

## Research



# The Modern Online Gig Economy, Consumer Benefits, and the Importance of Regulatory Humility

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In previous work, AAF focused on the online and traditional gig economy by exploring the changes in this labor force since the economic downturn.<sup>[1]</sup> But within this broad class, a narrower category of networked technologies has taken the spotlight to become a constant focus for policymakers, critics, and presidential hopefuls. These technologies meld peer-to-peer networks on both the production and consumption sides to sell goods and services.<sup>[2]</sup> While labor practices have been a constant topic of conversation, many have lost sight of the primary benefit of new network-based service technologies, and the chance that it affords policymakers. Disruptive technologies bring new and expanded services to consumers. As consumers switch and efforts are made to place the new services into the old regulatory buckets, the costs of the old system are highlighted and policymakers have the opportunity to rebalance asymmetric regulations. The burdens of the regulatory system are extensive but often go unseen. While there has been a lot of concern about how to regulate disruptive technologies, consumers and governments stand to benefit from these innovative changes and a hands off approach that incentivize their creation. This paper highlights both the state of the modern gig economy, its consumer benefits, and the cost and affiliated burdens imposed by regulators.

## How networked technologies are bringing benefits to consumers

Disruptive technologies and innovative business models benefit consumers because they internalize the power of markets, thus bringing to bear their power to help transform a service. Markets are characterized by three broad features: they must attract a sufficient proportion of potential market participants both as buyers and sellers to come together; they must mitigate the problem of congestion by allowing participants alternative possibilities or making the markets clear quickly; and finally, they must make it safe to participate in the market as simply as possible.<sup>[3]</sup> Disruptive network technologies employ advanced communication methods to help solve the first and third issues, while also bringing into the market new participants and protection mechanisms. Broadly speaking, what unites these new technologies are four broad features:<sup>[4]</sup>

1. Enabled by advanced communication networks, new technologies reduce transaction costs and allow new trades to occur.
2. These trades often occur with assets that otherwise will not be used, thus bringing “dead capital” back to work for consumers.
3. These new organizational forms push services from isolated exchange to market exchange.
4. Review systems and other dynamic policing mechanisms instill trust into the both side of the bargain.

## The reduction of transaction costs

For some time, the existence of companies posed a problem for economists. When consumers want a good or service, why is it that they cannot just go to the market and contract for it? In other words, why are there so many companies? As Nobel Prize winning economists Ronald Coase and Oliver Williamson explained, there are huge costs that one has to incur to participate in the market, to find out who has the good or service, to make a deal, and to ensure that the provider follows through on their agreement. Thus, companies capitalize on what economists have come to call transactions costs. The nature of firms is intimately tied with the transactions costs within the market.

Advanced networked technologies such as Internet purchasing, mobile app commerce, etc., have dramatically reduced the cost of interacting, bargaining, and monitoring, allowing for the creation of new kinds of organizations. Thus, with the internalization of market processes, trade in services and goods is expanded. In turn, consumers have flocked to these networked services because of the added convenience, lower prices, and higher quality services. This new organizational form first took hold with the Linux operating system and has become especially well known via the Wikipedia project. Decentralized exchanges and cheap communication over the Internet allowed for programmers to connect to collectively edit and advance Linux, while those same tools have allowed for Wikipedia editors to collect and publish over 5 million English language pages.<sup>[5]</sup> The biggest names in this space, including Uber, Lyft, and Airbnb operate in industries with large barriers to entry, which also might be understood as having high initial setup costs, a kind of transaction cost.

While today these platforms are transforming specific services, there are countless smaller players that have created their own niche market that could not have been possible before ubiquitous communication. Two of the more well-known organizations include Kiva, which allows people to lend money via the Internet to low-income and underserved entrepreneurs and students across 82 countries, and Kickstarter, which crowdfunds creative projects. These patronage platforms evince how powerful networks can be if they utilize a vast network of suppliers, who have committed relatively small funds, to affect a targeted domain of consumers. The case of financing is, however, just a small part of a much larger change in how assets are being deployed in the marketplace.

