Insuring the sharing economy

RISK + INNOVATION | PART 7 IN A SERIES

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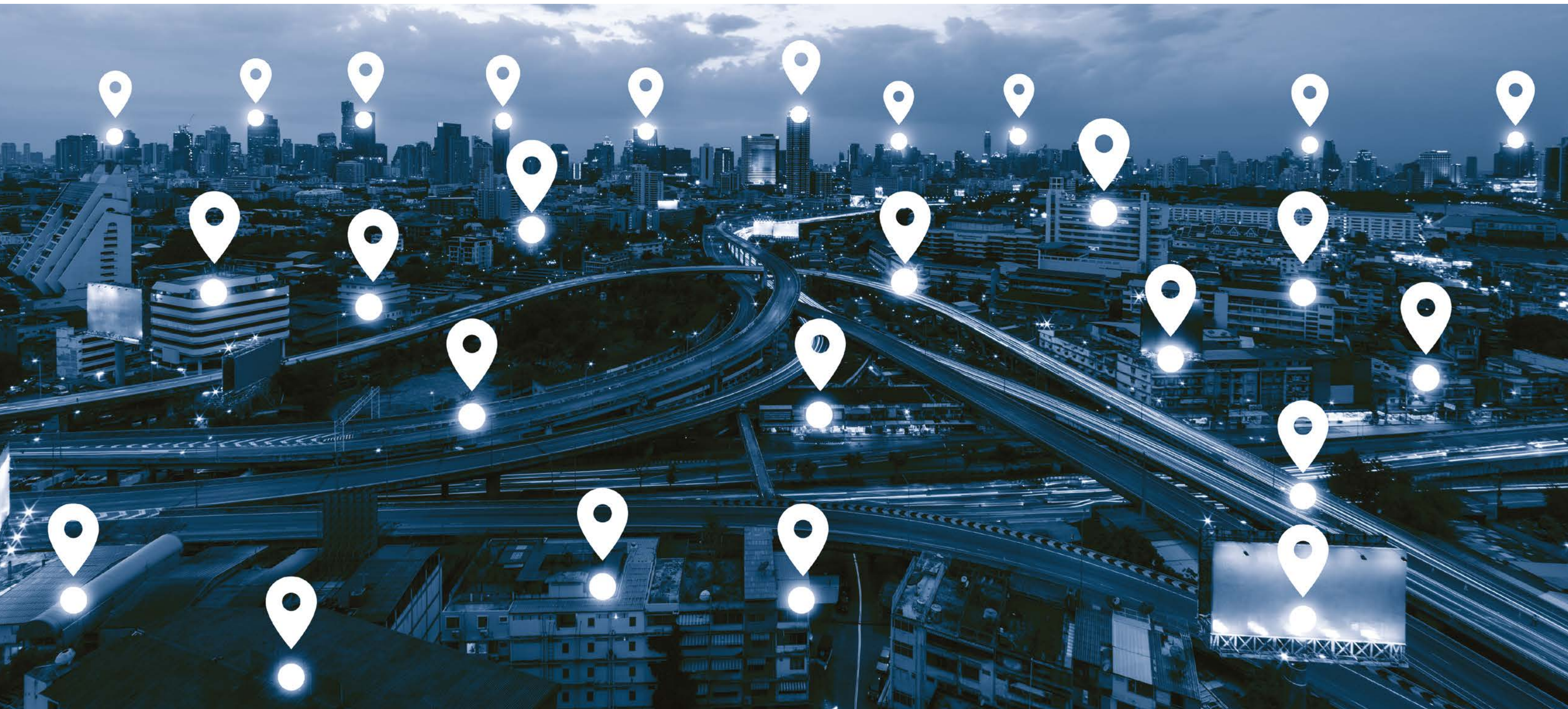

FOREWORD

CONTENTS

Crowd-based capitalism. Collaborative consumption. The 1099, gig, or on-demand work force. Call it what you wish, the sharing economy is here to stay. An exciting new way to live and work is available to those who wish to participate. Millions of us do. And we love it.

But what about insurance in this new world?

We believe insuring sharing economy platforms and participants is one of the biggest puzzles the insurance industry will face over the next decade.

On one hand lies significant opportunity. To quantify, structure, and transfer risk by partnering with firms who may have significant insight about risk in real time is an insurance professional's dream scenario. Trust is made more transparent. We could always rent a room in Bob's house. But now there is a platform for Bob to tell us he's willing to rent it, next weekend, at a specific rate. And we can see others who have rented from Bob tell us it's not only safe, but that Bob cooks a delicious breakfast and is a great host. What can peer-to-peer rating systems tell us about risk?

On the other hand lie significant challenges. Pricing models are being constructed with loss history that is just beginning now. Some types of insurance remain highly regulated. Where the distinction between personal and commercial use of assets in the sharing economy is blurred, regulators view personal lines of insurance very differently than commercial.

In the end, we believe good partnerships, like those between brokers, insurers, and clients, will prevail.

Marsh and AIG are delighted to bring this joint perspective on the sharing economy to you. It is our attempt at putting many conversations together on paper. Our thinking evolves as quickly as the technology does. Please don't hesitate to reach out and share your views. In the spirit of sharing, we'd love to hear from you!

