

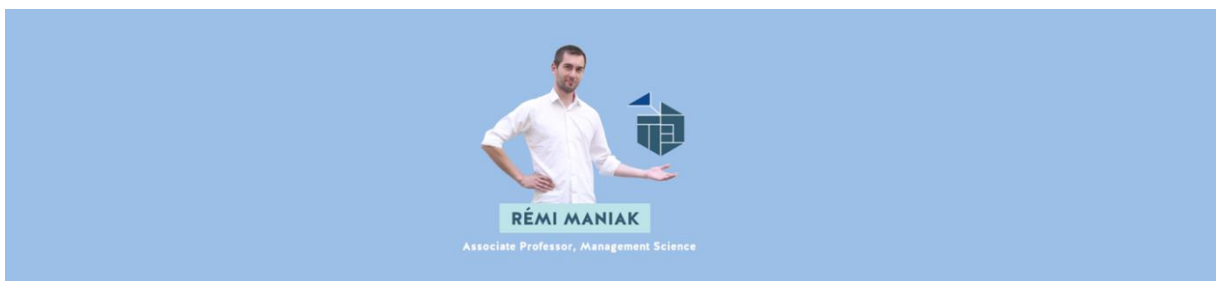


MOOC

Innovating in a Digital World

Lesson: Digital disruption

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Introduction

It's becoming really annoying. Every time a digital company launches new product, it's the same story. "This innovation is going to change the world", "it's going to disrupt an industry". Let's be reasonable. A disruption is not just a nice new product. Is this frenzy of constant disruption not just a reflection of entrepreneurs' egos? Or simply marketing? Well, not only.

Back to the roots of disruption

According to some theories, once a radical innovation has been launched, like the computer or Internet, markets stabilize for several decades. Customers gradually become familiar with the innovation, then start wanting it. Companies improve associated products and their manufacturing process. And all this slowly converges towards what is called a "dominant design", where all offers look the same.

The concept of disruptive innovation was born from the study of companies that had followed this continuous improvement approach too closely.

For example, in the 1980s hard drive manufacturers saw the limits of the race for storage capacity. With the breakthrough of laptops, the priority gradually shifted to new attributes of the product such as light weight, compactness or silence. This change in uses made it possible to bet on other technologies, with a much poorer performance in terms of storage capacity. Some were successful. Others less so.

This is the mechanism of disruption. A seemingly harmless competitor enters a stabilized market. It gambles on new attributes particularly valued by some customers, and sacrifices attributes thought to be vital. It can thus turn a whole market around if it manages to massively change buyer preferences.

Let's not forget that when the iPhone was launched, the main criterion for buying a mobile phone was battery autonomy. Yet the product came with less than 24 hours of autonomy, at a time when the norm was five days. Who today would sacrifice the ergonomics of a touchscreen to save a few days of battery? No one

In fact, the digital world offers all the conditions needed to break away from the dominant designs.

Digital empowers disruption

There are three reasons for this.

First, because with the benefits offered by dematerialization, customers easily forget about some of the luxuries they had become accustomed to. The MP3 disrupted the CD industry despite its poor audio quality, but opened up the possibility of infinite choice from home. Likewise, the 3D printer you will soon have at home will build objects that will certainly be less robust than what you would have found in-store, but you will have unprecedented possibilities of choice and customization, all from the comfort of your home.

Second, because it's never been so easy for customers to test innovations. And a disruptive product spreads only if consumers can easily test it before buying it. They need to experience the value added by the new attributes, and to make peace with losing the attributes that have been foregone. The new business models of the digital world are largely based on free offers or freemium, which allows for massive trial campaigns, at a low cost.

Finally, because the diffusion of innovations is facilitated by digital forms of prescription. Recommendation systems in social networks are far more efficient than mass marketing to overcome the fear of anything new. And the market size offered by global platforms makes it possible to quickly reach the critical market mass beyond which an innovation becomes known and credible, even for the most conservative customers.

Creative Destruction

Who knows what this will lead to, and if it will stabilize again? All we have to go by is a similar disruptive period: the industrial revolution at the beginning of the 20th century. And the least we can say is that it has indeed changed the world.

It shows us that inventions and technology can combine and enrich one another endlessly, and can lastingly revolutionize established industries. Experts call this creative destruction.

The early 20th-century scientific discoveries that led to the thermal engine, chemistry or electricity

were combined to revolutionize transport, medicine and agriculture. The parallel with the infinite possibilities of combination afforded by informatics, electronics, biotechnology and artificial intelligence is obvious. From this perspective, computers and Internet are very timid exploitations of this potential.

In the early 20th century, Schumpeter identified the key player of this transformation: the **entrepreneur**. Entrepreneurs were the ones who engineered these shifts, through their desire to exploit technology to revolutionize existing products. Today still, they are the heroes of global disruption.

Finally, these innovations have such ripple effects that they also disrupt numerous capitalist mechanisms. Around 1910 emerged the foundation of the industrial company as we know it today. For example, the limited company status was invented, along with investment control methods, Taylorism, and the Chief Executive Officer role. Today, digital technology is changing the rules of the game once again, this time to suit the 21st century digital company.

This constant disruption craze is indeed irritating sometimes. But we'll have to get used to it. The word "disruption" isn't just there to sound smart in a keynote. Above all, it's the symptom of a historical period where, at least theoretically, all established industries can effectively be disrupted.