example, in some enterprise-level integrations, clients prefer to use their own finance systems for payment, though they are invoiced via the platform. Another example could be if a company uses a partner company for payments (e.g. a payrolling firm), but still captures the payment data on its platform.

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Workforce solutions ecosystem

To the right is our representation of the interconnected components of the staffing industry and other types of workforce solutions. We organize the multitude of workforce solutions into six segments, with staffing in the middle. The human cloud is in the talent acquisition technology segment.

The human cloud is an evolving set of online work intermediation models that enable work arrangements of various kinds to be established and completed (typically including payment of workers) entirely through a digital/online platform. Importantly, we exclude intermediaries where the bulk of the transaction happens offline, such as staffing agencies and consulting firms. We also exclude other talent acquisition technology vendors such as job boards and VMS providers from the human cloud as, while those products support the sourcing and recruitment of candidates, they do not further support work arrangements through to completion (including payment of workers, tax filings, etc.).

That said, vendors from different segments of the workforce solutions ecosystem are experimenting with the human cloud. For example, Linkedin and Indeed, two of the largest job boards globally, each have a human cloud offering (Linkedin Profinder and Indeed Prime). Meanwhile, a number of traditional staffing and consulting firms have invested in or built their own human cloud offering, while several VMS providers have built integration capabilities with human cloud vendors to offer their clients access to this new pool of talent.

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The three business models of the human cloud

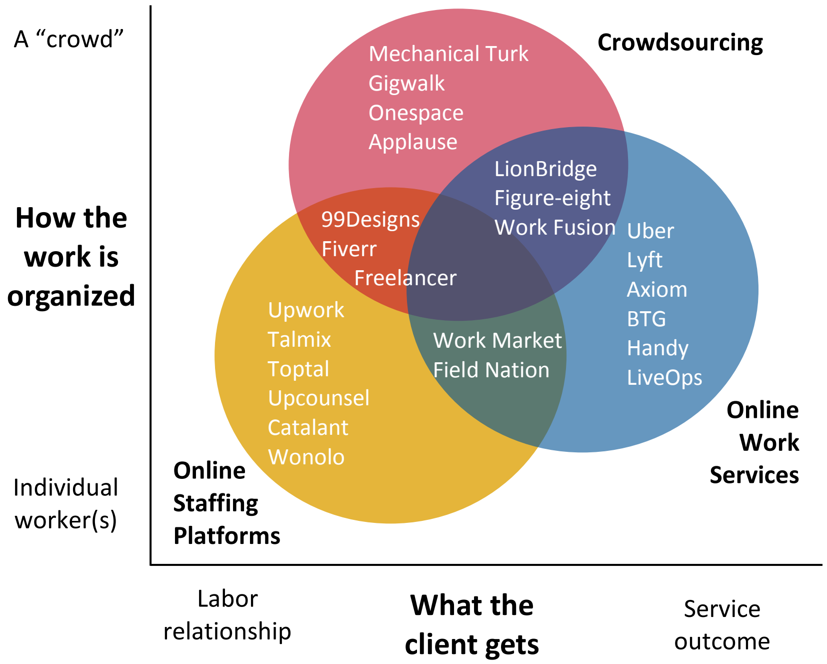
At their core, human cloud platforms enable hirers to find and engage independent workers to transact and complete various kinds of work, typically of a contingent nature, which can be completed remotely or in person, most often (though not always) through an online marketplace. Although this description is simple, it is the DNA that links together the variety of companies that make up the human cloud.

We have defined three categories of human cloud platform models: online staffing, online work services, and crowdsourcing (described in detail on 19, 23 and 24). These categories are not mutually exclusive. Many companies seem to "blend" models, and may be better thought of as existing along a spectrum rather than as within three discrete segments.

In online staffing, the outcome of the transaction is typically a direct legal relationship between manager and worker. In online work services, the platform provides some specialized product or service, with the platform organizing and managing a freelance workforce to deliver the product or service (like freelancer-enabled business process outsourcing). Crowdsourcing firms specialize in micro-tasks and contest/bid-based work performed by a typically anonymous "crowd" of workers, each working independently, and compensated piecemeal for their work.

Despite the framework, the human cloud is fluid and evolving, with providers experimenting with new delivery models and adding or eliminating various services, evidenced this year by the increase of "direct sourcing" platforms. Firms can operate in multiple categories and can shift categories over time.

The Human Cloud framework and taxonomy



Source: SIA

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The human cloud versus the gig economy

Merriam Webster's Collegiate Dictionary defines the word "gig" as "a job usually for a specified time." Staffing Industry Analysts describes "contingent work" as work "primarily distinguished by an explicitly defined or limited tenure." Contingent workers include temporary employees provided by a staffing agency, independent contractors and consultants, temporary workers from an internal pool, and other temporary workers such as summer interns, seasonal workers, freelancers, "crowdsourced" workers, etc. engaged directly by an organization for an intentionally limited time period.

While some pundits, many in the media and the general public at large have associated the term "gig economy" solely with technology companies that allow workers to find work online (what we refer to as the human cloud), nothing in the actual word "gig" suggests that technology is inherent to gig work. People have been doing gigs for decades through self-employment, temp agencies and other informal networks; the gig economy is broader than the human cloud, and was around long before it. The gig economy represents all contingent work, including not only work performed by those in the human cloud, but also by temporary agency workers, independent contractors, SOW consultants, and other temporary workers.

The "sharing economy" is an even broader term sometimes used to describe technology companies that allow individuals with underutilized assets (of any kind) to rent them out to other individuals, who find each other and complete the transaction online or through a digital device. Airbnb is an example of such a company (allowing individuals to rent rooms or housing on a nightly basis), as are on-demand bike rental services such as Lime or Jump. We consider the human cloud part of the sharing economy in cases where the unutilized asset being "shared" is either a worker, labor force or labor service. That said, we do not consider companies where labor or work is not the primary good being exchanged as part of the human cloud (i.e. Airbnb and Zipcar may be part of the sharing economy, but they are not part of the human cloud). Though some claim the term "sharing economy" itself is a misnomer (as the word "sharing" implies platforms don't charge for their services), generally the companies in the "sharing economy" are for-profit entities facilitating economic exchanges and, of course, charging for the service.

The following page provides additional detail about the size and composition of the human cloud in the context of the broader gig economy in which it operates.

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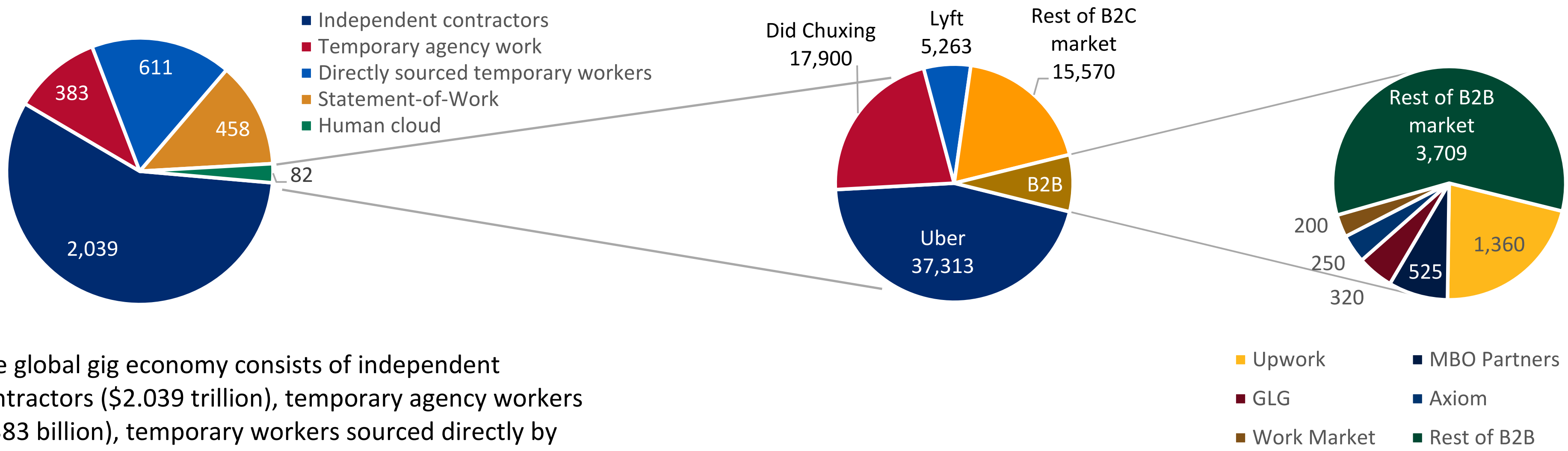
The gig economy in context

Global gig economy revenue by category (USD Billions)[1]

Global 2017 human cloud revenue (USD Millions)



The global gig economy consists of independent contractors ($2.039 trillion), temporary agency workers ($383 billion), temporary workers sourced directly by companies ($611 billion), statement of work consultants ($458 billion), and human cloud workers ($82 billion).

Notably, independent contractors are the largest labor category of contingent work globally, though the bulk of this work happens offline via informal networks.

The charts to the right look in more detail at the composition of the human cloud slice.

There are hundreds to thousands of human cloud businesses globally, though in 2017 just three ridesharing firms generated nearly three quarters of human cloud revenue.

The largest 5 business-related human cloud firms control 42% of the B2B market, though there is a long tail of firms competing in virtually every geographic and occupational niche, evidenced by the number of vendors listed in the appendix of this report.

1. 2015 spend data used for independent contractors, directly sourced temporary workers, and statement of work. 2017 spend data used for temporary agency work and human cloud.
Source: SIA

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Global human cloud market size estimates

Below is a table with our estimate of global gross revenue for all work facilitated by human cloud platforms in 2017, segmented by primary business model, business-to-business (B2B) versus business-to-consumer (B2C) transactions, and whether work was performed remotely (at a location of the worker's choosing) or onsite (at a location specified by the client).

We define gross revenue as the money paid to workers plus the fee for facilitating the transaction in whatever form the fee takes (markup, SaaS licensing fee, deduction from pay, payment for credits, etc.). In cases where a purchase of some physical product is part of the transaction (the case for many online work services companies specializing in on-demand delivery, for example), we have excluded the cost of such products from our market estimates[1].

Online work services made up more than 90% of all human cloud spend, with a substantial portion generated by just two online work services companies (Uber and Didi Chuxing). The following pages show the largest human cloud businesses in 2017, ranked by revenue per industry custom.

	2017 Human Cloud Global Gross Revenue by Business Model and Work Location ($millions)			
	Online staffing	**Crowdsourcing**	**Online Work Services**	**Total**
B2B	**4,864**	**773**	**727**	**6,364**
Onsite	958	189	290	1,438
Remote	3,906	584	436	4,926
B2C	**316**	**7**	**75,723**	**76,046**
Onsite	291	1	75,678	75,970
Remote	25	6	45	76
Total	**5,180**	**780**	**76,450**	**82,410**

Source: SIA

1. For example, a user might purchase groceries from Instacart and have them delivered to her home via that firms' network of on-demand couriers. In our revenue estimates, we would exclude the cost of the groceries, and only include any fees paid to the courier and any fees collected by the platform for facilitating the transaction.

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Largest human cloud platforms – business focused (B2B): 1 of 2

Rank	Company	2017 gross spend	Head-quarters (country)	Primary business model	Primary work location	Year founded	Occupations
1	Upwork	1,360	USA	Online Staffing	Remote	1999	Multi-category freelancers
2	MBO Partners	525	USA	Online Staffing	Mix	1986	Professionals
3	Gerson Lehrman Group[1]	320	USA	Online Staffing	Remote	1998	Expert network
4	Axiom[1]	250	USA	Online Services	Mix	2000	Legal Services
5	Work Market[2]	200	USA	Online Staffing	Onsite	2010	IT/marketing
6	EnvatoStudio[3]	187	Australia	Online Staffing	Remote	2008	Design/creative
7	Fiverr[3]	180	Israel	Crowdsourcing	Remote	2010	Logos/designers
8	Freelance.com[3]	174	France	Online Staffing	Remote	1996	IT/consulting
9	LiveOps	150	USA	Online Services	Remote	2000	Call Center
10	Field Nation	145	USA	Online Staffing	Onsite	2008	IT technicians
11	TalentNet[3]	135	Canada	Online Staffing	Onsite	2013	Various
12	Freelancer[3,4]	122	Australia	Online Staffing	Remote	2009	Design/developer/marketing
13	Toptal	117	USA	Online Staffing	Remote	2010	Programmers/developers
14	Genesys Talent	90	USA	Online Staffing	Mix	2015	Multi-Category
15	Applause	87	USA	Crowdsourcing	Remote	2007	Software/hardware testing
16	Zhubajie[3]	86	China	Online Staffing	Remote	2006	Various
17	Hired.com	85	USA	Online Staffing	Mix	2012	IT, software engineers
18	Gigwalk	80	USA	Crowdsourcing	Onsite	2010	Onsite gigs
19	Elevate Direct[3]	70	UK	Online Staffing	Onsite	2010	Contractors
20	Work Fusion[5]	69	USA	Crowdsourcing	Remote	2010	Data

1. Excludes non-human cloud revenue; 2. Includes Onforce acquisition; 3. Revenue converted to USD at the average daily exchange rate from 1/1/2017 – 12/31/2017 (exchange rates provided by www.oanda.com); 4. Excludes revenue from Freelancer.net acquisition; 5. Part of Work Fusion's revenue service includes work performed by human-assisted bots

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Largest human cloud platforms – business focused (B2B): 2 of 2