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A NEW BUSINESS MODEL

The sharing economy is a business model gaining momentum as it challenges incumbents in nearly every industry. Companies embracing this model develop technology that allows supply to meet demand with less friction and fewer transaction costs. The sharing economy allows access to physical assets, rather than ownership. Firms essentially become matchmakers and facilitators of services; many workers become freelancers. Whether it's a driver with extra seats in their vehicle (supply) meeting a passenger traveling in the same direction (demand), or a "pool" of passengers (supply) paying to fill seats across a fleet of vehicles in a ride-share service (demand), it may not matter who is on which side. Both gain efficiency. Each party is better off from a pure economic view. Quickly rising usage rates suggest all participants are more satisfied with the result:

- **Uber has facilitated more than 5 billion rides around the world since 2010.[i] Today Lyft completes 1 million rides a day, yet the companies do not own any cars.**
- **Dozr provides access to more than $50 million worth of construction equipment, but owns none of it.[ii]**
- **With 4 million listings worldwide, Airbnb gives users access to more rooms for rent than the top five hotel chains combined, but owns none of the apartments and homes on its marketplace.[iii]**
-

Facilitating access without ownership allows the ultimate asset owners–drivers, construction equipment owners,and homeowners in the examples above–to become independent business owners.

It's not just the new tech startups born in Silicon Valley; long-established companies are incorporating sharing economy principles into their business models, too. In 2017, Walmart announced that store employees could opt into a pilot program to deliver packages to customers who ordered goods online.[iv] In some markets, Amazon uses independent contractors as "delivery service providers" to fulfill Prime orders and courier packages. These and companies like them are practicing what digital media innovator Jay Samit says is required to thrive in the modern economy. "Rather than wait for the competition to steal your business," Samit says, "every founder and employee needs to be willing to cannibalize their existing revenue streams in order to create new ones."[v]

Labor Shift Gives Rise to New Risk and Insurance Challenges

History has not seen a business model shift towards which so many workers have swarmed since the last Industrial Revolution. From 2000 through 2014, the number of independent contractors, some of them sharing economy workers, filing 1099 tax forms in the U.S. grew by 22 percent. In the same 15-year period, the number of traditional employees filing W-2 forms dropped by 3.5 percent.[vi] McKinsey estimates that 20 to 30 percent of the global population engages in independent work, with 15 percent of them using digital platforms.[vii] The Freelancers Union estimates 35 percent of Americans—55 million people—are freelancing [viii] and contribute $1 trillion to the U.S. economy.

On the one hand, this is good. When labor suppliers are treated as customers—as independent contractors, rather than as employees—this creates several benefits for workers. Individuals can work in the sharing economy while also holding down a full-time job, as 58 percent of respondents to our survey do, to supplement their income. Most freelancers surveyed—58 percent—report having two jobs. Another 18 percent report having three or more. They can make their own schedules and work as much or as little as they want.

On the other hand, sharing economy firms give rise to new risks, and unique insurance challenges. Who pays the medical bills of a driver who develops chronic back pain after driving for eight to ten hours a day? In a trucking fleet operating under a traditional business model, the company's workers' compensation insurance would cover it. In the independent model, it's less clear. The protections that labor unions in the late 1800s and government-sponsored "social safety net" programs in the 1950s (UK National Health Service, 1948; U.S. Medicare, 1956) sought to stitch together, the sharing economy unravels. Either society tolerates the trade-offs of a more flexible work force—where it is sometimes unclear who pays the medical bills when a freelancer is injured, and where there is no such thing as "paid time off" for disability or bereavement—or a new social contract is constructed.

Without the benefits that government-mandated programs or employer-sponsored insurance typically provide, the business model that several sharing economy firms rely on is under attack from elected officials, regulators, and temporary workers themselves. For example, in the U.S., workers' compensation is not mandatory if the freelancers are not employees. In France, ride-sharing drivers waged a "strike" in 2016 to protest working conditions,[ix] and detractors in France and elsewhere have criticized companies for not offering drivers insurance coverage.[x]

Asset Sharing Introduces Challenges and Opportunities

The asset sharing enabled by the sharing economy also creates new challenges for the owners of property that is lent or rented on a sharing platform. Who helps a home-sharing renter if they lose a key to their host's residence while traveling in a foreign country? Renter's insurance may cover the host for the cost of a new key; travel insurance may allow the traveler to receive a restitution check for their trouble once they return home. But a significant customer experience question remains if the renter is still sitting outside, waiting for a locksmith.

While insurance claims are part of the challenge today, they represent an opportunity tomorrow for companies that take an innovative approach to answering these questions. Insurance can help solve some of these challenges—if it evolves with the times. With developments that blur the lines between commercial and personal insurance, there are certainly unmet needs waiting to be fulfilled. This paper explores those opportunities, and how risks are evolving as quickly as business models themselves.

HIGHLIGHTS AND ANALYSIS OF AIG-MARSH MARKET RESEARCH

AIG surveyed 132 independent contractors in sharing economy settings in the top 15 metropolitan statistical areas in the United States. Although the sharing economy is a global phenomenon—for example, a greater percentage of people in Singapore regularly use ride-sharing than in the U.S. and UK combined—this paper focuses on the U.S. We will address global implications in later studies.

