ONE to ONE
CORPORATE FINANCE

UNDERSTANDING 21ST CENTURY BUSINESS MODELS

JOSÉ RAMÍREZ TERC

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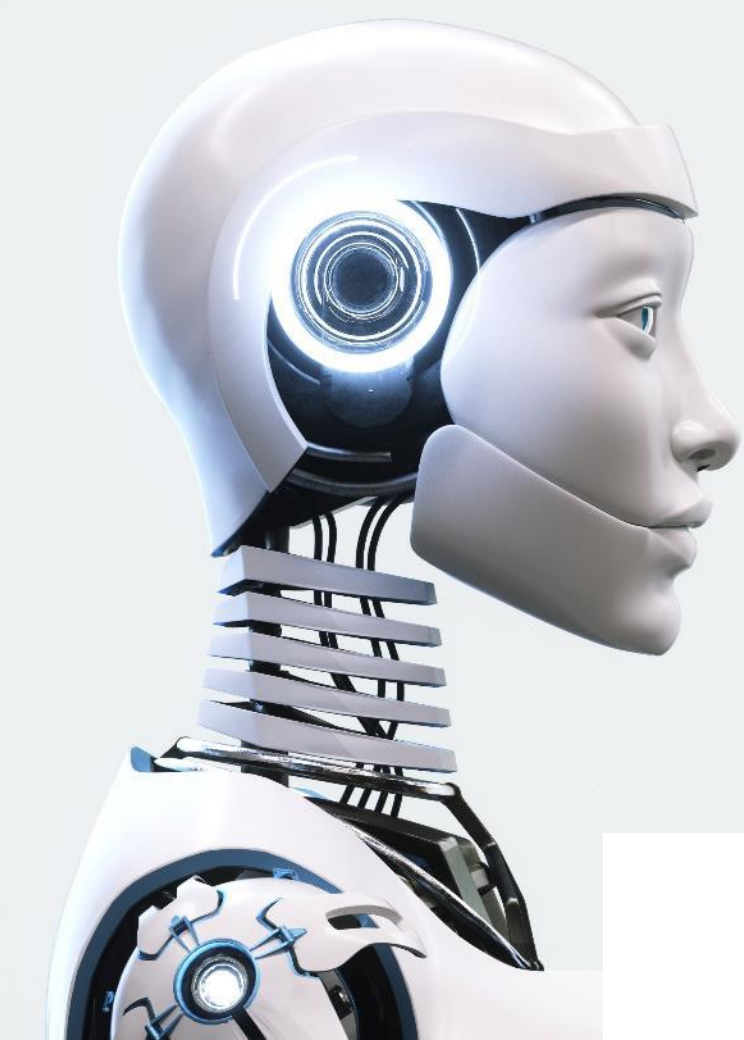
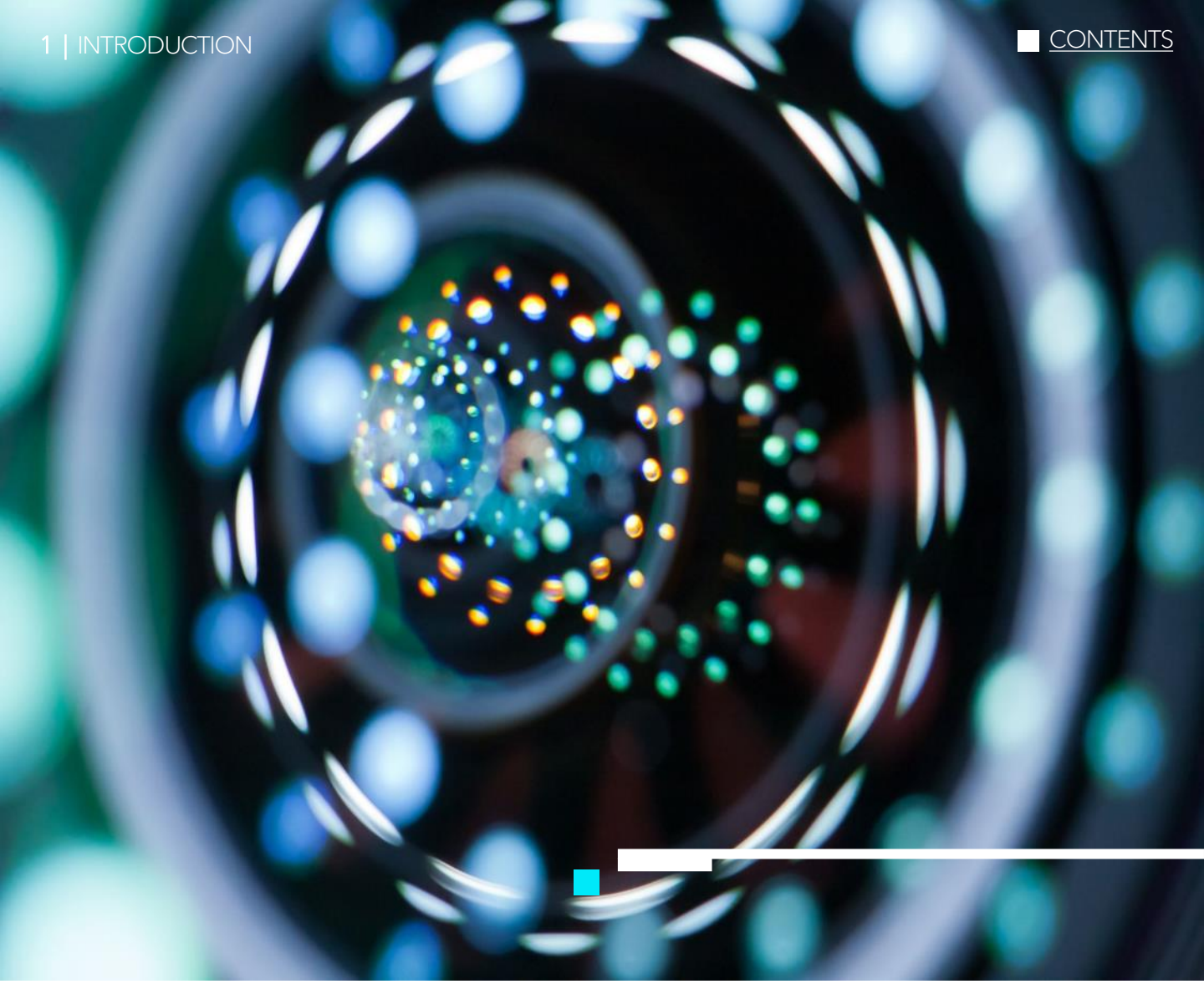
1 INTRODUCTION

