

## Tomorrow 3.0

### Transaction Costs and the Sharing Economy

With the growing popularity of apps such as Uber and Airbnb, there has been a keen interest in the rise of the sharing economy. Michael C. Munger brings these new trends in the economy down to earth by focusing on their relation to the fundamental economic concept of transaction costs. In doing so Munger brings a fresh perspective on the “sharing economy” in clear and engaging writing that is accessible to both general and specialist readers. He shows how, for the first time, entrepreneurs can sell reductions in transaction costs, rather than reductions in the costs of the products themselves. He predicts that smart phones will be used to commodify excess capacity, and reaches the controversial conclusion that a basic income will be required as a consequence of this new “transaction costs revolution.”

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*To Donna Gingerella,  
who showed me how to love,  
e  
to Skippy Squirrelbane,  
who showed me how to live*

*No one claimed that any of their possessions was their own,  
but they shared everything they had.*

Acts 4:32

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## Preface

There is a lovely apocryphal story, generally told about Dwight D. Eisenhower during his time as president of Columbia University: The school was growing, necessitating an expansion of the campus, which produced a very hot dispute between two groups of planners and architects about where the sidewalks should go. One camp insisted that it was obvious – self-evident! – that the sidewalks had to be arranged thus, as any rational person could see, while the other camp argued for something very different, with the same appeals to obviously, self-evident, rational evidence. Legend has it that Eisenhower solved the problem by ordering that the sidewalks not be laid down at all for a year: The students would trample paths in the grass, and the builders would then pave over where the students were actually walking. Neither of the plans that had been advocated matched what the students actually did when left to their own devices. There are two radically different ways of looking at the world embedded in that story: Are our institutions here to tell us where to go, or are they here to help smooth the way for us as we pursue our own ends, going our own ways?

Kevin Williamson, 2013

The story above is true, even though it likely never happened. The “truth” lies in its core insight that permissionless innovation is, or should be, what institutions seek to promote. As Lu Xun put succinctly: “Originally there was no path – yet, as people are walking all the time in the same spot, a way appears.”

There is a simple logic to the “way” that is appearing all around us: reduced *transactions costs* foster *permissionless innovation* to make more efficient use of *excess capacity*. The result is that more people can get cheaper, better access to the stuff we already have. Markets are, or *can be*, a form of sharing, because people often just want to use things, not (necessarily) to own them. This has always been true to some extent – I never owned the huge factory machines



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that made my clothing; I simply shared them for a few seconds at some point, and then gave them back – but the rate of change and the expansion of sharing today is unprecedented. If you want to know why at present we own rather than share, the answer is transaction costs. And that is all going to change.

## THE ARGUMENT

A simple summary of an entire book can be misleading because it is simple, and a summary, and therefore leaves out both details and the steps in the argument. Nonetheless, it is worthwhile to provide a map, if only to help the reader identify where each step in the larger argument is located in the hilly terrain to come.

The history of growth, and destruction, in economics has centered on complex voluntary interdependencies caused by the division of labor and specialization. I can produce far more widgets if I do nothing but practice my widget-making skills, while you produce corn, and Jones over there produces only clothing. There is lots more stuff in the world if each of us specializes, but we will only do that if we can rely on being able to acquire, by exchange or some other form of cooperative sharing, the stuff we ourselves do not produce. Until recently, much of this specialization has centered on skills in production and finding ways to make more stuff.

But now that is changing. In the past 20 years – dating the change roughly from eBay’s expansion in 1997, after beginning as “AuctionWeb” in 1995 – entrepreneurs have for the first time been able to specialize in selling not more stuff, but reductions in transaction costs for access to existing stuff. One could argue, with some merit, that the oldest organizations that specialized solely in selling reductions in transaction costs were marketplaces, or “Souqs,” in northern Africa and western Asia. Until the recent disastrous events in Syria, the al-Madina Souq in Aleppo had been open for business for well over 4,000 years.

The al-Madina is a (partly) covered area that extends over 10 kilometers in terms of the storefronts and open-air stalls that open

onto streets and alleys. You can find almost anything there. The reason merchants sell there is that they know you can find other things there as well. That does not seem to make sense: it seems like merchants would want to be off by themselves, far from any competition. Why would a fruit merchant want to be in a place where there are hundreds of other fruit merchants? The answer is transaction costs: gathering many sellers into one large physical area reduces the effort required for “comparison shopping” for customers.

The notion of a “market” as a means of reducing transaction costs long meant a physical place where people knew to gather to buy and sell. But one thing that the Sears catalog was clearly selling was a reduction in transaction costs: farmers in rural areas who might not otherwise have access to any specialized products could, if they waited a couple of months, obtain from Sears anything from clothing to food preparation tools to cars or houses. Sellers of commodities contacted Sears (as they now contact Amazon) to list their products for sale, gathering in a “place” that was in a sense virtual rather than real. Of course, the virtual space was not online but lived in the pages of a thick catalog. Still, that was the place to go. So while the differences I am talking about are real, there are plenty of examples in the past if you know where to look.

