# Joost Rietveld Platform competition, who really wins?

Mon, 18/10 11:01 AM • 31:28

## SUMMARY KEYWORDS

platform, users, apple, market, game, work, sponsor, developers, app store, company, innovation, metaverse, products, questions, research, compete, competition, epic, firms, looked

## **SPEAKERS**

Vaughn Tan, Joost

## Vaughn Tan 00:04

Hello and welcome to Mind Shift, a podcast about innovation from UCL School of Management.

#### Vaughn Tan 00:09

I'm Vaughn Tan, an innovation and strategy researcher focusing on how organisations can flourish and adapt in times of great uncertainty. In each episode, I'll speak to one of my colleagues from the diverse community here at the School of Management. And we'll look through the lens of their research to get insight into the rapidly shifting world of business today.

#### Vaughn Tan 00:25

So in this episode, I'm joined by Joost Rietveld, Assistant Professor in the UCL School of Management's Department of Strategy and Entrepreneurship. Joost's research explores the intersection between technology strategy and innovation management. Joost's work has been published in highly ranked academic journals, including Organisation Science and Research Policy, and his PhD thesis was a finalist in two best dissertation competitions. So Joost, thanks for joining us today. Can you tell us just a little bit about yourself and your research interests?

#### Joost 00:55

Yeah, thanks for having me, Vaughn. I'm very much interested in issues relating to technology, strategy and innovation management. After I graduated from my Master's, I worked in the video game industry for a couple of years as a strategic manager. I helped bring to market several video games onto platforms like the iOS App Store, Nintendo WiiWare and several others. I worked for a developer, but we also partnered with large publishers and so that really showed me the importance of understanding kind of the market that you're operating in as a firm. And unlike regular markets, platform markets behave slightly differently, right? There's a large company such as Apple or Nintendo that is kind of orchestrating the market, dictating the rules of what you can and cannot do. And that was very insightful and so when I joined academia and started my PhD, I wanted to learn more about that. Right now, there's a lot of people working on platform strategy, platform competition questions. But back then we

knew very little about how platforms worked, and what it meant to be successful in platforms. And so I really set out to study that in different contexts. So I've been looking at settings related to video games, obviously, but I've also looked at crowdfunding, micro finance, mobile apps...

## Vaughn Tan 02:06

Cool, really cool. So why don't we start with the basics just for people who are not really familiar with the concepts, can you describe what you mean when you talk about platform and developer ecosystems?

## Joost 02:16

So a platform ecosystem or a platform really like an iOS app store, or a video game console, it's it's a market that's curated by a platform company, or the platform sponsor, if you will, and on on the platform, the platform sponsor is trying to bring together two sides of users - end users and developers, for example. And these end users and developers, they would typically have difficulties either finding each other directly, and or transacting with each other directly. So the platform facilitates these interactions and transactions between these two or more user groups. And what's really important in the context of platforms is this notion of network effects, right? So the platform sponsor initially faces an uphill battle, if you will, because if there's no developers, then end users would not be very interested in joining a platform. But without end users, developers aren't very interested in joining a platform. So the platform sponsor has to resolve this chicken and egg dilemma and typically, they do that by heavily subsidising one side of the market, and then trying to make money on the other side of the market. But once we get to the point that there are sufficient users on both sides of the market - there's a number of developers there's a number of end users, then typically that sets in motion this virtuous cycle where more and more users keep joining the platform, because not only it's a good platform, there's also a lot of users that they can interact and transact with. So what we tend to see is, once a platform has become successful, it typically takes a very dominant market position because of these network effects and it becomes very difficult for competing platforms to compete with the established platform.

# Vaughn Tan 03:54

Cool. So what would you say are the main research questions that you're trying to answer about this area?