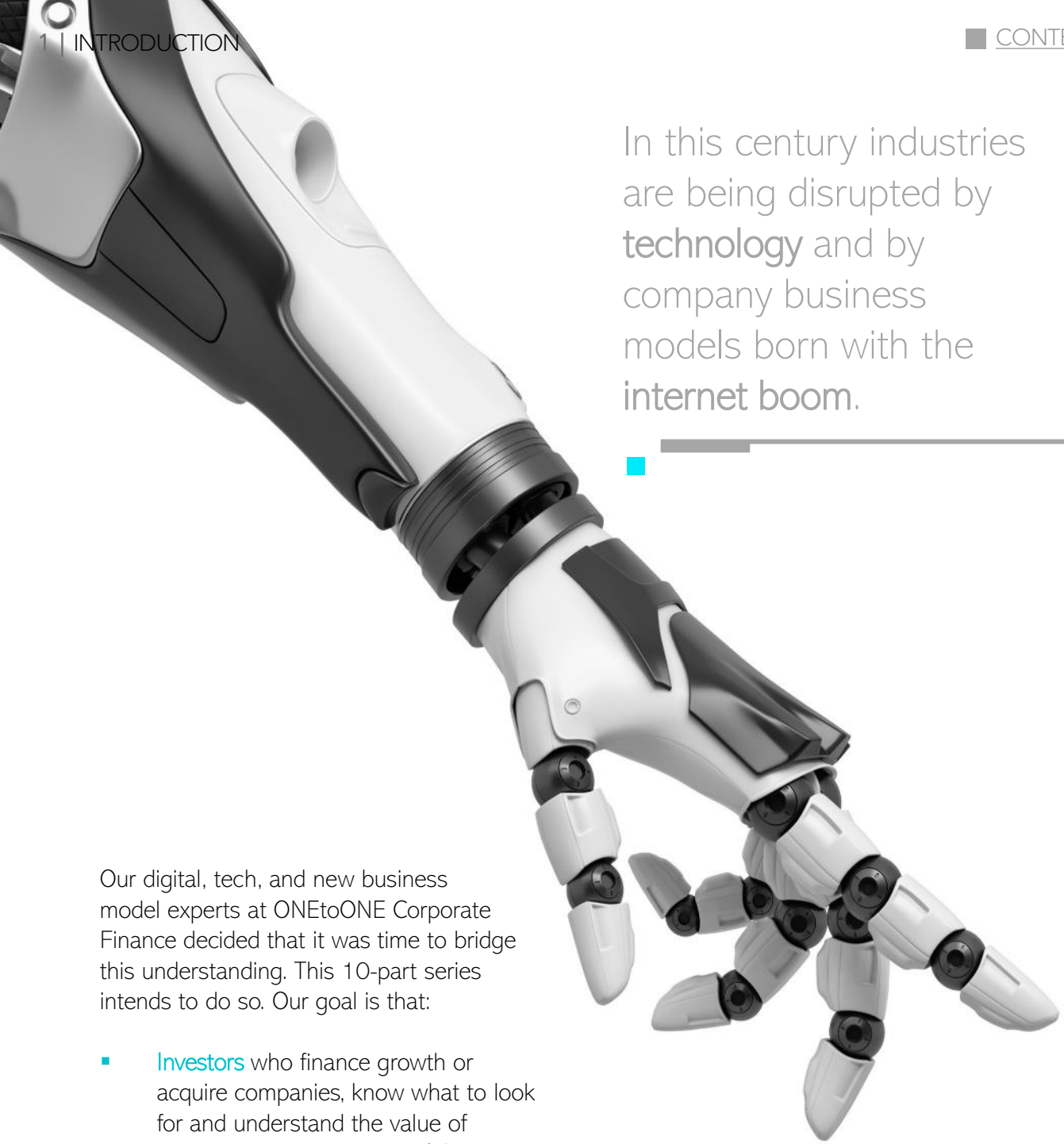




Introduction

We say some companies have 21st Century Business Models for two reasons. Firstly, although tech companies have been around for decades, in this century industries are being disrupted not by technology itself but by companies with certain business models and specific characteristics. Secondly, these are business models born with the internet boom at the beginning of this century.

Let's face it, there is a noticeable knowledge gap between traditional financing and investment firms, corporate finance, corporate development, and companies with innovative business models. It's like in movies when superheroes could do amazing things together, but they don't understand how they can be of value to each other. That would, arguably, explain why this knowledge gap exists. The reality is that these pillars that fuel growth need to understand each other more than ever.



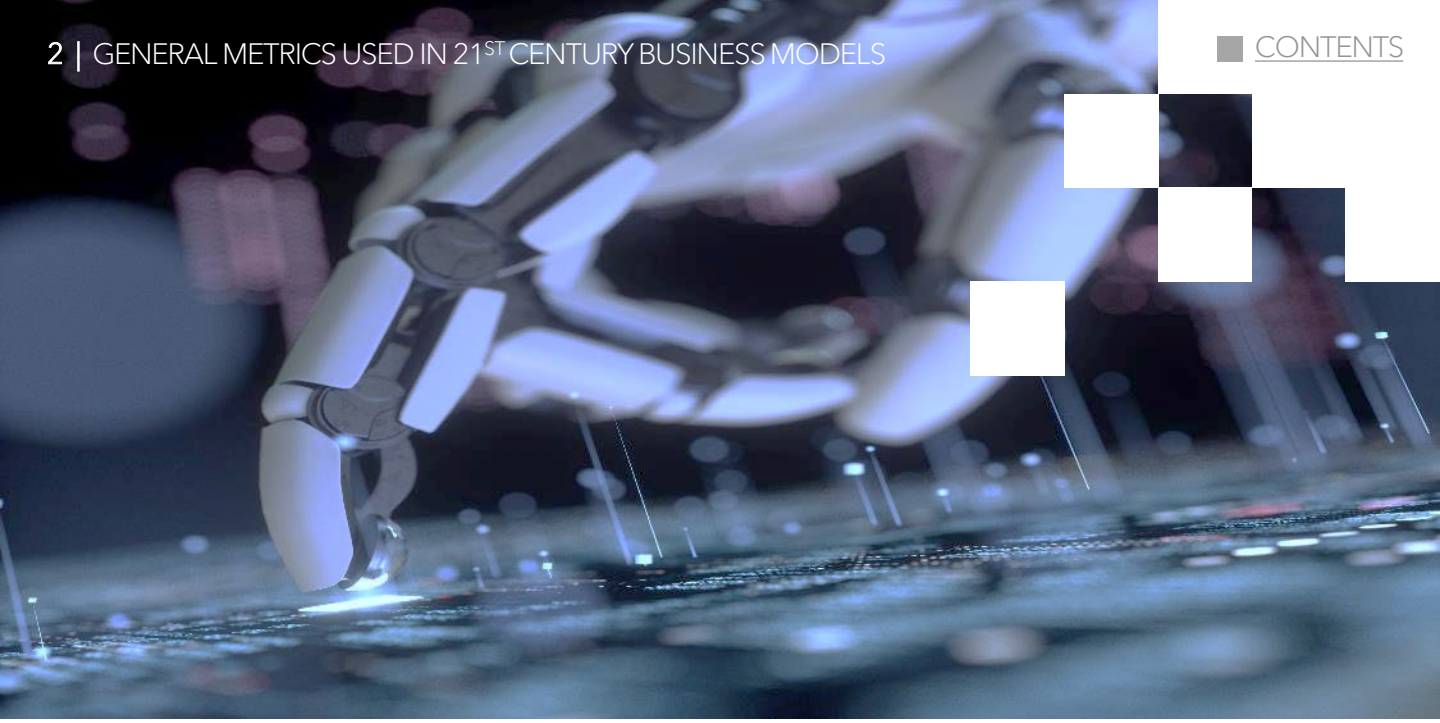
In this century industries are being disrupted by **technology** and by company business models born with the **internet boom**.