## **Resurrecting dead capital**

At any given time, there are countless assets not being used. In the US, about 1.5 rooms exist for every person, cars will often sit idle in parking lots during business hours, and countless other durable goods will go unused for long swaths of time.<sup>[6]</sup> Because these assets cannot easily be bought, sold, valued or used as an investment, they are often called dead capital.<sup>[7]</sup> Reducing the cost to transact means that these assets can be brought back into the market to be bought and sold, creating beneficial exchanges for both consumers and producers. While much of the focus has centered around Uber, Lyft, and Airbnb, it is likely that niche markets for specific goods and services like tools, boats, musical instruments, and extra factory space will see the biggest growth in upcoming years.<sup>[8]</sup>

Consider Airbnb. Renting out spare rooms and couches resembles the once common practice of “boarding out.” Boarding was especially popular in the early 1900s with lower-income and recently immigrated families to supplement income and help assimilate newcomers, who were often within that family’s social network.<sup>[9]</sup> Boarding out was prevalent, but fell out of favor as regulation of boarding homes increased. Airbnb has brought back these kinds of services to consumers, reemploying extra rooms into the economy.

There are a number of clear benefits from expanded services. For one, consumers and producers have greater choices. One of the biggest advantages of more choice could come in the form of narrowing of prices. Thus, while prices will not *always* decrease, it could be that the absolute range of prices will be narrowed around an average.<sup>[10]</sup>

As methodological techniques advance and data is collected, it is likely that the real benefits will be conferred to the owners of the asset. Early data from Airbnb and other online marketplaces suggests that the introduction of these peer-to-peer production firms has the effect of substituting rentals for ownership, thus conferring onto these new owners the financial benefits that go along with ownership. Moreover, used-good prices do tend to see drops that come hand in hand with consumer surplus increases.<sup>[11]</sup> As a recent paper on this topic explained,

Consumption shifts are significantly more pronounced for below-median income users, who also provide a majority of rental supply. Our results also suggest that these below-median income consumers will enjoy a disproportionate fraction of eventual welfare gains from this kind of 'sharing economy' through broader inclusion, higher quality rental-based consumption, and new ownership facilitated by rental supply revenues.<sup>[12]</sup>

While still early, these results are promising and suggest that both sides of the bargain actually win.

### **The transition from isolated to market exchange**

By reducing transaction costs and reintroducing dead capital back into the market, new technologies are able to transform isolated exchanges, a one-to-one interaction, into market exchanges, that brings both customer and producer knowledge to a wider audience. In the parlance of economists, search costs are reduced and the market is expanded.

The concept of isolated exchange is one that dates back to Aristotle's work on economics.<sup>[13]</sup> In this kind of exchange, the deal is limited to those in a close network, often among friends, and is not standardized, nor does it take into consideration other players in the market. The knowledge imbued in prices that comes from extensive and liquid markets is simply not the same when those interactions are just one offs. Transitioning from these one off trades to a more fluid market exchange has serious benefits, especially for consumers. As experiments in this space have shown, in some cases only four buyers and four sellers are needed to bring about competitive outcomes, but only if the structure of those exchanges is a market.<sup>[14]</sup>

Limited knowledge about demand for a service has long been a limiting factor in the expansion of some services. Airbnb has built a massive back catalogue of rooms in areas that have extra spaces but aren't typically in the same places that hotels aggregate. Indeed, this is a driving factor behind the company. Instead of a typical hotel room, many flock to the site because it offers a unique and comfortable space to connect with new people and rest.<sup>[15]</sup>

Taxicabs have long been criticized for not providing service in some neighborhoods and to some economic groups. In part, this is due to knowledge problems in that the demand for a product or service exists, but isn't known to exist. According to one analysis of actual Uber rides, the expansion of the company has largely benefited low-income New Yorkers, who live in the bottom half of New York City median household income.<sup>[16]</sup> While there has always been a demand for these services in underserved neighborhoods, knowledge of that demand can only now be quantified, pushing service to expand into these new areas. Indeed, in a survey of consumers of these products, the third most cited reason for use is that the product or service cannot be elsewhere.<sup>[17]</sup>

### **Personal reputation and trust enabled by reviews**

Like other kinds of trade, economic exchange enabled by new tech is built on a system of trust, which is supported via rating systems and electronic verification techniques. The sophistication of these rating systems enables the ecosystem and is clearly changing the nature of consumer regulation of bad actors. Paradoxically,

while consumers have lost trust in large companies, peer-to-peer networks and social selling might be adopted in part because they are more psychologically appealing as they provide an experience that is distant from bureaucratic organizations.<sup>[18]</sup>

It is a mistake to think that online reputational systems are simple affairs. As should be expected, buyers consider reviews and use them for a variety of purposes when purchasing goods. Moreover, “negative reviews do hurt sellers, but that a negative reputation hurts more than a positive one helps on some dimensions but not on others.”<sup>[19]</sup> Also, online sellers are able to distinguish themselves by replicating unique selling points highlighted by successful brands.

