OVERSEAS

Overseas Feature

海外·特稿

约车App开启的分享经济前景无可限量

文 | 泰德·普林斯

Uber在美国和其他很多地方都取得了成功,滴滴出行在中国市场的业绩也非常可观,那么,下一步出租车预定业务将如何发展,谁会是最终的赢家?对此我的观点是:出租车行业本身的变化并不重要——手机订车App的出现在一定程度上颠覆了这个行业,约车效率和乘坐体验因此有了很大改善,但由于传统出

租车行业及其从业者的抱残守缺，这个行业未来的变革空间并不大。但这不要紧，因为被滴滴和Uber真正改变的不是出租车行业本身，约车App引出了一个发展趋势，它正对人类生活的其它领域产生重大影响。下面我们来具体谈谈这个问题。

人们经常会犯这样一个错误：只看到眼前最直观的变化，忽视那些明显的发展大势。比如，大家都看到了滴滴在改善出租车服务质量方面贡献良多，但与其引发的深远变革相比，这不过是冰山一角。

不妨再看看比特币这个例子。以比特币为代表的数字货币，其诞生的意义不在于出现了数字货币，而在于出现了一种全新的不需以政府公信力做背书的信用体系。比特币的创新价值在于开发出了基于网络的"环块链"（blockchain）技术，这是一种由全球网络验证并分享、记录每笔比特币交易的总账技术。环块链技术在结算和记录保存方面的功能优势已经引起很多行业的注意，其使用正在向主流金融机构拓展。实际上，将引发金融产业发生革命性变化的正是环块链技术，而不是比特币本身。而且，这种变化的深度和广度将远远超越货币和货币交易本身。同理，我认为滴滴、Uber开发的手机约车App，而不是这两家公司本身，会在相关领域产生类似的深远影响。

我认为，随着市场参与者的不断增多以及传统出租车行业持续保持对抗态度，约车App的利润率会迅速下降。另外，政府部门从出租车行业获取的财政收入规模可观，它们也不会将这个获利行业拱手让给私营部门。

手机约车业务发展受阻不是什么大问题，因为真正有创新意义的约车App已经出现了。这种App的核心价值在于更便捷地分享某种事物的理念，它能应用到对分享具有巨大需求的各种领域中，下文所述就是其中的一些例子。

交通运输

除了滴滴和Uber的乘用约车App，出租车

有了共享型 App，无人机运输将打破区域的限制。

App已经扩展到了货运领域，用户可以很方便地约到私人小汽车或卡车来临时运点儿货物。这只是些明显的应用领域，分享能够发挥重要作用的交通领域还有很多，包括：

空中交管 目前，空中交通管制权掌握在各国的政府部门手中，效率因而很低。而滴滴约车这类App能够实现动态高效的空中交通管制，可以随时随地根据需求开辟新航路，更新时刻表，而不是像现在这样，开辟新航线之前需要花上一年半载等待政府部门审批。

军事领域 军队运输的效率非常高，但成本相应也很高，滴滴类型的App因此有了用武之地。借助分享软件可以动态地调动军用物资和人员，其效率将远远高于沿用自二战时期的传统军事运输手段。

全球运输 有了分享型App，建一个新的全球运输网不是难事。比如可以开设一家为自行车运动爱好者在全球范围内运送自行车的公司，用分享型App调动上千万辆自行车的运输轻而易举。这种分享技术还能用在无人机运输领域，如此一来，无人机运输将打破区域的限制。只要是你能想得到的小商品，不管商店开在哪里，无人机全球运输网都能把它送到你面前。

