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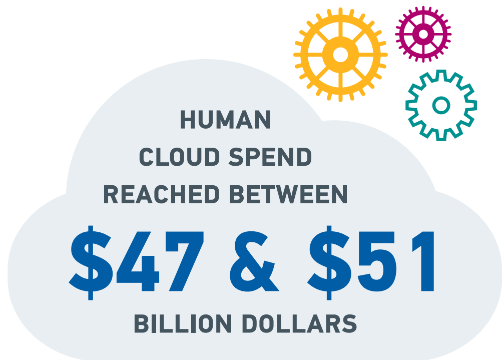
The Human Cloud, the Gig Economy & the Transformation of Work

The Gig Economy and the Human Cloud Landscape



The gig economy continues to disrupt, enhance and transform traditional work models, methods, means and infrastructures. As organizations around the world utilize, explore and reconfigure contingent work across marketplaces, there is an increasing spotlight on the ***human cloud***, arguably the fastest-growing segment of today's technology-fueled gig economy.

The human cloud is an emerging set of online/digital marketplaces where talent and those looking to hire talent can find and engage one another in a work arrangement.

With total human cloud spend reaching between an estimated $47 and $51 billion dollars globally, human cloud revenue nearly doubled in 2016. While the majority of that spend was generated by business-to-consumer (B2C) human cloud companies, the business-to-business (B2B) segment of the human cloud grew approximately 20% year-over-year.

Staffing Industry Analysts (SIA) actively monitors the shifts and the rapid developments around how work arrangements are facilitated and how talent is engaged. Our latest research detailing the human cloud focuses a sharp lens on an evolving ecosystem. **The Gig Economy and Human Cloud Landscape: 2017 Update** report presents the most comprehensive framework to date around the related business services and features of human cloud platforms. The full version of this 52 page report, available to SIA's Corporate and CWS Council Members, includes market intelligence and data for over 350 firms operating in the sphere; and pays particular attention to the B2B segment (see Appendix for report information and top ten largest B2B and B2C company listings).

Key insights and findings from the report are summarized here, as we highlight the state of play and the current outlook for an area of the workforce solutions ecosystem where innovation is in full swing.

Companies mentioned here, as well as in the full report, provide examples of and specifically identify leading human cloud firms; however new enterprises crop up continuously, and existing ones may extend offerings, streamline focus or undergo other types of organizational transitions. We also provide a range of market estimates since we have not captured every human cloud platform and there may be a number not yet on our radar. Unless otherwise specified, all estimates and revenue calculations are based on 2016 data.

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Defining the Landscape

Defining and understanding the human cloud and its relationship to the gig economy and to labor markets at large is essential in further understanding the evolution of the workforce solutions ecosystem and how to leverage a changing workforce predicated on the collision of technology and talent. The following detailed definitions[1] characterize the core components of the human cloud and inter-related aspects.