Rank	Company	2017 Gross spend	Head-quarters (country)	Primary business model	Primary work location	Year founded	Occupations
21	Crowdworks[1]	65	Japan	Crowdsourcing	Remote	2011	Designers/developers
22	99Designs	60	USA	Crowdsourcing	Remote	2008	Creative/design
22	FieldAgent	60	USA	Crowdsourcing	Onsite	2010	Data collectors
24	One Hour Translation	50	USA	Online Services	Remote	2009	Translation
25	Eden McCallum	47	USA	Online Services	Mix	2000	Management consultants
26	Business Talent Group	45	USA	Online Services	Mix	2007	Management consultants
26	Catalant	45	USA	Online Staffing	Remote	2013	Management consultants
26	Gigster	45	USA	Online Staffing	Remote	2014	Programmers/developers
29	Lancers[1]	43	Japan	Online Staffing	Remote	2008	Creatives/design
30	Coople[1]	40	Switzerland	Online Staffing	Onsite	2010	Industrial/office/clerical
31	Shiftgig	38	USA	Online Staffing	Onsite	2012	Industrial/office/clerical
32	YunoJuno[1]	36	UK	Online Staffing	Remote	2012	Various freelancers
33	PeoplePerHour[1]	35	UK	Online Staffing	Remote	2007	Design/creative
34	Guru	25	USA	Online Staffing	Remote	1998	Various freelancers
34	Twago[1,2]	25	Germany	Online Staffing	Remote	2009	Designers/programmers

1. Revenue converted to USD at the average daily exchange rate from 1/1/2017 – 12/31/2017 (exchange rates provided by www.oanda.com)
2. Acquired by Randstad, June 2016

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Largest human cloud platforms – consumer focused (B2C): 1 of 2

Rank	Company	2017 Gross spend	Head-quarters (country)	Primary business model	Primary work location	Year founded	Occupations
1	Uber	37,313	USA	Online Work Services	Onsite	2009	Drivers/Taxis
2	Didi Chuxing[1]	17,900	China	Online Work Services	Onsite	2012	Taxi drivers
3	Lyft	5,263	USA	Online Work Services	Onsite	2012	Drivers/Taxis
4	GrabTaxi[1]	2,320	Singapore	Online Work Services	Onsite	2012	Taxi drivers
5	Go-Jek[1]	995	Indonesia	Online Work Services	Onsite	2010	Bicycle rides
6	Ola[1]	921	India	Online Work Services	Onsite	2010	Taxi drivers
7	Ele.me[1,2,3]	801	China	Online Work Services	Onsite	2008	Food delivery
8	Gett[1]	600	Israel	Online Work Services	Onsite	2010	Taxi drivers
9	Instacart[2]	500	USA	Online Work Services	Onsite	2012	Shopping delivery
10	DoorDash[2]	383	USA	Online Work Services	Onsite	2013	Delivery (restaurant)
11	Deliveroo[1,2]	331	UK	Online Work Services	Onsite	2012	Delivery (restaurant)
12	Rover[4]	304	USA	Online Work Services	Onsite	2011	Dog sitting
13	Cabify[1,5]	300	Spain	Online Work Services	Onsite	2011	Taxi drivers
14	MyTaxi[1]	278	Germany	Online Work Services	Onsite	2009	Taxi drivers
15	Postmates[2]	250	USA	Online Work Services	Onsite	2012	Delivery
16	Delivery Hero[1,2]	217	Germany	Online Work Services	Onsite	2011	Food delivery
17	Care.com	174	USA	Online Work Staffing	Onsite	2006	In-home healthcare workers
18	GetNinjas[1]	84	Brazil	Online Work Services	Onsite	2011	Multi-category services
19	Shipt[2,6]	69	USA	Online Work Services	Onsite	2014	Delivery (stores)
20	TaskRabbit[7]	67	USA	Online Work Staffing	Onsite	2008	Misc. home services
21	Airtasker[1]	61	Australia	Online Work Services	Onsite	2012	Housework etc.

1. Revenue converted to USD at the average daily exchange rate from 1/1/2017 – 12/31/2017 (exchange rates provided by www.oanda.com); 2. Excludes non-human cloud revenue; 3. Includes revenue from Baidu Waimai acquisition (2017); Ele.me acquired by Alibaba in April 2018; 4. Includes revenue from Dog Vacay acquisition (2017); 5. Owned by Maxi Mobility (also owns Easy Taxi); 6. Acquired by Target (December 2017); 7. Acquired by IKEA (September 2017);

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Largest human cloud platforms – consumer focused (B2C): 2 of 2

Rank	Company	2017 Gross spend	Head-quarters (country)	Primary business model	Primary work location	Year founded	Occupations
22	Handy	60	USA	Online Work Services	Onsite	2012	Handymen
23	Wag	54	USA	Online Work Services	Onsite	2014	Dog walkers
24	Soothe	45	USA	Online Work Services	Onsite	2013	Massage
25	eDaiJia[1]	40	China	Online Work Services	Onsite	2011	Temporary drivers
26	Zeel	25	USA	Online Work Services	Onsite	2010	Massage

1. Revenue converted to USD at the average daily exchange rate from 1/1/2017 – 12/31/2017 (exchange rates provided by www.oanda.com)

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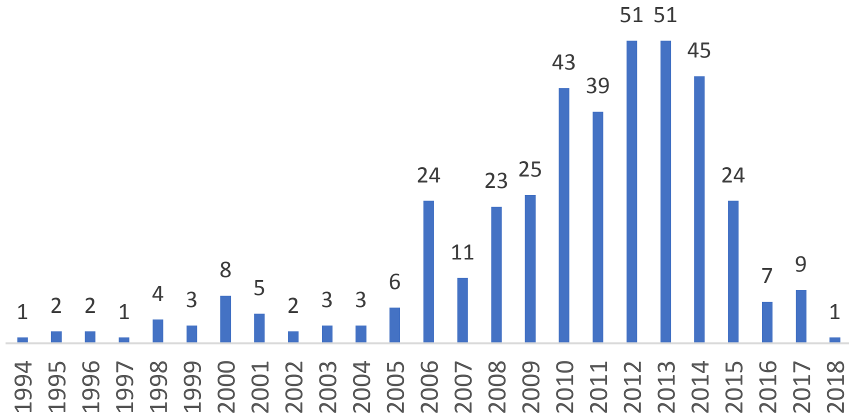
The human cloud from the 90s to today

The chart to the right shows the number of human cloud companies founded since 1994[1]. The first providers came onto the scene in the late 90s. Up until about 2005, the online/on-demand talent concept had not quite caught on (due in part to infrastructure issues such as lower internet penetration, slow internet speeds, and the nonexistence of smartphones), and relatively few firms were founded. The mid 2000s saw an influx of online staffing and crowdsourcing businesses start as internet businesses in general grew in popularity. In 2007, the smartphone was introduced, and in 2009 Uber was founded. Uber's success heralded a second wave of on-demand consumer-focused companies (which could match consumers with available labor in local markets), most offering some "Uber for X" service.

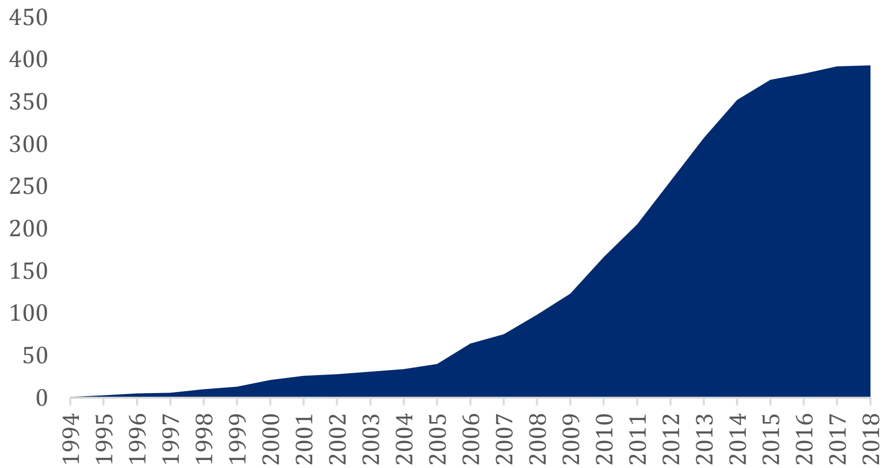
While the number of start-ups appears to be leveling off, one notable trend is the proportion of new human cloud companies that focus on onsite business-to-business work categories. Of the firms launched since 2015 (that are on our radar), a majority specialize in onsite work, with most selling primarily to businesses. This subset of providers is discussed in more detail on page 22.

Despite fewer startups than a few years ago, human cloud revenue nearly doubled last year, primarily due to continued surges by some of the largest providers, as detailed on the following pages 17 and 18.

Number of new human cloud firms per year, 1994-2018 YTD



Cumulative human cloud starts, 1994-2018YTD



Sources: SIA

1. This chart does not account for firms that went out of business but never made it onto our radar, and obviously does not account for firms we are as yet unaware of.

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Human cloud companies by country

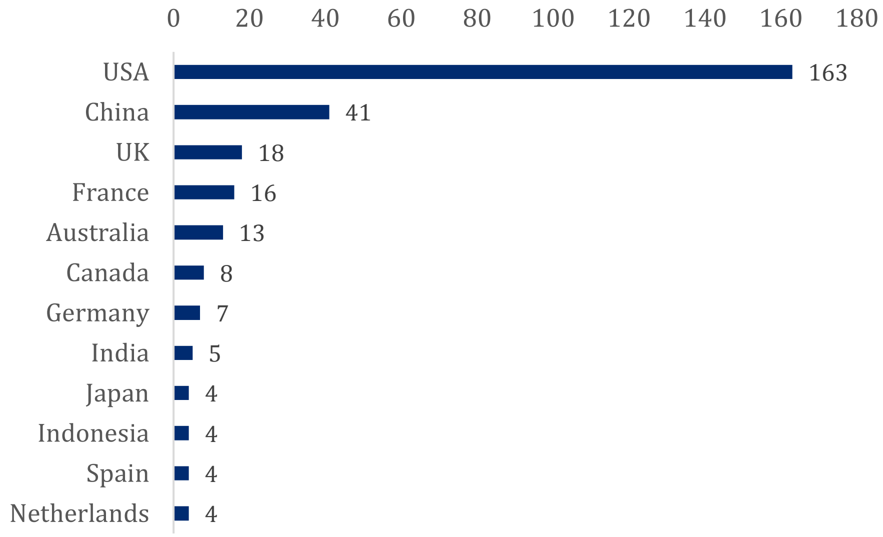
Not surprisingly, the human cloud is a global phenomenon. More than 30 countries were home to one or more human cloud platforms in 2017. The chart to the right shows the countries with the most human cloud companies headquartered in those countries.

The two largest economies in the world by GDP (USA and China) are also home to the most human cloud companies. The USA leads with 163 human cloud firms (of which we are aware), more than the rest of the world combined. On a regional basis, EMEA lags behind both the Americas and APAC.

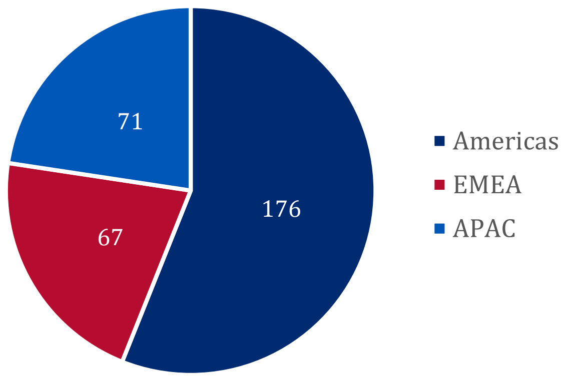
For further details on human cloud companies by country, see the Appendix starting at page 37.

Remote work locations make up a substantial portion of the human cloud market, especially in B2B segment (as shown on the table on page 10). Because remote workers can theoretically complete work from virtually anywhere in the world with an internet connection, a platform's home country need not dictate the source of supply or demand. While human cloud companies handling remote work tend to be headquartered in countries with large economies (as are human cloud companies in general), they create avenues for people to perform work from almost anywhere, especially countries with cheaper labor but the skills required to complete a given task.

Known human cloud companies by country



Known human cloud companies by region



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Human cloud demographics, growth and trends

B2C revenue growth and trends:

Human cloud revenue grew by approximately 65% in 2017, reaching $82.4 billion, driven primarily by gains among ridesharing companies and on-demand delivery platforms. Because these firms account for the vast majority of human cloud revenue, they also accounted for the majority of overall growth.

Ninety-two percent of total human cloud revenue was generated by consumer service-related human cloud applications, with two-thirds generated by just two firms, US-based Uber and China-based Didi Chuxing. Other ridesharing firms such as Lyft, Ola, Grab, and many others accounted for an additional 15%-20% of total human cloud revenue. On-demand delivery companies such as Ele.me, Deliveroo, Postmates, and Shipt generated between 5%-10% of human cloud revenue, while other on-demand companies specializing in other local consumer services (such as home repairs, caregivers, masseuses and dog sitters) another 1%-5%.

While growth decelerated slightly from 2016 levels (when revenue nearly doubled y/y), it is notable that revenue in this segment continues to grow at such an astonishing pace despite being much larger (it is generally very difficult to maintain high levels of growth at increasingly higher revenue levels). For context, by our estimates, Uber *added* nearly as much revenue y/y as Adecco generated in 2017.

B2B revenue growth and trends:

The B2B segment of the human cloud grew 19% in 2017, reaching $6.4 billion. Remote work arrangements – those in which the worker can choose her own work setting and location (that is, the work is not tied to any specific location, like a manufacturing facility) -- are the norm among online staffing platforms, accounting for 80% of that categories' revenue. That said, nearly $1.5 billion worth of work

Composition of human cloud work	
Total human cloud revenue	**100%**
Consumer applications (B2C)	92%
Uber	45%
Didi Chuxing	22%
Total ridesharing	81%-86%
On-demand delivery firms	5%-10%
Other consumer services	1%-5%
Business applications (B2B)	8%
Remote work	6%
Onsite work	2%

Source: SIA

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was performed "onsite" in 2017 (i.e. in a location that the worker was required to be in such as a factory, retail store, or hospital). If you included temporary workers employed by a staffing agency who are connected digitally to assignments via a mobile app (a trend discussed further on page 22), this number would be even higher.

