

DIGITAL PLATFORM

THE HEART OF A BUSINESS

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Foreword

omorrow's winners are defined by digital platforms. It's a bold statement but backed up by undeniable facts. By looking at CNBC's annual list of companies that are transforming their industries the most you can tell that digital platforms are running the show [1].

According to a recent study by Accenture, an average of 50 % of the companies under study considered digital platforms to be at the core of their strategy [2].

But forget about statistics, just look around you. Today, takeaway is something you don't actually need to take away anymore, you can order it from Wolt. Ordering a taxi on your mobile app beats standing in line at a taxi stand any day. The quality of your sleep is monitored by an Oura smart ring, which gives you information on your health and wellbeing. Watching television is transforming into streaming. Digital platforms are a part of our everyday lives. But actually the pioneers in the field already started out decades ago.

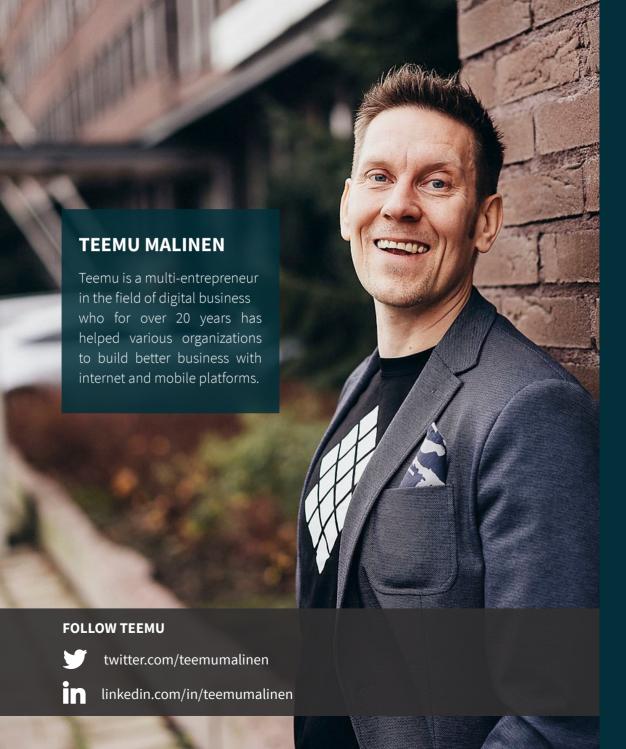
Around the mid-1990s home pages were all the rage, then came the intranets, web stores, social media and so on. Digital platforms have systematically and consistently moved towards the center of business. To me, the change in the market has been painfully slow but also understandable: deployment of technology is not enough, we as people need to change as well.

Today the world is more willing to embrace digital platforms than ever before. On a few select fields the game of platforms may already be over but most markets are just waiting to be conquered. This is encouraging news to those who want to be winners in their own market.

The heart of a winning business conceals a digital platform.

Regards, Teemu

Turku March 27, 2019



♦ SOFOKUS

Sofokus is a digital business company founded in 2000. Sofokus helps its ambitious customers to gain a competitive advantage with digital platforms. Sofokus offers business and service design along, growth hacking, technology services and analytics. Sofokus is an income funded company and owned by its employees, and it is among the fastest-growing companies in Europe (Inc. 5000EU, 2018).

For more information, visit **SOFOKUS.COM**



Introduction

t's easy to agree that digitalization is somehow closely connected to the development of modern business practices, but a closer look reveals that in itself the term means very little. Digital platforms and the platform economy, on the other hand, provide a concrete framework and even clear execution models that can be applied to business operations.

The new platform-enabled business models and strategies have been said to be the most profound macroeconomic change since the Industrial Revolution [2]. The Internet has for a long time provided a global channel, but only platforms have been able to harness its power at great enough scale. Amazon or Facebook could not have been founded around any other channel.