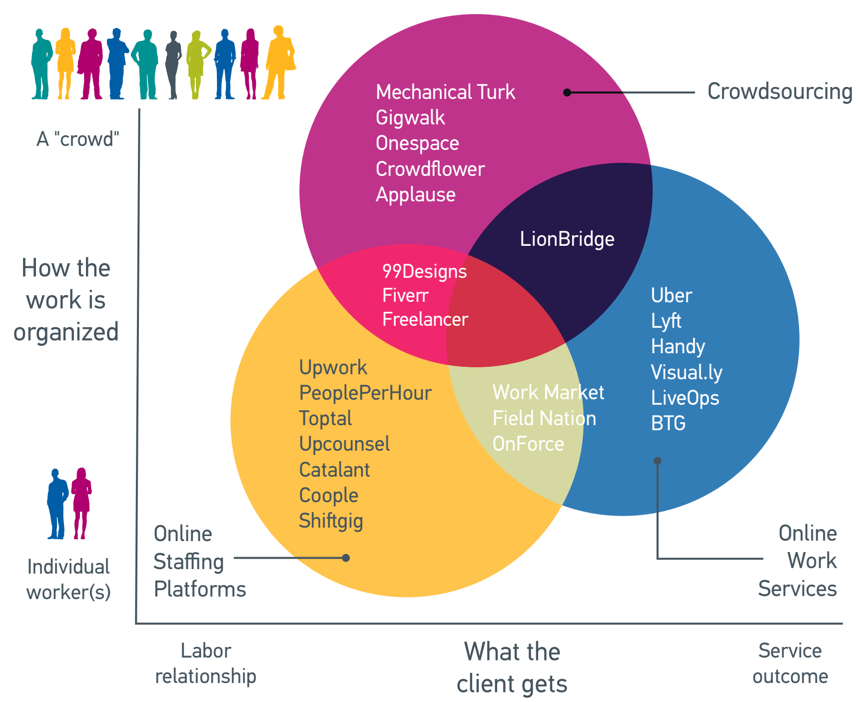
Gig Work/ Gig Economy

The gig economy is one of several names used to describe various forms of "gig" work, or small project freelance work. Others include "on demand economy," "collaborative consumption" and "sharing economy." Definitions of the gig economy vary widely among commentators. The more narrow definition includes work structured as small projects of a relatively limited duration typically facilitated by an internet platform or app (i.e. freelancing as intermediated by vendors operating in the so-called "human cloud"). SIA's definition is broader than this in that it includes any contingent work of a fixed duration such as temporary workers (sourced directly or through a staffing agency) and independent contractors. We see no reason to limit the concept of a "gig" solely to transactions mediated online. SIA treats the gig economy as synonymous with **contingent work** and, as such, these workers are sourced and managed through a number of different segments within the Workforce Solutions Ecosystem. Some commentators would also include online services such as Airbnb and Zipcar as part of the gig economy. As these services are not labor-related, SIA regards these services as part of the sharing economy (see Appendix, figure 1).

Human Cloud

The Human Cloud is an emerging set of work intermediation models that enable work arrangements of various kinds to be established and completed (including payment of workers) entirely through a digital/online platform. In many cases (though not always), the platform also supports "the enactment and management" of the work (to a lesser or greater degree). Job boards and social networks do not fall within our definition of the Human Cloud; while those two types of talent exchange platforms may support the sourcing and recruiting part of work arrangements being established, such platforms do not generally further enable or support work arrangements through to their completion (including payment of workers, tax filings, etc.). SIA has defined three types of Human Cloud platform models: **CrowdSourcing**, **Online Work Services** and **Online Staffing Platforms**. Some companies operate across more than one of these Human Cloud segments.

The Human Cloud framework and taxonomy



[1] Definitions taken from SIA's Lexicon of Global Workforce Solutions-Related Terms http://lexicon.staffingindustry.com/

[2] Though some job boards have a human cloud offering, e.g. LinkedIn Profinder and Indeed Prime.

Defining the Landscape (cont.)

Online Staffing Platforms

A sub-segment of the Human Cloud, an online staffing platform enables specific hirers and specific (typically contingent) workers to enter into, complete and transact work arrangements most often virtually with resources anywhere in the world. It is the oldest Human Cloud model (arising in the early 2000s). There is typically a direct legal relationship between the hirer and worker, which the platform enables.

Online staffing's labor marketplace

Marketplace of workers

Can be comprised of a variety of occupations, skill sets, geo-locations, etc. Workers often have searchable profiles and ratings/work history.

Online staffing platform

Matches the two parties through searchable database; result is direct labor relationship. Facilitates rest of transaction through to payment of worker(s).