And that is the key to understanding the contribution of this book: the sustained thesis is that the single key fact in explaining the disruption of the economic system in the past 20 years or so is the sharp reduction in the transaction costs of commodifying many things that we have never before thought of as commodities. Lower transaction costs facilitate a hybrid form of “collaborative consumption.” If you own something, you can extract some of this unused value by renting it out. If you own almost nothing, you can still enjoy much of the value of ownership by renting from someone else. But this more intensive use of existing resources can only happen if transaction costs – the sum of what I will call triangulation, transfer, and trust – convert unused stuff into usable excess capacity. To make

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a long story short, both the sharing economy and the middleman economy are *sort of* new, but only in intensity and rapidity of change.

That does not mean that reducing transaction costs has never been important before. To the contrary, reducing transaction costs has been an important source of creating value since the very first transactions. After all, “length of braided vines three miles away, across a mountain” is much less valuable than “length of braided vines in my hand, ready to use to tie bundle of wood.” So a crucial part of transactions, and in fact an essential part of the competition to sell things, has always been the transaction costs. The reason is that, to consumers, all costs are transaction costs. Reducing the cost of physical production by 10 percent is no different from reducing the cost of delivery and convenience of use by 10 percent, from the point of view of the consumer.

Consequently, economists have long highlighted reductions in transaction costs as a focus of economic innovation and competition. Joseph Schumpeter (1934, 66) listed “types” or categories of innovations that entrepreneurs focused on, and transaction costs are important aspects of three of them:

- (1) a new good, or an old good with a qualitatively different level of quality
- (2) a new technique for producing or handling the product
- (3) the opening of a new market, or recognition of a new use for the product
- (4) improvements in security or reductions in costs of raw materials or partly-manufactured goods up the supply chain
- (5) the conception and execution of a new system or organization for manufacturing or delivering the good.

But Schumpeter saw the transaction costs elements as something that helped the entrepreneur sell the *product*, though to his credit he recognized that low transaction costs were an essential part of the product themselves.

This theme of institutional innovation and the form of delivery and measurement was echoed by other economists, including Commons (1931) and Chandler (1977). But for the most part – there

are exceptions, such as firms that specialize in accounting audits or management consulting – the innovations in transaction costs were attached to a product or service. What has happened in the last 20 years is that many firms simply offer to sell reductions in transaction costs without knowing what products or services will be sold as a result.

That means that what we are seeing are the early signs of a revolution being driven along two quite different dimensions. The intersection of these dimensions explains the growth of the new economy to date; where they are far apart, we learn why many sectors are yet unaffected.

The two dimensions are (1) the sharing economy and (2) the transaction costs or middleman economy.

The *sharing economy* is

- (1) entrepreneurship applied to reducing transaction costs rather than reducing production costs
- (2) working through new software platforms
- (3) operating on smart, portable hardware
- (4) connected over the web.

Software programs in the sharing economy are both system (executing instructions) and application (storing, retrieving, and interpreting information entered by users). Software will play the same role in producing reductions in transaction costs that robots and automation have played in reduction production costs in the ownership economy. Software will displace human workers, reducing both actual prices and implicit costs, and expanding the set of things that we think of as commodities.

The *middleman economy* arises from the ability to sell reductions in transaction costs to enable mutually beneficial exchange in commodities, services, and activities that may not even have been conceived as commercial until now.

This means that there are two variables of concern: excess capacity and transaction costs. Excess capacity is the unused time or

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space to do more. Excess capacity is expensive, but we may not notice the cost because it can only be measured by things not done.

Transaction costs are the expenses, including time, inconvenience, and actual payments required to use the item, and the problems involved in trusting others to deliver on their promises and not to rob us.

The value proposition in the new economy is selling access to excess capacity. As transaction costs are driven by new software applications, it is more expensive to hold or store consumer and producer durables, precisely because new software applications makes it cheaper to use them.

My storage unit, my garage, my kitchen cupboards, and my closets are all full of useful stuff. I am not using them; in fact, I am paying to store them. But in many cases, someone *else* would pay to use them. Excess capacity of durable goods is variable with respect to the transaction cost – triangulation, transfer, and trust – of reassigning their temporary use.

Of course, when I look at my closet or garage, I do not see “excess capacity,” I see storage of valuable items. But those suits, shirts, my car, my mower, all those things could be being used by someone else. Lowering transaction costs raises the opportunity cost of idle durable goods. Still, that does not translate into “excess capacity” until we found a way of selling reductions in transaction costs.

And now, because of the combination of portable smart communication devices, a set of software apps that run on those devices, and a network to connect those devices, we have found a way. That is why tomorrow will be different.

## Acknowledgments

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