



# PENTAGROWTH REPORT

The five levers of accelerated growth

A new point of view on the keys for growth for organisations in the digital environment of the XXI Century



#pentagrowth  
@ideas\_4\_change  
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# Executive summary

Pentagrowth is a model that describes the five exponential growth levers that the Ideas for Change team has identified after studying 50 organisations which have grown more than 50% in terms of revenue and number of users during 5 consecutive years since the year 2008.

In the introduction, we explain the study we have developed and the main observations that have led us to shape @pentagrowth.

In **CHAPTER 1**, we explain and exemplify each of the levers.

These are the five levers of exponential growth that we have identified:

- **Connect:** the larger the number of nodes (people, situations, things) that an organisation is able to connect, the greater the growth potential of the organisation.
- **Collect:** the smaller the internal effort an organisation makes to build its available inventory, the bigger its growth potential.
- **Empower:** the more an organisation takes advantage of its users' capacities, the bigger its growth potential.
- **Enable:** The greater the number of value creators that use the tools provided by the organisation to generate their own business, the bigger its growth potential.

- **Share:** The larger the community that has a shared sense of resource ownership with the organisation, the greater the growth potential.

In **CHAPTER 2**, we explore the correlations between the different leverages and we derive the three generative growth principles:

- **Reach:** combines Connect and Share.
- **Interaction:** combines Collect and Empower
- **Resilience:** combines Enable and Share.

In the **CHAPTER 3**, we find the three business structures that have shown great growth potential and explain them according to the Pentagrowth leverage combinations.

- **Services:** Enable and Connect.
- **Markets:** Collect and Empower.
- **Communities:** Collect and Share.

Finally, in **CHAPTER 4**, we share the Pentagrowth methodology we are using to help organisations envision their role in this new environment and generate accelerated growth strategies sustained by new combinations of the leverages available in the ecosystem and those internal assets and competences that can be used to combine them.

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## CHAPTER 1

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# Growth in the XXIst Century

The Internet allowed us to organise in networks and gave us the possibility of combining distributed capacities to generate markets or develop shared resources. Social media transformed everyone into a content producer and spread mutual knowledge and trust between strangers. Smart phones put the possibility of connecting anywhere, anytime, into everyone's pocket. Now, our personal belongings (watches, bracelets, clothes) and those surrounding us (electronic devices, vehicles, urban furniture) are also integrated in the network.

Two years ago, Marc Andreessen stated that software was eating the world: the biggest warehouse and the biggest bookstore (Amazon), the favourite music platform (Spotify), the pay television provider with the most subscribers (Netflix), the most acclaimed movie producer (Pixar) and the sector with the largest budget (videogames) are all now digital. In addition to these, the biggest chain of accommodation providers (Airbnb), the largest fleet of private drivers (Blablacar), the biggest market of independent professionals (Odesk) and many more already affect our daily, tangible lives.

They have a wider view of their business ecosystem: they connect new nodes, they integrate more resources from different origins in their processes, they take better advantage of their users' capacities, and they share tools and resources to enable others to develop their own businesses and lifestyles. The value of these organisations is not their volume, but the amplified

view of what is available for them, which comes from the design of business model itself. Their advantage is based on scope, not on scale. They are net contributors to their ecosystems, specifically designed to generate value beyond what they need to capture in order to sustain and evolve their contributing capacity.

From the results obtained, it can be concluded that growth acceleration depends significantly on the network and platform properties embedded in the organisation's business model design.

## The #whatgrows study

The @pentagrowth model is the result of a study carried out by Ideas for Change between 2012 and 2013. It takes more than 50 digitally based organisations that:

1. Have grown more than 50% per year in terms of users and income between 2008 and 2012/2013.
2. Have reached a relevant scale of the industry where they operate;
3. It was possible to obtain information from reliable sources. They are mainly young companies, and the majority of them are not listed in the stock market nor have any duty to make their information public.

For the analysis, we have categorised every organisation according to the year of creation, the type of inputs used, the business structure, the type of access that they provide, the pricing system, the

## The 50 organisations analysed for #whatgrows study

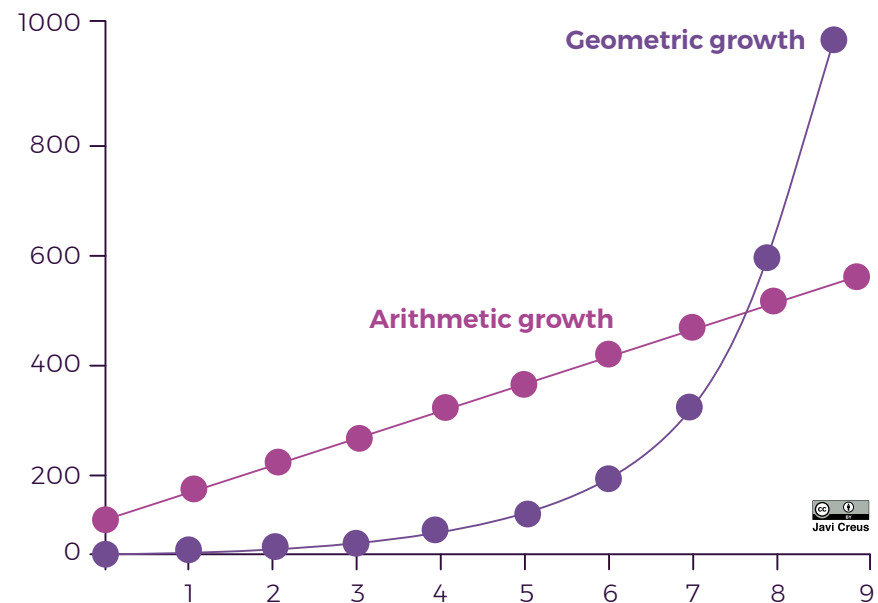
- |                |                 |                  |                  |              |
|----------------|-----------------|------------------|------------------|--------------|
| • 23AndMe      | • Crowdgather   | • Hootsuite      | • Pinterest      | • Taskrabbit |
| • 8Coupon      | • Docstoc       | • Instagram      | • Plos One       | • Ted        |
| • AirBnB       | • Dropbox       | • Khan Academy   | • Quirky         | • Twitter    |
| • Ancestry     | • Ebay          | • Kickstarter    | • ResearchGate   | • Waze       |
| • Android      | • Elance        | • Kiva           | • Salesforce     | • WeTransfer |
| • Arduino      | • Etsy          | • Lendingclub    | • Shapeways      | • Whatsapp   |
| • AthenaHealth | • Evernote      | • LinkedIn       | • Shiplly        | • Wikipedia  |
| • Blablacar    | • Facebook      | • Meet Up        | • Shutterfly     | • Yammer     |
| • Carpooling   | • FON           | • Netflix        | • Skype          | • Yelp       |
| • Causes       | • FON Quora     | • oDesk          | • Stack Overflow | • Zipcar     |
| • Couchsurfing | • Foursquare    | • Outbrain       | • Sparkfun       |              |
| • Crowdfunder  | • Global Giving | • Patientslikeme | • Spotify        |              |

type of customers, the typology of their APIs (tool for developers), as well as the results they have obtained.

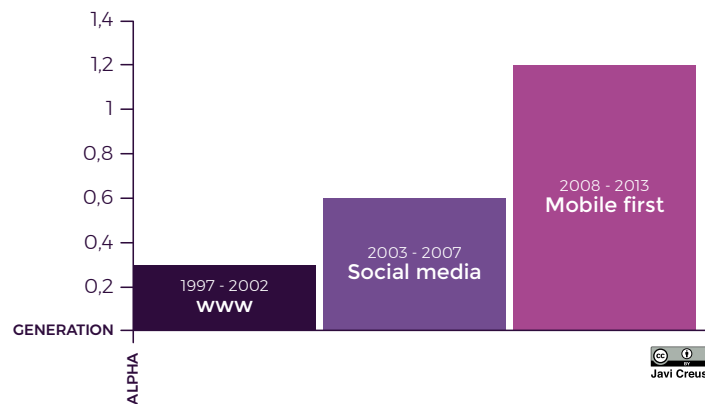
We have calculated the growth velocity and the acceleration of growth (alpha) of each organisation and we have crossed data with all descriptive variables we have used.

**Observation: Growth is faster with every generation of connectivity**

Organisations born in the smart phone era (after 2008) grew twice as fast in terms of users from 2008 to 2012 than those that grew in the social media era (2003-2008). Moreover, the latest ones grew twice as fast as those that started their activity before 2003.