Managers (businesses/ consumers)

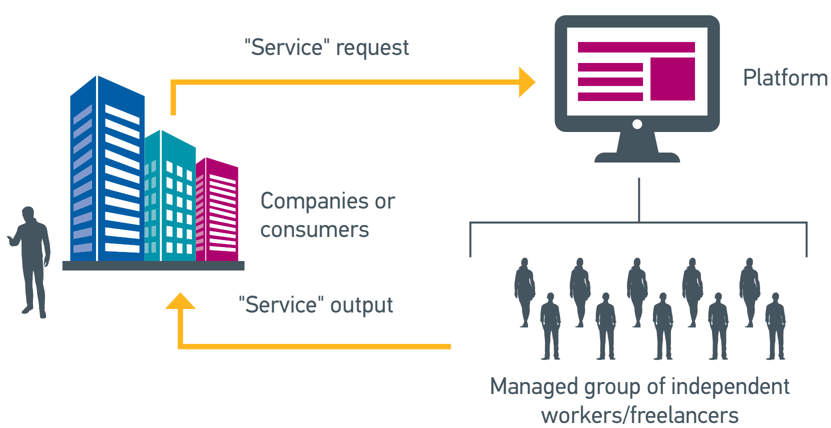
Businesses or individuals who need work done. May be looking for project-based workers or hourly workers, local or remote, etc.

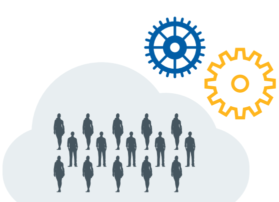
ONLINE STAFFING PLATFORMS PROCESSED BETWEEN
$4.7 AND $5.2 BILLION **IN GLOBAL SPEND IN 2016**

Online Work Services

A sub-segment of the Human Cloud, Online Work Services is an online platform model that enables the delivery of certain specialized services (customer service, translation, writing, taxi rides, etc.) performed by a group of online workers that are organized/ managed by the platform provider. The client is purchasing “an outcome” (as a service output, not a labor relationship).

Online work services platform model





ONLINE WORK SERVICES FIRMS PROCESSED BETWEEN
$41.5 AND $44.7 BILLION **WORLDWIDE IN SPEND IN 2016**

This was largeley driven by the on-demand ride sharing firms such as Uber and Didi-Chuxing.

[1] Definitions taken from SIA's Lexicon of Global Workforce Solutions-Related Terms http://lexicon.staffingindustry.com/

Crowdsourcing

A sub-segment of the Human Cloud, Crowdsourcing is an online platform model that enables work assignments to get parsed out and performed (often as disaggregated "microtasks") 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" (as a service output, not a labor relationship). Crowdsourcing also includes work arrangements where a "crowd" of workers compete or bid against one another to solve problems or tasks, with winner(s) selected and compensated based on the merit of their submissions.**