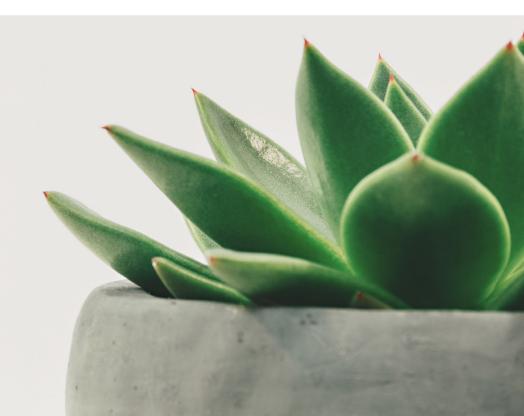
In Finland, public discussion not necessarily the other way has centered around artificial intelligence and block chains, but I believe digital platforms to have more meaning to organizations of all sizes. My view is based on the fact that deploying artificial intelligence, for instance, requires platforms but

around. In other words, if you make sure that your platform strategy is up and running, adding things like machine learning-based dynamic pricing to your business becomes just normal, market-driven service development.

one who wants to understand why digital platforms are a must for future competitiveness. I will offer tips on how to use platforms to support your own business and provide plenty of illustrative examples. I hope that after

This guide is meant for every-reading this guide you will be inspired to discover the potential of platforms in your organization.

W HAVING YOUR OWN DIGITAL PLATFORM IS KEY IN GAINING AN UNFAIR COMPETITIVE EDGE."

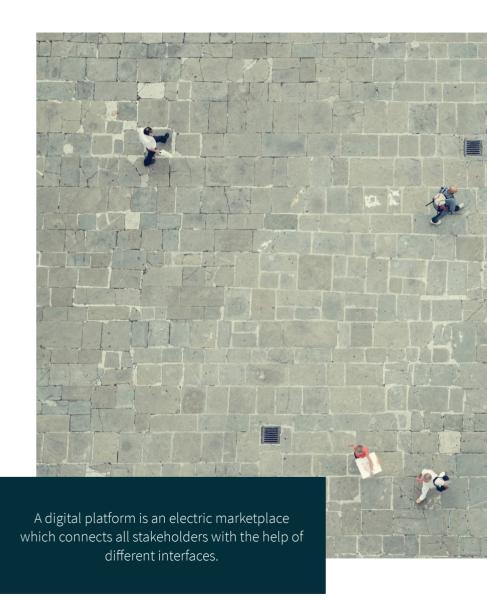


Virtual marketplaces

hink of the platform economy as a marketplace. A town has a marketplace (platform), where merchants (platform operators) can freely set up their stands. The town charges a fee for every stand. Customers gather at the marketplace since there they can find a lot of similar services and service providers in one place.

The customers can freely move to another marketplace (platform) by travelling along a road (API). The whole system (platform ecosystem) is built in such a way that it is in everybody's interest to make the various marketplaces even better and keep them competitive so that the customers keep coming back.

A digital platform differs from a marketplace in one crucial way, however: not just anyone can establish a marketplace but **digital platforms are up for grabs to all organizations**. This is one of the reasons why digital platforms are so capable of challenging traditional power structures. The organization with the biggest capital or ownership over the best areas is not necessarily going to win the platform game.



Here are some definitions for some of the central terms:

API or Application Programming Interface

is a communication channel through which two pieces of software (e.g. two digital platforms) can exchange information. In the API and platform economies, interfaces are a central concept, and they can also be seen as marketable service products, for example.

API economy

is a business model where the use of application programming interfaces or APIs takes center stage. By using APIs, a company can, for instance, make their business processes or data available to others.

Digital platform

is an Internet-based software solution that brings the operators of a certain area together to form one single value network. A digital platform can be figuratively described as the heart of a platform economy operator. The central element of a digital platform is a well-documented and comprehensive API, through which the platform can receive data from or send data to the operators of the value network (or the platform databanks). APIs enable the linking together of several different digital platforms.

Network effects occur when new users make a network more valuable to other, existing users. When a network reaches a critical point, competing and more limited networks start to lose their significance.

Platform economy

is a business model brought about by the development of the Internet. In the platform economy, some entity – such as a company, some other organization or an individual – provides others with a technical platform that is meant to be used for commercial purposes. By exercising platform economy, a company is able to change the value chain logics of their industry.



Check out: "10 biggest platform economy myths". [3]

Platform market review

ut of the ten most valuable brands in the world, seven represent digital platforms [4]. Out of the ten most valuable companies, half are based on the platform economy [5]. According to a study by Global Platform Survey, the U.S. market share of the platform economy was 3,123 billion dollars, China came in second with 930 billion, leaving the whole of Europe with a humble market share of 69 billion dollars [6].