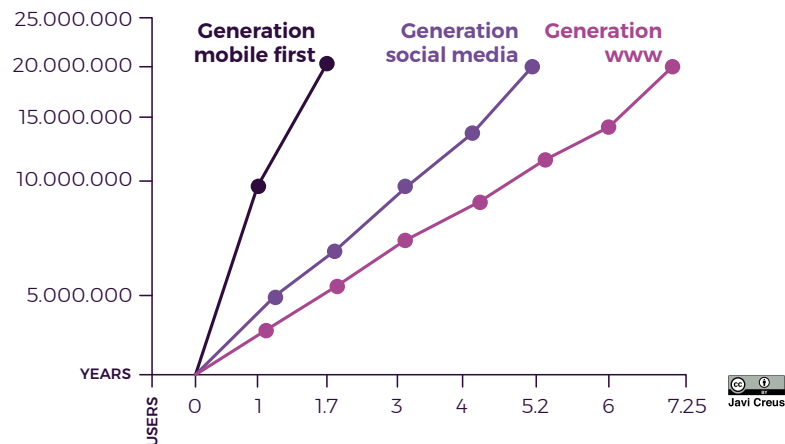


GRAPH 1. Alpha measures geometric / accelerated growth.  
Speed measures arithmetic growth



GRAPH 2: Alpha by connectivity generation

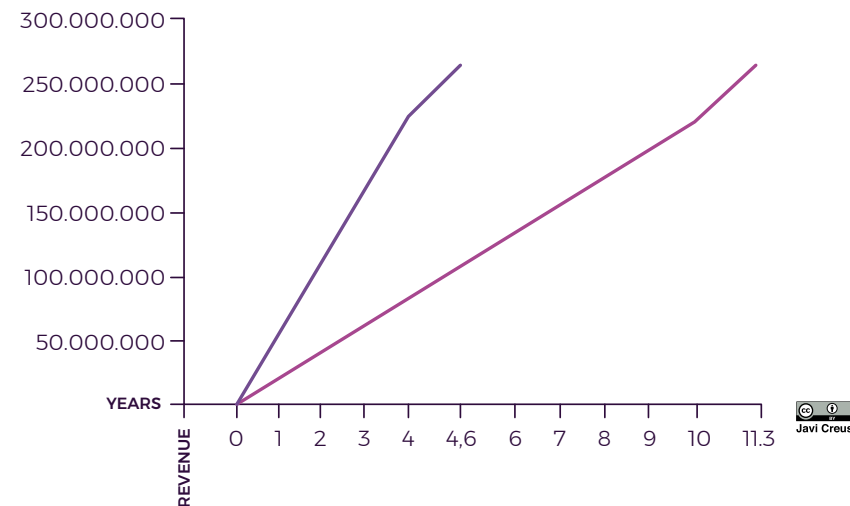
It appears foreseeable that younger organisations grow fastest. Nevertheless, the network effect is unquestionable, as it can be observed in the following image that shows, for each generation, the number of years needed to reach 20 million users.



GRAPH 3. Years to reach 20 million users

## Observation: Platforms grow faster than services

Organisations that build their available supply using distributed mechanisms, such as Airbnb's temporarily unoccupied apartments, and those that share their tools and resources to enable others to develop their own creations, like Apple did with its iTunes application market, grow at least twice as fast as those whose supply does exclusively depend on their own capacities.



GRAPH 4: Years to reach 250 million USD income



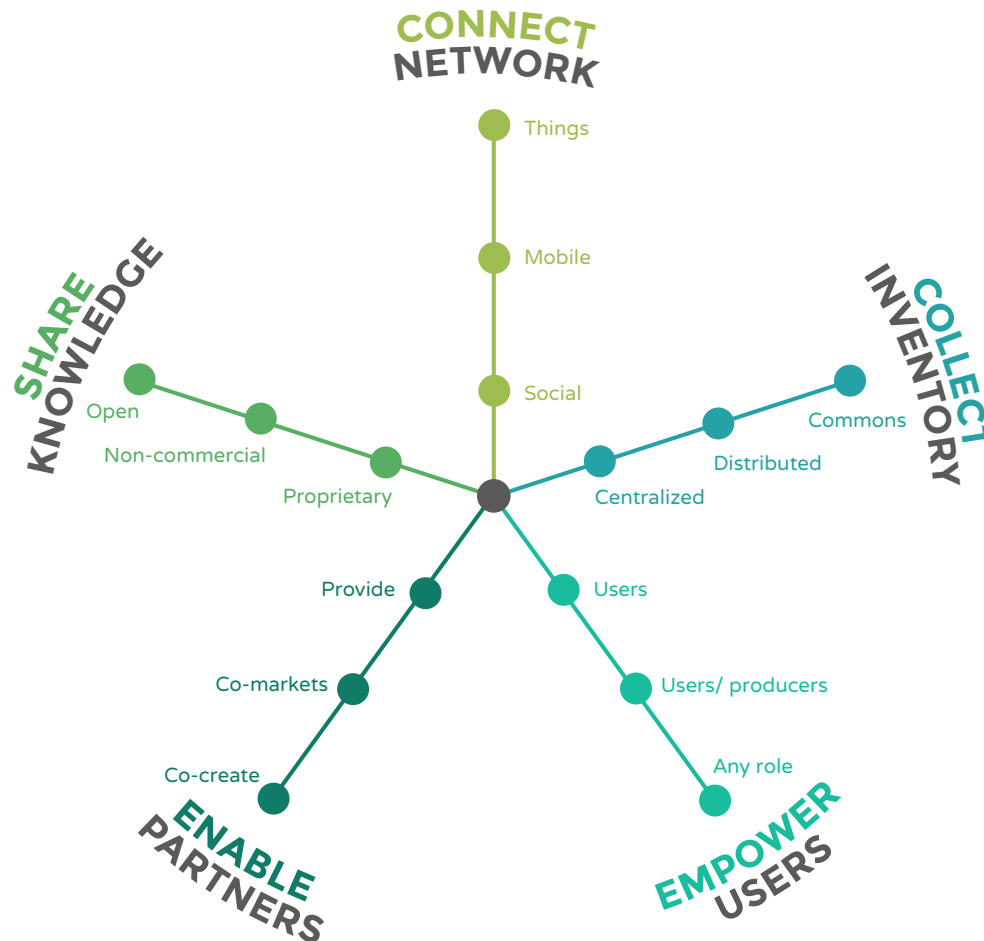
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## CHAPTER 2

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# @Pentagrowth: Five levers for accelerated growth

The @pentagrowth model summarizes the five key dimensions for exponential growth observed in the selected organisations (that have grown exponentially.)



The five laws of exponential growth are:

- **Connect:** the larger the number of nodes (people, situations, things) that an organisation is able to connect, the greater the growth potential of the organisation.
- **Collect:** the smaller the internal effort an organisation makes to build its available inventory, the bigger its growth potential.
- **Empower:** the greater the number of capacities from its users that the organisation integrates in its business models, the greater the potential growth.
- **Enable:** the greater the number of capacities from its users that the organisation integrates in its business models, the greater the potential growth.
- **Share:** the larger the community that shares a sense of resource ownership with the organisation, the greater its growth potential.

We have turned each of these laws into a lever for growth, and determined a scale that allows us to describe the business models observed.

## Connect: leveraging the network

The larger the number of nodes (people, situations, things) that an organisation is able to connect, the greater the growth potential of the organisation.

What connects the network over which the organisation operates?

### Connect 1: from the web page to social media

Spotify was the first external service entirely integrated in Facebook. Initially, it allowed its users to use Spotify with their Facebook password (August 2010). One year later, it created a network specific application. Daniel Ek, its founder, explained it this way: We have spent the last few years building a service where you can find music. Add this to Facebook's 800 million users (2011) and this will light up the world."

### Connect 2: reinventing from the mobile (smartphone/cellphone)

Amarnath Thrombe, president of Match.com, mentioned the following during his press interview about his new mobile application in April 2014: During the past two years, Tinder, an application that takes information from Facebook and matches candidates that are geo-localized within a certain distance, has arranged more than 100 million chat connections, without questionnaires. Match's reinvention imitates Tinder's functionalities.

### Connect 3: networked things

NestLabs, a company that manufactures in-

telligent thermostats (sensor-equipped network-connected, habit-learning and programmable) with the greatest market share, was founded in 2010 and launched its first product in 2011. Two years later, in 2013, Google bought it for 3,2 billion dollars. Nestlab's ambition is not just to generate savings in each household through learning and anticipation. The network they run seeks to avoid peak demand periods and utilizing the most opportunistic and environmentally polluting energy plants. Of course, the exploitation of personal data obtained through these connected networks does not end here.

### Reflection: when possibilities expand, everything starts from the beginning

The number of nodes (people, situations, things) connecting the networks over which the organisation operates determine the scope of its potential growth. Since the dawn of the Internet, more and more nodes have become accessible and interconnected. Given the speed and escalation of this progress, we tend to interpret it as linear. However, many networks overlap each other, like social networks on the web, and others multiply their potential when combined, such as the mobile network and connected items.

Each of the networks of the structure expands the universe of connectivity in at least one of the following

## CONNECT NETWORK



elements:

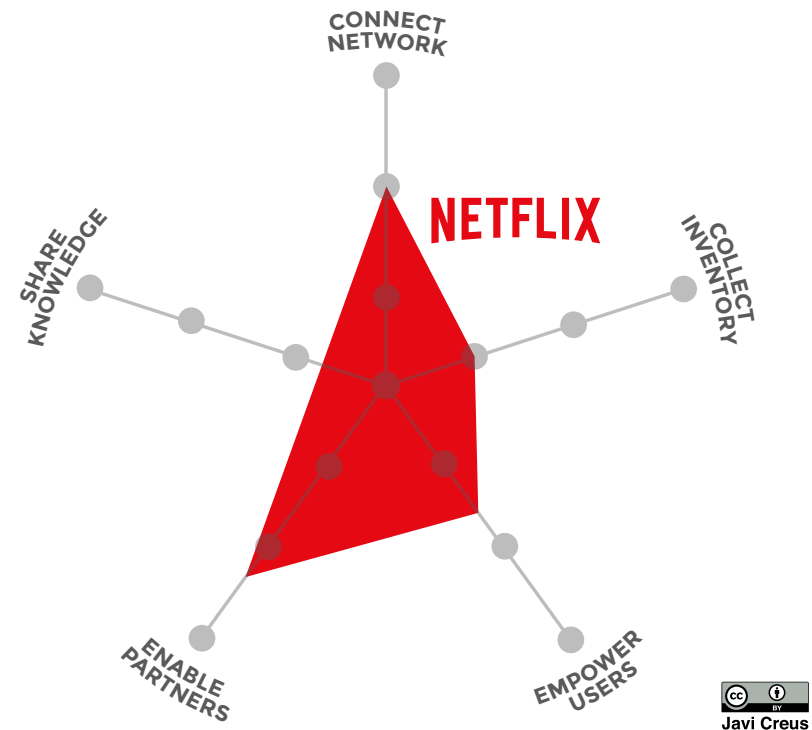
- **Connected nodes:** from the www to the mobile, with a greater reach and lower accessibility costs.
- **Possible interactions:** from www to the social media, with no programming skills required.
- **Situations of use:** from the mobile to the internet of things, which creates new usage situations.