执法领域 不管人们是否愿意接受这个事实，但新技术会不可避免地引发新型犯罪，好在新技术同样能够用来打击犯罪。在打击网络犯罪方面，共享型App也提供了很多可能性。

分享物品

从本质上说，分享型App能让我们分享任

泰德·普林斯
佩斯领导力研究院创始人暨CEO

何想要分享的事物，比如Airbnb能让人们分享自己的房屋。除了这类固定资产之外，我们可以分享的事物还有很多，比如：

机械设备 有了分享型App，工厂不必再花巨资购买生产设备，尤其是不用购买那些使用频率不高的设备，成千上万家企业可以动态地按需使用用于分享的机械设备。农业领域也是如此，农用机械设备可以更有效率地随着季节变化在不同地区间调配使用，这将大大降低农业生产成本。

家用设备 有些家用工具和电器不是需要频繁使用的，比如除草机、园艺设备、某些清洁工具等。分享类App能让人们很方便地在网上租用需要的家用设备，这就节省了大笔购买开支。

分权所有

在美国，分权所有（fractional ownership）制度已经发展得很好。这种做法主要用于购买昂贵的资产，人们共同出资购买此类资产，然后分别拥有资产的一部分所有权。分权所有最初产生于旅游地产领域，后来扩展到商务飞机消费领域。如今，美国很多资金实力不太雄厚的小企业主都通过分权所有这种形式拥有商务飞机的使用权。沃伦·巴菲特麾下的公务航空公司Net Jets就是这个领域的代表性企业。

滴滴和Uber开发的分享型App能够管理这种分权所有的资产，约车软件可以很容易地升级为分权所有型汽车的管理软件，那它升级为分权所有型昂贵资产管理软件也不成问题，比如帮助人们分享高档游艇、珠宝、分时度假酒店公寓，在遥远的未来，大家分享一艘火星飞船的所有权也不是不可能的。

物联网

物联网是下一个具有爆发潜质的技术领域。万事万物都可以被赋予一个IP地址，然后被纳入到物联网中，不管是无人机、冰箱、摄像头，还是玩具、汽车，我们都可以与之通信并通过网络来遥控它。

以前的物联网概念存在一个大问题：我们可以通过IP地址与某物通信并控制它，但如果我们想同时与大批对象通信并控制它们时该如

物联网是下一个具有爆发潜质的技术领域。万事万物都可以被赋予一个IP地址，然后被纳入到物联网中。

何做呢？比如，如何指挥1万架无人机在不同时间飞往不同的目的地，如何控制位于不同地点的100台各式设备同时工作？如今，分享型App具备的控制与协同功能已经能够让我们掌控这种情况，它在物联网领域发挥作用的广度甚至已经超出我们目前的想象范围。我认为，物联网设备将是未来与分享型App结合得最紧密的设备。

供应链优化

供应链具有重要价值，对于中国这样的制造业大国来说尤其如此。在全球范围内，制造业、金融服务业等各行各业都形成了庞大而复杂的供应链，在同一条供应链上工作的人甚至可以多达数百万。

目前，管理者主要在用一套数学的方法来监控供应链的运转。但我们完全可以使用由共享式App衍生出的一套新工具来管理并优化供应链的运转。如今供应链上协同工作的要求正变得越来越高，比如随着3D打印技术的发展，一些3D打印生产商可能在各地同时使用上百万台3D打印机生产一次性产品的不同配件，每一种配件的设计以及生产原料和生产工艺都不相同。满足这种生产要求的供应链会异常复杂，而分享型App能够很好地管理这类供应链。

大数据管理

共享型App工作的时候会产生极大量的数据，比如上百万人同时使用一个约车App时，软件系统需要分析处理大量的实时数据，运营App的企业因而面临着巨大压力，因为能开发出此类App的企业未必都有能力维持它有效地运转。

不过，如今有一些开源渠道可以解决此类问题，比如实时开源数据库Hadoop，以及数据分析引擎Storm和Spark。此类数据库和数据分析引擎有些可以用于分享型App的管理，可以成立一些专门的公司，以第三方的身份提供此类服务。

这些数据计算分析功能不仅能够用于过程及供应链数据管理，还可用于广告行业、需求预测与管理，以及面向个人的市场营销。可以预计的是，在这类广告和市场营销领域，很快会涌现出大量的新公司，它们将成为众多新成立的分享经济供应商的合作伙伴。