# Joost 04:04

So I'm very interested in how the firms that enter platforms compete with each other and how their competitive dynamics are affected by what the platform sponsor does. I'll give you an example - in one of my studies in many different platform settings, we see that the platform sponsor selectively promotes certain products, right, if you go on to your your app store, you see a selection of apps and that selection of apps is not put there at random. Apple has made a conscious decision to promote some of these apps. And these are highly coveted promotions, because there are millions of apps in the app store and if you're one of the select few that is being featured on the front page that is going to tremendously favour your downloads, your revenues, the exposure that you get to consumers. And so one of one of my studies we tried to understand so which products are platforms selectively promoting? And if they are being selectively promoted, how does that affect their performance on the platform? How does that affect their future behaviour on the platform? And there, I think we really see this

difference between a traditional market where there's not really someone who's actively governing that mark market and a platform market where there is a company at the top, who has its own strategic agenda and who is trying to orchestrate what goes on in its marketplace.

## Vaughn Tan 05:27

So clearly, there's major policy implications, as well as strategic implications not only if you're the platform sponsor, but also if you are a company that's trying to operate on the platform.

## Joost 05:38

Yeah, so if you are a company of one thing that you would look at initially is how many users are there on the platform, how many users can I sell to? This is the installed base of the platform. And as a company, there is a bit of a trade off, because you can choose to enter the platform with the largest install base. But that will also likely mean that there's a lot of other companies on that platform that you're going to be competing with. And so in some research we've looked at, okay, maybe if you're doing something that is highly innovative as a company, you want to enter a platform with a small install base that is only just starting out. And there's users on the platform that are actively looking for innovation that are looking for new things. Whereas when you're producing some something that's maybe slightly more derivative, it could be a sequel to a game that you've made, or it could be a follow up app to something that you've made before, well, maybe then you want to launch on a platform with a larger install base aware that name recognition will perform better, will make you help stand out in the crowd of all these companies that you're competing with. So that could be one strategic consideration that these companies are looking at. And obviously, there's many others.

#### Vaughn Tan 06:45

Yeah, for sure. One thing that you said that I think is quite interesting is as the platform grows, you know, so you've got this initial problem that the platform sponsor faces of getting enough people on both sides of the market to like, come in - once they manage to do that the platform sponsor then has quite a bit of power. So, I think one of the questions that, at least in my mind, if I were a developer trying to work on one of these platforms, are there things that a developer can look at in terms of the actions taken by the platform sponsor to figure out whether or not it's a platform that will be favourable to a small innovative developer, for instance, versus one that's really catering to entrenched interests?

# Joost 07:23

Yeah. So in one, one study that we did, we tracked for leading platforms over time over many years. So we looked at the iOS App Store, we looked at Kickstarter, a crowdfunding platform, we looked at Kiva, a micro financing platform, and we looked at Steam, a PC video game platform. And we tracked these companies over many years and what we were interested in is, as these platforms become dominant, because these are all fairly dominant platforms in their respective markets, do they change their governance, do they change the rules that they set for companies, do they change how they treat companies? And as you alluded to, what we observed is, initially, they want to be very good for their companies, because they need these companies to make the ecosystem work. So we see in the early stages, the platforms heavily investing in making new business models possible on the platform, making sure that these developers are happy, allowing for different types of pricing options, and so on and so forth. And then later, as these platforms become dominant, we see that their governance is

shifting more from a focus on the companies to a focus on end users. And so clearly, that benefits you and I as consumers on the platform, because it becomes easier to get refunds, it becomes easier to make complaints. But on the other hand, it becomes harder for the companies to become successful on the platform Right, because now the governance has tilted from favouring the complementor or the producers to favouring the end users. So as a result, what we observe on the producer side is the majority of the producers start making less money on the platform. So their average performance goes down, we see that there is a larger wedge between the top performing products on the platform and the rest. So the platform clearly is not trying to screw over its producers, but it's starting to become more selective in who they offer preferential treatment. And we also see that in terms of profits in terms of the value that these companies can capture, it becomes harder to do just that.