The new combination of connected nodes, possible interactions and new usage scenarios represents a new universe of relationships and possible applications. This new scenario sometimes completely re-defines the business ecosystem, the value perceived by users, and the processes in critical activities of the company. It generates an ongoing process of de- and re-intermediation.

A recent study by Two Much Research explains how music users listen to music in different situations, and how they relate to it differently depending on the situation: listener, explorer, taster, or fan. In the first three cases, they are not willing to pay to listen or to discover songs. They only want to pay when they can manage music, and the tool allows them to create their own sessions. It turns out that the perceived value, except for fans, has gone from the music itself to the technology for customisation.

Organisations that are successful in the new network are those that are born or reinvented from within, and design situations of use and value chains adapted to new possibilities. The simple extension of the opera-

ting mode of the previous network to the new (integrating Facebook buttons or adapting the web to mobile access) generates an effect of quantitative growth by increasing connected nodes, but doesn't imply the maintenance of the competitive position in the new environment. Organisations must revisit their basic social function and design it from scratch with the new network in mind.



## Collect: leveraging assets

How does the organisation add new units of value and build its available supply?

The less internal effort an organisation must make to amplify its available supply, the bigger its growth potential.

### Collect 1: centralized inventory

Zipcar (Avancar in Spain) stirred up the car rental market with its birth in 2000. Its proposal consists of having a high variety of vehicles in several car parks close to big cities where its subscribers can rent them by the hour. The rental process, collection and return of the vehicle are done without the intervention of employees as they are managed through a smart phone application or intelligent devices installed inside the cars. In 2013, Avis Group bought Zipcar for 500 million dollars, with more than 80,000 subscribers and 10,000 available vehicles. Its growth is impressive; however, the increase of its available supply depends exclusively on the organisation's financial capacity to produce or acquire goods. Traditional car rental companies, which generally rent cars on a daily basis, have progressively adopted per-hour car rental. Also, some car producers and dealers have started to implement this strategy to generate rotation (auto makers) and traffic (car dealers).

### Collect 2: distributed inventory

Etsy is the world's chicest market, where a million vendors sell their artisanal or unique creations and vintage articles (20+ years old) without interme-

diaries. In August 2013, it had more than 30 million registered users, and finished 2013 with more than one billion dollars in transactions. Etsy is also a very efficient structure, able to develop and evolve while only capturing a 3.5% transaction fee.

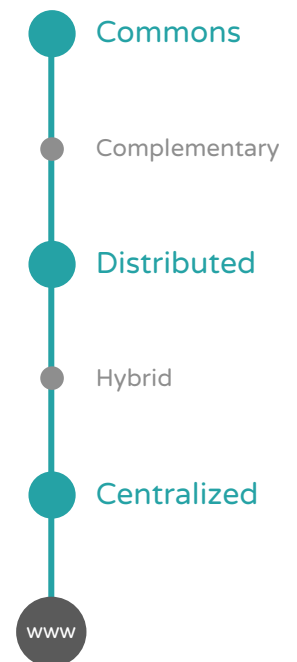
### Collect 3: integrating the commons

Github is the biggest open-access software repository of the world. Its file sharing methodology (Git) was designed by Linus Torvald (Linux's creator) to facilitate the access, modification and integration of changes in open-access projects. It also offers payment services to those who prefer to keep their files private. By the end of 2013, it had around 13 million repositories and added 10 thousand users every day. Many programmers use Github to first check and see if the program they need has already been developed and shared by another professional.

### Reflection: the value of aggregating what is available

With each new universe of possible connections, new levels of efficiency of access and use of under-utilised assets are created. In the case of assets whose reproduction is made at a zero marginal cost, like digital goods, new efficiency levels are also achieved. Thus, the likelihood of creating a network of avai-

## COLLECT INVENTORY



lable and connected assets and knowing about their availability in real time multiplies. This fact enables the rapid development of new entrants in consolidated industries where capital requirements, regulatory structures or other advantages associated with the scale of the organisations used to limit the growth rate of new entrants.

In each new scenario, the growth rate advantage goes to those organisations whose critical assets (generally company-owned) are computer algorithms that gather, organise and categorise the available supply units (whether articles or apartments) from different supply sources, and present them organised by filters in response to user demands. Assets used for effective service delivery are not the property of the organisation, which concentrates its initial investment in conquering the reference aggregator position.

This advantage is even more relevant for high-value goods (houses, cars) or for goods which can be reproduced at a zero marginal cost and increase their social value with their use (knowledge).

This is why the accommodation and the passenger transportation industries, the two with the largest in ux of private investment, are being highly affected by the new levels of productive efficiency derived from the aggregation of assets. When incumbent agents

aren't able to foresee the new scenario, they may be faced with the paradox that assets once considered vital have now become dead weight, initially keeping them from taking the opportunity to fill the space opened by the new entrants.

At the other extreme, the organisations that can aggregate the open resources available in a specific field with an acquisition value close to zero (encyclopaedic knowledge, coding, clinical trials) completely redefine the perception of value by users. Again, many of the assets and relationships that were once crucial to sustaining a competitive advantage become barriers to developing the value chains necessary for being competitive in the new environment.

However, there are many ways in which incumbent organisations can take advantage of the high productivity levels derived from the new universe of connectivity: hybridising its supply, as Amazon did to complement its already immense supply with that provided by many independent booksellers connected to its system. Developing a business line from a service or an under-utilised asset which complements the core value proposition of the organisation, as the French La Post did by testing a system of physical identity certification to promote safety in private transactions. Or, by simply using the open knowledge available in their area of activity.

Building the available supply by collecting distributed assets allows new organisations to achieve exponential growth rates and reach, in a very short period of time, the largest available supply in the industry. Brian Chesky, cofounder of Airbnb, issued this tweet after catching up to the larger multinationals in the industry, in terms of number of rooms available: “Marriott wants to add 30,000 rooms this year. We will add that in the next 2 weeks.” Kike Sarasola, an innovative entrepreneur in the hotel sector and promoter of the hotel chain Roommate, has just launched an intelligent response to the challenge made by Airbnb. In their new concept, BeMate, each hotel in the chain will provide hotel services (reception, cleaning, food, drinks, activities) to 300 apartments selected from the area. Using this strategy, the organisation will be able to increase its available supply of rooms along with opportunities to intermediate and scale operations to complementary services.



# Empower: leveraging users

## How many roles does your user play?

The more the company takes advantage of its users' capacities, the bigger its growth potential.

### Empower 1: consumer - only user

Netflix is the largest service provider of on-demand audiovisual content (films, series) in the world, with more than 40 million subscribers as of 2013. In order to offer something exclusive without being dependent on dealing with the major film distributors, they began producing their own television series, which have gone on to receive numerous awards and which were later licensed to other television services in foreign markets where Netflix doesn't operate. Netflix's competitive advantage lies in the quantity and quality of its content and the entertainment experience provided to its subscribers. Members enjoy the service and can recommend and evaluate products, but they are not expected to produce their own movies.

### Empower 2: user and producer

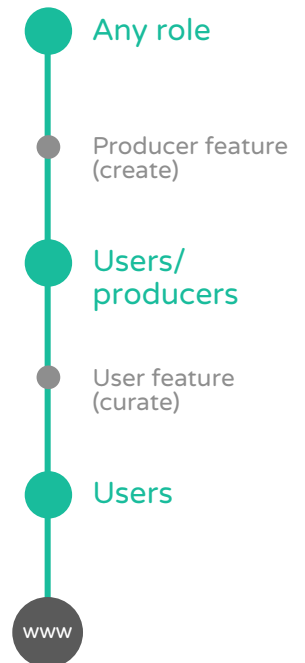
Fon, an enterprise created by Martin Varsavsky in 2005, permits its ADSL subscribers to have a special router (fonera) designed to maintain private W-iFi connection and keep part of this connection accessible to other Fon users. The innovation considers subscribers as not only ADSL consumers but also empowers them to become partial connectivity providers. Its develop-

ment has been encouraged by both individuals and big operators such as BT in Great Britain. BT has integrated Fon as a unique service of its high-speed Internet lines. By May 2014, Fon's global Wi-Fi network had almost thirteen million access points accessible to its users.

### Empower 3: any role

LinkedIn, the most widespread professional social network, had 200 million users as of March 2013. Its primary use was providing a way for professionals to publicly post a curriculum vitae, enabling them to meet, create contacts and find professional opportunities. After its IPO in 2011, LinkedIn began an ongoing strategy of splitting the roles among already registered users. First, it offered differential services to those who published jobs or searched for candidates. Later, it allowed users to create and moderate discussion groups. Finally, it invited some of its most distinguished members be part of a list of "thought leaders" and to publish posts periodically. The increased number of existing roles escalates interactions among registered users and creates opportunities to attract new ones.

## EMPOWER USERS





### **Reflection: the overwhelming emergence of the citizen producer**

The combination of education and widened connectivity endows citizens with new productive capacities and opens the door to new possibilities of exchange and co-creation.

Clay Shirky estimates that Wikipedia was developed (up to 2009) using 100 million hours, 0.05% of the 200 billion hours that North American citizens spend watching television each year. The advantage of having a network of citizens may also be qualitative. In specific situations “knowledge of groups” offers estimations and decisions that are more accurate than the decisions based on the reasoning of a limited number of experts.