Before insurers can develop new products and services that could meet the needs of this evolving sector, we need to gain a strong understanding of the people and companies involved in the sharing economy. That is why AIG conducted its own survey of individuals active in the sharing economy, and partnered with Marsh to develop risk profiles for major stakeholders including freelancers, sharing-economy companies, and other companies that interact with the sector.

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DEMOGRAPHIC PROFILE

The typical sharing economy worker in our study is 30-49 years old, holds a four-year college degree, and has a full-time W-2 job. In fact, 55 percent of respondents had a full-time W-2 job, and an additional 14 percent had part-time W-2 work. A high majority (89 percent) of the respondents with W-2 jobs receive either health or disability benefits from their employers.

ENGAGEMENT IN THE SHARING ECONOMY AND OTHER WORK

The sharing economy is shaping up to be a part-time, temporary option for most participants. Sixty-four percent have worked in the sharing economy for less than a year, and 67 percent view their sharing economy role as a part-time or temporary job. Only 11 percent identified the sharing economy as a career they plan to pursue for an extended period of time.

According to our survey, delivery courier services are the most popular form of sharing economy work, with 57 percent of survey respondents working for delivery platforms such as Uber Eats, Postmates, or Doordash. Nearly half—48 percent—drive for a ride-sharing service such as Uber, Lyft, or Gett, and 33 percent perform task-based work such as cleaning or furniture assembly on platforms like TaskRabbit, Handy, and UrbanSitter.

The participation numbers by genre add up to more than 100 because many sharing economy freelancers are active on multiple platforms. The majority—58 percent—work two jobs including their sharing economy work. Another 18

The sharing economy is shaping up to be a part-time, temporary option for most participants. Sixty-four percent have worked in the sharing economy for less than a year, and 67 percent view their sharing economy role as a part-time or temporary job.

percent report working three or more jobs. Two-thirds work fewer than 15 hours per week in the sharing economy, and only seven percent work full-time hours of 35 hours or more per week.

SHARING ECONOMY EARNINGS

Despite a widening gap between W-2 and 1099 workers, 1099 earnings in the sharing economy have not reached levels comparable to “full employment.” In keeping with findings that most sharing economy workers work full-time W2 jobs and spend fewer than 15 hours per week working in the sharing economy, the survey also revealed that most workers earn only supplementary levels of income from gig platforms.

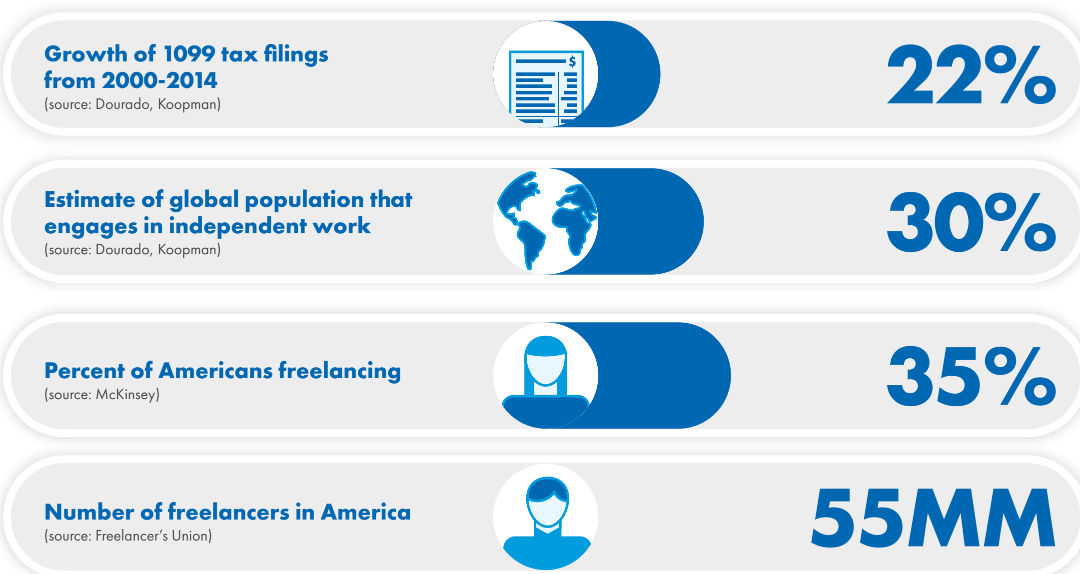
A plurality of respondents (39 percent) reported earning less than $5,000 from sharing economy work last year, with another 14 percent earning between $5,000 and $9,999. Just eight percent reported earning more than $50,000 on gig platforms last year.

However, a plurality of respondents (38 percent) also characterized the money they earned from digital platforms as “essential for basic needs,” with another 36 percent describing their earnings as “important but not essential.” Fewer than one in four took a more casual view of their sharing economy earning, describing the money as “nice to have.”

In general, sharing economy workers reported that their earnings aligned with their expectations. When asked if they make as much as they thought they would, 44 percent said they do. Nineteen percent reported making somewhat or much more than they expected, while 30 percent reported making somewhat or much less than anticipated.

AUTOMOBILE USE IN THE SHARING ECONOMY

An overwhelming majority of sharing economy workers use automobiles, either for their work or to get to gigs. Sixty-five percent of respondents use cars for their sharing economy work, either as ride-sharing drivers or to make deliveries. Another 14 percent use a car to commute to a gig job. Just 20 percent report not using a car at all related to their sharing economy work.



