Can Entrepreneurs Leverage the Platform Paradox to Drive Growth?

Professor Mauro Guillén
Dean, University of Cambridge Judge Business School

Amazon and Uber are global platforms with millions of users. With their vast reach and resources, they should in theory dominate every market they serve. But they do not…

Amazon, for example, is a behemoth that was worth (at the end of 2020) $1.6 trillion, had annual revenues of almost $350 billion, and more than 1 million employees worldwide.

And yet, despite its size and scale, the company gets 60% of its revenues from the U.S., representing less than 20% of the global economy. The same fact holds true for Uber. For all its seeming global ubiquity, the ride-hailing platform operates in just 700 cities, while the world has some 10,000 cities with more than 100,000 residents.

What explains this paradox – of global platforms that are not truly global when you peer under the surface? Mauro Guillén, a longtime Wharton professor of management who is now the Director (Dean) of the Cambridge Judge Business School, deals with this puzzle in his new book, The Platform Paradox: How Digital Businesses Succeed in an Ever-Changing Global Marketplace (Wharton School Press, May 2021).

How can entrepreneurs leverage their understanding of the paradox to drive their growth strategies? What are its implications for angel investors, venture capitalists, and private equity firms? Guillén discussed these questions and more in a conversation with Coller Venture Review. An edited version of the interview appears over the following pages.

Coller Venture Review —
What is the platform paradox? How did you discover it? Why did you decide to write about it?

Mauro Guillén —
The platform paradox has to do with something that I think is counterintuitive. When you think about digital platforms like Uber, Facebook, or Netflix, one tends to think that the technology is the same, the internet is a global medium, and therefore these successful platforms should take over the entire world market. They should have the largest market share everywhere. And yet, the paradox is that it is extremely rare for a platform to be No. 1 everywhere in the world. The only platform I can think of that way is Google. As a search engine, it is No. 1 pretty much everywhere except for a couple of countries. Of course, it is banned in China. Facebook has major competitors such as WeChat in China and several more in other countries.

The same goes for Uber. It only has a presence in 700 cities in the world. There are more than 10,000 cities in the world with more than 100,000 people, so Uber is far from being a global platform. But we think of Uber as this force of nature.

That is the paradox. The paradox is how come these digital platforms, although the internet is a global medium, and although they take advantage of economies of scale and network effects – why don't they have the No. 1 market share everywhere?

CVR —
The question is why.

Guillén —
The observation, I think, is relatively straightforward; the book delves into the "why" aspect. The reason essentially has to do with the nature of network effects. As you know, the network effect is that the more users a platform has, the more people want to use it because it is advantageous. The platform's value increases with the number of users. The value of a platform to you increases if I also join the platform, and if our friends also join the platform. That's the network effect.

The problem is that network effects are not all the same. We assume they are, but they are not. The key distinction here that helps us answer that question – and therefore explains the paradox – is the geographical level at which the network effects take place.

At one extreme, consider Google as a search engine. Everybody benefits from more people using Google and from more advertisers using Google. When you're searching, you want to have access to the widest and deepest amount of information. At the other end, consider Uber. If you get out of your house today because you want to get to the train station, and it's raining and you want to get an Uber, you don't care as a user how many Uber drivers there are in New York or San Francisco or Sydney, Australia. You care about how many there are within two or three miles of your home.

The same goes for users on the other side of the platform, the drivers. They also couldn't care less about how many people like yourself have been looking for an Uber hundreds or thousands of miles away. They only care about how many people want to get an Uber within two, three or four miles from where they are. So, the network effect is extremely local in Uber's case.

Let me finish the argument. If that's the case, Uber may start in the United States, but there's nothing preventing DiDi from starting in China to serve Chinese cities, or Grab in Southeast Asia, or Cabify in Spain and Latin America. In other words, no platform, unless it enters all the possible local markets in the world at the same time – no platform stands to have the upper hand in each of those local markets. That is because of the nature of the network effects.

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Between the two extremes of Uber and Google, you have various shades of gray. You have national network effects, regional network effects, and so on. It's as simple as that. Very few network effects are truly global. What we observe is this paradox that the platforms don't have 'number one' market shares everywhere in the world. It's as simple as that.