## Vaughn Tan 09:38

I want to switch gears a little bit now. And I think one of the questions that, at least from a strategic management perspective is a really important question is if you're trying to build one of these platforms, it's obviously not like building a traditional product. And I think one of the things that your research is pointing to is this idea that if you're trying to build a platform, you need to do the strategic management of the overall value for the different players in the platform, you need to think about it quite differently, right? So could you maybe say a little bit more about some of the counterintuitive things that you're finding that lead to a platform sponsor being able to create a successful growth platform?

## Joost 10:18

These platforms are operating two-sided or multi-sided business models, right? And so one thing that is very important in successfully kick starting a platform is understanding who your different user groups are. And understanding the extent that these user groups are sensitive to each other's presence on the platform. And so what that means is, in practice, as a platform, you typically have a money side and a subsidy side. You have a side of the market that you want to monetise, that you want to profit from. And then you have a side of the market that you subsidise, because it is really important to have a lot of those users on the platform because it attracts the other users that you're going to generate a profit from. So a very, very simple example of a two-sided business model is newspapers. If I go to my favourite tube station, and if I go to work, then I can pick up these newspapers for free. And a lot of people initially wondered like, how does that work? Why are these newspapers given away for free? Well, that's because I am, I am the subsidy side of that business model and advertisers are the money side of that business model. And advertisers want to have many readers of a newspaper, because that gives them more exposure, right? So that is a a very simple example and kind of extrapolates to how these big technology platforms work, right? Identifying who is your subsidy side, who is your money side. So so there is subsidisation across user groups, but there's also subsidisation over time, meaning that if you're starting a platform, your primary objective should not be to make a profit now - your primary objective should be to grow your user base, and make a profit down the line when you have many users on your platform. So we very often see that when a new platform enters the market, it is heavily investing in its users and the content on the platform. And again, this has baffled many spectators, like why are venture capitalists...Why do they keep investing in these platforms that are making a loss now? That's because they're banking on these platforms becoming dominant in the future, and having many users and then being able to make a profit. Right, so you you want to... as a starting platform you you want to manage not for the now but you want to manage for the future, you

want to anticipate these large user groups. Because once there are many users on your platform, it becomes very difficult for these users to leave the platform, they become more or less locked in and then once you're there, you want to start monetising your users.

## Vaughn Tan 12:50

I think the thing that you're saying which I find really interesting is this idea that over time, the action that you take as the platform sponsor in terms of who you're choosing to subsidise, and where you're getting the money from, that's likely to keep on changing, right? So your management of a platform is in a way it's dynamic over time, the strategic management of a platform for success is not a "set it and forget it thing" you've got to be rebalancing along the way, what you're doing as time goes on. If you're - if like a you're a newspaper, then the thing that you do is you try and get a lot of users, like readers, and once you know the demographics, then you sell specifically to advertisers that want to sell to those people and in a sense, the playbook is more or less the same over time. But if you're in a platform situation, it is not quite the same thing. And I think it's like counterintuitive, some of the things that are being done, for instance, one of the things that you don't necessarily always do if you're a platform is you don't always promote only the best early on, you may have to promote people on the edges, you know, like the long tail compliments in there. And that's not always clearly understood why you do that. So maybe you could speak a little bit about why that's intuitive in this situation where it would be counterintuitive somewhere else?