分享经济改变世界

亚马逊公司最开始只卖书，当它意识到自己拥有的先进的零售库存及分销管理系统才是公司的核心竞争力，而且这套系统可以用于任何零售类产品之后，逐渐发展成为了美国最大的在线零售企业。阿里巴巴公司在中国市场的发展轨迹也是同样的例证，它从创建在线零售平台起家，随着市场竞争日趋激烈，又在淘宝网的基础上发展了B2B业务。如今，凭借在支付宝业务领域积累的专业经验与知识产权，阿里巴巴已经进军在线银行业务市场。

我们完全可以设想约车服务企业也照方抓药，实际上，Uber已开始提供在线货运预约业务，滴滴无疑很快就会跟进。如今每个国家都有自己的在线约车服务企业，它们正在各自的市场中与传统出租车行业苦苦竞争，未来它们都有可能拓展自己的业务范围，在线货运预约将首当其冲。与此同时，竞争者们不会在租车领域恋战，它们都在极力迅速识别并抢占那些最有价值的任何业务领域。我们很快就能看到，上文谈到的各个领域的在线分享业务会出现爆发式增长。

与此同时，这种爆发式增长不会局限于企业，政府部门也将参与其中，政府职能方面的分享式App会有很大发展，企业和政府部门的分享业务会并行增长。如上文所说，这种爆发式增长的影响还会深入到分享经济的各个配套领域，比如广告和市场营销，未来会有大批数学工作者和数论学家进入大数据分析领域施展才华。总之，分享经济的发展最终会影响到每一个人，而不仅仅是出租车行业的从业者。

"The Taxi Booking industry is Passé: It's All about Sharing Now"

Dr. E. Ted Prince
Founder and CEO
Perth Leadership Institute
www.perthleadership.org

Investment Community (Beijing)
October 2015

Didi in China is now huge just like Uber in the US and much of the world. What's going to happen with the taxi booking industry? Who's going to win?

Here's my prediction: the taxi industry is not very important in itself. Sure, it has been totally upended by the new apps and the industry is now vastly more efficient and user-friendly. But taxis and incumbents are now fighting back to make sure that taxis still survive in their current form so the amount of change left might be limited.

But it doesn't matter. The real change that derives from Didi and Uber is not the change to the world of taxis. These apps have introduced new paradigms which will have vastly more impact on other areas of human life. I will talk about some of them below.

Here's the true lesson. When something apparently revolutionary comes along, we often miss it because we focus on the immediate changes that are very visible. With Didi it's pretty obvious that getting a taxi has changed for the better so that's what we all see. But it's only the tip of the iceberg.

A good comparison is with the new digital currency called Bitcoins. If you are looking at this area, the obvious change is that you can buy things with a digital currency that is not backed by any government in the world. So that's pretty visible.

But the real innovation with Bitcoins and digital currencies is not with the fact that there is now a digital currency. It's the fact that there's a totally new way of having something that is totally trusted that has no government to back it. The true innovation here is the blockchain, a digital mechanism that mechanizes trust through a globally decentralized transaction registry. It's that, rather than Bitcoins, that are now revolutionizing finance and it will revolutionize far more than currencies and currency trading.

So here's what I think is going to happen to taxi booking apps like Didi and Uber.

I think that pretty quickly the profits being made by the taxi booking apps are going to disappear as other entrants come into the market and as traditional taxi companies everywhere fight back. They will

be helped by local governments that make a lot of money from taxis and don't want to give it up to private companies.

But that won't matter because the taxi apps are going to use the true core of their aps for other purposes. The true core of their apps is new and vastly more efficient ways of sharing things. In the case of their apps it is about sharing cars. Now they are going to move to other areas where the impact of sharing is going to be vastly greater. These will be in several areas:

Transportation

Taxis are just one form of transportation. The taxi apps are already moving into freight and trucking where you can now link in private cars and vans as well as other private resources to conduct freight operations on a part-time or opportunistic basis.