Upwork, the largest online staffing firm by revenue, grew by double digits y/y in 2017, by our estimates, with the majority of growth attributable to gains in its enterprise business. At the same time, a record number of firms generated more than $100 million in revenue 2017, suggesting segment growth is broad based.

Online staffing was again a good business to be in last year, with platforms specializing in specific niches and the higher end of the skill spectrum performing particularly well.

Though online labor marketplaces tend to tout the number of workers available via their platform, in practice, firms that intentionally limit supply (the number of candidates) or used other mechanisms to enhance marketplace quality generally performed better than those that had open, entirely self-service marketplaces.

The crowdsourcing model, despite its novelty, has not grown significantly in recent years, as in practice there are only so many kinds of work that can be micro-tasked and solved via contest. One bright spot is a new generation of service businesses that have been built on the top of crowdsourcing companies such as robotic process automation (RPA), market research firms, customer service platforms, and even companies that will text you (for a small fee) if you'd like to chat with a virtual boyfriend or girlfriend.

Business-related online work services companies generally had a good year, though performance by firm was likely more due to secular drivers in the underlying industry served/solution offered (e.g. legal services, call center, etc.) than by the fact these firms use a distributed network of independent workers to deliver their services.

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Mergers and acquisitions

The table to the right summarizes mergers and acquisitions that happened from January 2017 to May 2018 (a transaction is included if either the target or the acquirer or both are a human cloud company). An acquisition is defined as an investment of more than 50% of a company, and thus this table does not include minority investments (of which there are many more transactions).

Some notable deals in the B2B space include Adecco's acquisition of Vettery (reportedly for more than $100 million), WorkMarkets's acquisition of Onforce from Adecco and publicly traded payrolling behemoth ADP's subsequent acquisition of WorkMarket.

Interestingly, some large retailers acquired B2C-related human cloud companies, perhaps as a means to spur innovation in their organizations. For example, Target acquired on-demand delivery firm Shipt for $550 million while IKEA acquired home services firm Task Rabbit.

Quarter	Target	Target HQ	Acquirer	Price
18Q2	Freelancers.net	UK	Freelancer.com	ND
18Q1	AND CO	USA	Fiverr	ND
18Q1	WorkMarket	USA	ADP	ND
17Q3	OnForce (Adecco)	USA	WorkMarket	ND
18Q1	Uber Southeast Asia	Singapore	Grab	ND
18Q1	Vettery	USA	Adecco Group AG	$100 million+[1]
18Q1	99	Brazil	Didi Chuxing	Approx. $600 million
17Q4	Chauffeur Privé	France	Daimler	ND
17Q4	Foodpanda (India operations)	India	Ola	ND
17Q4	Shipt	USA	Target	$550 million
17Q4	Ola	India	Softbank et al	$1.1 billion
17Q3	TaskRabbit	USA	IKEA Group	ND
17Q3	Uber ride/EATS	USA	Yandex	$100 million (59.3% stake)
17Q2	Veed.me	USA	Fiverr	ND
17Q2	Ele.me	China	Alibaba Group Holding	$1.25 billion investment
17Q1	OneShift	Australia	Programmed Maintenance Services	ND
17Q2	MBO Partners	USA	Primus Capital (private equity group)	ND - minority investment
17Q2	Maple	USA	Deliveroo	ND
17Q2	Angie's List	USA	IAC	$130 million cap. Share exchange or $8.50/share in cash payout.
17Q1	FinitePaths	USA	Lyft	ND

Sources: SIA Daily News; company press releases

1. Price not disclosed by Adecco, but by insiders familiar with the transaction

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Online staffing (definition and examples)

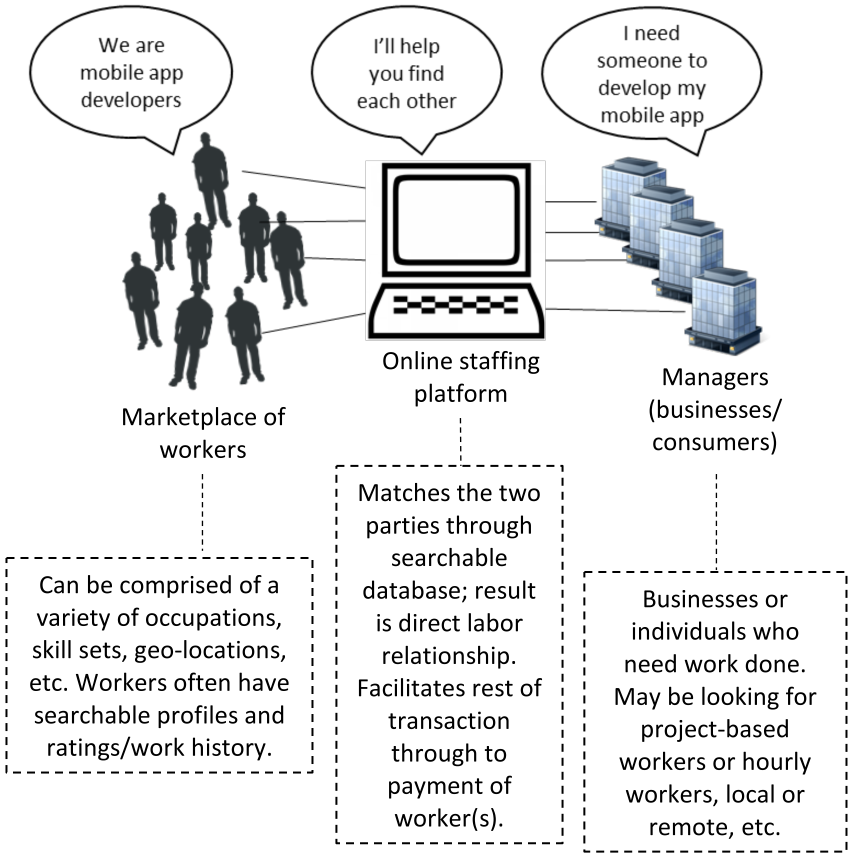
Online staffing is a human cloud model that enables specific hirers and specific (typically contingent) workers to enter into, complete and transact work arrangements through an online or other digital platform such as a smartphone. There is a direct legal relationship between the manager and worker, which the platform enables.

There are a wide variety of online staffing platforms enabling enormous diversity of work types (onsite & remote, professional & commercial, project-based & hourly engagements, etc.). In 2017, 13 firms generated more than $100 million each in online staffing revenue, by our estimates.

Essentially, online staffing platforms are independent worker "marketplaces" where managers can find and engage the worker(s) they need for specific work arrangements. The nature of an online staffing engagement is most often a one-to-one labor relationship. The vast majority of online staffing businesses are B2B.

By our estimates, the online staffing segment generated $5.2 billion in spend in 2017.

Online staffing's labor marketplace



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Freelancer management systems

A freelancer management system (FMS) presents a special flavor online staffing platform. The solution came about to address the needs of large organizations that wanted an enterprise-level tool for managing, organizing, and engaging their independent workforce while minimizing the risk of doing so.

Though FMS was heralded as a vendor agnostic tool that could create talent pools spanning both an FMS's marketplace and enterprise clients' candidate databases, in practice, most vendors marketing themselves as FMS platforms have been used simply as talent suppliers, not unlike their online staffing brethren. Part of the reason for this is because there are very few "vendor agnostic" FMS; each brings its own marketplace of workers, and is unable to tap into other talent marketplaces (for instance, Upwork Enterprise cannot tap into Work Market's worker marketplace and vice versa). The result is that an FMS is not used solely for its technology (as with VMS), but also for the marketplace of talent each brings to the table. Since no one company has a "universal" marketplace (even the largest online staffing firm is a niche operator) this situation limits what could otherwise be a holistic FMS technology (akin to a VMS that could only source from one staffing company).

Two notable developments to address this apparent shortcoming in the market are the advent of so-called "direct sourcing" platforms, which seek to turn clients' internal hiring processes into an online staffing platform of sorts, and the incorporation of human cloud vendors into VMS technology (which, confusingly, may in some cases also be referred to as "self-sourcing" or "direct sourcing"). Examples of the former include firms like Curasion, Fulcrum, TalentNet, ElevateDirect and a number of solutions offered by large MSPs (such as Talent ETL from Agile1), while examples of the latter include Beeline (via its "Partner Ecosystem") and SAP Fieldglass (via its "Digital Network"). This trend is discussed in greater detail on pages 27.

The FMS market may best be characterized as consisting of those online staffing firms that have developed an "enterprise-grade" offering, with the feature set, sourcing, compliance, reporting and workforce management tools and services demanded by large enterprise contingent workforce programs. Regardless of semantics, the capabilities and functionalities of human cloud vendors servicing enterprise clients continues to grow (even if primarily still used as marketplaces).

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Just-in-time staffing – thinning the line between the human cloud and staffing

Just-in-Time Staffing (JITS) is a subset of online staffing platforms. These companies have built smartphone apps capable of providing a staffing-like service for onsite work, most often for low wage, high turnover, blue collar roles. These companies are unique in that they combine the technology of more typical freelancer marketplaces (such as a two-sided digital labor marketplace, ratings system, and algorithmic recruiting, management, and matching) with services that are typical of a more “traditional” staffing firm.

In the US, for example, these companies can provide employer of record service, either themselves (handling statutory employment taxes and workers’ compensation as a traditional staffing firm would) or via a payrolling firm. Outside the US, JITS companies typically (but not always) employ the workers directly under the relevant local temporary agency worker regulations.

JITS companies tend to specialize in work that is very short-term in nature (i.e. shift-based or hourly), and can be filled in a very short period of time (minutes to hours).

The firms operating in this space, as well as staffing companies that have developed similar solutions, are discussed on the following page.

Characterized by:

- B2B, onsite work arrangements
- “Blue-collar” occupations; e.g. hospitality, warehousing
- Short-term work assignments
- High-volume of assignments
- Paid hourly
- Often (not always) acts as the Employer of Record (US) or operates according to temporary agency work law (Europe)
- Gross margins similar to staffing firms
- Work found via phone

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Signs of convergence between human cloud and staffing

Nowhere are the similarities between online staffing and traditional staffing more apparent than with the just-in-time staffing model described on the previous page. Though just-in-time staffing firms primarily use technology – such as a mobile phone application and matching algorithms – to assist in making a match between hirers and workers, the similarities to traditional staffing are striking.

For example, just-in-time staffing companies often employ the workers that find work through their platforms, similar to a staffing company. Similarly, many just-in-time staffing firms perform background checks, drug screenings, and other onboarding/screening services for the workers on their marketplaces -- services not normally associated with a technology company, but par for the course for a traditional staffing company.

The delineation between the two models has been further muddied by staffing firms' foray into offering a similar technology-powered solution. For example, the publicly-listed US industrial staffing giant Trueblue recently built its own just-in-time staffing application called Jobstack, launched in 2017. The firm reported "digital fill rates of approximately 30% [across our entire network]" in its first quarter earnings call, implying roughly $450 million of work transacted via this application[1,2]. Other staffing firms have built similar solutions, such as Adecco (Adia) and French firm Alphyr (Mister Temp), while some have invested (such as Japanese staffing firm Persol's investment in Wonolo). Still many more staffing companies have licensed technology that allows them to offer a similar "out of the box" solution via vendors such as NextCrew, Sirenum, TempBuddy or WorkN. Even some just-in-time staffing companies themselves (Shiftgig, Allwork, et al) also license their software to staffing agencies in addition to being just-in-time staffing marketplaces.

This is a dynamic sector of the industry, comprising a majority of the new firms on our radar. It is by far the most directly competitive model to the staffing industry, and it will be interesting to observe how this space develops over the next several years.

Company	Year founded	HQ	Staffing affiliation
Catapult	2015	UK	
Helpster	2016	Indonesia	
Jobble	2014	USA	
ShiftGig	2012	USA	
Sidekicker	2012	Australia	
Coople	2010	Switzerland	
Werkly	2013	USA	
Wonolo	2013	USA	Persol, AMN Healthcare
JobandTalent	2009	Spain	
Adia	2017	Switzerland	Adecco
Erandoo	2017	USA	Integrity
Jitjatjo	2015	USA	
Mister Temp	2015	France	Alphyr
Inploi.me	2015	UK	
Mon Hotesse	2015	France	
Cerebro	2015	USA	
JobStack	2017	USA	Trueblue
Apli	2016	Mexico	
Work Llama	2016	USA	
bruce.work	2016	France	
Steady	2017	USA	
OneShift	2012	Australia	
Snag.work	2017	USA	
Hyr	2015	USA	Mitchell Martin

1. Source: Trueblue 1Q18 earnings transcript
2. Calculated by multiplying Trueblue's 2017 revenue by Peopleready's share of revenue and multiplying that by percent of jobs matched through app ($2.5 billion x 60% x 30% = $450 million)

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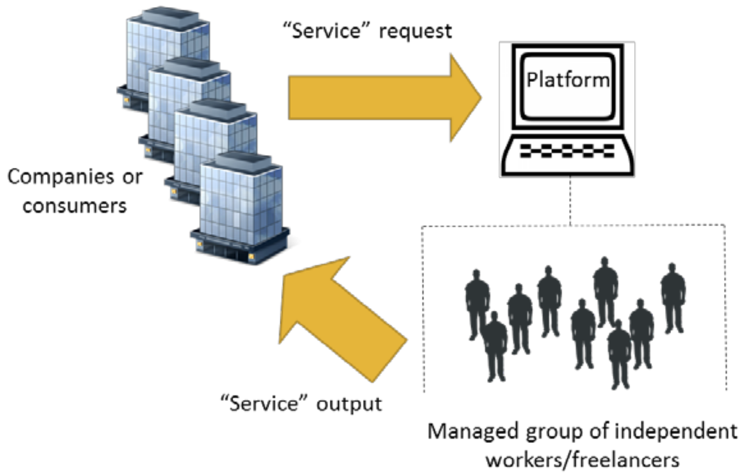
Online work services

Online work services is a human cloud model that enables the delivery of certain specialized services (customer service, translation, writing, taxi rides, etc.) performed by workers organized and managed by the platform provider. The client is purchasing an outcome, not a labor relationship. Though the model was launched by LiveOps in 2000, only recently have more businesses (Uber, Rev, Postmates, Deliveroo et al.) begun appearing in this segment. In 2017, online work services firms generated $76.5 billion in gross spend. The majority of that was generated by two on-demand ridesharing firms, US-based Uber and China-based Didi-Chuxing.