The motivations for people to actively participate using their productive capacities could be economic, as in the case of Etsy or the on-demand personal service markets (like Uber, Task Rabbit, Odesk), but they’re

far from the only ones. The Wikipedia Editor Survey given to volunteers who continuously contributed in 2011 indicates the wide range of reasons why volunteers actively contribute. Among these reasons, we highlight the following: supporting open-knowledge (“volunteering to share knowledge” 70% ; “information should be free” 63%), the love of a specific field of knowledge ( “contribute to content with expertise” 63% ; “find or look for mistakes” 57%), simply enjoying the experience (60%); or other types of professional motivations ( “demonstrate my knowledge” 29% ; “gain a reputation in Wikipedia” 18%).

The design of business processes oriented toward exponential growth identifies an organisation’s repetitive tasks and evaluates the skills, qualities and relative costs of employees, algorithms and users needed to complete them.

## Enable: leveraging partners

What tools do you provide to third parties so they can create value?

The greater the number of value creators that use the tools provided by the organisation to generate their own business, the bigger its growth potential.

### Enable 1: providers

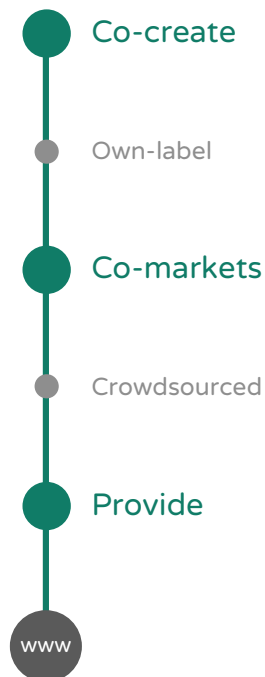
Airbnb is the largest chain of accommodation providers in the world. It exists in 34,000 cities in 192 countries and it is valued at 10 billion dollars. In record time, just six years, it has acquired an enormous supply of rooms, apartments and special places that make it possible for anybody to rent a space they are not using. During its five first years of existence, it has put a lot of effort into ameliorating all aspects of creating trust between strangers to increase transactions on the platform. And so, they quickly realized that those spaces posted with professional photography were rented more often than those advertised with home-made pictures. Since then, it offers free professional photography services to its users. Moreover, it has recently introduced a new rule that establishes 10 minimum requirements which any rented space should have, from clean towels to Wi-Fi. In fact, Airbnb has created many commercial opportunities: independent professionals who clean or deliver keys, small enterprises in charge of managing apartments in exchange of sales commissions, applications to professionally manage prices and rooms (like hotels) and other platforms of tourist activities between citizens: meals in

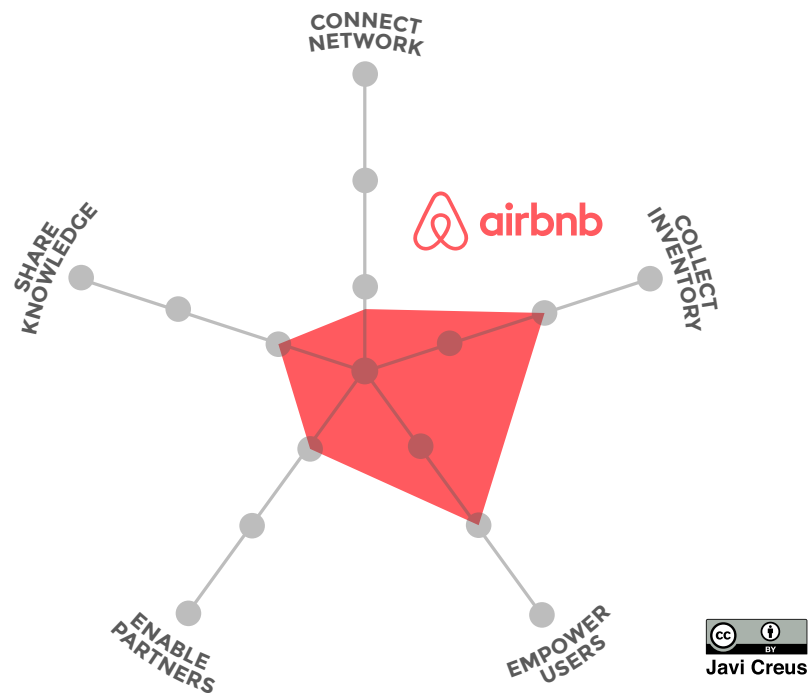
private houses, car rentals between neighbors and tailor-made tourist activities, among others. While Airbnb has reached specific agreements with some of them, they have not developed any particular tools to encourage their development beyond making the reservations schedule compatible with the most widespread systems. To date, Airbnb has devoted its energies to generating transactions, and has not needed business partners to grow and innovate with the company. In fact, the entry of the large hotel intermediates in the apartment rental market, such as Booking.com with its new Villas.com will probably help push the development of tools to incentivize other agents to use its platform for developing their extended commercial offer.

### Enable 2: Co-market

Forty thousand professionals use Athenahealth's services for patient medical records, professional administration management and insurance company billing and payment collection. These services are provided on the network, with no need to install any hardware or software. In April 2013 Athenahealth announced the launch of a set of open tools for developers to create applications that could be marketed by Athenahealth and integrated with its databases, allowing further improvements in the

## ENABLE PARTNERS





coordination, delivery and payment collection for medical assistance provided by its professional subscribers. This way Athenahealth, just as Apple did with its iTunes mobile applications, promotes a speed and diversity of innovation which could not have been dealt with internally, while integrating a group of businesses that invests in its platform and with whom it shares access to its customer base.

### **Enable 3: co-create / freedom to develop and range of service**

Arduino is one of the most widespread open-access hardware platforms for electronic projects. It is used by thousands of amateurs, professionals and

corporations to develop new applications for their own use. In 2005, in IVREA Institute in Italy, a team led by Massimo Banzi created a microcontroller with a development system that was simpler and cheaper than their existing alternatives. In face of the announcement of the school's closure, the project promoters decided to liberalize their design, permitting everybody to produce their own clones. Nevertheless, the promoter team reserved the right to use the brand name and offered its producers the possibility to homologize their electronic boards in exchange for a percentage of their sales.

### **Reflection: in a world of standards, the competition is across ecosystems**

The absolute leadership of Blackberry in the market of professional terminals didn't ensure its survival in the market: size has lost relevance as an indicator of the competitive position of an organisation. Faced with the traditional advantage of scale, its competitors applied a new advantage of scope.

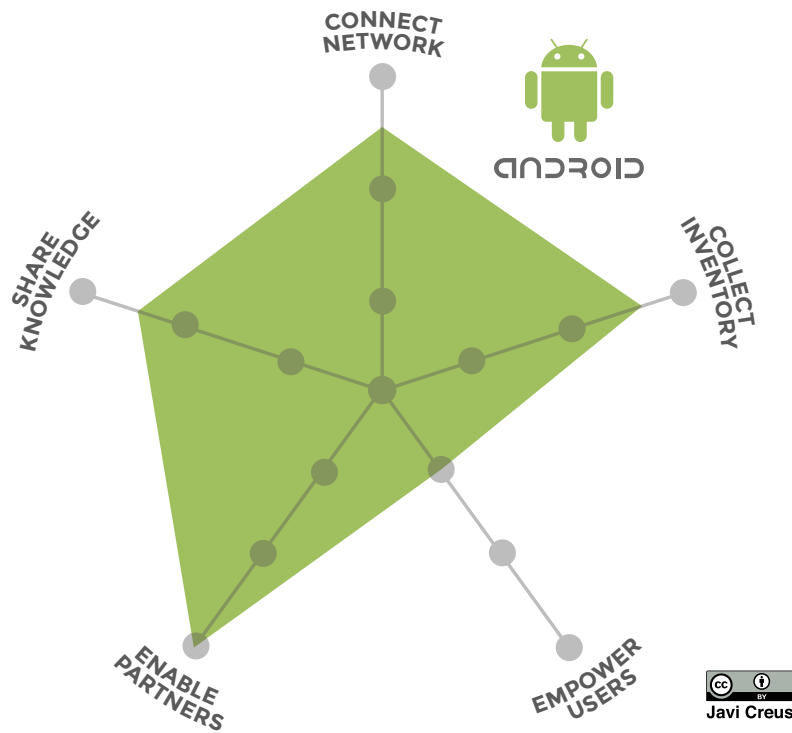
Apple became the leader in high-added value devices thanks to the contributions of millions of programmers who developed their own applications to be sold in the iTunes market, controlled by the company. When Google got into mobile operating systems, they went a step further and opened up the better part of Android so that any programmer or hardware producer could develop their own plans directly for the market. Android has been adopted by large and small hardware manufacturers alike, and by all those who want the freedom to invest in a platform that allows them to unapologetically take ownership and

market the result of their efforts.

In June 2014, Elon Musk announced that Tesla would liberate all the patents related to one of their most competitive pillars: their electrical storage systems. Despite being leaders in terms of the production and distribution of high standard electrical vehicles Tesla didn't have the means to develop its own technological standards or to finance the development of adequate re-fueling points to ensure the free movement of its buyers all over the territory.

In all the cases presented, the organisations became aware that their business survival depends not only on their capacity to innovate, but also on attracting a sufficient number of members to the platform who invest their own resources in the use of the development tools provided by the organisation. Thus, they contribute to extend the market and to extend the use of the tools in the pursuit of their own goals.

Leveraging in partners involves designing business models that aspire to generate more value than what the organisation needs for its survival and development, enabling third parties to develop their own business vision.



# Share: leveraging the community

## How openly is your knowledge shared?

The larger the community that has a shared sense of resource ownership with the organisation, the greater the growth potential.