CROWDSOURCING COMPANIES GENERATED BETWEEN

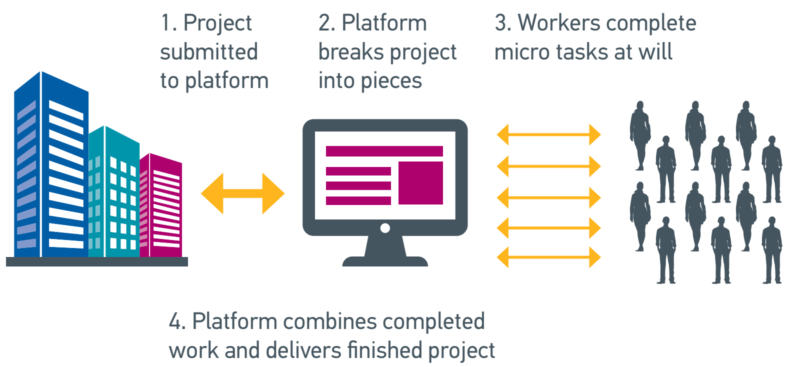
$600 & $800

MILLION GLOBALLY IN 2016

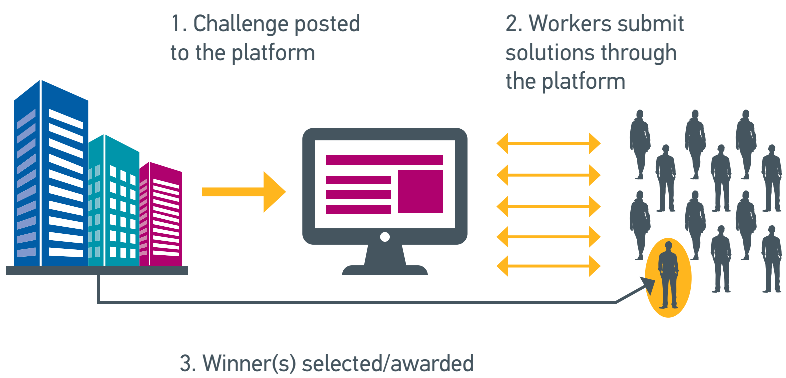
*See Crowdsourcing distributed micro-task model below

**See Crowdsourcing content based model below

Crowdsourcing distributed micro-task model



Crowdsourcing contest-based model



Human Cloud companies 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)
2. Rely on user-based ratings
3. Offer workers flexibility in deciding working hours or times
4. Typically expect workers to supply their own equipment to complete work (e.g. computer, software, car, tools, etc).
5. Manage the relationship from sourcing through payment via the platform

Key Insights

Market Size & Features of the Global Gig Economy & the Human Cloud

We estimate **total human cloud revenue worldwide was between $47 billion and $51 billion** in 2016. As a rapidly growing segment of the gig economy, the human cloud is making a significant impact globally as organizations look for more efficient ways to engage workers. With automation driving transformation across industries and continents, the workforce solutions ecosystem is finding new, innovative ways to automate the connection to talent.

The Gig Economy:
$3.5 trillion

B2C Human Cloud Companies:
between $41.52 & 44.74 billion

Online Work Services companies Uber and Didi Chuxing were the largest of the B2C companies, and the largest human cloud companies overall. Online work services made up more that 80% of all human cloud spend in 2016.

Online Staffing Platforms Zhubajie and Upwork, substantially larger than their nearest competitors, were the largest of the B2B companies, with online staffing business being the top revenue generators with the B2B segment.

Just-in-Time Staffing, a subset of online staffing which primarily enables 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) via smartphone apps, has seen a sharp rise in the number of entrants to the niche, and has generated interest from across the staffing sphere.