#### Joost 14:06

So there's there's a couple of things that I can think of from the top of my head. So one is you give away your product for free initially, right? Or you you sell your product below costs, for example, PlayStation and Xbox. They generate losses by selling their consoles to you and I and so why is that? Well, because if there's many users, then that attracts game developers, and Sony and Microsoft make 30% of every dollar that's being generated on the game side. So it makes total sense to incur a loss on one side and then make a profit on the other. Another thing is, once you've created this market, an intuitive thing to do might be as a platform sponsor, you enter it and you start selling your own products on it, right? So Amazon is notorious at doing this. But you might want to be careful doing this because it could send a very strong negative signal to all the firms that are entering your platform, it might tell them, oh, there's this big, established company that knows the market way too well, that doesn't have a double margin, they don't have to share their profits with the platform, I am going to think twice about selling other products on this platform. And so it could, it could scare off producers. Some of my research has shown that these these selective promotions by platforms of products on the platform, they're not going after the very best products in the market, they are much more likely to promote up and coming products in the market. Why is that? Well, first of all, the platform wants to grow its ecosystem, it wants to make sure that content and products and firms that they think are important, have the opportunity to flourish. Also, maybe you don't want to make the most powerful firms in your platform even more powerful, right? So you you want to, you want to create a level playing field. So you're going to kind of push down to ones that are at the very top of the market and you're going to bring up the ones that are just below that. You might want to consider promoting products in categories that you think are very important on the platform, product categories, or genres, but are not doing so well. Right? And this is very counter to what, for example, supermarkets are doing - supermarkets are just passing on promotions that sellers are offering to the supermarket and it's about making the most

money right now, in this very moment. Whereas platforms, they really have to ensure that the entire ecosystem is flourishing, and not just for the now but also for the future.

## Vaughn Tan 16:39

Yeah, cool. So I think there there's clearly issues in terms of policy, both at the level of the platform itself, because the platform sponsor is the governance in a sense on the platform. And then also policy in terms of like the usual regulatory policy looking at these platforms and how they work. So who really benefits when a platform becomes dominant? Right? So you said as a platform becomes dominant, usually the benefit flows more towards the end consumer people like you and I on the platform. Is that really true?

## Joost 17:13

Yeah! It might be good to first kind of briefly go back to why these platforms are so dominant. First, we already talked about these network effects. So if there's more users on one side, users on the other side of the market will be more attractive to the platform and so this sets in motion, this virtuous cycle. And it becomes hard to break that virtuous cycle because a new platform or a competing platform would have to both offer superior technology, and they would have to attract users. But that dynamic in recent years has been very much amplified by the connectedness of platforms, right? A platform sponsor, like a Google like an Apple, they not only enjoy these very powerful network effects, they also enjoy very strong learning effects. Everything that you and I do on the platform, and that these firms do on the platform is observable to the platform sponsor and they can use that data to generate knowledge about what are some of the trends in the platform? Where are our strengths? Where are our weaknesses? What improvements should we make to the technology of the platform? Maybe what products should we start offering ourselves because these are highly lucrative and would be beneficial to both us and end users if they were integrated with the functionality of the platform. So there is this, this learning on what happens in the platform for which you need to have many users and for which you need to have many interactions. So not just the network effect is self-reinforcing. Also, the data learning effect is self-reinforcing. So as a result, what you have is it's not just the platform locking their users in by way of the network effect, it's also the platform becoming technologically better and better over time, which makes it harder to any competitor to enter the market because they have to keep up with those technological changes. So this has made these platforms, these big tech platforms so powerful, and this is why I think there is so much interest right now in whether and how we should regulate them. Now, what is the potential problem? The potential problem is that these markets might become monopolistic. It's so difficult to compete with Apple or with Facebook, that there are hardly any competitors in the market, and so we could argue that in their respective market categories, these platforms are monopolies and and that's something that we would like to avoid as a society. We see that these platforms, they have a lot of clout, they have a lot of power, they have a lot of money and so whenever there is a potential competitor emerging on the scene, they can just snap them up, buy them and either kill them, right a killer acquisition, like shut them down or integrate their superior technology into their own platform and make their own platform even better, right? So so it's been argued that Facebook's acquisitions of Instagram and WhatsApp were precisely for these reasons, they had the potential to become very powerful social networks in their own right, which could then potentially compete with Facebook, so Facebook thought, "well, why don't we acquire them and make them part of our own ecosystem," right? And so this can then prevent healthy competition. Again, we would have to