But that's just the obvious stuff. There's some other areas where sharing could result in huge impacts too. These include:

- Air traffic control: Because it's run by governments everywhere, air traffic control is incredibly inefficient. Didi-type apps could revolutionize the area by allowing ATC to be far more dynamic and efficient, able to open up new air routes and schedules immediately instead of, as at present, having to wait months or years for the government to organize new routes and plans.
- Military: military transportation is also massively efficient and costly; Didi-type apps could also revolutionize this area; imagine for example the transportation of supplies and ammunition for different types of military assets and for military personnel being transported dynamically around a potential battlefield using Didi instead of current methods which often date back to World War 2.
- Global alternative transport networks: It's now possible, using these apps, to get really creative. How about someone starting up a global bike transport company using private owners in many countries and having a network of, say, 10 million bicycles? It's all possible now!
- The same thing goes for a country-wide or even global drone transportation network. Instead of just making deliveries in a local area it's inevitable we are going to see drones tied together in global networks carrying just about any small object you can think of.
- Naturally this is going to pose some problems of law enforcement, but it's going to happen whether we like it or not. So there will also be new possibilities in the criminal and law enforcement space for companies that can help prevent criminal abuses of these networks.

The Sharing Economy

Didi and Uber allow us to share cars, both private and public. In essence they allow us to share anything that we want to share. We've already seen the success of Airbnb in allowing people to share their own houses and apartments. Of course these are fixed assets. How about sharing things which are not fixed? For example:

- Machinery: now I can share machinery, either industrial or for the home. That means a manufacturer doesn't have to buy all his machinery especially ones that he doesn't need all the time. Thousands of firms can form machinery collectives where machines are shared dynamically and on-demand.

- The same thing can happen with farms and farm machinery. So now I have a way to dramatically reduce costs in the agricultural area by dynamically sharing farm machinery between different areas and in different seasons of the year.
- Home Appliances: Of course there are many home appliances that I want to have in my house all the time. But there are other appliances and machines that I don't want all the time. Lawn-mowers; home handyman tools, gardening tools and machines, hobbyist machines and tools, and so on. A Didi-type app allows me to share all these dynamically and on-demand both in my neighborhood as well as in the same city and even between cities if I want. So I don't have to buy these things; I can just rent them when I need them.

Fractional Ownership

In the US the area of fractional ownership is now well-established. This is the practice of many people getting together to buy an expensive resource and then sharing it in proportion to their ownership. The original application was for vacation condominiums.

Some time ago fractional ownership was extended to business jets. Now many small business people are fractional owners of a business jet and regularly travel in one despite not having enough money to afford one of them for themselves. Warren Buffett acquired Net jets, one of the main companies in this area.

Didi and Uber apps are able to offer the same capability. Currently they could easily move to shared ownership of cars. However there's no reason why they – or a competitor – couldn't move to fractional ownership of other expensive assets. Examples are large pleasure yachts, spaceships, hotels and mansions. How would you like to be the part-owner of a Mars spaceship?

It would also be possible to have fractional ownership of very expensive jewel so that men could provide their paramours with ultra-expensive jewelry occasional – which is only when they are likely to want it – and to be able to tell people honestly that they own the jewelry!

The Internet of Things (IOT)

The IOT is the next Big Thing. Everything in the world can have its own IP address and so we can now connect with all these things to communicate with them and control them. That means things like drones, refrigerators, webcams, toys, cars and so on.

But I still have a big problem with the IOT. Sure I can communicate and control these things individually but how do I coordinate a lot of things all at once? What if I have a fleet of 10,000 drones and I want them all to go to different places at different times? Or what if I have 100 pieces of machinery that have to work together in different ways and from different locations?