Combined, these forces act as constraints on businesses as evidenced in research on Yelp, a service rating web site. For one, it has been found that a one star increase in Yelp’s five star rating system leads to between a 5 and 9 percent increase in revenue for independent restaurants. For chain restaurants, however, ratings seem to not have an appreciable effect on revenue. However, as Yelp penetration has expanded, the market share of chain restaurants has diminished.<sup>[20]</sup> In other words, online consumer reviews are standing in for more traditional forms of reputation.

Yet those traditional forms of reputation are also undergoing changes, mirroring one of the oldest forms of selling, direct selling. Direct selling is built on relationships, distinct from physical and online retail outlets. As such, the performance of the service or good is being continually monitored because there is a close connection between the buyer and seller. Now, those kinds of connections and the resulting consumer insights are being extended online into online social channels via technology, fostering closer experiences. New platforms create the spaces for communication and personal brand management that had largely gone unnoticed apart from direct sellers. Thus, the constant two-way communication imbued in networks has expanded the scope of this important constraint into other methods of selling.

This more robust knowledge ecosystem has had direct effects on taxicabs much like Yelp reviews. Because there is extensive data provided by Uber for use, there are some interesting relationships to be found in their rise and effects on the quality of local taxis. After controlling for a number of other factors, Uber’s expansion is connected with a decline in consumer complaints per trip about taxis in New York. In Chicago, there is a similar story. The networked service’s growth is associated with a decline in broken credit card machines, air conditioning and heating, rudeness, and talking on cell phones.<sup>[21]</sup>

But for taxicabs, this is a two way street. As a profession, taxi drivers are subject to some of the most significant levels of workplace violence, up to 33 times higher than average. Nonfatal assaults, homicides, robberies, and verbal abuse are among the highest for taxicab drivers, while the perpetrators of the less serious actions typically face few legal consequences. With Uber, personal reputation is quantified. Moreover, because there is no cash exchange, the possibility for robbery is severely diminished, and if there are problems, identifying information on the rider is kept which allows for ex post enforcement. All combined, the safety of the driver is better assured with Uber.

## The Unseen Cost of Regulation

While innovation in business models for independent businesses has enhanced economic opportunity for sellers and quality of service options for consumers, changes in the marketplace have also given rise to new efforts to regulate these firms. The laws some want to apply to these upstarts are meant to ensure safety, quality, and transparency. Yet, as the above section highlights, desirable outcomes for both consumers and producers are occurring with these networked technologies. As has been detailed for some time, the laws meant to ensure consumer protections act as hurdles for new entrants, imposing costs on the economy, producers and consumers.

However, it is difficult to calculate just how extensive this drag is. Two problems plagued past studies of regulation. For one, specific and narrow areas of regulation were often studied, like environmental or telecommunication regulation, and thus limited in scope. On the other hand, more generalized methods, like the World Bank's *Ease of Doing Business Index*, quantified the regulatory burden in a comparative fashion among regions.<sup>[22]</sup> While this method has proven useful to researchers in making comparisons and connecting this data with economic growth figures, the downside is that the absolute cost to consumers is difficult to ascertain. Efforts to calculate the total burden of government mandates have been taken up in recent years, and are taking a number of different forms.

One way to get at the cost of regulation can be found in AAF's Regulation Rodeo, which compiles the cost of final rules as published in the Federal Register. The innovation of this program lies in data collection and ease of access, as it compiles official figures. According to the total implemented rules so far this year, consumers will ultimately have to bear \$90 billion and 48 million paperwork hours.<sup>[23]</sup> However, this method doesn't include all of the proposed rules, which when summed for the whole of 2014 came to a grand total of \$181.5 billion.<sup>[24]</sup>

Another method of articulating the cost of regulation uses textual analysis to count all those instances in the Code of Federal Regulations (CFR) where individuals or companies are constrained in their actions.<sup>[25]</sup> Using this method, researchers found that the total number of restrictions in the entire CFR rose from about 835,000 in 1997 to over 1 million in 2012.<sup>[26]</sup>

Both of these projects help to illuminate the extensive unseen costs built into markets that occur when the federal government either requires or restricts some kind of action on the part of companies or individuals, which in turn gets placed as a burden on consumers. Though it takes many forms, what unites disruptive technologies and business models is that they are disrupting regulatory regimes and lowering the barriers to entry.