Our digital, tech, and new business model experts at ONEtoONE Corporate Finance decided that it was time to bridge this understanding. This 10-part series intends to do so. Our goal is that:

- Investors who finance growth or acquire companies, know what to look for and understand the value of certain companies with 21st Century characteristics.
- Corporate development managers and strategic buyers know what they should be looking for when sourcing potential acquisitions.
- XXI century CEO and Directors know what they would need to communicate to investors.
- Corporate finance professionals know how to add value to investors, acquirors and their sell-side/private placement clients.

In the series "Understanding 21st Century Business Models" we look to explain these models, what drives them, how they came to be, how they are innovation catalysts, general metrics that they use, and how to value the companies using them.

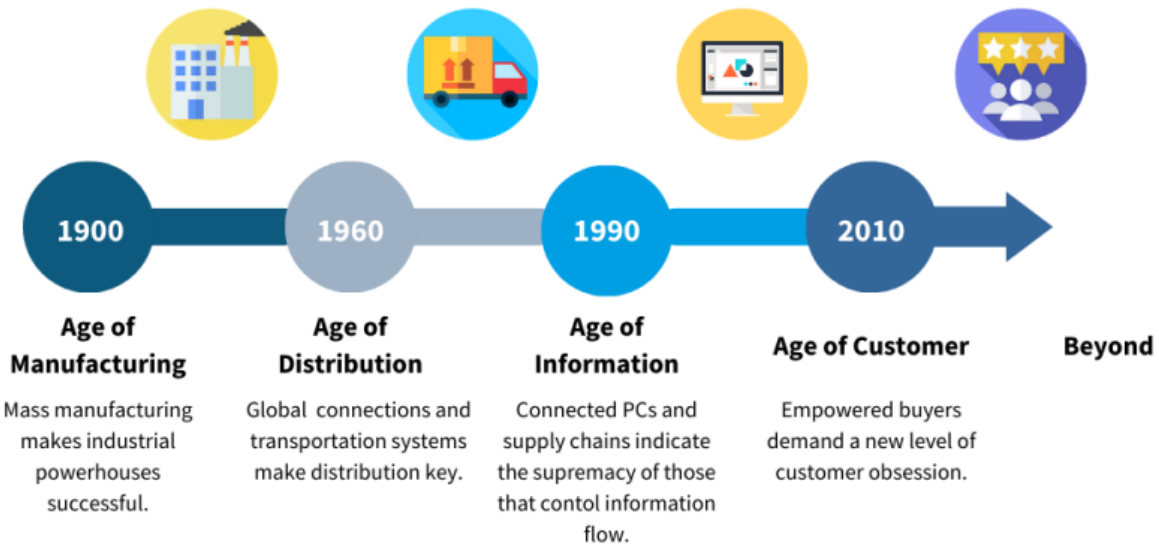
2 GENERAL METRICS USED IN 21ST CENTURY BUSINESS MODELS



What are 21st Century Business Models and what drives them?

We are in the age of the customer-centric approach. By customers, we mean anyone or anything that would use a product or a service, meaning users, clients, businesses, governments, and citizens.

In the 21st Century, business value creation is being driven by a customer-centric blend of physical and digital business models.

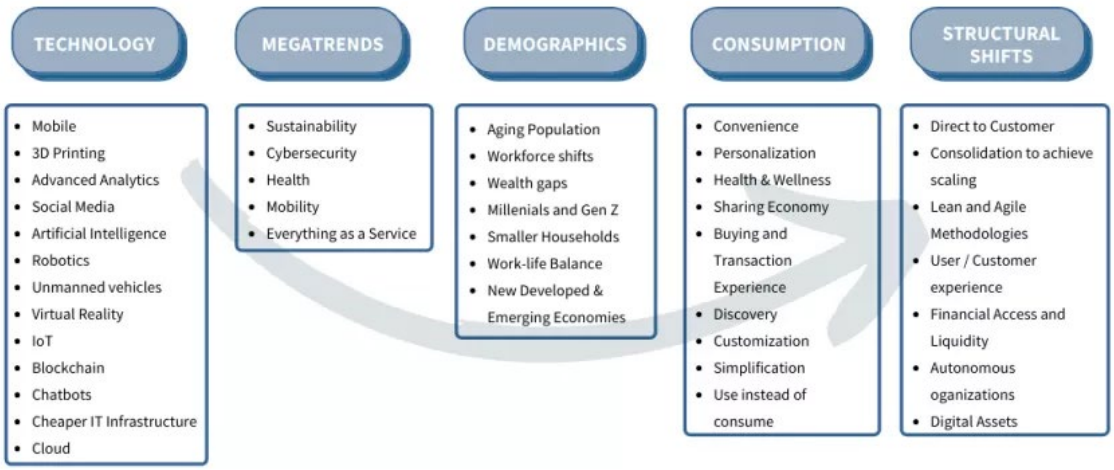


Source: Forrester Research. Design: ONEtoONE

Due to technological capacities, an extreme shift in demographics, ever-growing interconnectivity of humans, and a demand for faster human development, these models are characterized by their ability to scale at a faster rate and offer a bigger geographical reach than before, with higher profit margins and use of technological advancements allowing them to reach target markets faster.

The core of a 21st Century Business Models is the value proposition that solves a customer problem or satisfies a customer need.

What is driving these customer needs?



Source: Forrester Research. Design: ONEtoONE

How they came to be?

21st Century Business Models are not digital or technological companies themselves. Instead, they use technology to create new value in business models, customer experiences and the internal capabilities that support its core operations.

In many cases they become digital companies, but before they get there, they must go through innovation frameworks.

21st Century Business Models are designed as innovative responses to specific customer needs.

These business model innovations, whether digital or not, disrupt industries, creating new verticals within them that adapt new business models.