### Share 1: Proprietary knowledge

Devianart is a platform where several artists' communities present, comment and commercialize their plastic artwork, photography and videos, among others. Created in 2000, in mid 2013 it had more than 25 million members that each day produced a million and a half comments and likes for the 246 million exhibited art pieces. To protect the rights of those artists who market their work, all exhibited pieces are subject to copyright, which means users don't have the right to free use of art pieces. Only artists who explicitly have a Creative Commons license offer free use.

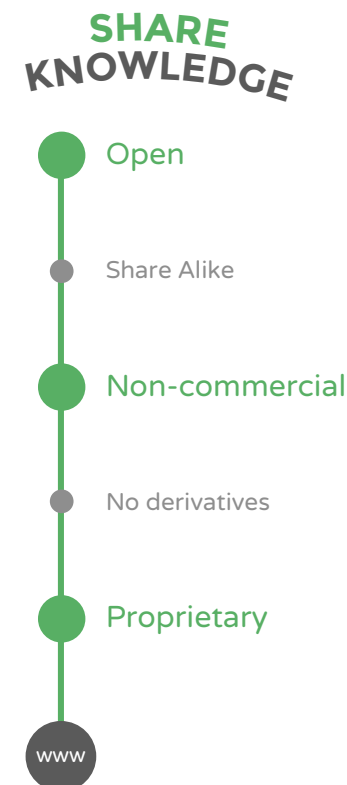
### Share 2: Non-commercial knowledge

Getty images was created in 2005 with the objective of being the leading photography archive for commercial usage. Its collection has more than 80 million images and 50,000 hours of video, thanks to the combination of acquisitions of other collections and the contribution of thousands of photographers. The rapid growth of alternatives based on social relations, mobile devices and royalty-free content increased the use of third-party's images in the network, including those coming from Getty Images, with the ensuing avalanche of lawsuits. In March 2014, Getty Images

decided to liberalize 35 million images for non-commercial private users such as bloggers. They may use images if they acknowledge and credit their authorship with a Getty file link. The company promotes its services and reserves the right to insert advertising in its non-commercial network.

### Share 3: open knowledge

PLOS ONE is an open-access and open-edition scientific magazine created in 2006. Since 2010 it is the scientific publication with the greatest number of scientific articles per year. In traditional models, scientific research is only accessible to research centers and universities that buy a subscription. However, PLOS ONE has subverted the scientific publication industry with a radical change of business model. In the new business model, the authors (or the organisations they work for) finance the review and publication of their articles. Since costs are covered, all content is accessible to the entire scientific community for its permanent use, reference and evaluation. PLOS ONE's articles incorporate pictures, videos and databases used for their publication. All this scientific material has no rights reserved, only the obligation to reference authorship.



### *Reflection: the community beyond the market*

A community is a group of people who share a common resource. When the resource is tangible and finite, the communities organise access systems that ensure the equal enjoyment of the resource. When the resource is intangible, this limitation doesn't exist. Knowledge is a renewable resource; it flows constantly and its use does not exclude other individuals; instead, in many cases its use contributes to increasing its value. Thus, the value of knowledge may increase with its free availability.

Faced with the widespread view that the competitive advantage in the knowledge economy would be based on proprietary knowledge, there are ever more frequent examples of organisations that release at least part of the knowledge they create in the course of developing their own activities, which feeds a community of users that integrate this knowledge as their own. Communities have the goal to preserve and improve the common resource that they share. This common goal allows organisations that share resources to be

supported by, collaborate with and even count on the financial support of individuals from outside the market mechanisms. This relationship, which goes beyond utilitarian exchange, allows the organisations that participate in the lever of shared knowledge to come up with new business models that can significantly modify their respective industries, as we have seen in the case of PLOS ONE.

The community acts as the primary force to move in favour of the preserving and spreading of knowledge, and in cases like Wikipedia or Eldiario.es in Spain, contributing financially to sustain the organisations in order to preserve business and editorial independence.

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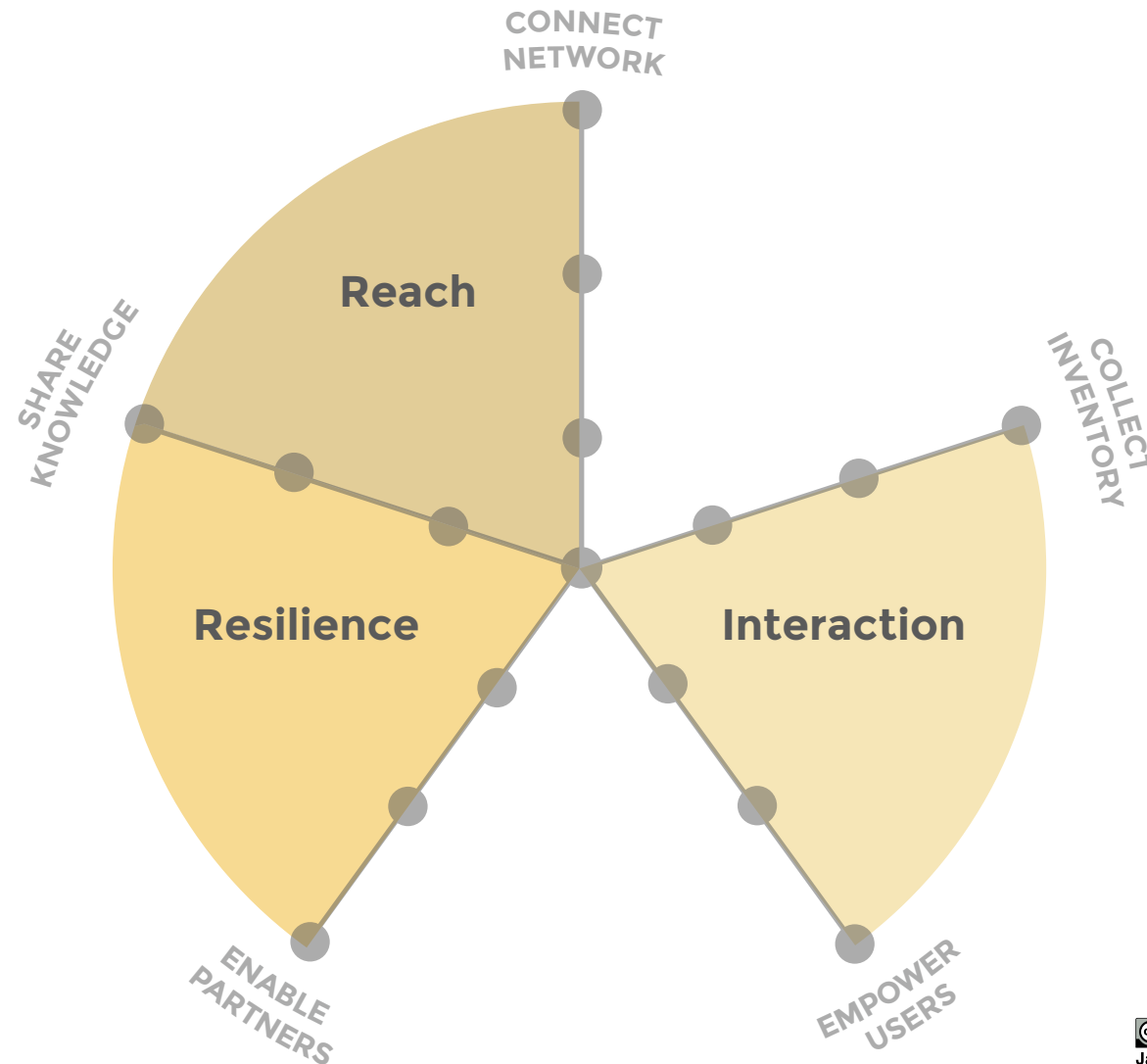
## CHAPTER 3

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# Principles for accelerated growth

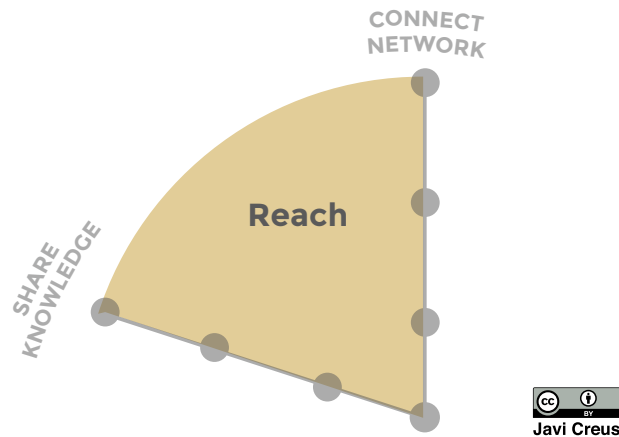
From the correlation analysis between @pentagrowth's five levers and the rate of growth in users and income growth of the studied organisations, we have determined the three principles of accelerated growth: reach, interaction and resilience.

These three generative principles are fundamental to the design of the organisation's strategy, as we will explain after a brief introduction.





# Reach



What is the potential reach of the organisation?

The principle of reach correlates Share and Connect with users growth rate. The organisation's potential scope depends on the combination of two factors:

- The number of people, situations and things connected through the network in which it operates.
- The number of valuable units users can freely share with others.

The reach strategy of an organisation is a result of the combination of these two factors. Let's look at some examples:

## Netflix: reach based on the network

Netflix's business model is to provide access to their proprietary assets (rights to audiovisual contents negotiated with distributors, as well as self-produced

content) in exchange for a monthly subscription to its services. Company history shows its strategy has always been to collaborate with all manufacturers (Sony PlayStation, Microsoft Xbox, IOS Apple and Android Google), developing its own network of connected screens.