B2B Human Cloud Companies:
between $5.75 & $6.49 billion

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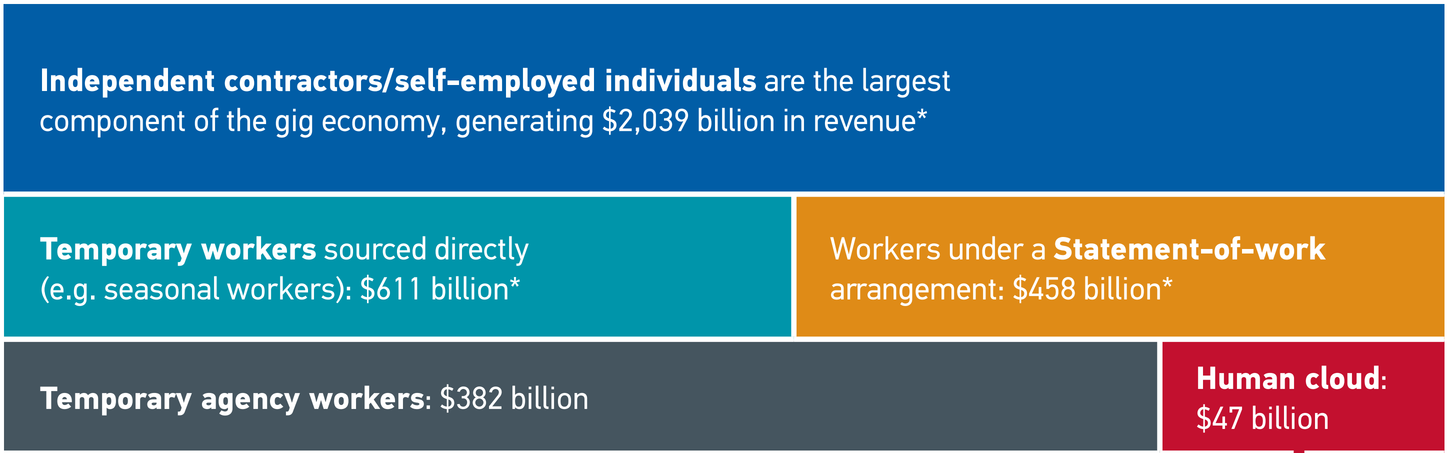
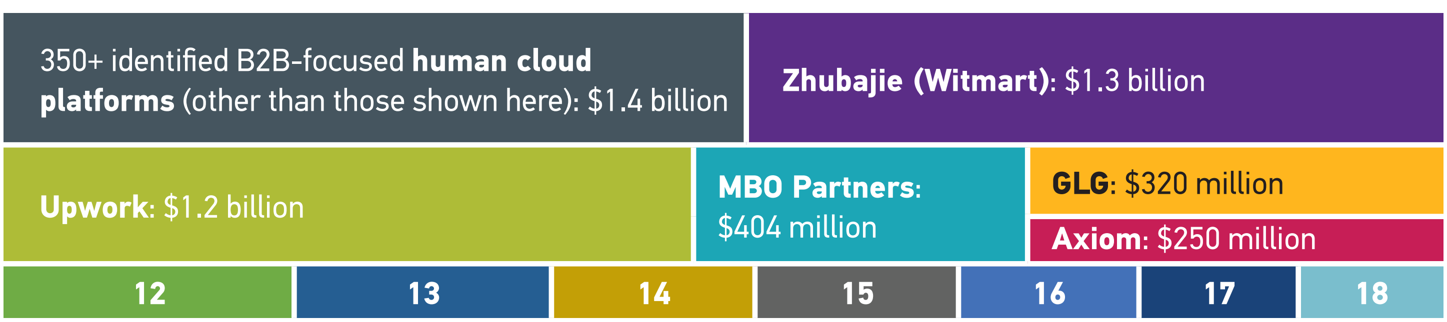
Market size and features of the ***Gig Economy***



Market size and features of the ***Human Cloud***

Market size and features of ***B2B Human Cloud Companies***



1. **Grab Taxi**, $630 million; 2. **Ola**, $583 million; 3. **Ele.me**, $562 million; 4. **Gett**, $500 million; 5. **Instacart**, $479 million; 6. **Go-jek**, $288 million; 7. **DoorDash**, $171 million; 8. **Postmates**, $171 million; 9. **Care.com**, $162 million; 10. **My Taxi**, $150 million; 11. **Rest of B2C-focused human cloud firms**, $727 million; 12. **Lancers**, $158 million; 13. **Liveops**, $150 million; 14. **Field Nation**, $120 million; 15. **Fiverr**, $120 million; 16. **Freelancer**, $119 million; 17. **Toptal**, $105 million; 18. **Work Market**, $102 million

Sources: The Global Gig Economy: Market Estimates and Features, Global Staffing Industry Market Estimates and Forecast: May 2017

*2015 revenue used as a proxy for 2016 revenue

Key Insights (cont.)

Estimated global gross revenue for work facilitated by human cloud platforms in 2016, segmented by primary business model, B2B versus 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), provides a breakdown of where talent works. One of the much-touted benefits of the human cloud is geography— ostensibly, talent has the flexibility to work from whatever location best suits them.