ask to whom is this potentially hurtful or beneficial, and one group of users of these platforms to who it's increasingly clear that it can be quite harmful is these producers entering platforms, is the app developers, is the game developers, is the content producers on Facebook. Because they have fewer and fewer outside options and they know that they are very much reliant on these platforms for reaching end users and so these platforms can set the terms that can change their governance, to benefit the platform to benefit the end users, they can change the business model to extract more value, they can impose rules on what you can and cannot do. And so the very high profile court case of Epic versus Apple is a direct result of that. Epic as a games developer is not happy with what it can and particularly what it cannot do in Apple's ecosystem. And we've seen the formation of a coalition of App Fairness, where a bunch of large companies are banding together, trying to increase their bargaining power and trying to make a fist towards Apple. Because let's face it, more often than not, the platform is a much bigger company than the small producers, right? So it's very difficult for the small producers to fight with the platform.

# Vaughn Tan 22:03

Absolutely. Can you just say very quickly, what the actual claim is that Epic has against Apple?

# Joost 22:10

It's a good question, and I followed the case quite closely. So Fortnite is one of the most successful games in the history and it runs on a number of different platforms, including the iOS App Store in the Google Play Store. And Epic Games is the company that's developing and publishing Fortnite. And Fortnite is a free game, so you can download as a user the game for free, and then you have to pay for in game components, such as outfits for your character, or entire play modes. And here's the thing, whenever a user buys any of these items in the game. Apple gets 30% and Epic has referred to this as the "Apple tax" and Epic doesn't think it is fair that it has to share the revenue that's being generated inside the game with the platform sponsor. And I think they particularly think this because Fortnite is a game that's very successful, almost regardless of how it's doing on the App Store. It's very successful on different platforms as well. And so Epic being the rebel that they are, they created an extra option in the game, they offered their users to say you can pay \$9.99 for this bundle of content, or you can pay us directly and you pay I think it's \$7.99. So it's cheaper and lo and behold, most users choose the cheaper option. But this was entirely against the rules set by Apple for how app developers have to behave themselves on the platform and so as a response, Apple banned the game, it got thrown off the App Store and Epic retaliated by immediately launching this huge campaign directed towards gamers like "free Fortnite, we're being held captive by this big platform bully." And they immediately sued Apple and Google (Google did the same thing) and then Apple and Google countersued. And that's where we are right now.

# Vaughn Tan 24:10

I think the interesting thing that you're bringing up here for me is that, because this is such a complex ecosystem, there's a question about whether or not a dominant, very powerful platform stimulates or stifles innovation on the platform itself, as well as one about whether or not a very powerful platform stifles innovation at the platform level, right? Because both of those things are happening at the same time. What do you think are some policy implications like if you were the regulator, let's say you're the Competition Regulator or you're the Economic Development Ministry of a country, like what would you

be thinking about in terms of regulating these platforms and how they work. What should you be doing as the competition authority so that you ensure that innovation on the platform is promoted? And, then what should you be doing as a economic development or trade promoting body to think about how to design policy to make sure that innovation on platforms is also more robust?