CVR —
A fascinating point you make in your book is that the nature of the network effect can change with the user's intentions. You write about dating apps that depend on local network effects. But instead of a casual date, if you want to get married, you might cast a wider net that is regional, national, or even global. How does that process work?

Guillén —
It depends on what people are looking for. If they are looking for just a one-night stand, they care about the local network effect [to find local matches], right? But if people are using an app for matchmaking, or to find a spouse, then they may be willing to search more broadly so the network effect is at a higher level.

CVR —
What are the implications of local, regional, national, and global network effects for entrepreneurs? How can entrepreneurs leverage these effects to devise their own growth strategies?

Guillén —
The key here is that entrepreneurs want to launch an idea obviously that is successful. They need to understand the network effects in terms of prioritizing how they allocate their resources. It makes a big difference whether you, as a platform, are essentially taking advantage of local network effects as opposed to regional or global ones. You would allocate resources in terms of your expansion around the world in a very different way. If you don't carefully analyze the nature of the network effects, you are bound to make mistakes.

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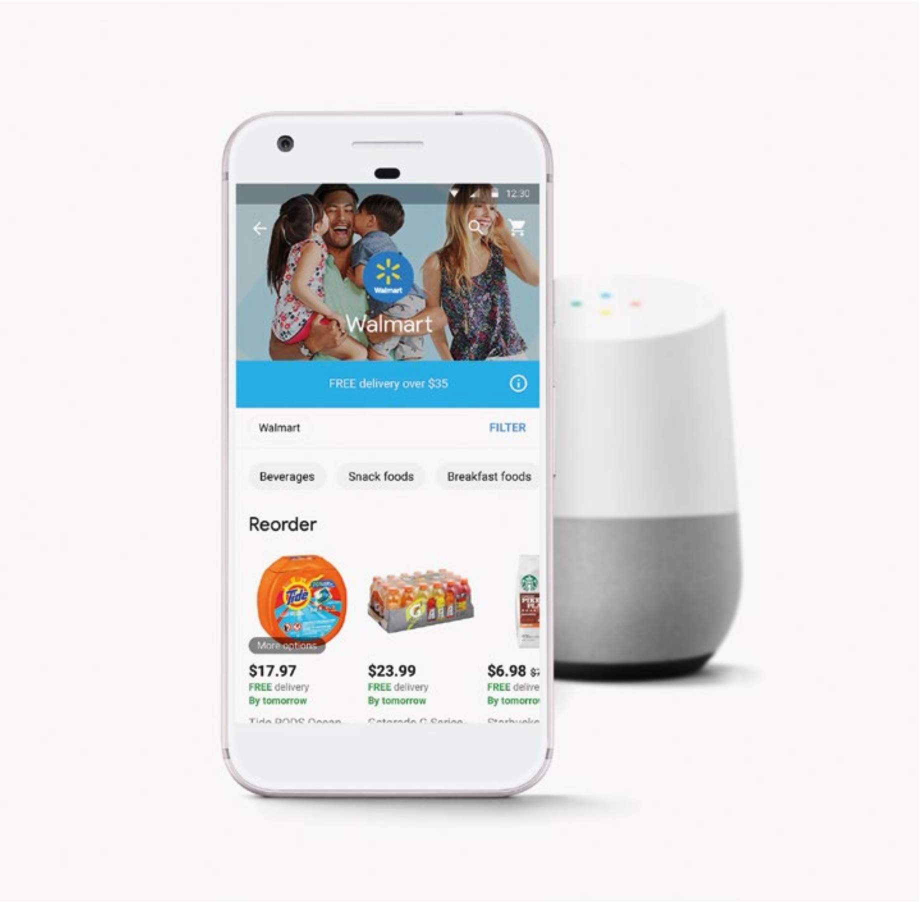

This analysis is useful not just for entrepreneurs. It is also helpful for venture capitalists or angel investors who are trying to decide whether to give money to an entrepreneur. They need to understand before they commit any money what is the growth potential and what is the time frame for that growth.