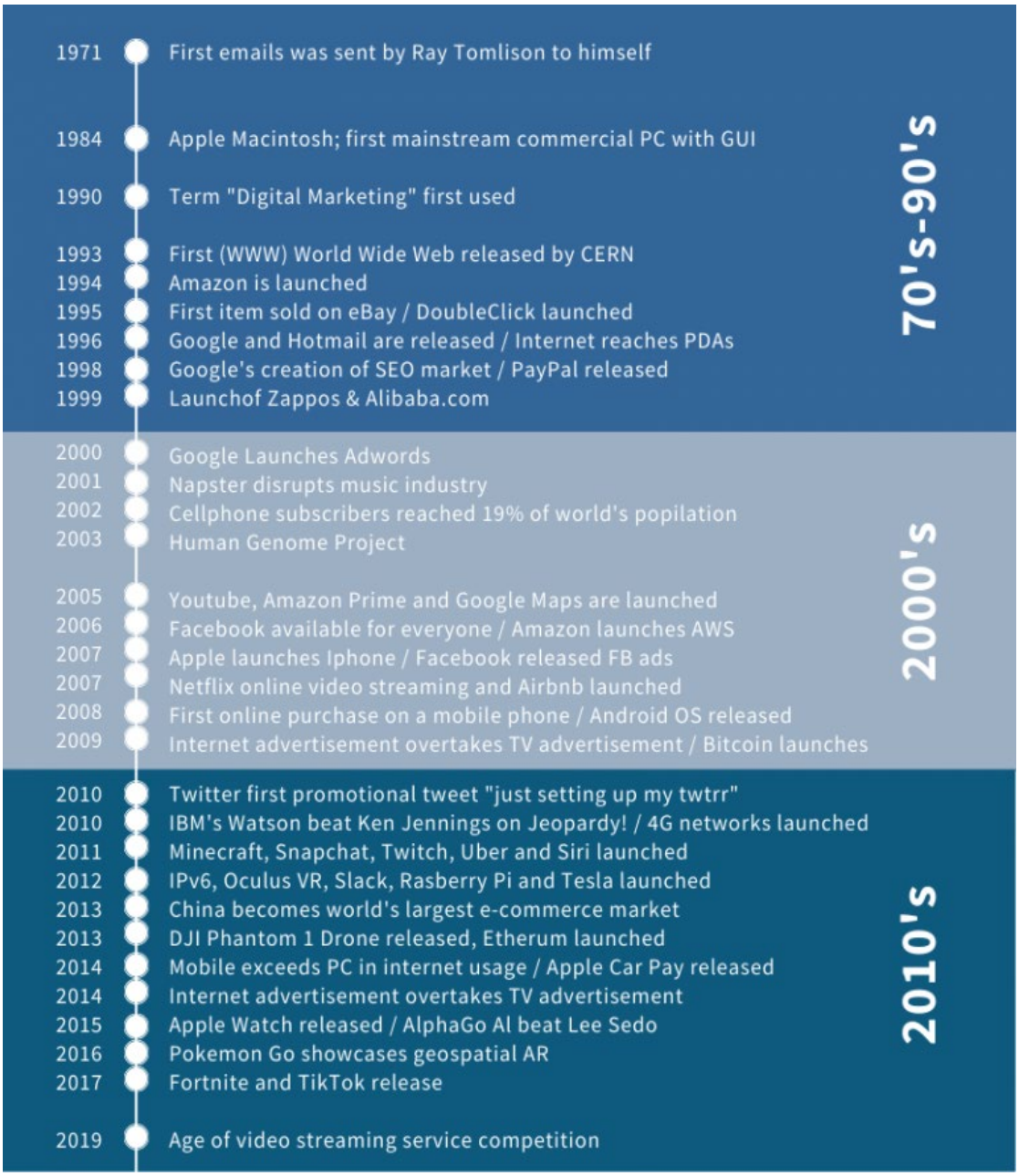
Some of these verticals we call "Industry"-Tech. The best 21st century companies are digital companies that identify gaps in existing industries and business models that can be improved upon and/or exploited to better serve customers.

Our focus with this document is to illustrate some of the business models that allow for industries to be disrupted today. Hence, most of the business models to be discussed are digital. However, we just wanted to clarify that they do not necessarily need to be digital models.

Some examples of 21st century verticals are:

- Mobile
- Mobile commerce
- Micromobility
- PropTech
- MortgageTech
- RestaurantTech
- Mobility
- Micro Mobility
- SaaS
- Virtual /
- Augmented Reality
- 3D Printing
- AdTech
- AgTech
- AudioTech
- Machine Learning / AI
- Big Data / Analytics
- PaymentTech
- Medicinal Cannabis
- ClimateTech
- CloudTech & DevOps
- Crypto Currency/Blockchain
- Cyber Security
- E-Commerce
- EdTech
- Digital Health
- Content Creation
- E-Sports
- Gaming

Who paved the way?



New Business Models use technology to create **new value**, **customer experiences** and the **internal capabilities** that support its core operations.

5 ways digital businesses innovate:

Due to technological capacities, an extreme shift in demographics, ever-growing interconnectivity of humans, and a demand for faster human development, these models are characterized by their ability to scale at a faster rate and offer a bigger geographical reach than before, with higher profit margins and use of technological advancements allowing them to reach target markets faster.

The core of a 21st Century Business Models is the value proposition that solves a customer problem or satisfies a customer need.

1 | Asset-less platforms

Uber is the world's largest "taxi company" and doesn't own a fleet of vehicles. Airbnb has the most "rooms" but doesn't own a group of hotels. Facebook is arguably one of the largest content companies in the world, all without producing content. What about YouTube? Companies don't have to own the hard assets to provide the service. Users just want the service. Get the point?

2 | Data

More data has been created in the past few years than in the entire previous history of human race. Websites, smartphones, and sensors' data are produced and collected around the clock. Determine what unique data you have, what you can obtain, and then how to use it to add customer value in ways that lock out the competition and create new revenue streams.

3 | Change the economics

"Make money" by simplifying the pricing concept:

- Selling products as individual units.
- Products bundled together or with services.
- Charge by the time of use.
- Full or partial access.
- Subscriptions for a specific period of time.
- Memberships (single or group membership with or without tiers of value).
- Licenses (for a given time, or with escalating sets of features).
- Platforms (membership fees with or without transaction-based revenue sharing).

Modify the **revenue stream**:

- The user pays in a different way.
- Fixed fees vs commissions.
- Pay per use.
- Freemium.
- Make a third party pay (hidden revenue).
- The user gets free service/product and other pays.
- Ads (Ex; Google or bus stops).
- Discounts difference or fees on another's product or services.
- Get paid from the savings or earnings achieved by your clients.

Revenue model examples

Free Google Quora	**Freemium** slack zoom mailchimp	**Open Source** Red Hat MySQL Compiere
On-Demand deliveroo NETFLIX SHARENOW	**E-Commerce** asos Veepee zalando	**Ads** YouTube Instagram Google
Subscription Spotify DAZN salesforce	**Peer-to-peer** Uber airbnb mintos	**Hidden Revenue** Pinterest Google JCDecaux

4 | Create network effects

Metcalfe's law states that the value of a network is proportional to the square of the number of connected **users of the system**.

So, the more users, the more users get attracted to the network, and the more value is added to the network itself.

The **bigger the network and its interactions, the bigger the company value**.