The survey results also suggested that sharing economy drivers may be more exposed to risk than the general public. Participants who use their cars for ride-sharing were most likely to drive between 1 p.m. and 8 p.m. or between 8 p.m. and midnight (35 percent), and 31 percent cited making an effort to drive during bad weather to earn higher fares. Sixty-three percent reported driving more than 200 miles per week. Driving in difficult weather or under fatigue conditions potentially means higher risks for those drivers.

RISK AND ATTITUDES ABOUT INSURANCE

Freelance survey respondents reported a wide range of negative experiences while on the job through gig platforms. The most common experiences related to personal property, with 11 percent reporting having had their personal property damaged and seven percent reported having personal property stolen while on the job.

Six percent of respondents reported suffering an injury while working in the sharing economy, twice as many injuries as suffered by full-time workers in private industry. The Bureau of Labor Statistics reports that three percent of full-time workers experienced a nonfatal workplace injury or illness in 2015, the most recent year for which data is available.[xi]

Additionally, four percent of sharing economy freelancers reported having injured someone else, and three percent reported causing accidental damage. Five percent of respondents have faced legal threats related to their sharing economy work.

Of the 65 percent of respondents who use cars for their sharing economy work, only 17 percent reported currently having commercial auto insurance. Eighty-seven percent of all respondents reported having personal auto insurance coverage, and when asked what they think would happen if they experienced an accident while working a gig job, 27 percent said their personal insurance would take care of it, and 20 percent said the digital platform would take care of it. Of the 28 percent who said they weren't sure, nearly 40 percent reported worrying about it.

The survey found that sharing economy workers are generally open to the idea of purchasing insurance to protect themselves on the job. Forty-seven percent said they would likely or very likely remain on a platform that required them to buy insurance, while 28 percent said they would be unlikely or very unlikely to stay on the platform. Twenty-six percent were neutral.

This AIG-Marsh sharing economy survey sample is indicative, but not representative of the U.S. population, so certain comparisons may not be statistically significant.

For more, please download the report at www.aig.com/innovativetech.

THE SHARING ECONOMY AND RISK

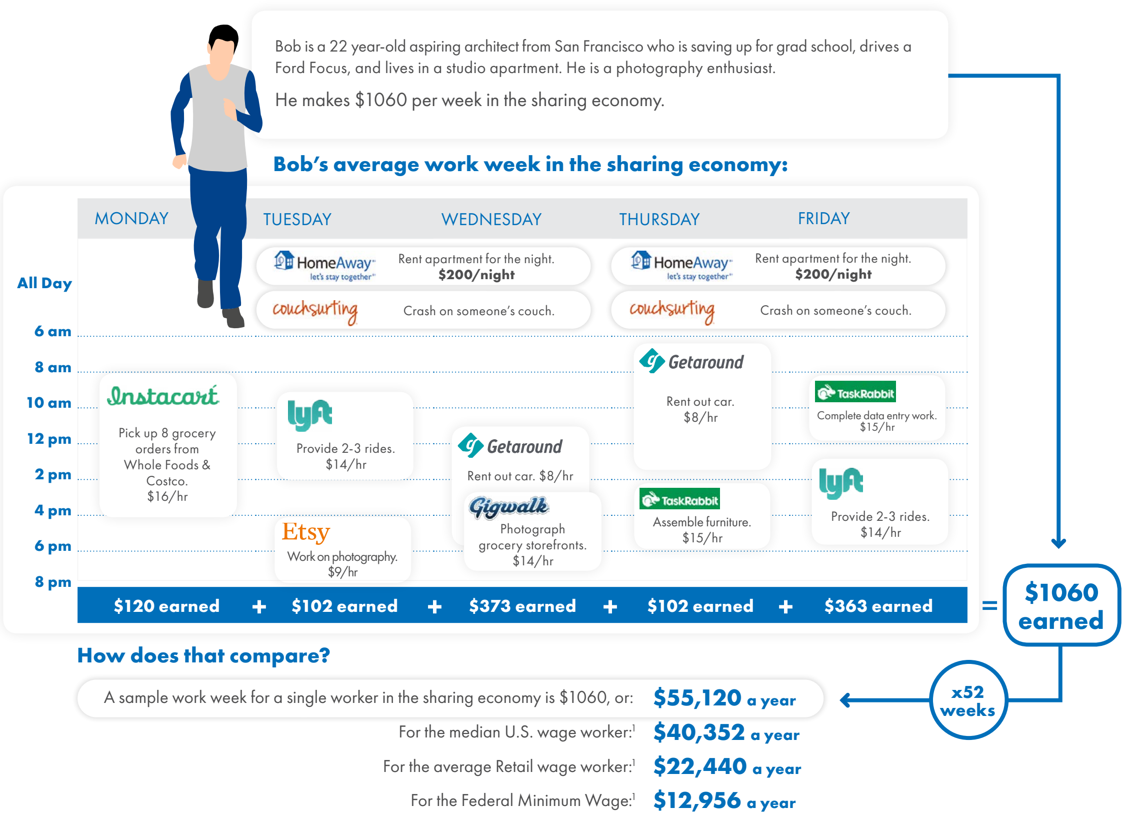
Today, the sharing economy appears to be a part-time, temporary option for most participants. Sixty-four percent have worked in the sharing economy for less than a year, and 67 percent view their sharing economy role as a part-time or temporary job.