The sharing economy allows us to use apps like Didi to control and coordinate with the IOT in ways that we can't even begin to imagine. I think that the IOT applications will almost certainly be the biggest application of the taxi-sharing apps.

Supply China Optimization

We all know how important supply chains are and particular to China as it has grown to be the world's leader in manufacturing. Globally we now have immensely complicated and sophisticated supply chains for every industry. These are not just in manufacturing but also in services such as banking and finance where sometimes millions of people are linked into these chains.

Until now we have used mathematical approaches, mainly deterministic to control and monitor these supply chains. But apps like Didi give us a new set of tools to monitor and control them and to optimize them.

This problem has become more important now with the rise of 3D printing and the ability to manufacture things on a one-off basis. We now face the possibility that some manufacturing will only produce one-off items and that millions of these 3D printers in maybe millions of locations will be manufacturing things that are all different. The printers will need different raw materials, different designs and different processes for each individual item they produce. Thus supply chains are set to become vastly more complex. The Didi-type apps will be able to control these supply chain processes too.

Processing the Big Data

These new sharing applications are going to generate massive torrents of data. If an app is sharing transportation assets between millions of people it will generate a deluge of real-time transactions which have to be processed and analyzed in real-time. This raises new challenges for these new sharing-economy companies. Even if they have great apps, this doesn't mean they have the data analytics capabilities to use them effectively.

But there are now relatively new open-source ways of dealing with this. These include Hadoop, the real-time open source database and the two data analytics engines, Storm and Spark. There are now huge numbers of users of these databases and data analytics capabilities. Some of these can be used as part of the new applications. Other specialized companies will be established to provide these capabilities on a third-party basis to the new types of competitors in the sharing-economy space.

These capabilities will be used not only for processing operations and supply chain data. They will also be used for advertising, demand prediction and management and to provide new forms of focused and personalized marketing. So we can expect a new slew of companies in these marketing and advertising areas to emerge as collaborators with the new sharing economy companies.

First Taxis, Then the World!

When Amazon first started all it sold was books. Then it realized that's the true basis of its competitive advantage was its sophisticated retail inventory and distribution system. This could be applied to anything at all in retailing. So then Amazon went on to become the largest online retailer in the US,

In China Alibaba has had a similar evolution. It started off as an online consumer retail platform. When competition emerged it extended this to business-to-business commerce via Taobao. Now it has used its expertise and intellectual property in that area to enter into the online banking business through Alipay.

We can expect a similar evolution to occur in the taxi booking space. Uber has already entered the online freight space and no doubt Didi will do something like that also. But since there is now

competition emerging in every country to these original taxi booking services, we can expect them to extend into adjacent market areas, especially the ones I have mentioned above.

These new competitors are going to figure out where the best value is to be achieved by extending from the taxi booking applications and then they will enter there rather than in taxi booking itself. Soon we are going to see a huge expansion of online capabilities in the spaces discussed above but using the paradigm of the sharing economy.

It won't just affect the private sector; it will probably affect all areas of government too. So a parallel area will open up for public and governmental applications.

And it will also have a huge impact in expanding ancillary and support areas such as marketing, advertising and data analytics. We can expect to see talented mathematicians and number theorists opening up new areas of analysis based on these new types off data streams. So the sharing economy is going to affect everyone, not just the taxis, taxi operators and taxi drivers.

Dr. E. Ted Prince, the Founder and CEO of the Perth Leadership Institute, located in Florida in the US has also been CEO of several other companies, both public and private. He is the author of two books: "The Three Financial Styles of Very Successful Leaders" (McGraw-Hill, 2005) and "Business Personality and Leadership Success", Amazon Kindle 2011 as well as numerous other publications in this area. He is a frequent speaker at industry conferences. He works with large corporations globally on leadership development programs and coaches senior executives and teams in the area of financial leadership. He has held the position of Visiting Professor at the University of Florida in the US in its Graduate Business School and is currently a Visiting Professor at the Shanghai University of Finance and Economics in China.