Regardless of the list or study, the United States and China seem to be running the show as well as reaping the biggest benefits. Us Europeans have quite a big handicap to overcome, but at the same time we're also presented with an amazing opportunity. The market has a guaranteed demand for digital platforms that have been geared towards European needs.

According to a recent study by Accenture, digital platforms are considered a key factor for growth-oriented companies. Platforms are developed, for instance, in response to new customer needs, to start a platform-based business, for product launches, creating ecosystem partnerships and reimagining customer experience [2].



Challenging Alibaba with a super app:

Meituan-Dianping

eituan-Dianping is a digital platform that focusses on selling and delivering things such as food, hotel services and movie tickets. The company platform produces nearly 30 billion transactions for over 350 million people in 2,800 cities. Still it's highly likely that this is the first time you've ever heard about this company.

The market in China is not open in the same way as in the rest of the global network, which is why many Asian platform giants remain largely unknown. Still, China can't be ignored when it comes to platforms. The country is clearly set on conquering global markets not only through traditional means but also through digital platforms.



OUR STRATEGY IS TO ATTRACT AN ENORMOUS NUMBER OF CUSTOMERS WITH SERVICES THAT HAVE A HIGH PURCHASE FREQUENCY AND THEN OFFER THEM SERVICES, SUCH AS HAIRDRESSER OR WEDDING SERVICES, WHICH HAVE A LOWER PURCHASE FREQUENCY"

Xia Huaxia, Meituan Chief Scientist [7].

The ABC of an unfair competitive edge

Background

ne of the most fascinating features of digital platforms is the possibility to create what seems to be an unfair competitive edge. Such unfair advantages have always existed, but their creation has been closely tied to things that are hard to achieve, such as central land areas, large-scale infrastructure, political influence or extensive financial resources. Now, creating an unfair competitive edge is achievable by anyone.

Establishing a competitive edge is not easy of course, but modern winning concepts often share surprisingly similar traits. One of the most central is the utilization of digital platforms and network effects at the core of the business. It's still possible to win by purely traditional means, but I can't see why any-

"It's so unfair!"
one taxi driver aptly
exclaimed when I asked
him how he felt about
Uber, which was making
its way to Finland.

one who's building something new would not take advantage of the possibilities provided by digital solutions.

Since discussions on digital solutions naturally tend to focus on technologies, I have decided to write about the things that lie outside the expected public discourse on the API

economy, interfaces and artificial intelligence. It seems to me like the business aspect has a much smaller role in these discussions

In this section, I have gathered a number of basic things that you will encounter when moving digital platforms to the core of your business.





War of the super platforms

Spotify vs Apple

iel Ek, one of the co-founders of Spotify, issued a complaint with Facebook, Amazon, and Apple the European Commission on Apple [8].

"Apple operates a platform that, for over a billion people around the world, is the gateway to the internet. Apple is both the owner of the iOS platform and the App Store and a competitor to services like Spotify. In theory, this is fine. But in Apple's case, they continue to give themselves an unfair advantage at every turn,"

Daniel Ek writes in his blog post about the case [9].

n March 13th, Dan- Ben Thompson, the founder and author of Stratechery.com, states the following: "Google, dominate because consumers like them. Each of them leveraged technology to solve a unique user needs, acquired users, then leveraged those users to attract suppliers onto their platforms by choice, which attracted more users, creating a virtuous cycle." [8].

The power struggle between Spotify and Apple as well as seeking out precedents for anti-trust laws draw attention to how significant the competitive edge given by platforms can be and how difficult it is to apply age-old antitrust laws on modern-day super-platforms.

Current state and objectives

Over the years, I've noticed that organizations sometimes feel that others are better equipped and miles ahead of them when it comes to utilizing the potential of digital development. It may feel like your competitors are much further along than you. I think this optical illusion is caused by comparing what you have to what you see others doing online. However, in reality a company without a platform may have a better chance of success than a company that is seemingly further along.