## YouTube: reach based on openness

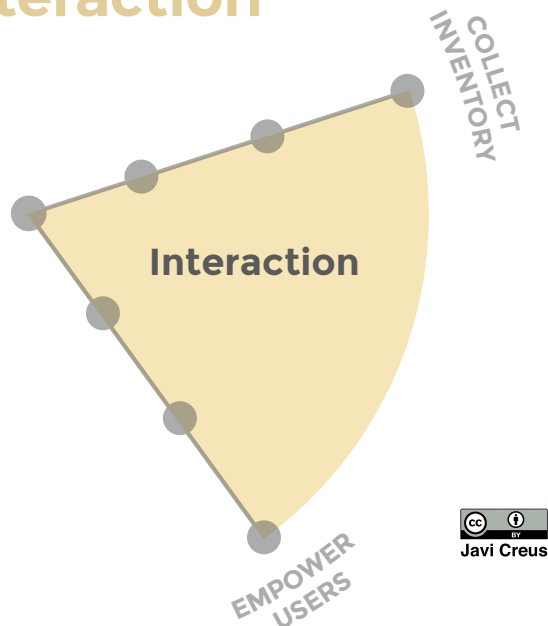
YouTube's business model is different, as everybody has access to its content with no need for sign-in identification. The vast majority of it can be linked or embedded on other web pages and used without any authorization. The enormous amount of available open-access contents converted some videos into a kind of social coin, as they can be freely shared. In certain cases, they have become a massive phenomenon, such as the famous "Gangnam Style" video that reached a billion visits six months after its launch in December 2012.

## Reflection

Beyond reach strategies that are based on a unique lever, it is important to design combinations where two levers mutually reinforce each other. Getty Images' decision to liberalize part of their content for non-commercial usage can be interpreted as an example of this reach perspective. For instance, Yomvi, the digital pay-television service of Canal+ in Spain, recently acquired by Telefonica, has negotiated with the NBA for the free broadcast of one of its games every day. This agreement has a twofold purpose. On the one hand, it allows the NBA to promote the Ame-

rican basketball league and to increase its number of supporters. On the other hand, it helps Yomvi Canal+ to increase the number of people who try out the service, get interested in it, and finally convert to subscribers.

## Interaction



What do users come to do in your organisation, and what else can they do?

Interaction is the result of the correlation between Collect and Empower.

The number of potential interactions on a platform depends on the combination of two variables:

- The number of valuable units that constitute the inventory.
- The number of roles users can adopt.

Platforms produce interactions. The value of a platform depends on the number and the importance of its interactions. Each interaction is an opportunity to increase and/or capture part of the value generated by the platform. The edition of Wikipedia's articles increases the value of using the encyclopedia. Renting a room through Airbnb allows the platform to capture a commission as a part of the transaction's value.

### Spotify: interaction based on inventory

Services based on providing access to proprietary content, like Spotify, necessarily consider the user as a consumer. Additionally, they continually look for new ways to complement this role with more and more services for the user, utilities such as recommendations or the creation of music lists are some examples. Nonetheless, the most important factor for producing interactions is the amount of inventory. Every new song (valuable unit) added to Spotify's catalogue (inventory) increases the number of potential interactions as much as the amount of existing users.

### Wikipedia: interaction based on the users' roles

Since its creation in 2001, Wikipedia's evolution is especially interesting, due to the continuing division of roles between users and contributors. The creation of a collaborative encyclopedia requires many contributors who can write large numbers of articles.

Moreover, it also needs editors to supervise the writing quality and apply specific rules to reduce potential conflicts. The maintenance, updating and continuous improvement of the encyclopedia's contents require an optimisation of everybody's functions. As a consequence, there is a need to multiply the number of roles adopted by users (reader, writer, editor, moderator, donator, etc.).

### *Reflection*

Not every inventory increase has the capacity to generate interactions, just as not all potential roles make sense for all users. The temptation to be “everything for everybody”, building a wide but heterogeneous inventory and offering many different forms of interaction, could place the platform in a very complicated situation of inactivity and irrelevance.

Therefore, it is highly important to determine the design of the platform's main interaction strategy, that which justifies the subscribers' use. Furthermore, it must be distinguished from complementary interactions designed to assist or complement the main interaction.

The most common interaction strategy is to launch a platform limited to a very specific field or area (topic, geographic region) and then, from that point, progressively expand it once it has started to generate a satisfactory and growing dynamic of interactions.

# Resilience



What external capacities does the organisation rely on in order to adapt to change?

The principle of Resilience correlates the levers of Enable and Share. The resilience of an organisation depends on:

- The number of business partners who have developed their commercial offerings and their lifestyles within the standards of the market and the organisation itself.
- The number of citizens who feel shared ownership of the organisation's open resources.

## Arduino: resilience based on instrumenting

Arduino quickly became the most widespread development board among free hardware

experimenters. In few years, it became a standard of the internet of things, as it demonstrated with Intel's release of Galileo, an Arduino-compatible Intel microprocessor. The decision to liberalise the necessary information to create and program Arduino boards has allowed the creation of an ecosystem of agents that have invested in the development of the hardware and software platform. These agents include manufacturers of boards and electronic components, distributors, marketers, creators, developers, corporations, schools, universities and amateurs. Eventually, the founding team took a small fraction of the value that their platform was able to generate. The commercial partners consider Arduino a distributor node of the system and contribute to its growth and development for their own benefit.

## Wikipedia: resilience based on openness

Wikipedia's Foundation, the organisation that manages Wikipedia, is financed through a combination of hundreds of thousands of donations from more than 150 countries, several important funds, and other providers that offer services such as free hosting. More than 500 million people use it every month. Additionally, in recent years it has emphasized granting universal accessibility for people with disabilities, those without Internet connection, or with non-intelligent terminals. Having a moderate cost structure, their annual budget for the year 2012-2013 was 46 million dollars, raised during 50 days of open donations. In this sense, Wikipedia is a common good,

a resource many people use and consider their own, and this is why they contribute to its maintenance and development with their own work and resources.

### Reflection:

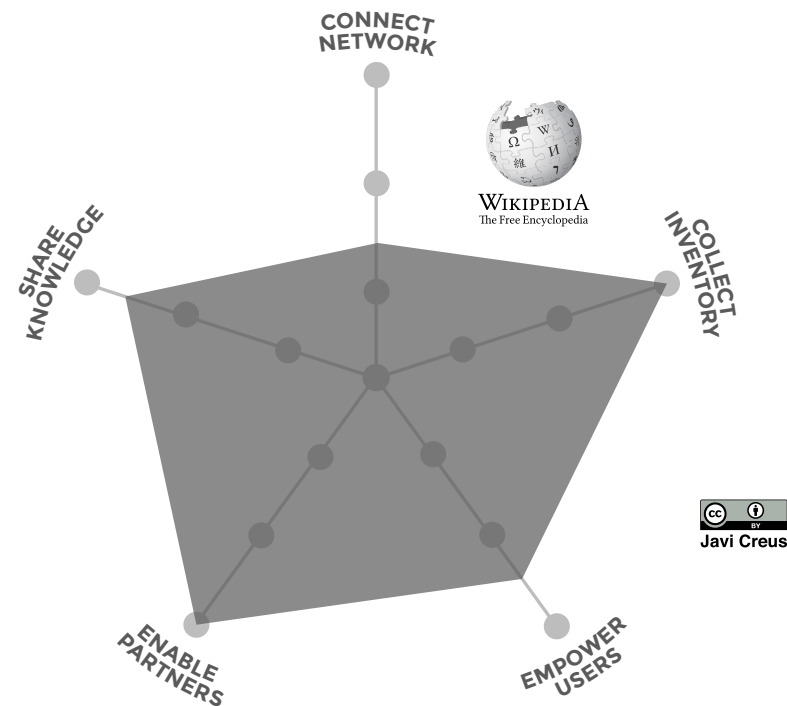
When there are sudden and accelerated changes in the environment, windows of opportunity rapidly appear and disappear in very short time periods. In these cases, the most powerful competitors are the ones that emerge from outside the industry. Resilience, understood as the capacity to anticipate and adapt, is essential to avoid unexpectedly losing market position.

The development of a professional or citizen community that has an ownership sense of shared resources, and makes complementary efforts for its conservation and expansion, is the most efficient way to ensure future survival. The huge number of freelancers that develop their own solutions according to their objectives is the best guarantee to simultaneously explore all dimensions. In this regard, it also ensures that during the periods of change, there will be an agent in the platform that can be counted on to have a solution that's compatible with the rest of the system.

Resilience is obtained by creating more value than the organisation needs to survive and by contributing to the development of the ecosystem. Some frugal organisations such as Wikimedia or Arduino can completely adopt this organisational structure, but many others only partially adopt it. General Electric, for example,

has liberalised part of its patents on products intended for the final consumers to the Quirky community. The aim is to foster the development of this range of goods by sharing the value created with community members.

A resilient competitive position is obtained by a contributive business model that creates more value than it captures, through the combination of freely shared resources, closely cooperating partners, and the organisation's key capacities.