There are many types of networks, each with virtually endless business model opportunities:

DEVELOPER	USER GENERATED CONTENT	MARKETPLACE	COMPATIBILITY	DATA
Users use applications, developers build out the platform, which increases the appeal for developers themselves.	Users create and then use the content contributed by others, which attracts more contributors.	Buyers find seller, which attracts more of each.	Compatibility makes interaction easier and better, attracting more participants, which in turn makes the compatibility even more widely available and beneficial.	Information gathered from individuals within the network and then aggregated into something meaningful for all participants.
• Android • iOS • Playstation • Windows	• Youtube • Facebook • LinkedIn • TikTok	• Google Store • eBay • Airbnb • Alibaba • Uber	• PayPal • Office • Skype • WeChat	• Waze • Spotify • Weather Company • Cloudera • Salesforce

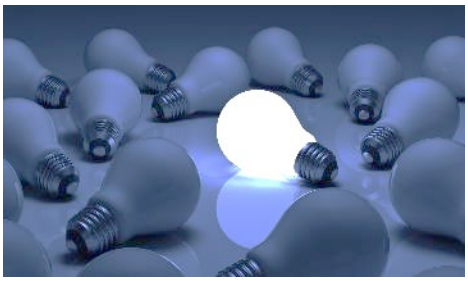
5 | Combine innovative markets with business structure strategies

Explore the fundamental assumptions of current players in your market segment and then find business models from outside your space that disrupts the status quo.

Modify or eliminate steps in the value chain.

Associate with competitors, suppliers, or complementary businesses.

Think on:



- Who is your target market?
- Who else targets them?
- How can you target them together?

Reduce the customers' experience hassle and complications using a product or service. Break an industry belief.

Know the success factors that have withstood time:

- Can they be changed?
- Do restaurants and bars need a physical place to serve customers?
- Should hotels have a reception?
- Do bank loans need guarantees?

3 E-COMMERCE

What is e-commerce?

A bold but not wild statement would be that e-commerce is the parent of all 21st century business models. It refers to the business of selling products online, via computer, and purchases via mobile devices such as smartphones and tablets.

E-commerce is often used to refer to the sale of physical products online, but it can also describe any commercial transaction facilitated through the internet. Therefore, we can think of it as a tree trunk, where all of the other digital business models are branches.

It didn't evolve that much until cryptocurrencies, and new business models came along. We now see companies with mixed business models combining online and offline channels:

B2C: Directly to customers.	B2C: Direct to sell other business. B2B2C: Direct to sell to customer through other businesses direct to customers channels.	Can also be Marketplaces (C2C) or platforms (C2B), which we will expand further on.

Source: Forrester Research. Design: ONEtoONE

Top E-commerce players

Due to various aspects such as technological capabilities, extreme shifts in demographics, ever-growing human interconnectivity, and a demand for faster human development, these models are characterized by their ability to scale at a faster rate and offer a bigger geographical reach than before allowing them to reach target markets faster.

amazon.com

JD.COM 京东

Alibaba.com
Global trade starts here.™

ebay

Rakuten

zalando

flipkart.com

asos
discover fashion online

overstock.com

E-commerce takes on a variety of forms depending on the relationships between businesses and consumers and the different objects being exchanged in the transactions between them.

E-commerce forms: businesses, consumers and products

1 | Retail

The sale of a product by a business directly to a customer without any intermediary.

2 | Wholesale

The sale of products in bulk, often to a retailer that sells them directly to consumers.

3 | Dropshipping

The sale of a product manufactured and shipped to the consumer by a third party.

4 | Subscription

The automatic recurring purchase of a product or service regularly until the subscriber chooses to cancel.

5 | Physical products

Any tangible good that requires inventory to be replenished and orders to be physically shipped to customers as sales are made.

6 | Digital products

Downloadable digital goods, templates, and courses, or media that must be purchased for consumption or licensed for use.

7 | reCommerce

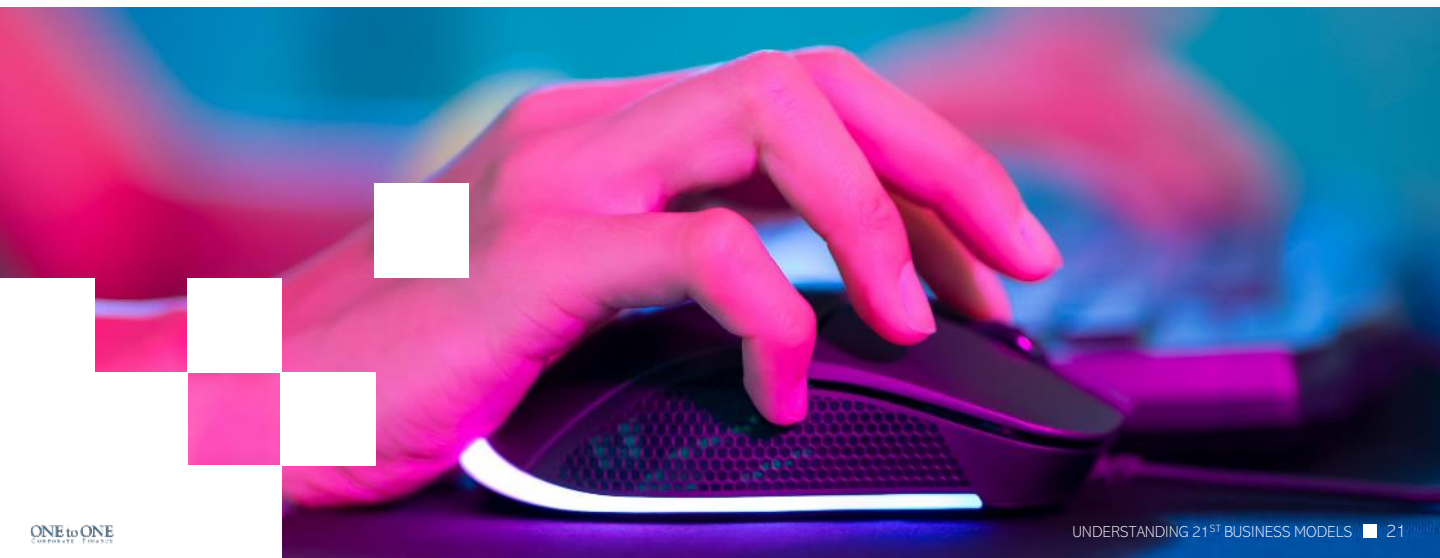
Resale of used, defective or repaired goods.

Important terms to know about e-commerce:

With many branches extending out of E-commerce, the following terms would be used in many customer/user-centric business models. Knowing them would provide a head start to understanding the rest of these models.

IMPORTANT TERMS TO KNOW			
Site Traffic	**Conversion Rate**	**Bounce Rate**	**Order**
# of visitors to a site.	% of customers who place an order relative to the total # of site traffic.	% of visitors who enter the site and then leave (bounce) rather than continuing to view other pages.	A single checkout which may consist of multiple items.
Churn	**Organic Search**	**Paid Search**	**Affiliates**
The annual % of customers who stop shopping on the site.	Traffic from search engines that are not paid for.	Traffic from search engines that is paid for.	Paid traffic from another site.

New Business Models use technology to create **new value**, **customer experiences** and the **internal capabilities** that support its core operations.



P&L Assumptions

We can see below how these terms are used as assumptions to fill in an E-commerce business P&L (take a look at the colour coordination, as P&L items are supported by a number of assumptions).