Based on my experience, I believe that a lasting competitive edge is always somehow based on the DNA, history and natural strengths of an organization. A technological touch-up is never something permanent. In building a competitive edge, old rules still apply - platforms just provide new opportunities for following them. A good place to start when beginning to build your competitive edge is to analyze the current state of your business and to set your goals. Here are a couple of questions that can help you understand your situation:

Concept

- What is the problem you're trying to solve?
- What can you bring to the market that's new?
- How will you set yourself apart from the operators of the market?

Ambition

- How much are you aiming to grow?
- Is your business idea local or global?
- What is your budget?

Current state

- Where do your strengths lie compared to your competitors?
- Are you in possession of any data that would be of value to others?

Culture

- What is the digimaturity of your organization?
- What type of organizational culture do you represent?

According to a study presented in the 2017/3 McKinsey report, challenges related to culture and behavior were mentioned as one of the biggest challenges when building up digital operations [10]. My own experiences support the findings of the McKinsey report when we're talking about organizations that haven't originally been built around a strong digital culture.

It's no wonder, then, that for example self-direction and agile team-based organizational models have become so popular in recent years. An organization (or should I say organism) saturated with digital culture is a faster learner, which has a positive impact on competitiveness. But enough texts to fill entire libraries have been written on modern corporate cultures and organizational models, so I won't say more about them here.

In addition to culture, attitude represents another element in the organizational foundations. Growth is painful and requires both investments and risk-taking, so the path is not for everyone. If the genuine aim of the organization is not to become better than others, for instance budgeting may remain at a level that does not acknowledge the need for allocating resources for development.

I propose that the matter can be resolved by stopping investing in "digital projects" and by adopting digital development as a permanent key area alongside traditional operations (sales, marketing, production etc.). This is an organizational mental exercise – you won't be able to achieve a permanent competitive advantage with one-off projects.

From the viewpoint of platform-based operations, organizations' existing data provides an extremely interesting opportunity for exploration. For instance, industry data that's been gathered for a long time may turn out to be very valuable to other, neighboring stakeholders. If this data can be packaged into a, say, easyto-use mobile application or readily available format that's accessible through a modern interface, new opportunities may indeed emerge.



A wedding, the digital way

Nobu Nakaguchi in 2013, to people interested in getting married. The service has managed to raise 140 million One of the company's most dollars in funding – 100 million in the most recent round opening of a brick-and-mortar in 2018 [11].

allows you to create a website and guest lists for your wedding and to buy wedding presents. To avoid the usual challenges web stores have regarding returns, the bought products are ding venues [13].

ola is a digital plat- delivered straight from the manform founded by ufacturers to the customers. ✓ Shan-Lyn Ma and The wedding couple can also change their presents to ones offering all there is to offer that suit them better before the presents are delivered [12].

recent developments was the business in New York at the beginning 2019. The company Among other things, the service is beta-testing their new Real Weddings concept in 17 cities around the United States. The Real Weddings service lets future wedding couples to browse through suitable wed-

Networks

In the old days, your business plan required a detailed description of all relevant value chains. Showing understanding of the value chains and positioning the business let the investors know what type of position the company was going for. The world of platforms has come to prefer a network-like approach over linear value chains. Value chains have by no means disappeared, but conceiv-

> **II** THOSE WHO UTILIZE PLATFORMS IN THEIR OPERA-TIONS WILL BEGIN TO THINK IN TERMS OF VALUE NETWORKS INSTEAD OF VALUE CHAINS."

ing their world requires you to understand your own operational environment and all the intersecting networks in more encompassing terms. You must also know how to chart the relevant platforms of the digital world. Through this understanding, it will be easier to determine the position that's right for your company.



Below you'll find some questions that will help you chart your environment.

Ecosystem/networks

- Which ecosystems do you belong to?
- Which operators and platforms does the ecosystem include at the moment? What about in the future?
- What kind of interaction do you want to take part in?
- Which networks are the people in your organization utilizing?

Positioning

- Do other operators have competing platform solutions?
- What position do you want to attain in your ecosystem?
- What is your current position in your organization?

Your organization may already be playing an active role in various networks, even without an official strategy. A digital platform may already be used for inviting tenders for resources related to the delivery of products or services without your knowing. It's likely that there are already some existing networks in your own business environment – the question is, are they utilized in a goal-oriented manner.