In exploring the potential earnings for sharing economy freelancers, analysts at Deloitte developed a profile of "Bob," a 22-year-old aspiring architect and photography enthusiast working in the sharing economy to save for grad school.

Deloitte estimates that Bob's average earnings in the sharing economy would total $1,060 per week, or $55,120 per year. For context, the federal minimum wage for a full-time worker amounts to $12,956 per year. The median U.S. wage worker earns $40,352 per year. Bob's earnings come from a variety of sharing economy gigs:

- Bob rents his apartment on a home-sharing site two nights a week for $200 per night. He uses another home-sharing app to find a couch to crash on for the nights his apartment is occupied.
- On Mondays, Bob spends eight hours shopping for and delivering groceries, earning $16 per hour.
- Two times per week, Bob spends five hours driving for a ride-sharing service, earning $14 per hour.
- Two other times per week, Bob spends several hours completing assorted tasks such as assembling furniture or completing data entry, for $15 per hour.
- He sells photography services on a few different gig and raft sites.
- When he's not using his car for his own work, Bob rents it out on a car-sharing platform for $8 per hour.

How much can you earn in the sharing economy?



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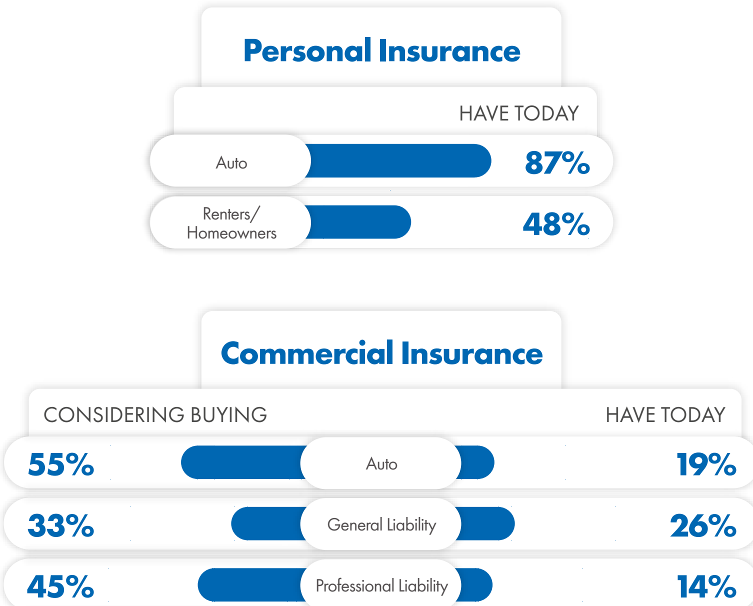
Our survey found that 87 percent of sharing economy freelancers have personal auto insurance and 48 percent have renters or homeowners insurance. However, there is a perceived gap in their coverage for the use of those assets on car-sharing or home-sharing platforms, for example. Just 19 percent of respondents reported having commercial auto insurance, but 55 percent said they are considering buying it.



Just 26 percent and 14 percent reported having general liability insurance and professional liability insurance, respectively, with 33 percent and 45 percent considering those options.

INDIVIDUAL RISK PROFILE

While Bob's earnings outpace those of the average U.S. wage worker, he faces a much more complex risk profile—one that also applies to scores of other sharing economy participants who share assets and work across a wide range of platforms. These risks generally fall into one of two buckets. The first contains risks associated with Bob's work as a service provider in the sharing economy. The second contains risks associated with Bob renting out his apartment, car or other assets. Gig workers operating in the services bucket are exposed to general liability when they're assembling someone's furniture, and professional liability when they engage with other companies to conduct data entry or other tasks. While they are likely covered by a Transportation Network Company's own (TNC) automobile liability when driving for ride-sharing services, other liability exposure exists when using personal cars for deliveries. Often there are multiple policies covering a vehicle–presenting a challenge in sorting out which applies. If a freelancer has multiple platforms running during the course of a day, the sharing of limits and coverage is complicated. There is a gap today in both personal and commercial policies which creates an opportunity to expand coverage that empowers individuals to participate in the sharing economy safely by bringing together risk expertise from what are traditionally known as the Personal and Commercial lines of business.

Across nearly all sharing economy gigs, real service providers like the fictional Bob are exposed to occupational accidents. A worker could injure their back assembling furniture, slip and fall while grocery shopping, or have their camera stolen during a photo shoot. As evidenced by the survey of sharing economy workers, they appear to be more exposed to on-the-job injuries than the average full-time, W-2 workers, and damage or theft of personal property is among the most common adverse events.

Participants in the sharing economy also often expose their personal assets to risk. In addition to direct damage to their personal property such as an apartment and car or even belongings such as televisions and furniture, etc., participants in the sharing economy are exposed to host liability when renting their apartments on home-sharing platforms, and to guest liability when they rent on home-sharing sites or crash on someone else's couch. As the names suggest, host liability holds the property owner responsible for damages that might occur on their property as a result of their own actions or negligence. Guest liability holds a renter or couch-crasher responsible for damage they inflict during a stay in someone else's home.