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## CHAPTER 4

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# Virtuous combinations

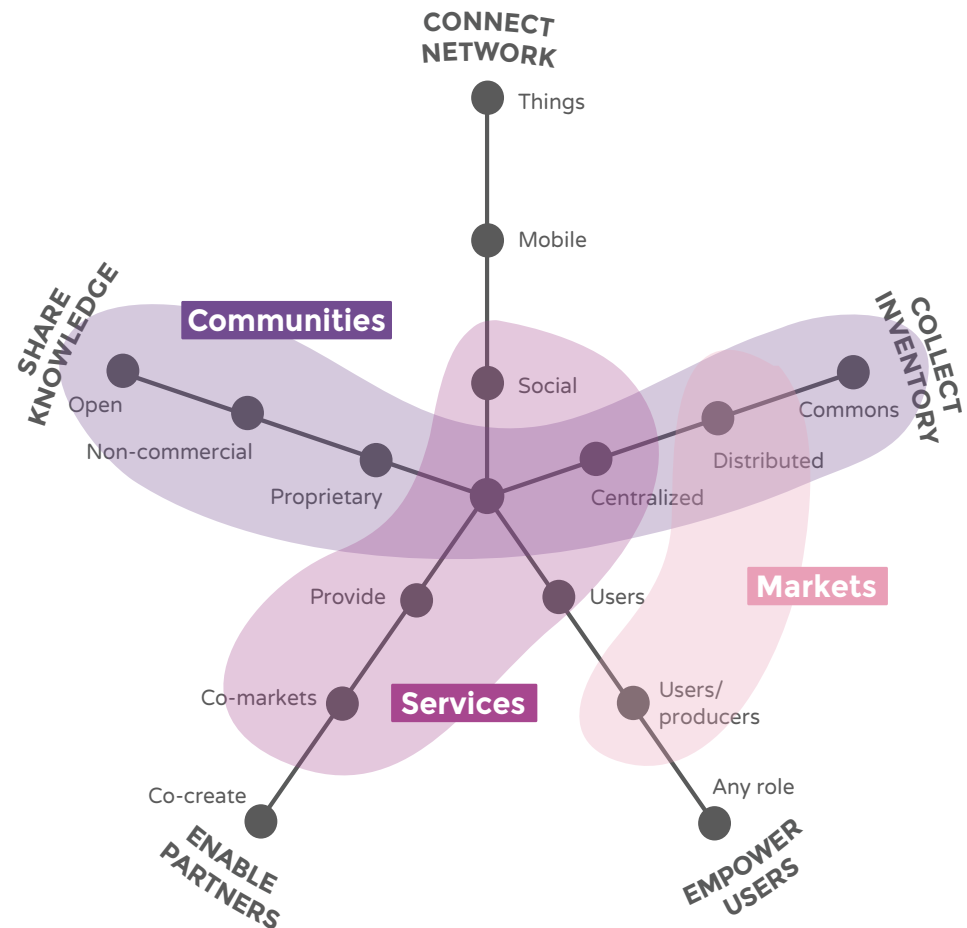
## Not all of @pentagrowth's levers combinations are viable or productive.

Business structures that try to simultaneously extend all levers will have the potential to create a lot of value, but with few possibilities to capture it. In contrast, business structures that exclusively depend on their own capacities will capture more of the value they create, but their growth potential or their capacity to explore multiples scenarios will possibly be lower.

We can observe three virtuous combinations of openness and support levels in the business ecosystem. They configure viable ways to leverage for growth and capturing value in Services, Markets and Communities.

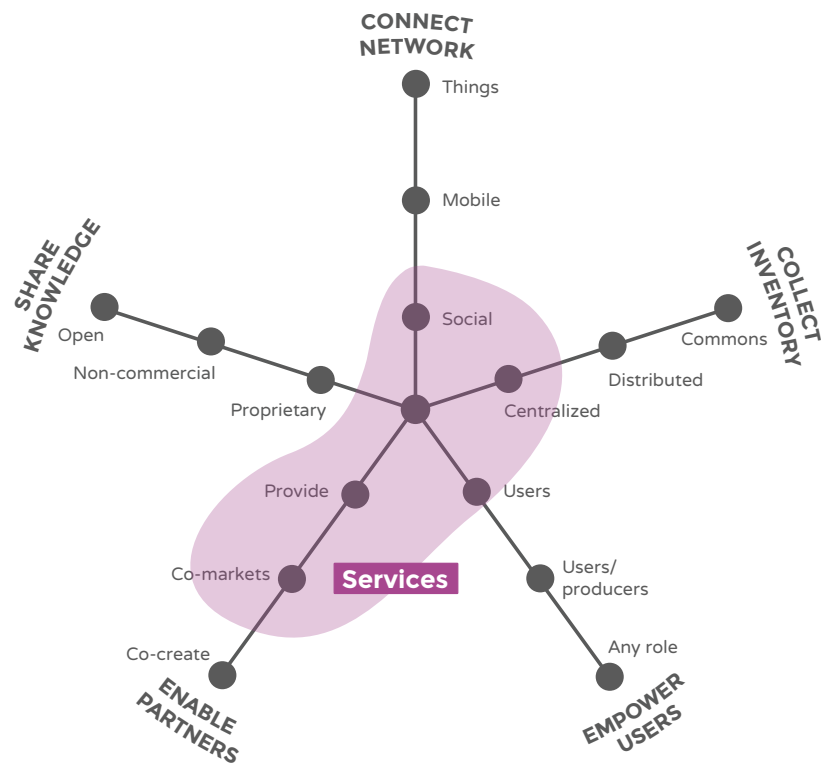
The observed organisations use at least one virtuous combination to accelerate their growth. In some occasions, they also adapt attributes of other combinations which they can adopt in response to competitive actions from different business structures.

We can organise these combinations according to the kinds of units used to build the value proposition: private, distributed or open- access / public.



# Private assets

## Services and the challenge of access



  
Javi Creus

Services provide access to centralized goods, privately owned or those for which they have obtained rights. Zipcar owns private cars and rents them per-hour. Spotify has the rights to a music catalogue that it offers in exchange for advertisements or a subscription fee.

Services only provide their users the basic role of consumers, which can be complemented with extra services: show or share preferences, personalise or organise the catalogue. Trust exclusively lies in the organisation that provides the service, which entirely assumes all responsibilities: the breakdown of a Zipcar vehicle, or the rights to a specific song on Spotify.

### The challenge of services is access to the market

The business model for services is based on commercializing rights of use (publicity, payment per usage, subscriptions, etc.) of an ensemble of assets that have high fixed costs and marginal variable costs tending to zero. The bigger its capacity to access the market, the more potential consumers/users it will have to market its services.

The conversion rate between potential and actual users determines its recruitment efficiency. Using this basis, when the organisation has achieved a critical mass and a healthy retention rate to amortise fixed costs, then profits rapidly increase. In fact, if assets are intangible, growth rates are spectacular.



On the other hand, services compete with each other for the right to have an exclusive catalogue of assets. When assets (songs, movies, books) are similar in all platforms, access rights' prices (rental, subscription) are decisive factors.

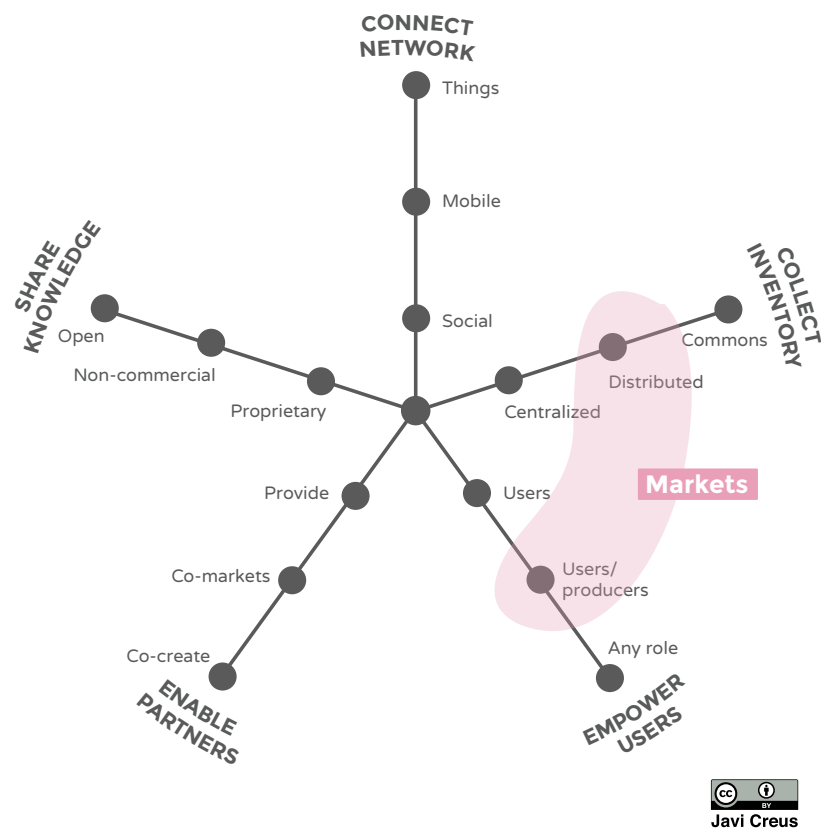
### **Connect and Enable: enable to connect**

In this particular case, enabling third parties to complete the organisation's commercial supply can be an effective way to accelerate growth. As we have already seen, this is what AthenaHealth did and what Netflix understood, until some months ago when it decided to stop providing open-access APIs.

This move to block new entrants happened when Netflix reached the leader position in the market; it is present on every network/hardware platform connected with a screen, and has also proven its ability to produce successful proprietary content that have become commercially successful and have received very positive criticism (like "The Square", a documentary nominated for an Oscar in 2013).

# Distributed assets

## Markets and the liquidity challenge



Markets generate occupation of underused distributed or open assets. Airbnb does this with empty rooms or apartments; Blablacar with seats in cars which would otherwise be empty.

Markets activate the users' roles of consumer and producer. The same person can rent his apartment in a city (producer role) while he hires an apartment in another city (consumer role). In these cases, trust is established between users and the platform acts as a final guarantor. If you are going to travel with someone else's car, you might want to know if his or her identity has been verified and how the experience was for previous users. The same happens in reverse; if you are going to host someone, you might want to know who this person is, check his social reputation and the evaluations and ratings of those that have hosted him before. When users cannot solve problems, the platform acts as a mediator and is ultimately responsible, reimbursing money or making claims on an insurance policy.