Another matter entirely is creating your own playing field

(platform). Has one of your competitors built their own digital platform? How well-known is it in various networks? What's the reputation of the platform? This type of inquiry will quickly give you a fairly good general understanding of the market situation.

If the market is showing a clear need for a platform that you feel would deliver more added value than any existing platform, you may be looking at a very interesting find in terms of competitiveness.





Pioneer in crowdsourcing:

Threadless

n the year 2000, Jake Nickell and Jacob DeHart founded a company with a thousand dollars. At first, the idea was to have a design competition, have its best ideas printed as T-shirts and then sell them. The founders realized that they had created a community that was driven by crowdsourcing for designs and a mechanism for voting for the best ideas [14].

behind the term crowdsourcing, stated the following about Threadless in 2016: "Threadless is an almost pure expression of the crowdsourcing model." At

the time, the company was selling 60,000 T-shirts a month, employed fewer than 20 employees and was on its way to an 18 million-dollar revenue. At the time, the company was a prime example of how an ecosystem built on a digital platform could turn into a profitable, fast growing business [15].

Along the years, the company has faced many challenges and tried out different models as it's Jeff Howe, the man said to be been redesigning its operations. In October 2017, the company announced they had acquired a company called Bucketfeet that specializes in artist-designed footwear [16].



To start your journey, download a Platform Innovation Kit. [17]

Technologies

Although utilizing technologies can't be disregarded when talking about digital platforms, I will only talk about the business level here. Solutions can be executed in numerous ways, but certain basics remain the same despite the type of operations. This is why I won't discuss things like the concepts of the API economy in depth.

Interfaces/data/platforms

- Can the existing data be accessed by using an interface?
- What type of user experience are you offering (or want to offer)?
- How familiar are you with the opportunities presented by APIs?
- Are your operations based on a platform? If not, could they be?

A digital platform can be thought of as a home base for building a competitive edge, one where you store information that provides value to the surrounding ecosystem. Practically every organization is in possession of data that's valuable to others. However, considerably fewer companies operate in such a way that all this data is available as easily and comprehensively as possible. Put very simply, API economy gives center stage to the ways in which your operations handle and channel data.

In his 2002 mandate, Jeff Bezos ordered that all of Amazon's digital services needed to be built to include an interface. Anyone who didn't comply with the mandate was fired. The result was a company-internal API economy, where a great number of different teams could cross-utilize the well-documented services of others as their own [18].

In grossly simplified terms, the core of an unfair competitive

edge is a digital platform upon which an organization bases its operations. For instance, Wolt's mobile application is a pathway that leads directly to the digital hear of the company. But instead of an app, you could just as well use a browser or get to the data through an interface.

Companies are always trying to come up with ways of commercializing their own expertise in a manner that's as attractive and competitive as possible. Sometimes the wisdom needed can be found inside the company, but why not try crowdsourcing for it? With comprehensive and easy-to-use interfaces, outsiders can help you be innovative.

TIP

If you want to get an idea of what interfaces there are, visit programmableweb.com, for instance. At the time of writing this, the service lists 21,091 different interfaces [19].





Pioneer in developerfriendliness

Stripe

eople such as Elon Musk and Peter Thiel were involved in developing PayPal, which later bepayment systems worth billions of dollars. Online money transfer is one of the areas that in the digital sense became highly developed already in the early years of the 2000s. Regardless, the founders of Stripe, Patrick and John, mustered up the courage to contact Thiel and Musk in 2011.

"It's a little impetuous to go to PayPal founders and say payments on the internet are totally broken," John recounts the meeting. The encounter result-

ed in getting funding, and the two founders were off to build the world's best developer experience for Stripe. The vision came the behemoth of online of the founders was based on the perception that deploying money transfer services was all too laborious and time consuming. The duo decided to invest in creating an interface that developers would love.

> The developer community welcomed the service with gusto, and soon Stripe landed the customer accounts of companies such as Facebook, Lyft, Salesforce, Shopify and Indiegogo. According to Wired, the company is valued at around 20 billion dollars at the moment. [20]

Platform revenue models

evenue models are a perennial favorite of the digital debate. Models arouse interest, cause fear and feel foreign. Markets are always looking for the newest recipe for success. In reality, success is the sum of numerous factors, and the suitability of revenue models is case-specific.