The common denominator of online work services platforms is that they offer a specialized service made possible by the labor of freelancers. A company that sends its documents to OneHourTranslation to be translated, for example, does not search a marketplace (as with online staffing) to find a qualified individual or team to do the work. Instead, it looks to OneHourTranslation to manage/organize the workforce and deliver a finished product/service through its platform, and the platform itself, not the freelancer, is ultimately responsible for the outcome.

Online work services has experienced explosive growth in recent years, primarily driven by the meteoric rise of mobile-phone enabled "localized" consumer service platforms. The main services offered by such platforms are ridesharing, food/other delivery, and cleaning/household services. Uber, the global ridesharing behemoth and largest human cloud firm by revenue, had more than seven times as much spend running through its platform as all online staffing providers combined in 2017. Uber's success has led to a myriad of imitators applying their business model to other consumer services (with varying degrees of success).

Online work services platform model



Examples of online work services providers	
B2B companies	**Service delivered**
LiveOps	Call center
Axiom	Legal services
Applause	Software testing
Business Talent Group	Management consulting
B2C companies	**Service delivered**
Deliveroo	Food delivery
Instacart	Shopping delivery
Uber	Drivers/taxis
Handy	Home cleaning services

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Crowdsourcing

Crowdsourcing is a model that enables work assignments to get parsed out and performed (often as disaggregated "micro-tasks") by a far-flung "crowd" of independent workers who perform (paid or otherwise compensated/incented) work at will. Typically, the client of a crowdsourcing platform is purchasing "an outcome", not a labor relationship.

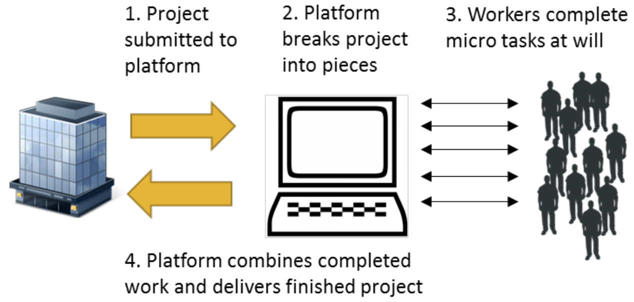
Crowdsourcing companies generated $0.8 billion in gross spend worldwide in 2017, by our estimates. There are two distinct delivery models that crowdsourcing platforms can take:

- **Distributed micro-task model** (e.g. Mechanical Turk, Onespace, Gigwalk, ClickWorker, Crowdflower)
- **Contest-based model** (Fiverr, Innocentive, PreSans, Kaggle, TopCoder, 99Designs)

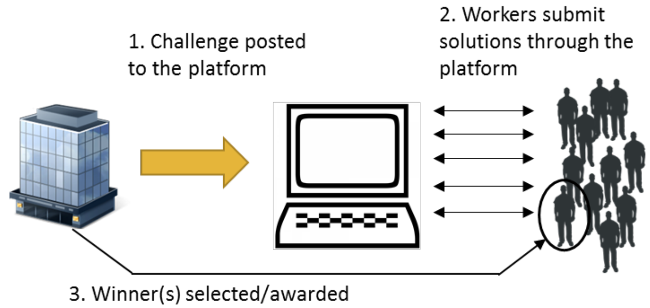
In the distributed micro-task model, projects are broken down by the platform provider into components, and then individually completed piecemeal by a "crowd" of (most often) geographically dispersed workers, each working independently. The results are uploaded back on to the platform and aggregated into a finished solution that is then delivered to the client.

In the contest-based delivery model (common for R&D projects, outsourced innovation, design/creative projects and marketing campaigns), a client describes the solution or outcome it desires (a cure for AIDS, a new logo, an algorithm that uses predictive modeling to forecast future insurance claims, etc.), and posts it to the platform. Individuals and/or networked teams around the world then compete to solve the challenge, with "winner(s)" selected and compensated based on the merit of their submissions.

Distributed micro-task model



Contest-based model



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Enterprise use of human cloud services

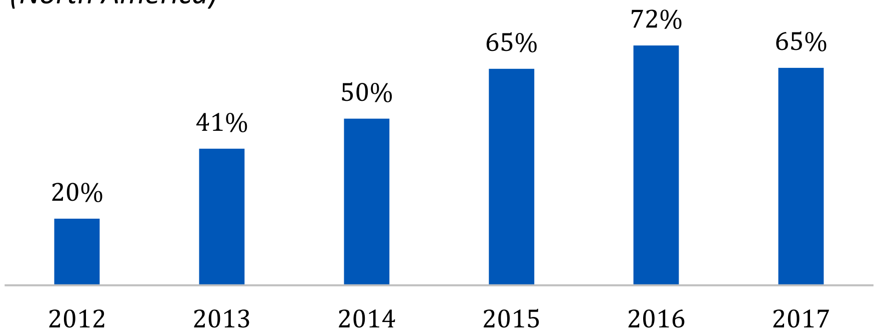
The charts to the right show the trend in familiarity with and use of online staffing platforms among large North American organizations (more than 1,000 FTEs) from 2012-2017.

As seen in the top chart, the percent of company respondents familiar with online staffing platforms rose from 20% in 2012 to 65% in 2017, as the service category has developed.

The percent of respondents reporting use of online staffing platforms has grown from virtually none (3% in 2012) to a still low (but much higher, relatively speaking) 13% in 2017. While the percent of companies reporting use of online staffing has not changed much over the last three years, the percent of firms considering use within two years (21%) suggests future opportunity for this service.

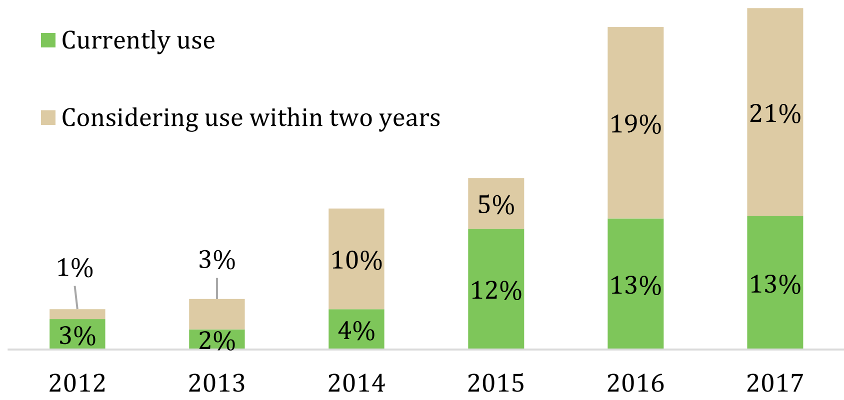
One limitation of this data is that it only accounts for the *presence* of use in a program, and does not account for the *volume* of use. Our research suggests that even at the most progressive, forward-thinking programs, the actual level of spend on workers sourced via human cloud vendors falls somewhere in the $1 million to $15 million range. It is notable that though 13% of survey respondents reported use of online staffing, human cloud spend remains a “drop in the bucket” relative to total managed contingent workforce spend at large companies. That said, low adoption and growing interest imply a substantial opportunity if the model is able to demonstrate efficiencies and cost savings versus other labor sourcing channels.

Percent of respondents familiar with online staffing platforms (North America)



N (2017) = 121

Percent of respondents using or considering online staffing platforms (North America)



Source: 2017 Workforce Solutions Buyers Survey, SIA

N (2017) = 121

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Why don’t human cloud solutions have more traction in large enterprises?

The findings on the previous pages are surprising, given the promise of these types of solutions as well as the historical context of rapid VMS adoption when that technology was introduced to the talent acquisition market. Why haven’t human cloud solutions gained more traction among large contingent workforce programs? The lack of adoption thus far is for four primary reasons:

Contingent workforce program managers are not comfortable with remotely performed work. Many engagement managers seem uncomfortable with or lack knowledge about work performed remotely, and remote work comprises the majority of B2B human cloud. Though pundits, analysts, and HR leaders tout the benefits of enabling more flexible kinds of work in theory, in practice most large organizations seem reticent to embrace this kind of work, and, to be fair, much work requires a physical presence. In interviews with program managers, many indicated confusion about how remote workers are vetted and managed, and some expressed risk management concerns, especially related to company assets and IP rights.

Human cloud companies (still) generally don’t address the question: who employs the worker? Many human cloud firms (including FMS providers) argue they are merely the “technology platform” in between the workers and an organization, and thus classify workers as independent contractors by default. This puts the onus of figuring out who should employ the worker (or if they even should be employed) on the client organization. With VMS, there is rarely a question of who employs a worker requisitioned through the technology in a typical “staff aug” arrangement; the staffing supplier will employ that worker. With FMS and other human cloud solutions, the issue of worker classification is not inherently resolved, and thus despite technological prowess, the uncertainty regarding employment status has been a roadblock to greater adoption. To many contingent workforce program managers, rightly or wrongly, “freelancer” means independent contractor, and “independent contractor” means misclassification risk.

The solutions and breadth of coverage are wrongly prescribed and marketed incorrectly. Many human cloud vendors market themselves as amorphous “gig economy” companies that can solve all of an organization’s contingent workforce problems. In reality, even the largest B2B human cloud vendors are niche providers primarily used by clients as suppliers of labor services, with firms most often specializing in a specific occupational category or vertical. By not being clear about the markets they serve and problems they solve, many companies have created a “cloud” of confusion.

Being online doesn’t necessarily decrease friction: Just because a platform delivers a service online does not mean that it is inherently better than its offline counterpart. Indeed, the online staffing model can potentially introduce new kinds of friction in the hiring process. For example, in a “staff aug” arrangement, a staffing firm might present a client with a single candidate. In an online platform, a manager may be presented with dozens of candidates who bid on a project, each of whom may have a different price point, skills and qualifications, with no easy way to determine who is the best fit at the best price. Firms have attempted to decrease this friction in a number of ways, among them “productizing” different labor services, providing “shortlisting” services/ranking applicants, intentionally limiting supply to increase marketplace quality, or even making the hiring decision on behalf of the client (a la the Uber model).

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Partnerships between VMS and human cloud vendors

Of the many interesting trends regarding the human cloud, one of the more notable is the integration of human cloud applications into vendor management systems. Though it is still very early days, these integrations could provide the framework for more robust enterprise adoption of human cloud vendors.

The two largest VMS in the world measured by spend under management, SAP Fieldglass and Beeline, have each publicly announced human-cloud related initiatives, while the third largest, DCR Workforce, has also reportedly built human cloud vendor management capabilities.

Beeline has announced partnerships with at least four vendors, with plans to introduce more. Fieldglass has announced partnerships with nine vendors, and will likely introduce more as well as the initiative matures. DCR Workforce has not publicly announced the firms it is integrated with.

In this VMS-human cloud integration, the human cloud vendors are treated essentially as staffing suppliers, though they may be set up to receive job requisitions before the traditional staffing supply base. Jobs are posted through the VMS tool and programmatically sent to the human cloud vendors, who send back candidate profiles against those positions that clients can choose whether or not to accept. In some instances, a client-selected payroll and compliance vendor will handle the payroll and employment of the worker. Workers who participate in this arrangement generally interact with the human cloud platform's user interface as opposed to the VMS's, with data fed between the two platforms via API[1]. Though limited, early evidence suggests that all-in costs (i.e. including payroll and statutory expenses) for workers sourced via a VMS-enabled human cloud marketplace are 10%-15% less than a traditional staffing channel.

While this arrangement is promising, there will likely be growing pains. Creating a standard means of sharing data between varying technology platforms is one challenge. Another is creating a consistent user experience across platforms; many human cloud vendors have optimized their product around a particular niche or vertical, and start-ups may be hesitant to surrender the client user-experience to a VMS. Furthermore, like traditional staffing firms before them, providers may not be keen on the idea of having external processes and standards imposed between them and end-users/clients. Pricing also varies considerably from firm to firm, and standardized pricing structures are still being figured out. Last, at least one VMS vendor (PRO Unlimited) reported that, despite willingness to incorporate human cloud vendors into their programs, the human cloud vendors were unsuccessful in actually filling the requisitions of the client.

Announced partnerships

Beeline
Crowdstaffing
InterviewJet
Interactive Resources
Jobaio
Genesys
SAP Fieldglass
Catalant
The Data Incubator
freelance.de
Genesys
MBO Partners
TalentNet
TalonFMS
twago
WorkMarket

Source: Press releases, company websites

1. API = application programming interface. A way for two technology systems to share data.

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What is driving use of human cloud applications at large organizations?

Though progress has been slow as noted on the previous pages, online staffing vendors have started gaining adoption by large companies. We address growth drivers on this page. In our 2016 Workforce Solutions Buyers Survey for North America, we asked companies with 1,000+ employees that reported using online staffing "What are the primary reason(s) your organization uses online staffing platforms? Select all that apply." Note that this survey question did not ask why online staffing platforms are used as opposed to other staffing solutions, only why they are used in general.