### The challenge of the market is liquidity

The business model of the market is fundamentally based on generating transactions between suppliers and purchasers. Part of the transaction's value must be captured through fixed or variable commissions when assets have an economic value, or through advertising when they don't. Furthermore, they can earn fees for the right to enter the market. For example, sellers pay Etsy every time they commercialise an article in its market.

Market liquidity shows the proportion between available supply and the number of completed transactions. In a low-liquidity market, there are few transactions for each unit supplied; few empty seats in cars are filled, or apartments are only sporadically rented. Consequently, suppliers don't have many incentives to invest in improving their position on the platform.

The creation of markets is based on the equilibrium between generated demand and available supply, to maximise liquidity. It is useless to attract new potential users if there is not enough supply to cover their needs. Contrarily, when a market has enough liquidity, it develops a dynamic traction that continually attracts and satisfies both suppliers and purchasers. As a result, exponential growth rates are obtained. When a market agent reaches a dominant position (like Ebay in the auction market), competitors who have the same technology find it difficult to survive without specialising in an activity through which they can generate liquidity. This is called the "winner takes all" phenomenon.

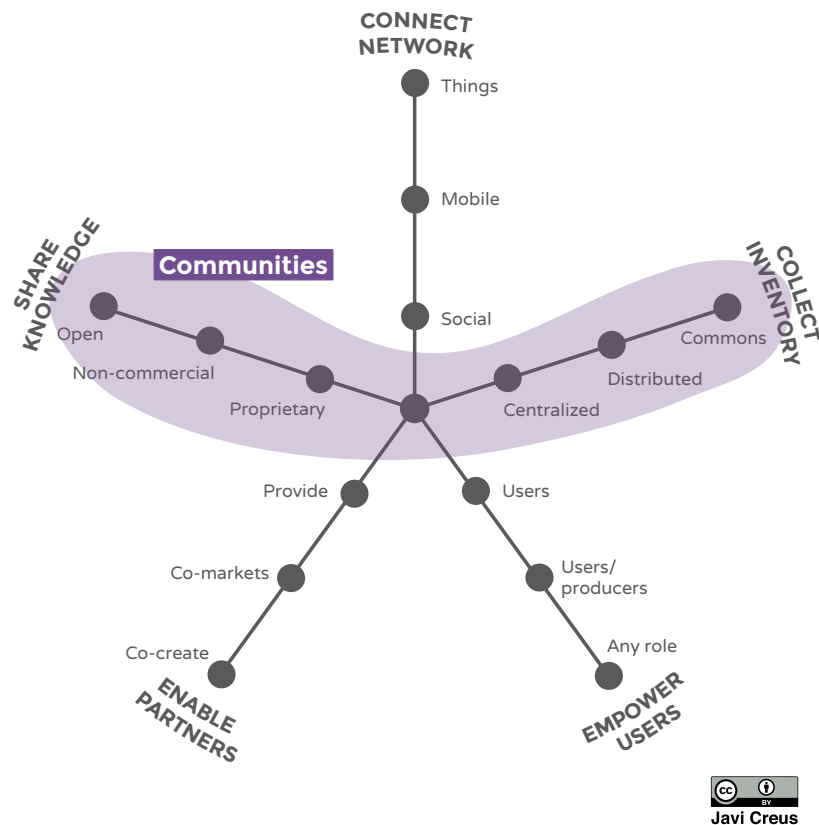
### Aggregate and empower

A high proportion of successful markets started their activities focusing on a moment, theme or geographic area that allowed them to generate liquidity before expanding to new areas. Initially, Airbnb focused on providing alternative accommodations in the area of San Francisco as they anticipated an excess of demand for rooms during Obama's Democra-

tic Convention. Before establishing in a new country, Blablacar studies of the routes that seem to attract more potential users. Finally, in 2009, Stack Overflow started as a site for computer science questions and answers. Once it gained recognition and built a reputation, it offered large communities the option to create their own sites with questions and answers. Nowadays, there are 123 active communities in programming science, but also in philosophy, patents, or Russian language, among others.

# Open-access assets

## Communities and the challenge of contribution



Communities are organised around a common resource. They conserve it, enlarge it with their personal contributions, and make it available to everybody. Wikipedia does this with its encyclopedia, PLOS ONE with its scientific knowledge, Arduino with its hardware platform, GitHub with its open-access software, and Android with mobile operative systems.

The availability of resources allows both users and business partners the possibility of developing the roles and capacities that interest them the most at any given moment. In a community, trust lies in operational rules, and authority is obtained through the contribution and acknowledgement of other members in the community.

### The challenge of communities is contribution

The business model/sustainability of communities is based, on the one hand, on being capable of capturing a sufficient proportion of the value they create. On the other hand, it's based on producing vital opportunities or lifestyles that are satisfactory to their key ecosystem contributors, in order to guarantee their capacity to maintain their efforts in the conservation and development of the common resource. Even though open-access doesn't mean free, many open-access resources are free. That is why business structures based on a community get income from outside the market mechanisms (Wikipedia is financed by its own users and donations), or from commercialising complementary premium services.

Automatic, the organisation in charge of editing the open-access publication platform WordPress, earns income 11 different ways including web hosting, spot advertising insertions, fees charged to producers of complementary features (templates, designs, tools) and premium accounts, among others. PLOS ONE's authors are the ones who pay for the review of their research and its publication, with no rights reserved.

The value of a community depends on its capacity to permanently conserve and improve its shared resources, on its own contribution levels, and on the ecosystem that the community can consistently mobilize. It is very difficult to maintain this growing contribution dynamic if value creation and value capture are not known and transparent, or in communities without economic transactions when the meritocratic system fails to integrate newcomers.

## Collect and Share

In such situations, the most resilient communities are the ones that operate with more adjusted cost structures, explore new roles for those users who

continue to actively contribute, or give business opportunities to their platform partners. A community reaches its peak when the shared resource is universally accessible and adopted as a standard, as is now the case with Wikipedia, Arduino and Wordpress.

This is when the collectively created value flourishes and the community lives through one of its most delicate moments. When 3D printer Makerbot reached a relevant position in its ecosystem, it stopped sharing its improvements with the community that contributed to its development. Wikipedia finds it difficult to integrate new editors in versions where an older team has already established their points of view.

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## CHAPTER 5

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**To innovate is to  
connect capacities:  
@pentagrowth system**

# Since January 2014 we have had the opportunity to develop workshops

and consulting projects for a variety of start-ups and organisations that wanted to explore exponential growth opportunities.

We have observed that the exploration of new business opportunities or the development of the current models generally starts by providing a narrow and static definition of the industry, as well as of the relevant business run by the organisation. Growth is explored from the organisation to the ecosystem, as an increased projection of the current business.

However, the @pentagrowth organisations show us a new way to consider new business models designed for accelerated growth: begin exploring the business ecosystem looking for new and free elements, create new relationships among them, and develop the required capabilities to establish the connections, generate and capture value.

When the organisation already exists, instead of developing the capabilities, it can spread some of the business processes that the organisation already runs to interconnect the new system. This is how Kike Sarasola, promoter of the hotel chain Roomate, has just announced the launch of the apartments operator BeMate. The new operator combines the existence of quality apartments for rent around its establishments with the capacity of the company to provide reservation, reception, cleaning and super-intendent services.

The @pentagrowth system can mainly be used in two ways:

## Competitive self-assessment and benchmark

On the first level, the model allows us to determine to what extent the organisation and its competitors are using the leverages available in the ecosystem to boost growth. To develop this exercise, it is fundamental to adopt an open competitive definition and consider all the agents that could easily satisfy the same need or function as potential competitors, taking into account industries which may seem to be remote.

The identification of the levers used by the competitive group offer the organisation the possibility to explore its capacity to develop imitative strategies, or to generate new combinations of levers that have not yet been applied in the specific sector.

## Exploration of opportunities for accelerated growth

In this type of workshop or consulting processes, the first step is to determine an approach to the ecosystem that will be analysed to narrow the initial research. The goal is to find a point of view that is useful to start exploring the ecosystem. We have been using strategic goals and challenges, perceived opportunities, a set of underutilised assets or a change in the levels of connectivity for this purpose.

The second step is to unbundle the organisation into a set of assets and competences that might be able to con-

nect the new value systems. The goal is to understand the current organisation or business as a group of capacities combined in a certain way in order to serve to a specific established market, but which can also be extended to other environments in order to leverage elements of the ecosystem, as we have seen with the reception and cleaning services in the BeMate example.

From this point, we start to explore the free elements found in the ecosystem and take inventory, without necessarily making connections among them.

Each of the levers provides a guide to identify:

- people, situations and connections;
- distributed and open-access assets that are available;
- capabilities of the users and new agents which are not integrated in the processes, and assets and knowledge that would be more valuable shared than kept within the organisation.

Once the available levers have been identified, we explore new combinations among them with the potential to create value throughout the ecosystem. In the areas where contributions to the ecosystem are obvious, we then explore the processes which are run by the organisation that could facilitate or accelerate the

creation of value. These areas of opportunity detected are prioritised according to their attractiveness and to how well-positioned the organisation may be to capture their value in three categories:

- those that are attractive to the organisation but which the organisation lacks the capabilities required to take advantage of them;
- those for which the organisation would be able to develop the required capacities;
- the ones for which the organisation already has the capabilities.

The selected areas of opportunity can then be formulated using lean methodology as a group of hypotheses used to validate and improve the business model to be developed through a combination of business anthropology for behaviours, platform design toolkits for interactions and financial planning for investment and returns.

And others that we invite you to share in our LinkedIn group.



# Credits

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# PENTAGROWTH REPORT

The five levers of accelerated growth

A new point of view on the keys for growth for organisations in the digital environment of the XXI Century



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