Most likely Bob and the real workers he represents are not aware that they are exposed to all these risks. If they were aware, as mostly part-time workers who set their own schedules, they're not likely to want to pay for an annual policy. But it is hard to find an insurance market that currently offers a solution on a per-task or per-gig basis.

CORPORATE RISK PROFILE

As the platforms facilitating transactions between supply (assets and services provided by independent workers) and demand (companies and customers), sharing economy companies also face exposure to a wide range of risk.

Home-sharing platforms face contingent host and guest liability; TNCs and delivery companies face contingent auto liability. These forms of liability hold third parties—such as the owners of cars leased by drivers, or corporations enabling transactions between customers–responsible for certain kinds of damages.

All sharing economy companies may also face a host of general, property, and contingent occupational accident exposure if, for example, a real-life "Bob" who works for the platform gets into an accident on the job. sharing economy companies collect and transmit large amounts of personally identifiable information about their companies, and many develop a complex behavioral profile of users—where they're going, when, how long they stay, what they are buying, etc.—that is attractive to hackers and exposes the companies to significant cyber risk.

Investors are also pushing many platforms to set up Directors' and Officers' liability insurance to protect company leaders from damages and legal costs resulting from lawsuits that name them as defendants.

While much of the focus on the sharing economy centers around consumer applications—ride- and home-sharing, deliveries, gig-based jobs, etc.—there is tremendous opportunity for adaptation and innovation within the commercial sector. The principles of the sharing economy are already disrupting commercial enterprises in major ways.

Informed by the principle that "if you can digitize it, you can share it," the progression of the sharing economy is growing exponentially, as more companies prioritize on-demand access over ownership, and as new technology connects businesses to unlock the highest and best use for their assets. This evolution is occurring across various sectors, including:

WORKSPACE

One of the fastest-maturing commercial sharing economies is office sharing through the use of digital platforms. Office sharing capitalizes on an estimated 12 percent vacancy rate in U.S. office space to enable flexible workspace usage for businesses that don't need permanent space.[xii] Small startups previously stifled by isolation and strapped down with long-terms leases now share space with other companies, lowering costs and increasing collaboration. With the International Data Corporation estimating there to be 1.3 billion mobile workers worldwide,[xiii] the answer to office space demand may not be new buildings, but unlocking previously unused space.

Office sharing is a perfect fit in the broader gig economy, which now comprises 34 percent of the work force, making flexible and on-demand workspace more essential to the office space industry. [xiv] With 120,000 customers across over 198 buildings in 52 cities, along with recent capital funding, industry leader WeWork is now worth a projected $20 billion.[xv] Splacer and Peerspace are also enabling access to underutilized assets in a more digitally native manner than WeWork, and are also on the rise.

A similar idea is also transforming the hospitality industry, where since 2010, LiquidSpace has been linking previously idle space in hotels to businesses needing short- or long-term office space. LiquidSpace partnered with Marriott in 2012 to offer rent-by-the-hour space at over 430 hotels.[xvi] Customers reserve space online as easily as booking a table at a restaurant.

GLOBAL FREIGHT

The sharing economy is also beginning to maximize efficiencies and reduce waste in the global freight market without driving any extra miles. The Environmental Defense Fund estimates that 15-25 percent of trucks on the road are empty, and non-empty trucks are 36 percent underutilized. The organization further estimates that "capturing just half of this under-utilized capacity would cut freight truck emissions by 100 million tons per year and reduce expenditures on diesel fuel by more than $30 billion a year."[xvii]

Technology has advanced to a

place where it's now easier to identify under-used space in trucks and other freight containers, and to connect that under-used space with companies that need to move goods. A plethora of start-ups—such as Cargomatic, uShip, Freightos and ShipHawk—connect regional trucks with either partially filled or empty trailers to companies that need on-demand shipping.

Since 2015, Convoy has been connecting truckers with idle freight space to businesses in the Seattle area, with plans to expand after securing $16 million from investors.[xviii] Through a mobile app, customers can select carriers select carries with similar routes and available space on demand, tracking all shipments by real-time GPS.

CONSTRUCTION

In the construction industry, the sharing economy enables companies to get more use out of equipment that may otherwise sit idle all but one or two days a month. Yard Club, established in 2013 by Colin Evran, connects companies with idle construction equipment to companies needing a particular piece of heavy machinery. It has over $200 million worth of equipment in its online marketplace,[xix] and facilitated $120 million in transactions in 2016 alone.[xx] Two years after investing in the start-up, Caterpillar bought Yard Club in 2016 in order to run the Yard Club platform as an internal machine-rental program. Once again, this demonstrates how traditional firms are looking to this new business model for organic evolution and inorganic growth.