INCOME STATEMENT	ASSUMPTIONS	
Gross Revenue	**Site Traffic (Avg monthly visits)**	**Customers**
Discounts, Promotions, Markdowns	Email	Churn Rate
Net Revenue	Organic Search	Opening active customer base
	Paid Search	Plus new customers
Cost of Goods Sold	Affiliates	Subtotal
Gross Profit	Total Monthly Visits	Less churned customers
	Growth Rate	Closing customer base
	Site Traffic (Annual)	**Marketing Expenses**
Gross Margin	Email	Variable
Variable Operating Expenses	Organic Search	Email (cost per click)
Marketing	Paid Search	Organic Search (cost per click)
Fulfilment	Affiliates	Paid Search (cost per click)
Total Variable Costs	Total Annual Visits	Affiliates (cost per click)
	Conversion Rates (%)	Average
Contribution Margin	Email	**Order Fulfilment**
	Organic Search	Variable
	Paid Search	Freight/shipping per order
Fixed Operating Expenses	Affiliates	Labour/handling per order
Fulfilment	Total Monthly Visits	Total
General & Administrative		Fixed
Total	**Orders Placed**	Warehouse rent
	Email	**General & Administrative**
	Organic Search	Fixed
EBITDA	Paid Search	Office rent
	Affiliates	Salaries, wages & benefits
	Total Orders Placed	Professional fees
	Order Details	Other
Depreciation	Average item value (gross)	Total
Interest	# of items per order	
Earnings Before Tax	Average markdown	
	Average promotion/discount	
Taxes	Cost of Goods Sold (Gross Product	
Net Income	Marin)	
	Average gross order value	
	Average net order value	

4. MARKETPLACE

What is a marketplace?

A **marketplace** is a platform where vendors can come together to sell their products or services to a curated customer base. The role of a marketplace owner is to bring together the right vendors and the right customers to drive sales through an exceptional multi-vendor platform – sellers have a place to gain visibility and sell their products. The marketplace owner earns a commission from each sale.

Marketplace owners do not own the inventory their platform sells, unlike online store owners. In some cases, marketplaces could invest in their fulfilment and other costs not associated with their core matchmaking business model to increase customer experience and satisfaction. For example, Amazon's distribution and fulfilment centers.

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Some key characteristics are:

- **Interaction** between supply and demand.
- **No inventory**.
- Focus on **customer satisfaction**.
- Lean and scalable **operations**.

The role of a marketplace owner is to bring together the **right vendors** and **the right customers** to drive sales through an exceptional multi-vendor platform.

Mind-blowing facts regarding marketplaces

50 of the 100 top marketplaces launched in 2011 or later. These include retailers that have been around for a while and recently began allowing other merchants to sell on their sites. More than half have been launched in the last 7 years.

The top online marketplaces in the world sold $2.67 trillion worth of products in 2020. Sales on marketplace sites, like those operated by Alibaba, Amazon, eBay and others, accounted for 62% of global web sales in 2020, according to Digital Commerce 360's analysis.

Although the top three marketplaces—Taobao, Tmall and Amazon—account for nearly two-thirds of the $2.67 trillion in GMV of the Top 100, several other marketplaces worldwide grew almost 100% last year—including Etsy in the U.S. and Ozon in Russia.

Collectively, these marketplaces grew 29%—faster than the 24% growth of global eCommerce.

Ranked marketplaces by Gross Merchandise Value

1 淘宝网 Taobao.com $ 609B

2 天猫 TMALL.COM $ 593B

3 amazon $ 475B

4 JD.COM $ 405B

5 ebay $ 100B

Types of business models in the marketplace

- B2B: wholesale suppliers sell their products or services to commercial buyers.

- Revenue models: commission, subscription, listing fee, and visibility upsell. Example: Alibaba, Global Sources, IndiaMART.

- B2C: businesses sell their products and services not to other companies but directly to customers.

- Revenue models: commission, subscription, listing fee, and visibility upsell. Examples: Amazon, Deliveroo.

- C2C or P2P: connects individuals with similar needs, tastes, and incomes to share products and services.

- Revenue models: commission, paid promotions, advertisement, listing fee, and visibility upsell. Example: Uber, eBay.

Important Metrics to know in marketplace

Gross merchandise volume (GMV)	Average Order Value (AOV)	Take Rate (Rake)	Buyer/Seller Overlap
Looks at the total sales dollar value of sold merchandise. It's a crucial metric for marketplaces, though revenue is still the top indicator of value.	Is average revenue per transaction (total revenue/number of transactions) indicates how much a business can afford to spend on acquisition and similar per-transaction expenses?	The percentage of GMV collected by the marketplace and typically falls between 10% and 30%. High take rates are associated with exclusivity, e.g., The App Store can charge 30% because it's the single point of access to over one billion iOS devices.	Several buyers are also sellers. A high overlap decreases CAC because you get both a buyer and a seller for each acquisition.
Buyer-to-Seller ratio	**Contribution Margin**	**Quick ratio**	**Net Promoter Score (NPS)**
It might be best measured as transactions per buyer/transactions per seller to guide user growth initiatives more accurately.	Sales minus variable costs and determines profit per unit. The contribution margin ratio is the contribution market/total sales and represents the percentage of revenue left over after subtracting all variable costs.	Compares growth to churn. For users, it's new and resurrected users/churned users; for revenue (specifically MRR), it's new and resurrected users + upgrades/cancelled users + downgrades.	Tracks customer satisfaction through customer satisfaction surveys by subtracting detractors from promoters; promoters give scores of nine or ten, and detractors give scores of six or below. An NPS over zero is good, and an NPS of 50 or more is excellent.

Marketplace financial metrics and assumptions

DEMAND	OVERALL	SUPPLIERS
New Buyers (#)	GMW (€)	New Suppliers (#)
Resurrected (#)	GMW Growth rate MoM (%)	Resurrected (#)
Churn (#)	Transactions (#)	Churn (#)
Buyers (#)	Avg. Order Value (€)	Suppliers (#)
Buyers Growth rate MoM (%)	Listing Fees (€)	Buyers Growth rate MoM (%)
Quick ratio [new+res(/churn)]	Revenues (€)	Quick ratio [new+res(/churn)]
Buyers Net Promoter Score (%)	Revenue Growth MoM (%)	Retention rate (%)
Demand Fulfillment rate (%)	Revenue per transaction (€)	Supplier Net Promoter Score (%)
Avg. Buyer CAC Paid (€)		New listings (#)
Suppliers acquired through paid (%)	Buyer to seller ratio	Listings (#)
Avg. Buyer CAC (€)	Buyer/Seller overlap	Listings growth rate (%)
Monthly Buyer CAC (€)		Avg. listing price (€)
Avg. Order Frequency (AOF)	Monthly CAC (€)	Avg. Supplier CAC Paid (€)
AOF Growth MoM (%)	CAC/Revenue (€)	Suppliers acquired through paid (%)
Average Purchase per buyer (€)	Variable cost per unit (€)	Avg. Supplier CAC (€)
Revenue per buyer (€)	Contribution margin per unit (€)	Monthly Supplier CAC (€)
Recurring buyers (%)	Contribution Margin ratio (%)	Revenue by Top 20% of buyers (%)
GMV from recurring buyers (%)		Avg. revenue per seller (€)
GMV by Top 20% of buyers		