As shown in the table at right, the most common reason for using online staffing platforms among buyers surveyed was greater talent access (63%), corroborating the idea that human cloud companies are perhaps best thought of as another kind of talent supplier.

At 50%, reducing costs was the second most frequently cited item. Using workers sourced through a human cloud company may save on recruiting costs and potential severance pay. Additional cost savings may be realized by expanding the geographic scope from which a worker can be sourced (for instance hiring a contingent software engineer based in Hyderabad, India instead of San Francisco, CA).

Expanding skills coverage, cited by 46% of respondents, is closely related to greater talent access, which is discussed above.

The variety of reasons cited suggests online staffing platforms are used for different purposes among different companies.

What are the primary reason(s) your organization uses online staffing platforms? Select all that apply.

	Response %
Greater talent access	63%
Reduce costs	50%
Expand skills coverage	46%
Ease of use	38%
Centralize management/control	33%
Decrease legal risk	25%
Reduce time to deploy workers	25%
Track spend better	17%
Other (please specify)	8%
	N = 24

Source: 2016 Workforce Solutions Buyers Survey North America, SIA

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Do workers really want to be independent?

An interesting narrative that has been propagated by human cloud vendors and other pundits is a “shift” in preference towards contingent work generally, and “freelancing” specifically. According to this narrative, talent is increasingly turning its back on full time work, instead preferring the freedom that comes from working independently.

SIA produced a study in 2016 of approximately 5,000 working US adults in which we asked respondents which of the work arrangements in the table to the right they would most prefer. Respondents were only allowed to choose one arrangement.

It is notable that more than 60% chose a full-time job (combining the 36% selecting “full-time salary” and the 26% selecting “full-time hourly”). Adding to that the 16% who chose part-time work (which is not necessarily contingent), means that more than three quarters of respondents did not choose an explicitly contingent arrangement. In this light, statements that most people want to be independent seem a bit overblown.

It is important to keep in mind, however, that respondents were only allowed to choose one arrangement. Therefore, though less than a quarter chose contingent work as their first preference, many may be happy to perform such work as an additional job for supplemental income or as part of a transition between jobs, and the preponderance of “moonlighting” in the human cloud suggests this is actually quite common. It will be interesting to observe as time progresses whether a more structural shift occurs; that is, to what extent workers begin to seek (and are able to find) “full time” work from online platforms.

Most Preferred Work Arrangement	Percent of Workers
Full-time salary	36%
Full-time hourly	26%
Part-time hourly	16%
Running my own business	9%
Working as an IC or freelancer	6%
"Gig" work through web or app	2%
Other	2%
Temporary worker through agency	1%
Work for consulting firm (Paid between assignments)	1%
Temporary worker employed directly by company (not assigned by staffing agency)	1%

Source: The Gig Workforce: Market Estimates and Features of the US Contingent Workforce, SIA

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The "Uber" effect on taxi employment

Despite the findings on the previous page, the human cloud has provided millions of individuals with the opportunity to work (or find more work). As one example, the top chart shows the number of US non-employers in the Taxi and Limousine industry from 1997-2010 (i.e. self-employed individuals with no employees, a proxy for US taxi drivers). The bottom chart shows the same data, but for California and New York over a shorter period of time.

In 1997, there were just over 100,000 taxi drivers in the US. Annual employment growth in the industry varied between zero and 9% until 2012. Since then, the number of independent taxi drivers increased dramatically, more than doubling over the last two years on record.

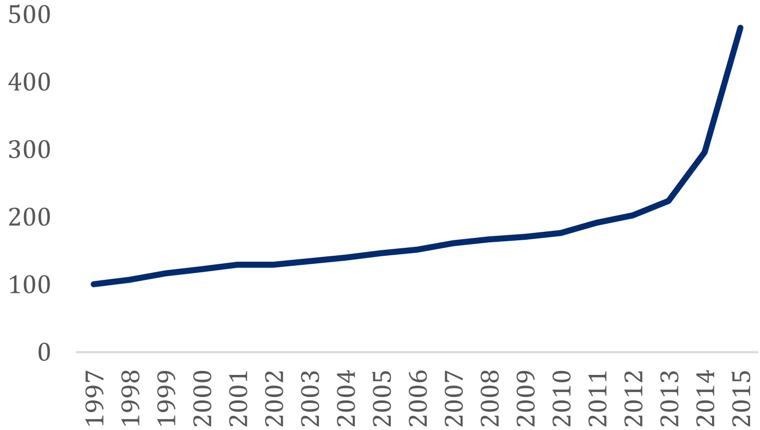
Why was there such a significant spike in taxi (self) employment? One explanation is on-demand ridesharing apps. Uber launched its service in San Francisco in 2010, and Lyft launched in the same city in 2012. Uber reportedly now has approximately 833,000 driver partners participate in a year in the US[1], suggesting the upward trend has continued since 2015.

The author is not implying that many more individuals becoming taxi drivers is necessarily the best economic outcome for US workers. That said, more than anything, the data suggests the opportunity available to both human cloud providers and staffing companies: a large number of people are willing to work if there is opportunity available and it is easy and accessible enough.

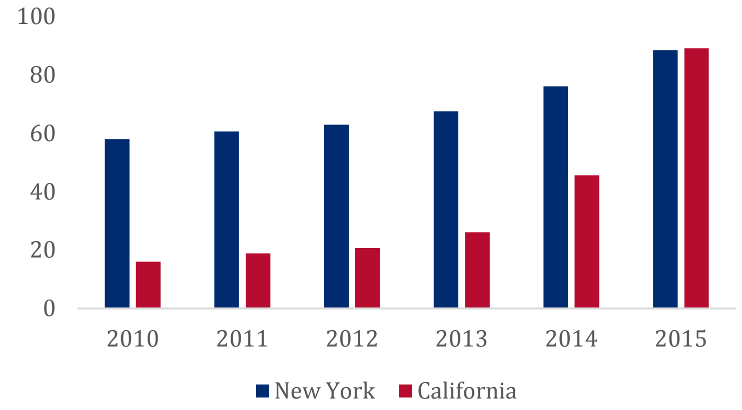
Similar data is difficult to tease from online staffing firms, mostly because of the preponderance of remote work, which isn't captured as cleanly in census data. That said, the millions of individuals registered to websites like Freelancer and Upwork (many of whom live in developed economies) suggest there is a labor force ready and waiting for demand to catch up.

1. https://www.epi.org/publication/uber-and-the-labor-market-uber-drivers-compensation-wages-and-the-scale-of-uber-and-the-gig-economy/

The "Uber effect": US non-employers in NAICS 4853 – Taxi and Limousine Services, 1997-2015 (000s)



The "Uber effect": US nonemployers in NAICS 4853 – Taxi and Limousine Services, California and New York 2010-2015 (000s)



Source: US Census Bureau

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Temporary worker plans regarding online staffing

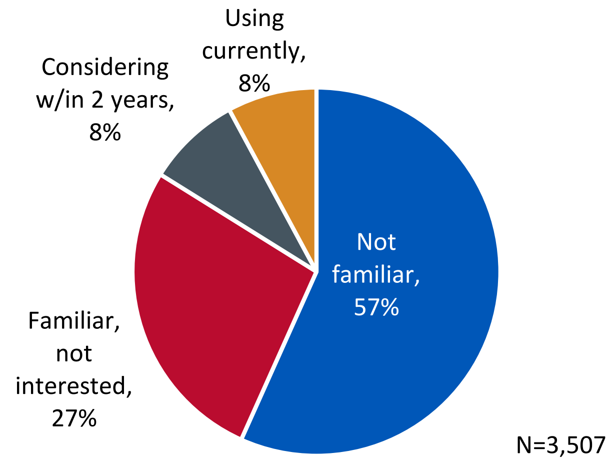
In our 2017 US Temporary Worker Survey, we asked workers assigned by a staffing agency to a temporary job about their familiarity with and participation in business and consumer-related human cloud services. The results are summarized to the right.

More than half of temporary workers (57%) are not yet familiar with business-related human cloud services. Another 27% percent are familiar with such services but not interested, 8% are considering using them within two years, and 8% are currently earning at least some income from business-related human cloud services. A higher proportion of temporary workers are familiar with consumer-related human cloud work, though this did not translate into higher use or planned use among temporary workers of such services.

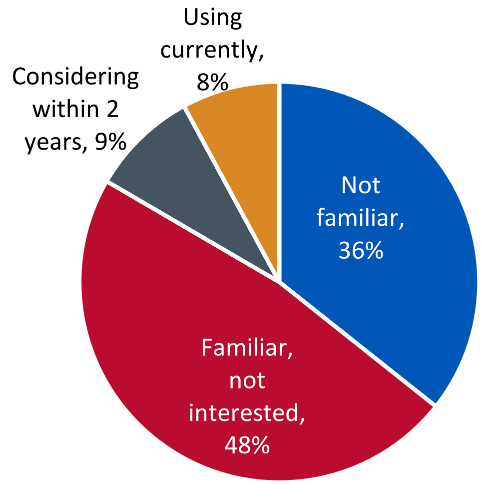
Though the 8% of temporary workers that participate in business-related human cloud work is a small share, it is an increase of three percentage points from 2017 levels. Another silver lining for human cloud vendors is that, of those already familiar with business-related human cloud services (43%), nearly a fifth are currently taking advantage of it in some fashion (8% of 43%), not to mention those considering use within two years. As familiarity increases, the share of temporary workers using online staffing should increase well beyond 8%.

The following page looks in more detail at the earnings distribution of those temporary workers that earned income via the human cloud.

Familiarity with and use of business-related human cloud services



Familiarity with and use of consumer-related human cloud services



N=3,524

Source: 2018 Temporary Worker Survey, SIA

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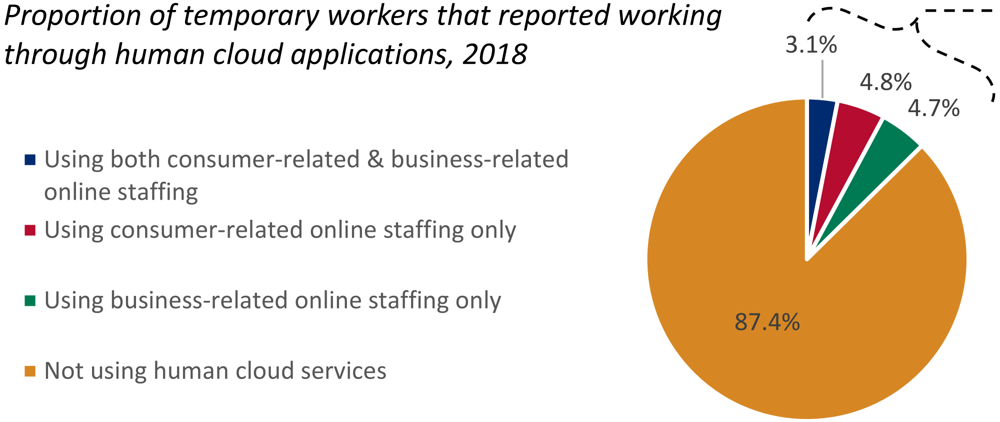
Distribution of human cloud income for temporary workers

As seen on the previous page and in the pie chart below, a relatively small share of temporary workers participate in consumer and business-related human cloud services. For those that do, we asked the proportion of current income being generated by such services. The distribution of human cloud earnings (as a proportion of total earnings) for temporary workers is shown to the right.

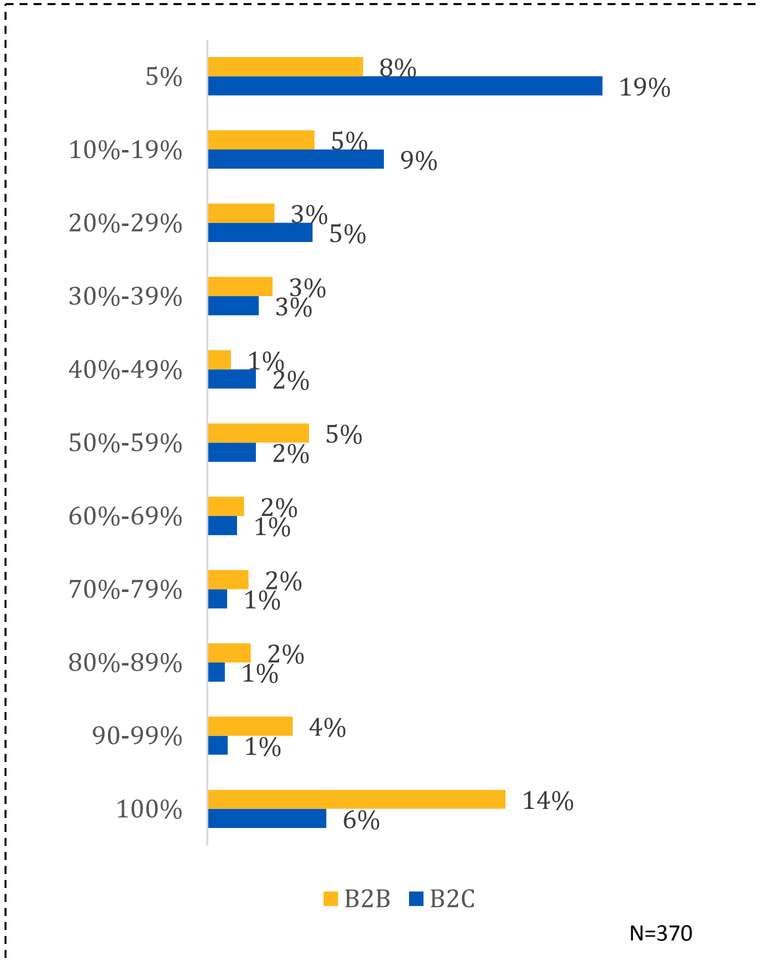
There was a wide distribution of earnings for both business and consumer-related human cloud work. The most common proportion of income earned via B2B human cloud work was the highest option offered, 100% of income, which was selected by just 14% of respondents. The distribution of income earned via B2C human cloud work was the exact opposite, with the most common response being the lowest offered option, 5% of income, selected by 19% of respondents.