A third issue – by the way, which I don't discuss in the book – in which this analysis is very important is for antitrust regulators. Obviously, they need to understand the nature of network effects from the point of view of competition and antitrust, the same way that prior to the digital age, the key was to understand economies of scale and whether any companies were becoming natural monopolies. This analysis has implications for several different kinds of people: entrepreneurs, venture capitalists, angel investors and also government antitrust authorities.

CVR —
You write that some traditional companies have jumped on the bandwagon by creating their own platforms. Is it better for entrepreneurs to try and build their own platforms or leverage existing platforms such as Amazon, Facebook, Google, or Apple?

Guillén —
It's hard to answer that question in the abstract universally for all types of situations. In reality, we see that companies are both creating their own platforms, but in certain circumstances they also rely on existing platforms. The reason is that obviously if they rely on existing platforms, they have to share profits [with those platforms]. They would prefer to avoid that. But sometimes it's very difficult because they don't understand the market, they lack familiarity with it, and it's culturally very different.

Take Walmart, for example. Walmart, as you know, is keen on moving away from physical stores and using online channels. In fact, Walmart's most important competitor now is Amazon. There is no question about it. So, Walmart has created its own websites, apps, platforms, even marketplaces, where they invite some of the companies whose products they sell to establish their own stores. They have done that in the United States and in other markets.

But in China and India – places where the local competition is fierce, and Walmart doesn't really understand the market well – it has set up joint ventures or collaborations with existing platforms. In China, they have tied up with JD.com, which is one of the largest marketplaces, as you know. In India, Walmart decided that instead of collaborating, they decided to acquire. They acquired Flipkart.

In these cases, we are still talking about the same kinds of things that we were discussing in the pre-digital age. Companies, if they can, prefer to operate by themselves, with 100% owned operations, because then they don't have to share profits with anybody. But if that's difficult or impossible, then they collaborate. If they collaborate, they must share profits. They also have the option of acquiring. In Walmart's case, we see that they have done each of these things, depending on the market.

CVR —
Some companies have learned that when they offer products and services off platforms such as Facebook or Amazon, it helps build awareness or leads that enable them to find new customers. But these benefits can vanish overnight if the platform changes its rules.

Guillén —
Yes, that is the danger.

CVR —
How can entrepreneurs protect themselves against such vulnerability? Any suggestions?

Guillén —
This takes us back to the same kind of question that companies often face: Should I go alone, or shouldn't I? Of course, the decision that they need to make for specific markets is reversible. They can start one way, and then they can change, depending on the circumstances.

One thing is you only want to collaborate when you feel that you lack a resource. Once again, this is because you have to share the profits, right? But sometimes you start collaborating and then you realize, as you said, that maybe the platform has changed the rules. Or, if things have changed, you may feel more comfortable operating by yourself. It could also be that the other party that you have been collaborating with has been abusing your good will. This also happens very often, as you know.

What happens in those cases is that companies decide to either set up their own operations or they decide to acquire. In India, for example, Walmart started out by collaborating with Flipkart first, and then they acquired the company. What we need to remember is that all these decisions are dynamic. Companies change their minds all the time. You can also start in a given place by collaborating, and then, as you acquire more experience, you may decide to stop collaborating and run things yourself.

That, I think, is the key. It is not a decision that once you make it, you have to stick with it. No, you can change that decision later. Very often companies do precisely that. Mostly, what I've seen is the opposite. Companies that thought they were all-powerful, when they failed, when they encountered obstacles, then they decided to collaborate. That has been more frequent in my assessment than the other way around.

CVR —
What are the main takeaways of The Platform Paradox for entrepreneurs?

> **“The key thing is to do your homework and understand the network effects before you start allocating resources, before you come up with a strategy to plan for growth and you make decisions about prioritizing”**

Are its lessons relevant mainly for large companies or also for startups and small firms?

Guillén —

Let me first answer the second part of the question. Absolutely every kind of company, even an entrepreneur who doesn't yet have a company but just has an idea, can benefit from these insights. In fact, the book uses examples and has different sections to address specific challenges faced by different kinds of companies.