2016 gross revenue from human cloud platforms by model and work location

	Online Staffing		Crowdsourcing		Online Services		Total	
	Min	Max	Min	Max	Min	Max	Min	Max
B2B (Total)	4,536	4,953	608	760	608	779	5,752	6,492
Onsite	749	882	143	179	231	308	1,123	1,368
Remote	3,787	4,072	465	581	377	471	4,629	5,124
B2C (Total)	205	275	1	20	41,322	44,442	41,527	44,737
Onsite	204	250	0	10	41,298	44,407	41,502	44,667
Remote	1	25	1	10	24	35	25	70
Total (B2B + B2C)	4,741	5,228	608	780	41,930	45,221	47,279	51,229

Remote work arrangments account for **80%** of B2B human cloud revenue. B2C arrangments typically involve an onsite configuration, as most B2C human cloud firms offer a consumer service (e.g. taxi rides, massages, food delivery). Jobs that are more readily performed remotely are natural occupational targets for firms that specialize in facilitating online work, eg software programming, design, content marketing, data validation, transcription, translation and knowledge work in general.

It is therefore no surprise that we see IT and marketing/creative highly represented in B2B human cloud spend.

B2B human cloud revenue by occupation of the worker

Source: 2017 Human Cloud and Digital Work Intermediary Global Survey, Staffing Industry Analysts

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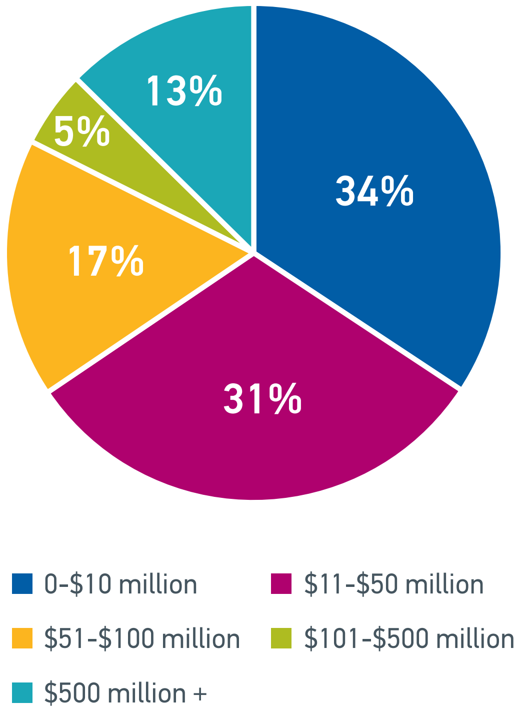
Utilizing the Human Cloud

Human Cloud Solutions: Who's Implementing?

Our estimates indicate that **82% of B2B human cloud revenue was generated from clients with under $100 million in revenue**. While there are signs of traction in larger enterprise programs, small and medium-sized business are still leading the uptake of human cloud solutions.

Technology startups in particular have been early adopters, possibly because they have been more aware that these kinds of solutions exist. As well, smaller organizations may have fewer centralized HR/hiring processes, allowing for a quicker implementation or utilization of solutions.

Distribution of B2B revenue by client size



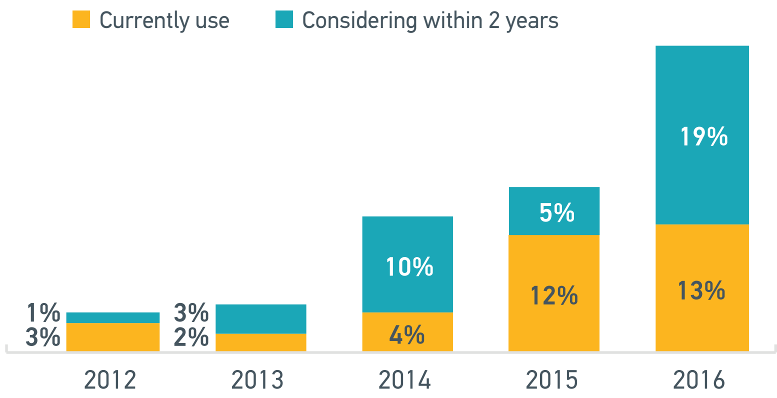
Source: 2017 Human Cloud and Digital Work Intermediary Global Survey, Staffing Industry Analysts

Human Cloud Usage at Large CW programs

Although less prevalent and accounting for only a small portion of overall contingent workforce spend, usage inside large contingent workforce programs is growing, with 13% of buyers currently utilizing human cloud talent and an additional 19% indicating that they are considering utilizing in the next two years. This could potentially mean close to a third of organizations will be sourcing some amount of talent via human cloud services by 2019.