In both cases, the high distribution suggests that temporary workers are open to alternative work arrangements to earn additional income.

Proportion of temporary workers that reported working through human cloud applications, 2018



*Among temporary workers currently working via the human cloud, what percent of their income does it generate?**



Source: 2018 Temporary Worker Survey, SIA
*Proportions don't sum to 100% due to rounding

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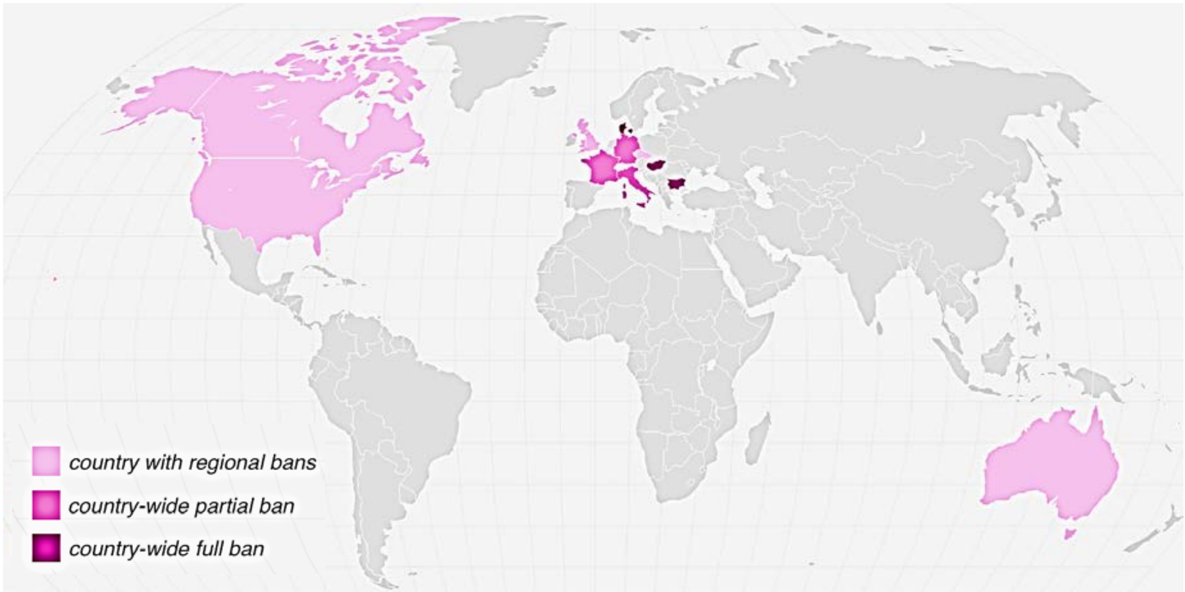
The legal environment for the human cloud

Legal challenges around worker classification have cast a shadow on an otherwise sunny human cloud market. Most human cloud firms position themselves as technology platforms that connect workers to work, but generally do not employ the workers that find work on their platform. In practice, this has meant that most human cloud workers are classified as self-employed by default. However, in most developed nations, employment classification is determined by the *nature of the work itself,* regardless of the status “dictated” by an employment contract. While employment law varies from jurisdiction to jurisdiction, there is generally some criteria used to determine the proper classification of a worker (for example the level of control a worker has in deciding *how* work gets done is one factor considered by many courts internationally).

Staffing agencies might wonder why they should be held responsible for employment taxes and social charges while online intermediaries are exempt (we note that in some cases, even staffing firms classify workers as self-employed by default, for example with temporary doctors or certain kinds of IT workers). The main point is that employment law is tricky, and many governments have, so far, failed to update legislation to address new online intermediaries although, given pressure to increase tax revenues, they are now starting to pay closer attention to the space. For example, the Taylor review was a comprehensive study commissioned by the UK government into modern employment practices to examine the increasing take-up of gig work to ensure this form of employment is fair to all parties and to recommend policies.

Countries where Uber faces partial or full bans



Source: Quartz, September 2017

Globally, the response from regulators has been mixed – and mostly focused on B2C services such as ridesharing and on-demand couriers. In the US, Florida passed the Transportation Network Companies Act (HB 221) which designates drivers for ride-sharing companies in the on-demand or gig economy as “independent contractors” as long as the “transportation network company” (TNC) meets four criteria that are currently met by Uber, Lyft,

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and other similar companies, demonstrating it is possible for human cloud companies and governments to find a middle ground. Meanwhile in California, the Supreme Court adopted the “ABC” test for determining whether workers are employees or independent contractors, a much more restrictive view of gig work, which presumptively assumes that workers are employees unless three specific criteria are met.

In the UK, GMB, a union representing professional drivers, won a case against Uber that determined Uber had acted unlawfully by not providing drivers with basic workers’ rights. More recently, the GMB is also taking legal action against Amazon delivery firms over employment rights in a case which might have broader implications for on-demand delivery firms operating in that country. Meanwhile, Deliveroo has faced legal challenges over the employment status of its couriers in the UK, Netherlands and, most recently, Spain.

The purpose of this paper is not to litigate the proper employment status for human cloud workers, or advocate one testing or classification method versus another. In fact, one of the biggest challenges with employment law is that two courts in the same country looking at similar cases might (and, in fact, have) come to different conclusions about the proper classification for a given worker. Probably the most important point to note is that the employment classification of a worker is a separate consideration than the method or source used to procure a worker. For example, in enterprise programs in which human cloud vendors are being used, there is often a third party payrolling and compliance firm embedded in the process to ensure that workers sourced via the human cloud are engaged compliantly.

Whether the legal challenges faced by Uber and others spread to other parts of the human cloud remains to be seen. While the likely evolution of the legislative environment seems likely to create some disruption to the human cloud business model, we do not believe it will seriously impair growth of the human cloud, and should be seen as the growing pains of a fresh industry.

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Where does the human cloud go from here?

We estimate that human cloud companies generated $82.4 billion in spend worldwide in 2017, with new companies continuing to spring up and a new global underwriter of growth financing in the form of the large Japanese bank-turned-VC, Softbank. While the human cloud represents a small portion of contingent work overall (and an even smaller share of non-contingent earnings), it also continues to grow substantially and online labor platforms have the potential to provide substantial economic opportunity for tens of millions of workers globally.

The industry in general has turned from a "growth at any cost" mindset to one focused more on profitability, with a fair share of firms going out of business. There has also been some minor consolidation in the industry, and it would not be surprising to see more deals in the next few years, and perhaps a few IPOs as well. Overall, we expect human cloud growth to continue, spurred on by increased internet access globally, increased comfort among job seekers with the idea of working through an app, increased digitization of work (which lends itself to being performed remotely), and more transactional data driving better algorithms and hiring decision making.

On-demand consumer companies like Uber and Instacart have proved there are individuals willing to work if firms will only make it easy and accessible enough to do so, and that consumers are willing to pay for speed, convenience and quality outcomes. In a B2B context, we have seen an increase in the number of firms and revenue associated with the just-in-time staffing model, and expect this trend to continue, particularly as more staffing companies invest in their own digital apps to deploy and connect temporary workers to work.

Perhaps counter-intuitively, a recession could spur growth in the B2B segment, as during a recession companies typically look for any way possible to cut costs, and using a globally distributed team of workers via an online platform might look a lot more appealing if it can improve a firm's bottom line. A recession would likely have the opposite effect on consumer-focused human cloud companies as, during recessions, consumers typically rein in discretionary spending, such as an Uber ride to the city for a night of drinking, or paying to have someone deliver your groceries.

We are already seeing a number of incumbent talent intermediaries/providers from around the wider workforce solutions ecosystem, such as management consulting firms, experiment with the human cloud, and this experimentation is likely to not just continue, but to accelerate. There have been a number of notable investments and partnerships formed between providers – some public and some not – as well as examples of hybrid staffing/human cloud firms. In the future, we will likely see other hybrid models emerge as staffing firms and other talent intermediaries explore digital transformation, and it seems increasingly likely that the future is one where there is no real difference between "staffing" and "online staffing."

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Appendix: List of business-focused human cloud firms

Company Name	Website	Year founded	Primary business model	HQ	Work location	Occupations
680	www.680.com	2006	Crowdsourcing	China	Remote	Multi-category
2478	www.2478.com	2012	Crowdsourcing	China	Remote	Marketing-related
10EQS	www.10eqs.com	2010	Crowdsourcing	USA	Remote	Consultants
10x Management	www.10xmanagement.com	2012	Online Staffing	USA	Remote	High end developers
28bux	www.28bux.com	2010	Crowdsourcing	China	Remote	Marketing-related
51cxb	www.51cxb.com	2006	Crowdsourcing	China	Remote	Marketing-related
51ps	www.51ps.com	2006	Crowdsourcing	China	Remote	Design
52Design	www.52design.com	2001	Crowdsourcing	China	Remote	Design
99Designs	www.99designs.com	2008	Crowdsourcing	USA	Remote	Creative/design
a-connect	www.a-connect.com	2002	Online Work Services	Switzerland	Mix	Consultants
Adepto	www.goadepto.com	2013	Online staffing	Australia	Mix	Various
Adia (Adecco)	www.adia.com	2017	Online Staffing	Switzerland	Onsite	Temporary staff, hospitality
Alegion	www.alegion.com	2011	Crowdsourcing	USA	Remote	Micro tasks/data
All Work	www.allworknow.com	2014	Online Staffing	USA	Onsite	Retail staff
Amazon Mechanical Turk	www.mturk.com	2005	Crowdsourcing	USA	Remote	Micro tasks
Apli	www.apli.jobs	2016	Online Staffing	Mexico	Onsite	Temporary staff
Applause	www.applause.com	2007	Crowdsourcing	USA	Remote	Software/hardware testing
Arise	www.arise.com	1994	Online Work Services	USA	Remote	Call Center
Axiom	www.axiomlaw.com	2000	Online Work Services	USA	Mix	Legal Services
Baiwanmeng	www.baiwanmeng.com	2012	Crowdsourcing	China	Remote	Multi-category

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STAFFING INDUSTRY ANALYSTS

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bajie1	www.bajie1.com	2011	Online Staffing	China	Remote	Multi-category
Band of Hands	www.bandofhands.com	2015	Online Staffing	USA	Mix	Multi-category
BangCN	www.bangcn.com	2011	Crowdsourcing	China	Remote	Work for Disabled
Battle of Concepts	www.battleofconcepts.nl	2001	Crowdsourcing	Netherlands	Remote	Ideas/college students
Bengbeng	www.bengbeng.com	2008	Crowdsourcing	China	Remote	Marketing-related
BizReef	www.bizreef.com	2007	Online Staffing	Israel	Remote	General freelancers
Bonsai	www.hellobonsai.com	2015	Online Staffing	USA	Remote	Various contractors
Boonle	www.boonle.com	2014	Online Staffing	USA	Remote	Authors/producers
bruce.work	www.bruce.work	2016	Online Staffing	France	Onsite	Blue collar
Business Talent Group	www.businesstalentgroup.com	2007	Online Work Services	USA	Both	Management consultants
Cahootify	www.cahootify.com	2014	Online Staffing	UK	Onsite	Movie crews
Catalant (Hourly Nerd)	www.catalant.com	2013	Online Staffing	USA	Remote	Mgmt. consultants
Catapult	www.joincatapult.com	2015	Online Staffing	UK	Onsite	Retail and hospitality workers
Ceke	www.iceke.com	2007	Online Staffing	China	Remote	Ching (Fortune)
Cerebro	www.cerebroinc.com	2015	Online Staffing	USA	Onsite	Registered nurses, surgical technicians
Challenge.gov	www.challenge.gov	2010	Crowdsourcing	USA	Remote	Innovations/R&D
Chaordix	www.chaordix.com	2006	Crowdsourcing	Canada	Remote	Marketing
Clarity	www.clarity.fm	2012	Online Staffing	USA	Remote	Startup founders/business advice
Clickworker	www.clickworker.com	2005	Crowdsourcing	Germany	Remote	Marketing/data
CloudFactory	www.cloudfactory.com	2010	Crowdsourcing	USA	Remote	Data

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CloudPeeps	www.cloudpeeps.com	2014	Online Staffing	USA	Remote	Marketing, copywriting, admin
Coconala	www.coconala.com	2013	Online Staffing	Japan	Remote	Various/miscellaneous
Cocoon Market	www.market.hkcocoon.org	na	Online Staffing	Hong Kong	Mix	IT, developers
codeable	www.codeable.io	2012	Online Staffing	Denmark	Remote	Word Press developers
Codeur	www.codeur.com	2006	Crowdsourcing	France	Remote	Developers
CogniStreamer (Ernst and Young)	www.cognistreamer.com	2000	Crowdsourcing	Belgium	Remote	Idea generation
Comet	www.hellocomet.io	2016	Online Staffing	USA	Mix	Freelancers
Coople	www.coople.com	2010	Online Staffing	Switzerland	Onsite	Industrial/office/clerical
Coworks	www.coworks.com	2009	Online Staffing	Sweden	Remote	Creatives
Crew	www.pickcrew.com	2012	Online Staffing	Canada	Remote	Designers/developers
Crossover	www.crossover.com	2014	Online Staffing	USA	Remote	Developers/IT
Crowdsite	www.crowdsite.com	2009	Crowdsourcing	Netherlands	Remote	Designers/creatives
CrowdSpring	www.crowdspring.com	2007	Crowdsourcing	USA	Remote	Designers
Crowdworks	www.crowdworks.jp	2011	Crowdsourcing	Japan	Remote	Designers/developers
Curasion	www.curasion.com	2014	Online Staffing	Canada	Remote	Professionals
DesignCrowd	www.designcrowd.com	2008	Crowdsourcing	Australia	Remote	Designers
dianwo98	www.dianwo98.com	2010	Crowdsourcing	China	Remote	Marketing-related
Didi Chuxing	www.didiglobal.com	2012	Online Work Services	China	Onsite	Taxi drivers
DoJobsOnline	www.dojobsonline.com	2012	Crowdsourcing	USA	Remote	Logos/SEO/small gigs
Eden McCallum	www.edenmccallum.com	2000	Online Work Services	UK	Both	Management consulting