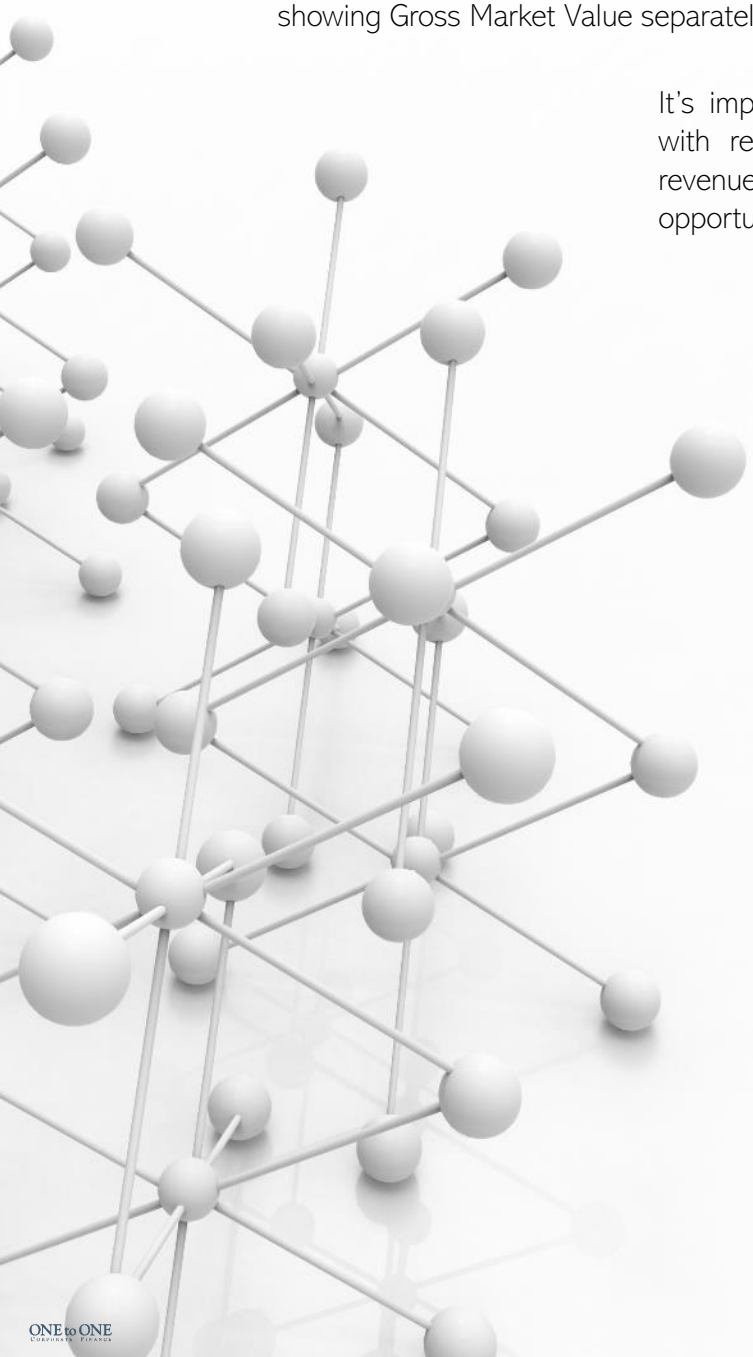
IMPORTANT: On GMV

Gross Market Value is generally not considered revenue as the filings of all these marketplace companies show.

Marketplaces recognize transaction fees as revenues. Taking payment and dividing it by the Gross Market Value will give you the Take Rate percentage, which is its metric that shows how much value is being extracted.

Marketplace companies raising capital can make sure they avoid any potential misunderstandings with investors by using transaction fees as revenue and showing Gross Market Value separately.

It's important to know that most investment firms with revenue size requirements will use the fee revenue metric to standardize size versus other opportunities.



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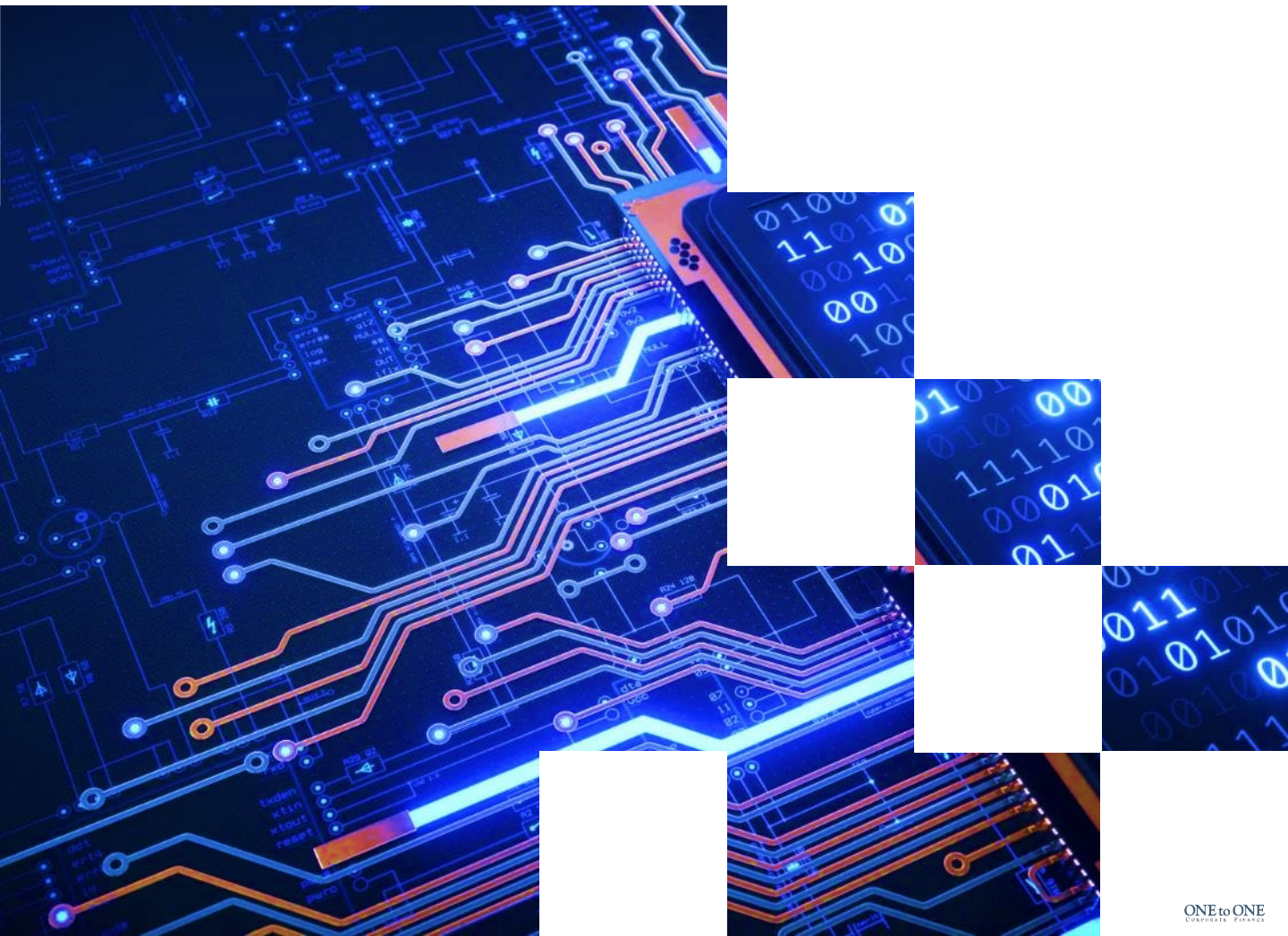
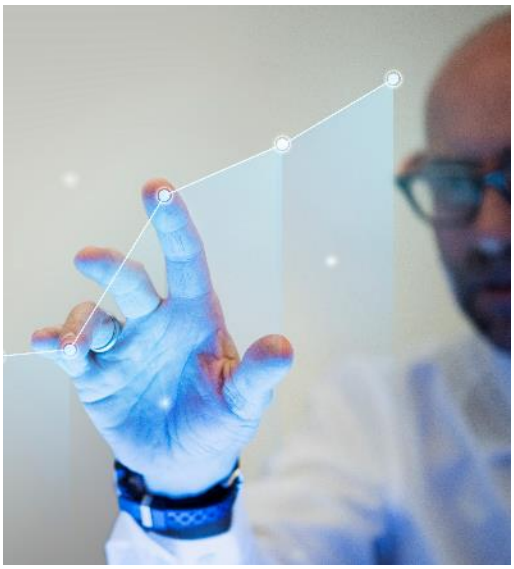
OMNICHANNEL MARKETING FOR E-COMMERCE