Examples of revenue models

In this section, I will introduce approximately ten common revenue models for digital platforms. The list is not supposed to be comprehensive but indicative. It needs to be said that platforms have combined and modified different models in numerous ways. The most important thing is finding the models that suit your own platform and userbase.

Transaction fees

Transaction fee is a common the model, the user's credit card revenue model, in which the is charged a fixed amount each service provider gets a small share of the selling price of a service. Typical examples include ticket sales and payment intermediation services.

Listing fee

Listing fee is a less common model in which the service provider charges a one-time fee for, for example, displaying a product that the user wants to sell in the service. Often some other payment method is used alongside a listing fee (additional revenue). This payment method is used by, for example, auctions and Etsy.com.

Subscription fee

Subscription fees must be one

of the most often used methods in all kinds of online services. In month in exchange for using a service. Countless of cloud services utilize this model.

Visibility fees

Visibility fees are used by service providers to charge their users for better visibility within a service. A typical example is an auction or car sales, where for a couple of euros you can have your product shown on the front page for a limited time.

Single payment

The concept behind single payment is easy to grasp: the user is charged a fixed amount, usually in connection with the deployment of a product or service. Single payment is a popular model, for instance, in mobile applications and digital game downloads.

Advertising

Advertising must be one of the best-known and oldest models of digital business. The idea is that the user pays for the service by watching forced adverts. Advertising has a lot of different variations, such as banner ads, paying for no ads, premium visibility, paywalls, affiliate marketing, sponsored content and branded content.

Donations

In the donation model the user decides whether they want to pay for a service or not. Typically, the amount donated is either set by the user or suggested by the service. As an example, in 2016 Wikipedia collected 82 million dollars through donations [21].

Freemium

In the freemium model the basic service is available for free, but the user is charged extra for more advanced features. The model is very popular and utilized by services such as Drop-

Data-as-a-service

Data-as-a-service is a typical API revenue model, in which buyers are charged for accessing service data. The Alfa Rating report on customer data is an example of this model's application.

Pay per unit

Paying per user/device/license is a very widely used model that some years ago was one of the most popular models in B2B services. The model is normally inexpensive to implement but it may become costly as the number of units grows. This is why models such as the freemium method have become more popular in recent years.

Other models

In addition to the models mentioned above, there are a host of different, more exotic models such as social payments, which is an online service whose revenue logic is tied to the freemium model. In a social payment the user pays with a tweet [22]. Other models include mydata, virtual cashback, free DIY and the co-op model. Only sky's the limit when it comes to using revenue models.



Revenue models in the platform economy

Significance of balance

The revenue models mentioned above are typical to digital platforms of all kinds, but the platform economy and ecosystems also add to this topic. It's important to understand that the traditional linear vendor-to-buyer model is changing as the focus is directed to the planning of interactions.

"Platform economy is not about seeking linear profit but about designing a balanced model that increases the overall value of the platform."

On platforms, value is created through the coming together of different user groups, which is why you should pay attention to how you use the various revenue models. If one user group objects to, say, a price increase, other groups may cut down on using the platform as well, thus reducing the attractiveness of the entire platform. In the eyes of the users, the attractiveness of a platform is based on critical mass, which presents a chicken and egg problem.

A balanced solution should be sought to resolve the situation – both (or all) groups should be represented in sufficient numbers so that the dynamics of the platform work as desired. It's in the interest of the administrator of the platform to create mechanisms that prevent users from bypassing the platform. This is a challenge for matchmaking portals, for example, since the platform may not offer any added value once the supply and demand meet.

When planning revenue models, the objectives need to be clear. If the objective is to see maximal growth in the number of users, it may be sensible to provide value for free (free-mium) and include some viral features (think of how Dropbox gives out extra storage for attracting new users).

If you want to keep current users, they can be rewarded with automatic discounts based on their use of the service. Listing fees can be used to steer the user towards quality content, and discounts can be given on annual fees (in relation to monthly fees). If the deployment threshold of a platform is low and there are competing platforms available, the user may start platform hopping.

When designing the revenue models of platforms, it's im-

portant to understand the concept of friction. Friction is a psychological resistance that the user experiences when using a platform. The platform admin aims at making the user reach conversion, since user operations often create value for other users. Friction is a powerful way of killing conversion.