WAREHOUSING

As more and more retail trends toward e-commerce, the sharing economy is making warehouse storage space more flexible, efficient and affordable. Online retail requires more storage space than traditional retail,[xxi] needing elbowroom to package a higher quantity of individual parcels instead of large pallets. Prologis is building the country's first vertical warehouse that a 53-foot semi-trailer can navigate. This warehouse can store upwards of 1 million 1 million square feet of product in the San Francisco Bay Area.[xxii]

As a new player in the warehouse industry, since its founding by Karl Siebrecht in 2013, Flexe has created an online marketplace for companies to share excess storage space without the restrictions of a long-term lease, allowing companies to share space by the pallet. The company now has 550 partner warehouses with 25 million square feet of storage, with plans to add 10 million more this year.[xxiii]

Flexe added online order fulfilment this past year, with the advantage over Amazon that companies can sell products from their own websites and ship packages in their branding the next day. In one example, Flexe unlocks all the excess leased storage space that Halloween stores have the other 11 months while the merchandise is in stores during October.

SUPPLY CHAIN

Nearly every stage of the commercial supply chain has opportunities for the sharing economy to transform. Floow2 casts a wide net, offering companies across Europe the opportunity to share idle assets and services at virtually every stage of the supply chain, ranging from vehicles and equipment to workers and office supplies. Users with idle assets post their available offerings online, enabling customers with needs to browse an online marketplace of over 25,000 available assets.[xxiv] After the booking, users leave reviews, maintaining both transparency and reliability.

RISK AND LIABILITY CONSIDERATIONS

In many cases, advancements in technology driven by the sharing economy are helping commercial enterprises reduce risk and increase efficiency. In warehousing, for example, atmospheric sensors are making it possible to monitor environmental conditions and prevent water or other weather-related damage.

At the same time, the changes that technology is enabling create new risks that companies need to address. In the warehousing example, technology is enabling more efficient use of vertical storage space, but the risks of worker injury or damage to stored items may increase when stacks get taller.

Many of the platforms enabling the commercial sharing economy today seem to take a "hands-off" approach to liability. They simply connect supply with demand. They sometimes provide a level of coverage, but largely leave commercial liability where it has always rested. Others, like those operating in the shared workspace sector or those that own the tools being rented out to construction companies, may be creating new exposures that need to be addressed with policies that recognize the fluidity of the sharing economy.

TRADITIONAL COMPANIES ENGAGING WITH THE SHARING ECONOMY

Well-established companies also take on various kinds of risk when they interact with other companies, including those involved in the sharing economy.

If a company starts allowing its employees to use home-sharing apps for business travel rather than requiring them to use traditional hotels, for example, the decision affects the company's risk profile and how it structures contracts.

In light of the changes being driven by the sharing economy, corporate risk managers will need to examine and re-design insurance programs, contracts and engagement with different vendors related to transportation, logistics, talent sourcing, food supply and occupational accident and worker compensation, among other issues.

The way we travel today is changing. We share rides. Cars park themselves. Driverless cars are being tested on public roads.

When artificial intelligence and automation take more control over the operation of vehicles, they upend our conventional wisdom about liability. Risks won't disappear as much as they will shift -- from humans to the collection of machines that power mobility in the future. AIG conducted a survey of 1,000 road users in the United States, 400 in Singapore, and 400 in the UK. We found that the new community of mobility operators includes:

- **auto manufacturers**
- **the companies that develop the algorithms and software that comprise an autonomous vehicle's "brain"**
- **manufacturers of various parts and systems (from traditional parts such as brakes, belts and fluid lines to new devices such as cameras, sensors and communication tools)**
- **the entities that develop, maintain and own infrastructure such as roadways and traffic lights**
- **the companies that build and maintain communications networks autonomous vehicles use to communicate with their networks and the cars around them**
- **suppliers of data such as mapping information**
- **and many more**

When a component of the car, rather than the driver, is in control, risk shifts among the entities mentioned above. Exposure may shift as well for those responsible for building and maintaining roads, and the digital networks on which autonomous vehicles operate.

Consumers, too, sense the coming shift in liability. The general public expects autonomous features and driverless cars to continue presenting risk, and they see liability shifting as autonomous features take more control of the vehicle. Respondents were presented with several accident scenarios and asked to choose which entities they would consider most liable in each.

In cases where the respondent was the operator of a vehicle with autonomous features that struck a pedestrian in a crosswalk, they viewed themselves as most liable. In the United States, 54 percent cited "the driver" as most liable, compared to 33 percent selecting the manufacturer and 27 percent selecting the software programmer. In the UK, 57 cited "the driver" as most liable, compared to 30 percent selecting the software programmer and 25 percent selecting the manufacturer. In Singapore, 44 percent cited "the driver" as most liable, compared to 37 percent citing the manufacturer and 37 percent citing the software programmer.