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Edge Amsterdam	www.edge-amsterdam.com	2013	Crowdsourcing	Netherlands	Remote	Creatives/design
Elevate Direct	www.elevatedirect.com	2011	Online Staffing	UK	Onsite/remote	IT contractors/consultants
EnvatoStudio	www.studio.envato.com	2013	Online Staffing	Australia	Remote	Design/creative
EPWeiKe	www.epweike.com	2010	Online Staffing	China	Remote	Multi-category
Erandoo (Integrity)	www.erandoo.com	2017	Online Staffing	USA	Onsite	Temporary staff, hospitality
Experfy	www.experfy.com	2014	Crowdsourcing	USA	Remote	Big data scientist/ consultants
Expert 360	www.expert360.com	2013	Crowdsourcing	Australia	Remote	Consultants and investment bankers
eYeka	www.eyeka.com	2006	Crowdsourcing	France	Remote	Creatives
Field Nation	www.fieldnation.com	2008	Online Staffing	USA	Onsite	IT technicians
FieldAgent	www.fieldagent.net	2010	Crowdsourcing	USA	Onsite	Data collectors
Figure Eight (formerly CrowdFlower)	www.figure-eight.com	2007	Crowdsourcing	USA	Remote	Data cleanup/machine learning validation
Fiverr	www.fiverr.com	2010	Crowdsourcing	Israel	Remote	Multi-category freelancers
Flinja	www.flinja.com	2013	Online Staffing	USA	Remote	College graduates
Folyo	www.folyo.me	2012	Online Staffing	France	Remote	Creatives/UX designers
Freelance.com	www.freelance.com	1996	Online Staffing	France	Remote	IT/consulting
Free-lance.ru	www.fl.ru	2005	Online Staffing	Russia	Remote	Creatives/designers
freelanced.com	www.freelanced.com	na	Online Staffing	USA	Remote	Artists
Freelancer	www.freelancer.com	2009	Online Staffing	Australia	Remote	Design/developer/marketing
Fulcrum	www.fulcrumworks.com	2018	Online Staffing	USA	Mix	FMS
Genesys Talent	www.genesystalent.com	2015	Online Staffing	USA	Mix	Multi-category

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Gengo	www.gengo.com	2008	Online Work Services	Japan	Remote	Translators
Gerson Lehrman Group	www.glg.it	1998	Online Staffing	USA	Remote	Expert network
GigBucks	www.gigbucks.com	2009	Crowdsourcing	USA	Remote	Micro tasks/artists/ marketers
GigNow (Ernst & Young)	www.gignow.com	2017	Online Staffing	USA	Mix	Independent consultants
Gigster	www.gigster.com	2015	Online Staffing	USA	Remote	Developers
Gigwalk	www.gigwalk.com	2010	Crowdsourcing	USA	Onsite	Onsite gigs
GoWorkaBit	www.goworkabit.com	2013	Online Staffing	Estonia	Onsite	Warehouse/office/clerical
Great Lance	www.greatlance.com	2009	Online Staffing	USA	Remote	Marketing
gun.io	www.gun.io	2011	Online Staffing	USA	Remote	Developers/"hackers"
Guru	www.guru.com	1998	Online Staffing	USA	Remote	Various freelancers
Hacker's List	www.hackerslist.com	2014	Online Staffing	USA	Remote	Hackers
Helpster	www.helpster.asia	2016	Online Staffing	Indonesia	Onsite	Temporary staff
High Skill Pro	www.highskillpro.com	2012	Online Staffing	UK	Remote	Consultants/accountants/ advisors
HighLance	www.highlance.com	2008	Online Staffing	USA	na	Various
Hillgate	www.hillgateconnect.com	2013	Online Staffing	UK	Remote	Management consultants/strategists
Hired.com	www.hired.com	2012	Online Staffing	USA	Mix	IT, software engineers
HireOwl	www.hireowl.com	2014	Online Staffing	USA	Mix	College interns
Hoofdkraan.nl	www.hoofdkraan.nl	2011	Online Staffing	Netherlands	Remote	Design/marketing/mgmt.
Hopwork	www.hopwork.com	2013	Online Staffing	France	Remote	Web and Mobile developers
Hubbul	www.hubbul.com	2015	Online Staffing	UK	Mix	Multi-category

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Humaniance	www.humaniance.com	2010	Online Staffing	France	Remote	Various
Hyr	www.hyr.work	2015	Online Staffing	USA	Onsite	Hospitality, retail
Hyve Innovation Community	www.hyvecommunity.net	2000	Crowdsourcing	Germany	Remote	Ideation and Innovation
ideaconnection	www.ideaconnection.com	2007	Crowdsourcing	Canada	Remote	R&D
ideaken	www.ideaken.com	2010	Crowdsourcing	Singapore	Remote	Innovation & Ideas
ifreelance.com	www.ifreelance.com	1998	Online Staffing	USA	Remote	Creatives
Indeed Prime	www.indeed.comprime	na	Online Staffing	USA	Onsite	Technology talent
InfoJobs -- Freelance	www.infolancer.net	1998	Online Staffing	Spain	Remote	Various freelance
Innocentive	www.innocentive.com	2001	Crowdsourcing	USA	Remote	Innovation
Innoget	www.innoget.com	2006	Crowdsourcing	Spain	Remote	R&D
Innovate	www.innovatemr.com	2014	Crowdsourcing	USA	Remote	High level B2B audiences
Inploi.me	inploi.me	2015	Online Staffing	UK	Onsite	Hospitality, temp staff
Interview Jet	www.interviewjet.com	2013	Online Staffing	USA	Mix	Programmers/developers
jdwz888	www.jdwz888.com	2010	Crowdsourcing	China	Remote	Marketing-related
Jitjatjo	www.jitjatjo.com	2015	Online Staffing	USA	Onsite	Temporary staff, hospitality
Job Minute	www.www.job-minute.fr	2015	Online Staffing	France	Onsite	Just-in-time staffing
Jobaio	www.jobaio.com	2017	Online Staffing	USA	na	Various
JobandTalent	www.jobandtalent.com	2009	Online Staffing	Spain	Onsite	Various
Jobble	www.jobble.com	2014	Online Staffing	USA	Onsite	Event workers
Jobboy.com	www.jobboy.com	2010	Crowdsourcing	USA	Remote	Microtasks

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JobStack (TrueBlue)	www.peopleready.com/jobstack	2017	Online Staffing	USA	Onsite	Temporary staff
Jolancer	www.jolancer.com	na	Online Staffing	Nigeria	Remote	Developers/designers
Juxiangyou	www.juxiangyou.com	2013	Crowdsourcing	China	Remote	Marketing-related
k5k1	www.k5k1.com	2010	Online Staffing	China	Remote	Multi-category
k68	www.K68.cn	2003	Crowdsourcing	China	Remote	Design
Kalo	www.kalohq.com	2015	Online staffing	UK	Remote	Various
Kang.fr	www.kang.fr	2014	Online Staffing	France	Remote	Multi-category, creative
LaborX	www.laborx.co	2015	Online Staffing	USA	Remote	Various
Lancers	www.lancers.co.jp	2008	Online Staffing	Japan	Remote	Creatives/design
Legal Hero	www.legalhero.com	2013	Online Staffing	USA	Remote	Lawyers
Lezhuan	www.lezhuan.com	2009	Crowdsourcing	China	Remote	Marketing-related
Linkao	www.linkao.com	2012	Online Staffing	France	Remote	Web designers
LionBridge	www.lionbridge.com	2006	Crowdsourcing	USA	Remote	Translation and localization
LiveOps	www.liveops.com	2000	Online Work Services	USA	Remote	Call Center
LocalSolo	www.localsolo.com	2014	Online Staffing	Canada	Local	Designers
Managed By Q	www.managedbyq.com	2014	Online Work Services	USA	Onsite	Cleaners
MBO Partners	www.mbopartners.com	2004	Online Staffing	USA	Mix	Professionals
Mediabistro	www.mediabistro.com	1996	Online Staffing	USA	Remote	Writers
Mini Freelance	minifreelance.com/index.php	2010	Crowdsourcing	USA	Remote	Micro tasks
Mister Temp	www.mistertemp.com	2015	Online Staffing	France	Onsite	Temp staff, hospitality

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MobileWorks (Lead Genius)	www.mobileworks.com	2011	Crowdsourcing	USA	Remote	Sales lead generation/data collection
Mon Hotesse (My Hostess)	www.monhotesse.fr	2015	Online Staffing	France	Onsite	Hostesses
Money4Jam	www.www.m4jam.com	2014	Crowdsourcing	South Africa	Remote	Micro tasks
mPlace	www.mplace.io	2015	Online Staffing	USA	Remote	Lawyers, legal services
MyClean	www.myclean.com	2013	Online Work Services	USA	Onsite	Maid service
MyStaffNow	www.mystaffnow.com	2012	Online Staffing	USA	Remote	Writers/content creators
Nabbesh	www.nabbesh.com	2012	Crowdsourcing	UAE	Remote	Creatives/designers
Nine Sigma	www.ninesigma.com	2000	Crowdsourcing	USA	Remote	Innovation
Niushe	www.niushe.com	2006	Crowdsourcing	China	Remote	Design
Nvoi	www.nvoi.com.au	2012	Online Staffing	Australia	Onsite	White collar workers
One Hour Translation	www.onehourtranslation.com	2009	Online Work Services	USA	Remote	Translation
OneShift	www.oneshift.com	2012	Online Staffing	Australia	Onsite	Shift workers
OneSky	www.oneskyapp.com	2010	Online Work Services	Hong Kong	Remote	Localization and translation
OneSpace	www.onespace.com	2010	Crowdsourcing	USA	Remote	Various
OnSite.io	www.onsite.io	2013	Online Staffing	UK	Remote	Creatives
Ooopic	www.ooopic.com	2008	Crowdsourcing	China	Remote	Design
Ozlance	www.ozlance.com	2006	Online Staffing	Australia	Remote	Miscellaneous
Pared	www.pared.com	2015	Online Staffing	USA	Onsite	Temporary staff, hospitality
Paro	www.paro.com	2015	Online Staffing	USA	Remote	Finance/accounting
Participa.me	www.participame.com	2011	Online Staffing	Mexico	Onsite	Various

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PeoplePerHour	www.peopleperhour.com	2007	Online Staffing	UK	Remote	Design/creative
Persian Freelancer	www.persianfreelancer.ir	2010	Online Staffing	Iran	Remote	Various
Power to Fly	www.powertofly.com	2014	Online Staffing	USA	Remote	Women professionals
Presans	www.presans.com	2008	Crowdsourcing	France	Remote	R&D
ProFinder	www.linkedIn.com/profinder	2015	Online Staffing	USA	Remote	Various
Progonline	www.progonline.com	2004	Online Staffing	France	Remote	IT/programmers
Projects.co.id	www.projects.co.id	2013	Online Staffing	Indonesia	Remote	Creative
Projektwerk	www.projektwerk.com/de	1999	Online Staffing	Germany	Remote	Project managers/developers
Prokanga	www.prokanga.com	2014	Online Staffing	USA	Remote	Strategic professionals/ professional "moms"
ProZ	www.proz.com	1999	Online Staffing	USA	Remote	Translation
PSCS	www.pscs.cn	2012	Online Staffing	China	Remote	Multi-category
PwC Talent Exchange	www.talentexchange.pwc.com	2015	Online Staffing	USA	Mix	Consultants, integrators
Quri	www.quri.com	2009	Crowdsourcing	USA	Onsite	Microtasks/field marketing
RallyTeam	www.rallyteam.com	2014	Online Staffing	USA	Mix	Various
Redocn	www.redocn.com	2005	Crowdsourcing	China	Remote	Design
RenWuYi	www.renwuyi.com	2006	Crowdsourcing	China	Remote	Multi-category
Rev	www.rev.com	2010	Online Work Services	USA	Remote	Transcription
Sadiant	www.sadiant.com	2016	Online Staffing	USA	Onsite	Nurses/healthcare staff
Samasource	www.samasource.org	2008	Crowdsourcing	USA	Remote	Micro tasks
Scribendi	www.scribendi.com	1997	Online Work Services	Canada	Remote	Proofreaders