The reduction of taxicab medallion prices across the country provides a visceral example. Before Uber and Lyft, driving a taxicab in Chicago required that you first pay the city \$357,000 for a taxicab medallion.<sup>[27]</sup> For New York City, the cost to get into taxis was much higher, at right around \$1 million.<sup>[28]</sup> In Boston, the price of a medallion is \$625,000, while in San Francisco, medallions were selling for \$300,000 with the city taking a \$100,000 cut.<sup>[29]</sup> Those prices are falling dramatically. In Chicago, the price fell to about \$270,000 and the number of medallions being transferred also dropped dramatically. In New York city, the cost of these medallions were down about 25 percent at the beginning of 2015, and the relatively liquid market has come to a standstill.<sup>[30]</sup>

So why did the medallions cost so much and why are they now falling? Only a certain number of medallions were ever available at one time, so a medallion's cost represents in part the going rate of exclusion also known as an entry barrier. With those entry barriers coming down, so too has the cost of the medallion. The story is the same for nearly every city. At first, there was free entry and exit into the taxicab market. Then, as a result of

efforts to regulate the industry, the medallion system was put into place. Only those with a medallion could drive a taxi. When the first set of medallions were stamped in the 1930s, those grandfathered into the system got a windfall. As economists say, the asset (medallion) is capitalized and the costs to acquire it are baked in. But from then on, anyone who wants to enter into the market has to pay for access to the market by purchasing or leasing a medallion. Once competition enters into the market, the asset holders are left with real asset decreases, leading to what Buchanan called into a transitional gains trap.

And yet, there isn't a huge difference between the medallion system and other regulations meant to affect quality, and quantity of service. Occupational licenses, which aim to ensure these consumer benefits, are proving to be another sad story of regulatory overreach, affecting about 1 out of every 3 jobs, compared to less than 5 percent in the early 1950s.<sup>[31]</sup> Both the medallion system and occupational licensing schemes act as a fixed cost and deter entry, thus increasing prices for consumers and keeping people out of certain professions. Only those that can jump through the regulatory hoops are able to secure their benefits, which has real and immediate impact. While the goals of these regulations are often laudable, the implementation imposes inefficiencies in the market, including limiting consumer choice, raising consumer costs, increasing practitioner income, limiting practitioner mobility, and depriving the poor of adequate services.<sup>[32]</sup> The White House has even chastised the broad nature of these regulations, noting that:

Too often, policymakers do not carefully weigh these costs and benefits when making decisions about whether or how to regulate a profession through licensing. In some cases, alternative forms of occupational regulation, such as State certification, may offer a better balance between consumer protections and flexibility for workers.<sup>[33]</sup>

It is important to note that the real benefit of these regulations – improved quality of service – is often hard to find in the data.<sup>[34]</sup> So not only do these laws impart costs, they do so in a way that does not improve the underlying services. By bringing together consumers and producers of services and goods, networked technologies and independent business models not only place pressure on this clunky regulatory system, but also benefit consumers via the introduction of new services.

## Conclusion

New technologies are upending the typical role of regulation. In a previous generation, it was regulation that protected consumers. Now reciprocal rating systems and transparency provide consumers critical buying information, giving all of us a chance to rethink why we regulate. Importantly, review and rating systems come as a result of expanding networks, which have brought a bevy of benefits to consumers and producers. Legislators need to be acutely aware of the benefits of change as they craft policy and work to ratchet down laws already on the books. Moreover, many services are growing and are being funded because there are opportunities separate from the traditionally regulated economy. In their zeal to protect and tax, governments all too often get in the business of picking winners and losers. New waves of products are forcing cities to justify their policies. Here's hoping the innovators win.

[1] Will Rinehart, Ben Gitis, *Independent Contractors and the Emerging Gig Economy*,

<http://americanactionforum.org/research/independent-contractors-and-the-emerging-gig-economy>