We've already spoken about what I believe are the two key takeaways. The first is that not all network effects are equal. They come in many shapes and sizes. It matters whether the network effects of the platform are local or all the way global. It also matters whether a platform is one-sided or two-sided. By a two-sided platform, I mean one like Uber where passengers who need rides and drivers who need passengers must come together, so you have two different types of users. So, the situation becomes a little bit more complicated. That's the first takeaway, I think, from the book.

The second takeaway is that it's all about prioritizing. Here I'm not saying that platforms cannot possibly succeed all over the world. They can. But in order to do that, they have to prioritize the allocation of resources – their time, their money, and so on – in such a way that they build up the network effects in the right sequence.

I illustrate that dynamic in the book with the case of Airbnb. I think Airbnb got it right big time. They really succeeded. They expanded from the United States in concentric circles around the world, following the wave of tourism and people looking for alternative accommodations. They were extremely, extremely smart when it came to prioritizing markets.

CVR —

What are the implications of your book for angel investors, venture capitalists, private equity firms, and other investors? What mistakes can they avoid by heeding the lessons of The Platform Paradox?

Guillén —

Venture capitalists and angel investors often have this approach of essentially investing in 100 ventures, hoping that one or two would make it, and then that will more than compensate for all the other money they have invested. The book offers a methodology for thinking, especially in the case of these platforms, for thinking before you invest, about which ones have the greatest potential and how far they can go.

It is the same for entrepreneurs. Entrepreneurs want to grow their ventures. That is their goal, and then they want to either go IPO with it or sell the company. In this business of digital platforms, you need to pay a lot of attention to the network effects.

CVR —

What surprised you most as you were working on this book?

Guillén —

I started working on this research maybe four years ago or so. I just couldn't at first understand why these platforms didn't take over the entire world, why there were so many other competitors, some of which, by the way, eventually became bigger than the pioneers. For example, DiDi is bigger than Uber. That was very surprising to me. And then, I started doing research on this and eventually wrote a book in response to that surprise.

After having written the book, another thing I still find puzzling is something that perhaps I might address in a future project. That is to study how economies of scale and network effects interact with one another. They are very different. Economies of scale are about how the number of users that you have, or the number of products that you sell – how that helps you reduce costs. That has to do with the production side. Network effects have to do in principle with demand, not with supply, not with production. That's something I'm still trying to figure out.

CVR —

What advice would you offer entrepreneurs about how to deploy digital strategies to scale their businesses locally, regionally, nationally and globally using the principles in your book?

Guillén —

The key thing is to do your homework and understand the network effects before you start allocating resources, before you come up with a strategy to plan for growth and you make decisions about prioritizing. That is the key takeaway. You must do your homework. You must really understand the network effects well. Entrepreneurs who manage to understand these issues very well are the ones who can then succeed.

CVR —

Any final comments?

Guillén —

I think perhaps two things may be worth adding there. One is we have been talking primarily about entrepreneurs who are in the for-profit business. They want to make money. But these principles, although I don't get into that in detail, also apply to nonprofit organizations. Service organizations that are essentially trying to help people also need to pay attention to network effects. I discuss one case in the book which is OLIO, the food-sharing company at the local level. That's a non-profit. I didn't get into more specifics about this, but I think these principles also apply to these types of platforms.

The other aspect I would mention is about education platforms. I don't discuss that in the book explicitly, but as you know, we are in the midst of what I think is only the beginning of a huge revolution in education. The pandemic has shown that there are immense possibilities, that online education is not a second-best alternative, and that a hybrid or a blended education approach may be very attractive in the future. I think these principles are also applicable in the field of education. ■

About

Professor Mauro F. Guillén is a Spanish/American sociologist, political economist, management educator. In March 2021, he was announced as the new Dean of the Cambridge Judge Business School, and a Fellow of Queen's College at the University of Cambridge. Until July 2021, Professor Guillén was the Zandman Professor at the Wharton School of the University of Pennsylvania, and Director of the Penn Lauder Center for International Business Education and Research. He was the Anthony L. Davis Director of the Joseph H. Lauder Institute of Management and International Studies from 2007 to 2019. He is the Wall Street Journal bestselling author of *2030: How Today's Biggest Trends Will Collide and Reshape the Future of Everything.*