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Company Name	Website	Year founded	Primary business model	HQ	Work location	Occupations
Scribie	www.scribie.com	2008	Online Work Services	USA	Remote	Transcription
Servicescape	www.servicescape.com	2000	Online Staffing	USA	Remote	Translation
Shi.Jue.me	www.shijue.me	2001	Crowdsourcing	China	Remote	Design
ShiftGig	www.shiftgig.com	2012	Online Staffing	USA	Onsite	Industrial/office/clerical
Shorttask.com	www.shorttask.com	2009	Crowdsourcing	USA	Remote	Microtasks
Sidekicker	www.sidekicker.com.au	2012	Online Staffing	Australia	Onsite	Sales/marketing/ business services
Skill Galaxy	www.skillgalaxy.com	2003	Online Staffing	USA	Onsite	Developers
snag.work	www.snag.work	2017	Online Staffing	USA	Onsite	Subsidiary of snagajob, on demand JITS platform
Spare Hire	www.sparehire.com	2013	Online Staffing	USA	Remote	Finance/consulting
Speedlancer	www.speedlancer.com	2014	Online Work Services	Australia	Remote	Design/writing/data
Sribulancer	www.sribulancer.com	2014	Online Staffing	Indonesia	Remote	Various
Starbytes	www.starbytes.it/starbytes	2011	Online Staffing	Italy	Remote	IT/technology
Steady	www.steadyapp.com	2017	Online Staffing	USA	Onsite	Hourly workers
StreetSpotr	www.streetspotr.com/en	2011	Crowdsourcing	Germany	Onsite	Mystery shoppers
swkweike	www.swkweike.com	2012	Online Staffing	China	Remote	Designers
sxsoft	www.sxsoft.com	2002	Online Staffing	China	Remote	Software/IT
Talao	www.www.talao.io	2015	Online Staffing	France	Remote	Blockchain freelance
TalentNet	www.talentnet.com	2014	Online Staffing	Canada	Mix	Direct sourcing platform
TalentPool	www.talentpool.com	2013	Online Staffing	UK	Mix	Online perm placement
Talent Cupboard	www.talentcupboard.com	2010	Online Staffing	UK	Remote	Student creatives
Talmix	www.talmix.com	2009	Online Staffing	UK	Remote	MBAs/consultants
Task Army	www.taskarmy.com	2009	Online Staffing	Australia	Remote	Web services

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STAFFING INDUSTRY ANALYSTS

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Company Name	Website	Year founded	Primary business model	HQ	Work location	Occupations
TaskCity	www.taskcity.com	2008	Online Staffing	China	Remote	Software/IT
TaskCn	www.taskcn.com	2006	Crowdsourcing	China	Remote	Multi-category
TaskRabbit	www.taskrabbit.com	2008	Online Staffing	USA	Onsite	Taskers/handy-people
Tenrr	www.tenrr.com	2011	Crowdsourcing	USA	Remote	Microtasks
The Mom Project	www.themomproject.com	2015	Online Staffing	USA	Remote	Working moms
The Second Shift	www.thesecondshift.com	2014	Online Staffing	USA	Remote	Women professionals
The Work Crowd	www.theworkcrowd.com	2014	Online Staffing	UK	Online	Unknown
Tilr	www.tilr.com	2015	Online Staffing	USA	onsite	Multi-category temporaries
Toidea	www.toidea.com	2006	Crowdsourcing	China	Remote	Design
Toluna	www.toluna.com	2000	Crowdsourcing	USA	Remote	On-demand surveys
Tongal	www.tongal.com	2008	Online Work Services	USA	Remote	Content marketing
TopCoder	www.topcoder.com	2001	Crowdsourcing	USA	Remote	Data scientists/programmers
Toptal	www.toptal.com	2010	Online Staffing	USA	Remote	Programmers/developers
Total Freelance	www.totalfreelance.co.uk	2013	Online Staffing	UK	Remote	General
Trabajo Freelance	www.trabajofreelance.com	2004	Online Staffing	Argentina	Remote	Various
Transifex	www.transifex.com	2009	Online Work Services	USA	Remote	Translation
Trusted	www.trustedhealth.com	2017	Online Staffing	USA	Onsite	Travel Nurses
Twago	www.twago.com	2009	Online Staffing	Germany	Remote	Designers/programmers
TWKer	www.twker.com	2011	Crowdsourcing	China	Remote	Marketing-related
Upcounsel	www.upcounsel.com	2012	Online Staffing	USA	Remote	Lawyers
Upwork	www.upwork.com	1999	Online Staffing	USA	Remote	Designers/marketers/content creators/web developers)

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STAFFING INDUSTRY ANALYSTS

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Company Name	Website	Year founded	Primary business model	HQ	Work location	Occupations
Vettery	www.vettery.com	2013	Online Staffing	USA	Mix	IT, software engineers
Visual.ly	www.visual.ly	2011	Online Work Services	USA	Remote	Data visualization and infographics
VoiceBunny	www.voicebunny.com	2011	Crowdsourcing	USA	Remote	Voiceover talent
wanzhuanle	www.wanzhuanle.com	2013	Crowdsourcing	China	Remote	Marketing-related
WeiTuiTui	www.weituitui.com	2011	Crowdsourcing	China	Remote	Microtasks
Wonolo	www.wonolo.com	2013	Online Staffing	USA	Onsite	Blue collar
Work Fusion	www.workfusion.com	2010	Crowdsourcing	USA	Remote	Data
Work Hoppers	www.workhoppers.com/en	2012	Online Staffing	Canada	Remote	Marketing/office/clerical
Work Llama	www.workllama.com	2016	Online Staffing	USA	Onsite	Temporary staff
Work Market	www.workmarket.com	2010	Online Staffing	USA	Onsite	IT/marketing
Work N Hire	www.worknhire.com	2012	Online Staffing	India	Online	Various
Work Rails	www.workrails.com	2015	Online Work Services	USA	MIx	Software implementation
Workana	www.workana.com	2012	Online Staffing	Brazil	Online	Design/developers
Working Not Working	www.workingnotworking.com	2011	Online Staffing	USA	Online	Creatives
woyao998	www.woyao998.com	2008	Crowdsourcing	China	Remote	Marketing-related
WriterAccess	www.writeraccess.com	2008	Online Work Services	USA	Remote	Writers
xplace	www.xplace.com	2003	Online Staffing	Israel	Remote	Technology/design
yiliuwk	www.yiliuwk.com	2013	Crowdsourcing	China	Remote	Marketing-related
Yoss (Adecco)	www.yoss.com	2017	Online Staffing	France	Remote	Various freelancers
Youzhuan	www.youzhuan.com	2013	Crowdsourcing	China	Remote	Marketing-related

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STAFFING INDUSTRY ANALYSTS

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Company Name	Website	Year founded	Primary business model	HQ	Work location	Occupations
YunoJuno	www.yunojuno.com	2012	Online Staffing	UK	Online	Creative/project management
Zhubajie	www.zhubajie.com	2006	Online Staffing	China	Remote	Various
Zintro	www.zintro.com	2010	Online Staffing	USA	Remote	Phone consultants
Zirtual (Startups.co)	www.zirtual.com	2011	Online Work Services	USA	Remote	Remote executive assistants
Zooppa	www.zooppa.com	2007	Crowdsourcing	USA	Remote	Creatives

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STAFFING INDUSTRY ANALYSTS

Appendix: List of consumer-focused human cloud firms

Company Name	Website	Year founded	Primary business model	HQ	Work location	Occupations
365Response	www.365response.org	2012	Online Work Services	UK	Onsite	Hospital transport
Airtasker	www.airtasker.com	2012	Online Work Services	Australia	Onsite	Housework etc.
Amazon Home Services	www.amazon.com/Amazon-Home-Services/b?ie=UTF8&node=10192820011	na	Online Work Services	USA	Onsite	Home repair professionals
Angie's List	www.angieslist.com	1995	Online Staffing	USA	Onsite	Home repair professionals
ArtCorgi	www.artcorgi.com	2014	Online Staffing	USA	Remote	Portrait artists
Ask for Task	www.askfortask.com	2012	Online Work Services	Canada	Onsite	Helpers/taskers
Bellhops	www.getbellhops.com	2012	Online Work Services	USA	Onsite	Movers/college students
Big Basket	www.bigbasket.com	2011	Online Work Services	India	Onsite	Couriers
Bloomthat	www.bloomthat.com	2013	Online Work Services	USA	Onsite	Flower delivery
Bridj	www.bridj.com	2014	Online Work Services	Australia	Onsite	Ridesharing (bus service)
Cabify	www.cabify.com	2011	Online Work Services	Spain	Onsite	Ridesharing
Care.com	www.care.com	2006	Online Staffing	USA	Onsite	In-home healthcare workers
Careem	www.careem.com	2012	Online Work Services	UAE	Onsite	Ridesharing
Caviar (Square)	www.trycaviar.com	2012	Online Work Services	USA	Onsite	Delivery persons
CoachMarket	www.coachmarket.com	2014	Online Staffing	USA	Remote	Career coaches
Codementor	www.codementor.io	2014	Online Staffing	USA	Remote	Mentor developers
CrowdMed	www.crowdmed.com	2010	Crowdourcing	USA	Remote	Healthcare diagnosis
Dog Vacay	www.dogvacay.com	2012	Online Work Services	USA	Onsite	Dog sitters
Dolly	www.dolly.com	2013	Online Work Services	USA	Onsite	Movers
DoorDash	www.doordash.com	2013	Online Work Services	USA	Onsite	Delivery (restaurant)

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STAFFING INDUSTRY ANALYSTS

Appendix: List of consumer-focused human cloud firms

Company Name	Website	Year founded	Primary business model	HQ	Work location	Occupations
DriveU	www.driveu.in	2015	Online Work Services	India	Onsite	Ridesharing
Eaze	www.eazeup.com	2014	Online Work Services	USA	Onsite	Marijuana delivery
eDaiJia	www.edaijia.cn	2011	Online Work Services	China	Onsite	Temporary drivers
Ele.me	www.ele.me	2008	Online Work Services	China	Onsite	Delivery persons
Favor	www.favordelivery.com	2012	Online Work Services	USA	Onsite	Delivery people
FlipTask	www.fliptask.comOnline Staffing	2012	Online Staffing	USA	Remote	Helpers
Freelance Physician	www.freelancephysician.com	2012	Online Staffing	US	Onsite	Physicians
Get Ninjas	www.getninjas.com.brOnline Staffing	2011	Online Staffing	Brazil	Onsite	Various handy services
Glamsquad	www.glamsquad.com	2014	Online Work Services	USA	Onsite	Beauticians
Go-Jek	www.go-jek.com	2010	Online Work Services	Indonesia	Onsite	Bicycle rides
GrabTaxi	www.grab.com	2012	Online Work Services	Singapore	Onsite	Taxi drivers
Grofers	www.grofers.com	2013	Online Work Services	India	Onsite	Delivery persons
Handy	www.handy.com	2012	Online Work Services	USA	Onsite	Handymen
Heal	www.getheal.com	2015	Online Work Services	USA	Onsite	Doctors
HealthTap	www.healthtap.com	2010	Online Work Services	USA	Remote	Doctors/telemedicine
HelloTech	www.hellotech.com	2014	Online Work Services	USA	Onsite	Device repair
HopSkipDrive	www.hopskipdrive.com	2016	Online Work Services	USA	Onsite	Drivers for children
Instacart	www.instacart.com	2012	Online Work Services	USA	Onsite	Shopping delivery
Luxe (acquired by Volvo in 2017)	www.luxe.com	2013	Online Work Services	USA	Onsite	Parking Valets
Lyft	www.lyft.com	2012	Online Work Services	USA	Onsite	Ridesharing

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STAFFING INDUSTRY ANALYSTS

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Company Name	Website	Year founded	Primary business model	HQ	Work location	Occupations
Maven	www.maven.coOnline Staffing	2008	Online Staffing	USA	Remote	Consultants/"Mavens"
Meadow	www.getmeadow.com	2014	Online Work Services	USA	Onsite	Medical marijuana delivery
Moonlighting	www.moonlightingapp.com	2013	Online Staffing	USA	Onsite	Small gigs
MyTaxi	www.mytaxi.com	2009	Online Work Services	Germany	Onsite	Ridesharing
Ola	www.olacabs.com	2010	Online Work Services	India	Onsite	Ridesharing
Pager	www.pager.com	2013	Online Work Services	USA	Onsite	Doctors
pceggs	www.pceggs.com	2006	Crowdourcing	China	Remote	Marketing-related
Postmates	www.postmates.com	2012	Online Work Services	USA	Onsite	Delivery
PrestoExperts	www.prestoexperts.com	1995	Online Staffing	USA	Remote	Tutors, coaches, other "experts
Room2Care	www.room2care.com	2014	Online Work Services	USA	Onsite	Caregivers
Rover	www.rover.com	2011	Online Work Services	USA	Onsite	Dog sitting
Saucey	www.saucey.com	2013	Online Work Services	USA	Onsite	Alcohol delivery
Seo Clerks	www.seoclerks.com	2011	Online Staffing	USA	Remote	SEO/Marketing
Soothe	www.soothe.com	2013	Online Work Services	USA	Onsite	Massage
Spruce	www.sprucehealth.com	2013	Online Work Services	USA	Remote	Dermatologists
Take Lessons	www.takelessons.com	2006	Online Staffing	USA	Both	Personal lessons, music, etc.
Taxify	www.taxify.eu	2013	Online Work Services	Estonia	Onsite	Ridesharing
Texxi Global	www.texxi.com	2005	Online Work Services	UK	Onsite	Ridesharing
TheMuse	www.themuse.com	na	Online Staffing	USA	Remote	Career coaches
tui5	www.tui5.com	2012	Online Staffing	China	Remote	Ching (Fortune)

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STAFFING INDUSTRY ANALYSTS

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Company Name	Website	Year founded	Primary business model	HQ	Work location	Occupations
Uber	www.uber.com	2009	Online Work Services	USA	Onsite	Ridesharing
Urban Sitter	www.urbansitter.com	2010	Online Work Services	USA	Onsite	Babysitters
Via	ridewithvia.com	2012	Online Work Services	USA	Onsite	Ridesharing
Wingz	wingz.com	2011	Online Work Services	USA	Onsite	Ridesharing
Wunder Carpool	wunder.org	2014	Online Work Services	Germany	Onsite	Ridesharing
Your Mechanic	www.yourmechanic.com	2011	Online Work Services	USA	Onsite	Car Mechanics
Zaarly.com	www.zaarly.com	2011	Online Staffing	USA	Onsite	Landscaping/handy-people
Zeel	www.zeel.com	2010	Online Work Services	USA	Onsite	Massage

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