There's no such thing as a free lunch

The old saying is still as relevant as ever in the age of platforms. Revenue models that are seemingly based on free use have in recent years promoted the image that all the best services on the web are practically free. Youtube, Wikipedia, Facebook and many other services benefit from this image, although in reality their revenue methods are just more modern.

One of the special features related to platforms is paying for use in other ways than money.

• **Listening to Spotify or Pandora is free.** In reality you pay by watching adverts.

The CRM of HubSpot is free.

the costs are high.

- Using Facebook is free.
 In reality, you pay by giving your social network to the company and by sharing personal data.
- In reality, you're giving the heart of your business to HubSpot, whose revenue model corresponds to that of traditional ERPs. Implementing and learning to use the seemingly finished product takes years, and in the end

All seemingly free platforms have sharp-minded revenue logic designers in their ranks, capable of minimizing the amount of friction. The service developers have managed to create something that looks so balanced that it just keeps scaling up.



Redesigning group exercise

Peloton

ounded in 2002, Peloton is a company that decided to come up with a way of letting busy parents enjoy group exercise hassle free. This resulted in a unique concept, where a tablet computer connected to a bike lets you take part in exercise classes straight from your own home [23].

Peloton controls all the areas of its business: devices (bike and tablet computer), software (interfaces and digital platform), logistics (delivery and installation) and brick-and-mortar shops. The company is valued at around 4 billion [24].

Peloton shares many characteristics with Netflix. The central

objectives of both is increasing the number of monthly subscribers. Every day, Peloton produces 12 hours of high-quality content for its communities.

The trainers of the group exercise classes are almost like Hollywood stars with their groups of devoted fans. The positive customer lock-in is based on the combination of usability, sense of community and cost-efficiency. The similarity of the core business elements of Netflix and Peloton serves as an example of a future where the boundaries of traditional industries become blurred.

Digital solutions are suitable for any industry as long as the business concept is fit for its purpose.

If there's something to be learned from the way Netflix operates, fitness industry operators will need to get a move on with renewing their business in Finland, too, so that they won't share the fate of local television channels. In case Peloton launches in Finland one day, it means that fitness customers will become bound to the company through an investment in a bike, a community and a monthly subscription.



Network effects

he concept of network effect is central when thinking about ways of increasing the value of a platform and boosting its growth rate. In practice, all super platforms have grown with the help of network effects. Even if the goal isn't to become a market leader, it's essential to understand network effects from the viewpoint of building and defending your competitive edge.

There are several different types of network effects, and they can be combined just like revenue models. Low level network effect types include, for instance, physical networks and protocols. Did you know that Google has its own massive backbone network that is designed to guarantee the availability of services at all times? [25]. The Internet itself is an example of the power of network effects.

Everyone's familiar with mobile application platforms that push more and more users into the ecosystem through new applications. In response, the growing number of users attracts more and more developers. Google's Android ecosystem is open, whereas Apple tightly controls its own iOS platform.

The value of the platform can be increased by making sure that the community creates content for it. IMBD, Wikipedia and TripAdvisor operate as massive, ever-growing databanks in their own business areas. Platforms based on data are also easier to defend, because a competitors first needs to acquire a critical mass.

Different placements in the market serve as an example of taking advantage of network effects. The market positions of nettiauto. com or tori.fi are highly stable, and they will remain that way as long as the market majority keeps using the services. Oikotie and Etuovi are examples of the fact that a certain market may contain more than one noteworthy market position in a small market area (Finland).

The designers of various modern "network applications" have managed to create massive growth by combining a smooth user experience with correct timing. In fact, network effects offer one explanation for why such seemingly ridiculous sums were paid for Instagram, WhatsApp or YouTube, for instance.

As the number of platforms goes up, the threshold to switch platforms gets lower. That's why it's good to think about how positions that have been gained can also be retained. Positions can be defended in numerous ways. If you manage to convince the users of a platform to produce more and more content that the other users want, your position is guaranteed as long as you can keep the momentum going.