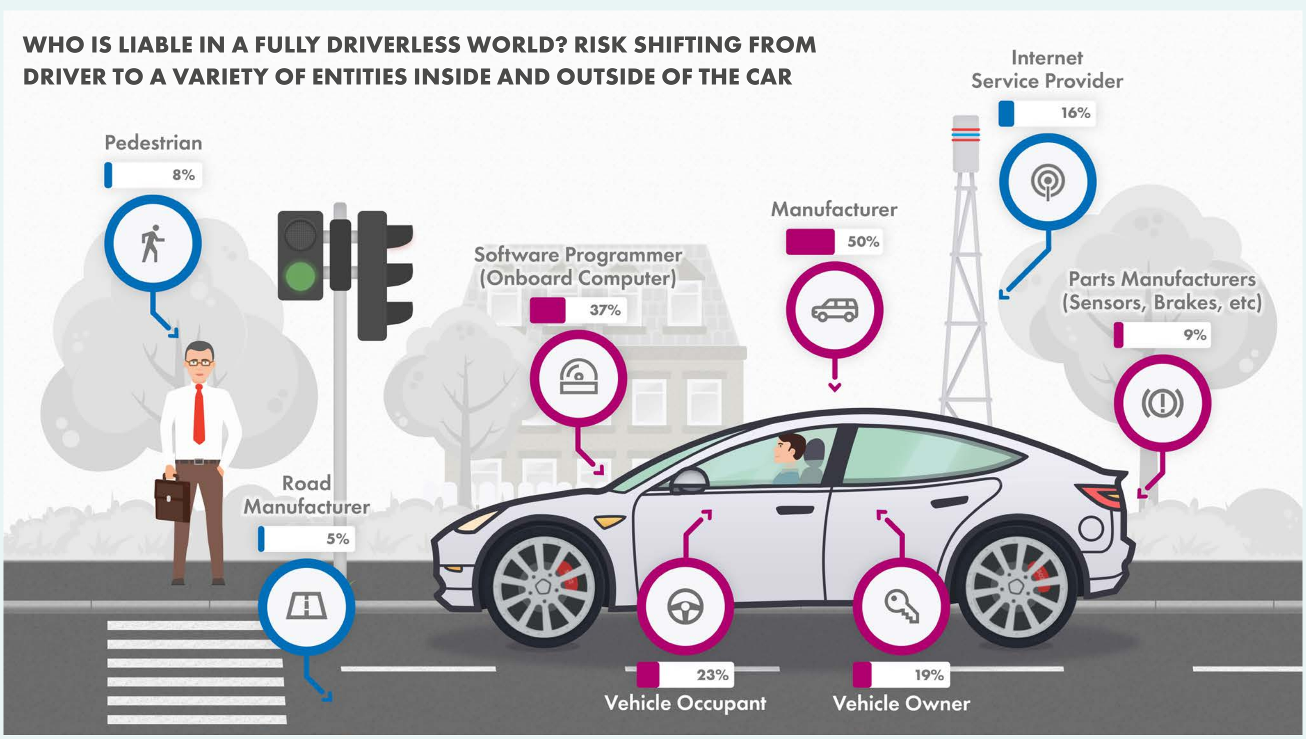
In scenarios involving fully driverless vehicles, consumers do see risk shifting to other parties. When the U.S. respondent was an occupant of a driverless vehicle that strikes a child, 50 percent named the manufacturer as most liable, followed by 37 percent naming the software programmer, 23 percent naming the vehicle occupant and 23 percent naming the vehicle owner who, in the case of driverless vehicles, may be another individual or a corporation.

In the same scenario, UK drivers cited the manufacturer and software programmer as equally liable, with 40 percent of respondents citing each as the most liable. Twenty-eight percent named the vehicle occupant and 19 percent named the vehicle owner as among the most liable.

Singapore drivers also cited the manufacturer and software programmer equally, with 45 percent and 46 percent naming them most liable, respectively. Just 16 percent of Singapore adults cited the occupant and just 18 percent cited the owner of a driverless vehicle as among the most liable.

This sidebar is adapted from the January 2018 AIG study, "The Future of Mobility and Shifting Risk," and cites data collected in AIG surveys of road users in the U.S., the UK and Singapore.

For more, please download the study at www.aig.com/innovativetech.



U.S. Respondents to AIG Future of Mobility and Shifting Risk Study

CONCLUSION: SOLVING INSURANCE MARKET CHALLENGES

The good news is that sharing economy platforms capture far more data than traditional companies do. Sharing economy companies may have a more accurate, real-time measure of the risk exposure looking forward.

In trying to meet the new demands of the sharing economy, the insurance industry faces a number of distinct challenges that will require new approaches to doing business.

Regulations are at best rapidly changing and often nonexistent. As a competitive advantage, some sharing economy firms do not make financial information public—which the insurance community could use to more fully evaluate their risk and exposure. Most startups allocate capital toward growth rather than devoting it to collateral that insurers typically use to validate credit exposure. Firms grow so quickly, there is little, if any, historical loss information with which to predict future losses and set rates for emerging risks.

The good news is that sharing economy platforms capture far more data than traditional companies do. Sharing economy companies may have a more accurate, real-time measure of risk exposure going forward than companies that use the traditional approach of reviewing several years' worth of loss data to predict the future. The challenge is in opening up the sharing economy's data sets to examination, and harnessing huge and complex stores of information to inform pricing decisions in real time.

For example, an insurer can look at 3 three years of historical loss data to predict future losses for a traditional limousine company. A modern ride-sharing company won't have that kind of historical data, but with the telematics they are collecting, the right model could lead to a more accurate representation of the exposure through new loss correlations that had not previously been considered. This may ultimately lead to more precise rate making. Insurers need to be creative.

One significant challenge is the market and regulators that view personal and commercial lines of insurance as separate. In the sharing economy, lines are blurred. Creating new, innovative insurance products for these markets will require collaboration and risk expertise from across the personal and commercial areas.

Innovation in the sharing economy is inherently risky, but risk should not keep companies from innovating. This is a business model here to stay. Partnership is key for forward-looking insurers and brokers.

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