Given the uptake around other workforce solutions technologies and given the profile of the gig economy in media along with the interest and visibility from both the private and public sectors, it is interesting to note the primary reasons for slower traction into larger contingent workforce programs include a lack of comfort or confusion around managing remote work; unresolved questions around worker classification (independent contractor vs freelancer vs temporary worker); and marketplace perception in terms of what human cloud companies can offer.

Percent of buyers using or considering online staffing services (North America)



Source: 2016 Workforce Solutions Buyers Survey North America, Staffing Industry Analysts

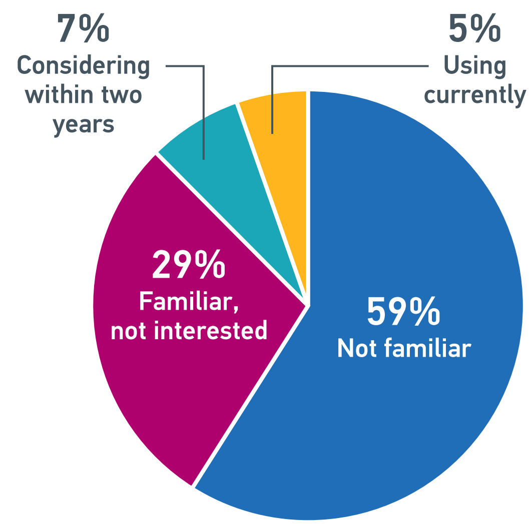
Key Insights (cont.)

Although the term gig economy may be top of mind for many in today's contingent labor market, the human cloud is still a relatively new term. As more individuals become adept at navigating the gig economy landscape, it will be interesting to see what worker preferences and prevalences arise.

Temporary Talent & the Human Cloud

In our 2017 US Temporary Worker survey[1], we asked workers assigned by a staffing agency to a temporary role about their familiarity with and participation in business-related human cloud services. 59% of these workers reported that they are not yet familiar with business related human cloud services, while 29% of workers are familiar but not interested, 7% are considering using within two years and 5% are currently earning at least some income via the human cloud. As familiarity increases, the share using online staffing should increase well beyond 5%, especially in an age where workers are actively seeking alternative work arrangements.

Familiarity with and use of business-related human cloud services



Moonlighting

In our The Gig Economy: Market Estimates & Features of the US Contingent Workforce report[2], moonlighting emerged as most prevalent among **human cloud workers**, with **69%** of these workers picking up additional work to supplement their income.

Conclusion

Driven by technology and spanning cultures, business sectors and ideologies, the transformation of work is well underway. It is no secret that traditional models have been disrupted by the gig economy. Talent is continuing to explore new ways of engaging. And organizations are contemplating the impact on the talent supply chain. Platform innovation, increased awareness and adoption from stakeholders, continual increases in widespread access to the internet, and deepening connections between human cloud companies and other workforce solutions providers are all likely to underpin growth in the human cloud going forward and to fuel a further extension for B2B applications of human cloud solutions to meet the new demands of the global talent marketplace.

