

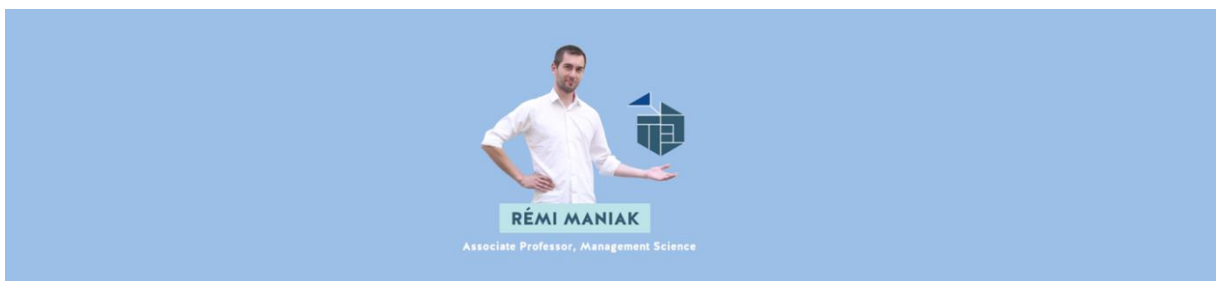


MOOC

Innovating in a Digital World

Lesson: Digital business models

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Introduction

Discount rates! Digital giveaways! Digital technologies have opened up a whole world of good deals. Want to find love? Read the news? Use an operating system? It's free! Want to buy an Amazon tablet! They're selling them at a loss. Want to find PC interface technology? Intel has developed USB, and is offering it on a silver platter.

With the new digital business models, companies can offer all this at slashed prices. And at the same time, they're putting pressure on all the traditional economic players. Here's how.

A world virtually for free

Digital markets are very different from regular industrial markets. They consist of "sides": men and women, customers and suppliers, customers and advertisers. All these populations are sides for a company to play around with, by taking advantage of the externalities they generate among themselves.

For example, companies may give freely to some clients to take better from others. This model, called "freemium", naturally flourished with the advent of the digital era, where every new free user comes at no cost, assuming that some of the customers do pay. The free service spreads virally, which establishes the brand and spreads it, thus attracting new users. That's how services like Dropbox or Evernote quickly became profitable, even with a few percent of paying users.

Companies can also give freely to customers, to take better from suppliers. Companies like Google, Booking or Facebook all offer their services free-of-charge to everyone. They derive maximum benefit from their position as trend-setters and vital intermediaries for a massive number of transactions. Most of their profits are generated by suppliers selling their products via their platform, more or less directly. They take sales commissions of up to 20% or 30%, or charge simply for visibility on their platform.

But it can also be really smart to give both to suppliers and partners, so as to better take from customers. For example, why did Intel develop the USB standard to distribute it freely to all peripherals suppliers? Why did Nest develop a free standard so that all home devices could communicate, including those of competitors? Because these companies bet on the externalities generated on the other sides of their market. The more "complementary" there are, the more the platform expands, and the more customers there are to buy their products. Intel will sell more processors. And Nest will sell more connected home devices.

Menace to (industrial) society

The incumbent players are threatened by these new digital business models.

Long-time product and service suppliers are still playing by old rules: they make a margin on the difference between the price and cost of their offers. They can quickly be overtaken or replaced by companies playing on several sides of the market

Service providers were the first to be hit. Record labels, taxi companies and travel agencies are naturally losing ground to platforms offering a better service at discount rates.

The world of hardware is also affected, by actors able to exploit the externalities generated across the different sides of the market.

Take the car industry. Google swept in and spread its Android Auto standard to on-board computers throughout the world, for free. It'll soon be able to exploit the mass of information recorded by vehicles. It also has captive customers, stuck in their vehicle for two hours a day. Yet vehicles are going to become increasingly smart and autonomous, and manufacturers will be less and less able to exploit this mass of externalities. Remember what happened to companies that kept to just manufacturing mobile phones.

Take heating. Qarnot Computing exploited the simple fact that a processor creates heat. It therefore sells heaters made of processors. And it sells them at discounted prices as it also sells the computing capacities of these heaters, accessible to anyone in the world, at a discounted price.

Menace to (digital) society

It may seem like the die has been cast. Everyone seems to get something out of it. But actually, the battles are on-going.

First between the platforms themselves. The profits generated by these super-intermediaries attract competitors, which attack by positioning themselves differently. Dating sites are some of the most hotly challenged. But the "sides" themselves are also challenging this nice model. They are, or will be tired of seeing the externalities they've created escape them.

On the customers' side, freebies can work only for so long. With the commercial exploitation of personal data, customers are becoming increasingly aware of free services, which are opening new niches for companies that do without this externality.

On the suppliers' side, application developers, freelance consultants, vehicle owners and residence owners are less and less willing to agree to the extreme conditions imposed by platforms. The benefits derived do not seem to warrant them.

On the complementors' side, partners are less and less willing to be tied down to a single standard. Take for example the attempts of hardware suppliers like Samsung or Sony to get free from Android.

To sum up, seen from the pre-digital world, this all seems very strange. It is becoming profitable to offer free-of-charge things that cost a lot to develop. That is the new law of

digital business models. Investing in one side of the market generates positive effects on the other sides. The key challenge is to know how to exploit them while keeping everyone happy.