It's no wonder that in the wake of digital platforms brands are once again thriving. When basically anyone can establish a competing platform, the one that has the best reputation and provides the best quality has the upper hand. Reddit, AirBnB and Uber have not only an excellent business concept but also a really strong brand. In Finland, ukko.fi, for example, has managed to convince its users in its own market, and it has even established the term "light entrepreneurship" through its operations.



The future of platforms

t's relatively easy to guess that platforms are facing a bright future. Machine vision, machine learning, internet of things, robotics, block chains and countless other technological innovations are accelerating the proliferation of platforms and providing opportunities for potential value production.

Finding answers to ethical and humane questions will become even more significant than technological breakthroughs. As I write, countries are wondering about the consequences of Facebook knowing everything there is to know about us. What if by manipulating this information you could affect elections? [26].

Who will be responsible when autonomous cars crash or a malfunctioning surgical robot causes someone to die? Regulation of digital platforms is a hot topic at the moment, as even entire countries are hard pressed to keep up with super-platforms such as Google, Amazon, Alibaba and others. It will be interesting to see, which instance will finally control the use of platforms.

One candidate is a web browser. Mozilla created an add-on for Firefox that prevents, for instance, Facebook from following a user around the Internet. The add-on quickly became the most popular one on Firefox, and it's been downloaded 1.5 million times.

And that's not all: Mozilla is planning to include an automatic feature in its browser that prevents online user tracking altogether. The feature should roll out in the summer of 2019. It remains to be seen whether Mozilla manages to lure people who are concerned about their privacy away from Chrome [27].

IT has been the herald of rapid growth for as long as the Internet has existed. We are on the verge of a new breakthrough as biological research is combined with digital platforms and openness and network effects are put to good use. For the first time in the history of mankind it will be possible to solve challenges that are related to our living ecosystem and people. Silicon Valley is enthusiastically charting so-called bio-platforms which can store information inside DNA instead of the current chip- and tape-based solutions [28].



Rocket sharing economy

Rocket Lab

ocket Lab is a private company focusing on commercial space flights. The company has been clear about its desire to launch rockets as often as possible, and at the moment it has settled on three-day cycles. Rocket Lab has a launch pad in New Zealand, and it's thinking of build-

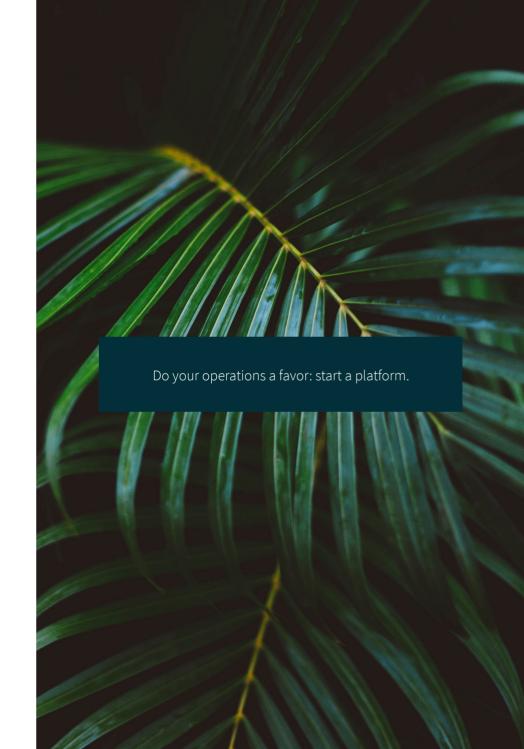
ing another one in the United States [29]. On its webpage, the company advertises that it has already launched 24 satellites [30] and also offers what it calls a rideshare service, which can take your satellite into space cost-effectively. Sharing cars is old-fashioned, now we're sharing rocket rides.

Closing words

igital platforms, platform economy and API economy may sound like tech jargon, but anyone interested in gaining a competitive edge will need to find out about them. Platforms have existed for some time, but their golden age is only dawning.

It's not too late to rethink your own business. There's a need for new platforms. Building a long-lasting competitive edge is always a lot of work. Digital solutions are no exception here. Platforms enable equal opportunities for building a competitive edge. Digital solutions are within reach to all organizations.

Platforms provide several elements for gaining a competitive advantage: it makes your business the center of attention, gives insight into the ecosystem, boosts growth and creates a positive customer lock-in. Have a safe journey in the world of platforms



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