[1] http://www2.staffingindustry.com/TempWorkerSurvey

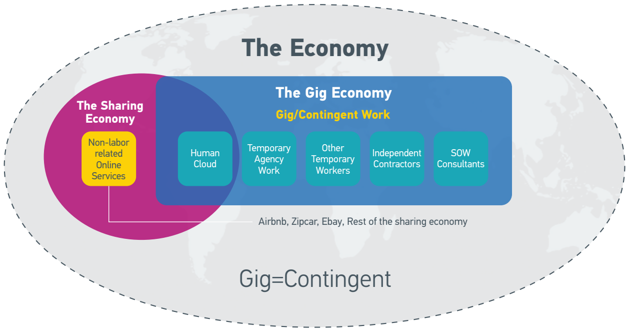
[2] http://www2.staffingindustry.com/gigworkforce

Appendix

The full 52-page report of **The Gig Economy and Human Cloud Landscape: 2017 Update** is available to SIA's Corporate and CWS Council Members based on regional access.

- Americas: http://www2.staffingindustry.com/HumanCloudLandscape
- EMEA: http://www2.staffingindustry.com/HumanCloudLandscapeEMEA
- APAC: http://www2.staffingindustry.com/HumanCloudLandscapeAPAC

Figure 1



Top 10 Largest B2B Human Cloud Companies 2016

Rank	Company	2016 gross revenue ($millions)	HQ (country)	Primary work location	Year founded	Occupations
1	Zhubajie[1,2]	1,269	China	Remote	2006	Various
2	Upwork	1,200	USA	Remote	1999	Multi-category, freelancers
3	MBO Partners	404	USA	Onsite/remote	2003	Professionals
4	Gerson Lehrman Group[2]	320	USA	Remote	1998	Expert network
5	Axiom	250	USA	Onsite/remote	2000	Legal services
6	Lancers[1]	158	Japan	Remote	2008	Creatives/design
7	LiveOps	150	USA	Remote	2000	Call center
8	Field Nation	120	USA	Onsite	2008	IT field services
9	Fiverr[2]	120	Israel	Remote	2010	Logos/designers
10	Freelancer[1,2]	119	Australia	Remote	2009	Design/developer/marketing

Top 10 Largest B2C Human Cloud Companies 2016

Rank	Company	2016 gross revenue ($millions)	HQ (country)	Primary work location	Year founded	Occupations
1	Uber	20,000	USA	Onsite	2009	Drivers/Taxis
2	Didi Chuxing[1]	14,150	China	Onsite	2012	Drivers/Taxis
3	Lyft	2,125	USA	Onsite	2012	Drivers/Taxis
4	GrabTaxi[1]	630	Singapore	Onsite	2012	Drivers/Taxis
5	Ola[1]	583	India	Onsite	2010	Drivers/Taxis
6	Ele.me[1,2]	562	China	Onsite	2008	Delivery persons
7	Gett[1]	500	Israel	Onsite	2010	Drivers/Taxis
8	Instacart[2]	479	USA	Onsite	2012	Shopping delivery
9	Go-Jek[1]	288	Indonesia	Onsite	2010	Bicycle rides
10	DoorDash[2]	171	USA	Onsite	2013	Delivery (restaurant)

[1] Revenue converted to USD

[2] Excludes non-human cloud revenue

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SIA is the Global Advisor on Staffing and Workforce Solutions

Elevating the Workforce Solutions Ecosystem

Founded in 1989, SIA is the global advisor on staffing and workforce solutions. Our proprietary research covers all categories of employed and non-employed work including temporary staffing, independent contracting and other types of contingent labor. SIA's independent and objective analysis provides insights into the services and suppliers operating in the workforce solutions ecosystem including staffing firms, managed service providers, recruitment process outsourcers, payrolling/compliance firms and talent acquisition technology specialists such as vendor management systems, online staffing platforms, crowdsourcing and online work services. We also provide training and accreditation with our unique Certified Contingent Workforce Professional (CCWP) program.

Known for our award-winning content, data, support tools, publications, executive conferences and events, we help both suppliers and buyers of workforce solutions make better-informed decisions that improve business results and minimize risk. As a division of the international business media company, Crain Communications Inc., SIA is headquartered in Mountain View, California, with offices in London, England.

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