## Joost 25:12

Yeah, these are great questions and in some way, these are the \$6 trillion questions that you're asking, right? So there's a lot of antitrust agencies and regulatory bodies that are currently thinking about these guestions and having a hard time coming up with an answer to them. And in a way that is because, as I understand it, I'm not an antitrust scholar, but the antitrust rules that we have just aren't fit for purpose in a digital setting where end users often enjoy products free of charge, right? They they almost become the product, if you will, and the paying customer is some third party, whether it's an advertiser or developer. So there's a couple of things that are being considered at the moment, right? So so one thing that's being looked at, which specifically relates to making sure innovation can happen inside the platform is should we prohibit the platform from directly competing on its own platform, so so India has passed a law where Amazon cannot sell on Amazon. Because Amazon, first of all, doesn't have to double margin - they don't have to pay Amazon before they can pay themselves. And second, Amazon has superior knowledge and data about what happens on the platform, right? They observe everything that all sellers do, they can learn from that and then they can decide, first of all, whether they want to compete and how they want to compete. And so arguably, that is not fair. Another thing that's being considered is should an integrated platform, such as Apple, right, where Apple runs on an Apple device, which is arguably hardware, and then there is the ecosystem, which is the App Store, should a company like Apple allow different app stores on its devices? This is part of Epics claim, they say Apple has a monopoly on stores running on Apple devices. I personally struggle a little bit with this argument because it's Apple's hardware and they should be allowed, I think that there is a good argument to say that they should be allowed to do whatever they want with their hardware as long as it's not illegal. But others have argued that well they have this stronghold on these devices, we should allow other stores to run on these devices and let consumers make the option whether they want to buy from the App Store or whether they want to buy from the "Epic Game Store". Again, we probably need to scrutinise platform's acquisitions more closely. I mentioned Facebook buying Instagram, I mentioned Facebook buying WhatsApp. So those acquisitions arguably have prevented competition from emerging. And so maybe we should stop large, big technology platforms from buying the smaller players, or at least we should scrutinise them more closely.

# Vaughn Tan 28:09

For sure. But then I think it's a it's a truism of competition law that the moment you reach a dominant position, a lot of the things that normally you would think are normal, no longer can be done, right? So once you reach the kind of market penetration that Apple has on its devices, it can't expect to be treated like a small player, it has to be treated like a big player that has disproportionate power in the marketplace. I think that what you were just saying I think is is sort of at the cutting edge in terms in terms of how I think about how, in our increasingly complex and nuanced economy, we need to think about the regulation of things like innovation, as well as market power, right?

#### Vaughn Tan 28:55

Before I let you go, I have one, I guess last question. You know, you've done a lot of work into various kinds of platforms. What do you think is the next thing that you're going to see as a set of behaviour on these platforms? Because, you know, we've seen a lot of interesting things happen, right? And so I'm asking you there, just crystal ball a little bit - what do you think's the next weird thing that you think will happen in this space?

## Joost 29:20

Yeah, it's, it's obviously a question everyone's interested in. So so we're going to see regulation, it's not quite clear what form that regulation will will take. But there's going to be some regulation. It's going to be interesting to see how platforms will respond to that regulation. Another thing that I am interested to follow is, to what extent will platforms start using blockchain technologies as part of what you're doing? Right, so there there's this notion of the "metaverse", Facebook now wants to be a "metaverse" company where essentially you can have an entire digital life. I mean, we used to have this game called Second Life, right? I mean, I think that was the first metaverse, if you will. So Facebook wants to be a metaverse company where everything that we do digitally happens in this ecosystem, and blockchain technology could kind of help facilitate the economic transactions within a metaverse and so I'm very interested to see the extent that this will happen and the form that it will take. So I think that those are two interesting trends that I'll be looking out for - so what kind of regulations will we see (not whether but what kind) and what does the metaverse look like and what's what will be my role in it? [laughing] As a user?

#### Vaughn Tan 30:40

For sure. Cool, man. Thanks, thanks very much. That was that was really, really fascinating. And thanks for joining us today.

**Joost** 30:49 Yeah, that was fun. Thanks for having me.

#### Vaughn Tan 30:55

You've been listening to Mind Shift, a podcast about innovation from UCL School of Management.

#### Vaughn Tan 31:00

Today's guest was Joost Rietveld, and we'll put links to their research in the show notes.

#### Vaughn Tan 31:05

This episode was presented by myself, Vaughn Tan, edited by Cerys Bradley, and produced by UCL School of Management.

#### Vaughn Tan 31:13

If you'd like to hear more of these podcasts, please subscribe to Mind Shift on your favourite podcasting platform.