Omnichannel Marketing for E-Commerce



Omnichannel is an e-commerce strategy that requires linking physical, mobile and web stores so that consumers can shop seamlessly across all channels. Omni-channel (or omnichannel) refers to a sales approach that uses multiple channels to reach customers and provide them with an excellent shopping experience. It covers all the ways brands and customers interact with each other. It is more of a strategy than a business model. We are taking the time and effort to explain this strategy for two main reasons:

1 | It is one of the **main strategies** of an e-commerce business.

2 | It provides a **source of data for measuring the customer engagement** of an e-commerce business.

Whether they are shopping at a physical store, by phone or by laptop, an omnichannel approach is designed to make shopping as smooth as possible. It means that the end-to-end process – from distribution and promotion to communication and sales – is well-integrated.

Omni-channel vs Multi-channel

Both omni- and multi- are prefixes that suggest "many" or "multiple." Omni-channel goes beyond utilizing many channels. It is designed to integrate all avenues to ensure that customers will be able to make transactions with their preferred brand in any manner that they want. When a brand adopts an omnichannel approach, details entered by customers through one channel will be integrated with all other channels.

With non-essential retail chains closing their doors to help combat the spread of COVID-19, retailers have been relying on omnichannel services to keep their stores afloat.

78% of online shoppers have used some omnichannel feature in the last six months, according to Digital Commerce 360.

The same source, who published a 2021 omnichannel report, stated that:

- 61.6% of retail chains in the top 1000 offer both buy online or pick up in-store.
- 21.7% of consumer brand manufacturers with stores, 20.6% of catalogue/call center retailers with stores, and 20.4% of web-only merchants with stores offer this omnichannel feature.
- 38% – The percentage of shoppers who say they will "buy online, pick up in store" more frequently over the next six months.
- 82.3% – The percentage of stores analyzed with a dedicated parking spot for shoppers picking up online orders.
- 78% – The number of stores analyzed that could get the product in a customer's hand within two minutes of them entering the collection line.

6 THE CLOUD MARKET GROUP: XAAS

The Cloud Market Group: XaaS

Following customer demand, businesses have found ways to deliver everything as a service (XaaS). In general, these business models are dependent on cloud computing to generate value for their customers.

Why? A business model based on the cloud market group provides varying levels of fault tolerance and resilience, the ability to scale up/down to meet capacity and performance requirements (depending on the workload created by its users/consumers) and are usually intended to operate their day-to-day functions without the need for human intervention.

There are too many to count, but generally every digital service can be delivered X as Service (XaaS). To name just a few:

Analytics as a Service	Contact Center as a Service	Government as a Service	Network as a Service
Artificial intelligence as a Service	Contact Information as a Service	IT as a Service	Payments as a Service
Backend as a Service	Communications Platform as a Service	Knowledge as a Service	Recovery as a Service
Business process as a Service	Data as a Service	Mobility as a Service	Robot as a Service
Code as a Service	Desktop as a service	Monitoring as a Service	Search as a Service
Content as a Service	Database as a service	Mobile backend as a Service	Security as a Service
Construction as a Service	Energy storage as a Service	Machine Learning as a Service	Transportation as a Service
Container as a Service	Games as a Service	Media Processing as a Service	Unified Communications as a Service

P&L Assumptions in XaaS

P&L Assumptions

Income Statement

Revenue
Business
Enterprise
Corporate
Platinum
Subscription Fees
Total revenue

Payment fees
Hosting
Gross Profit

Gross Margin
Paid Marketing
- Payroll
- Management
- Engineering
- Marketing
- Customer Support
- Sales

Team expenses
- equipment Software, tools Travel

Other expenses

EBITDA
Depreciation & **Amortization**
EBIT
Net interest
EBT
Corporate taxes
Net Income

Cost Assumptions

Outbound
- Month
- Closings per Sales Rep per month(#) (ramp-up)

Inbound (Paid Traffic)
- Beginning of the year (€)
- Marketing budget growth (%)
- Marketing budget
- Paid Traffic

Inbound (Organic Traffic)
- Beginning of year
- Organic Traffic monthly growth
- Organic Traffic

CAC
- Advertising
- New Customers
- CAC (Paid)
- Sales & Marketing
- CAC (Blended)

CAC Payback (months)
Paid
Blended
LTV/CAC
Paid Blended
Payment Processing Fees
- Processing fees (as % of revenue)

Customer Support
- Percentage of Customers requiring CS per month
- Number of tickets processed by a CS Agent per hour
- Number of efficient working hours per CS Agent per day
- The annual salary of a CS Agent
- Salary taxes

Hosting
- Hosting (as % of revenue)

Applied Metrics in XaaS

Since X as a Service models are, arguably, the most customer centric models, their analysis metrics are more of a reference to the user/customer engagement. To explain these metrics and financial models, we will concentrate on the SaaS business model.

Months to Recover CAC

- Helps determine how long after you've closed a customer you recoup the total CAC. In other words, months to recover CAC gives you an idea of how quickly a customer starts to generate ROI for your business.
- Divide CAC by the product of monthly-recurring revenue (MRR) and your gross margin (gross revenue – cost of sales): = CAC / MRR x GM.

Customer Engagement Score

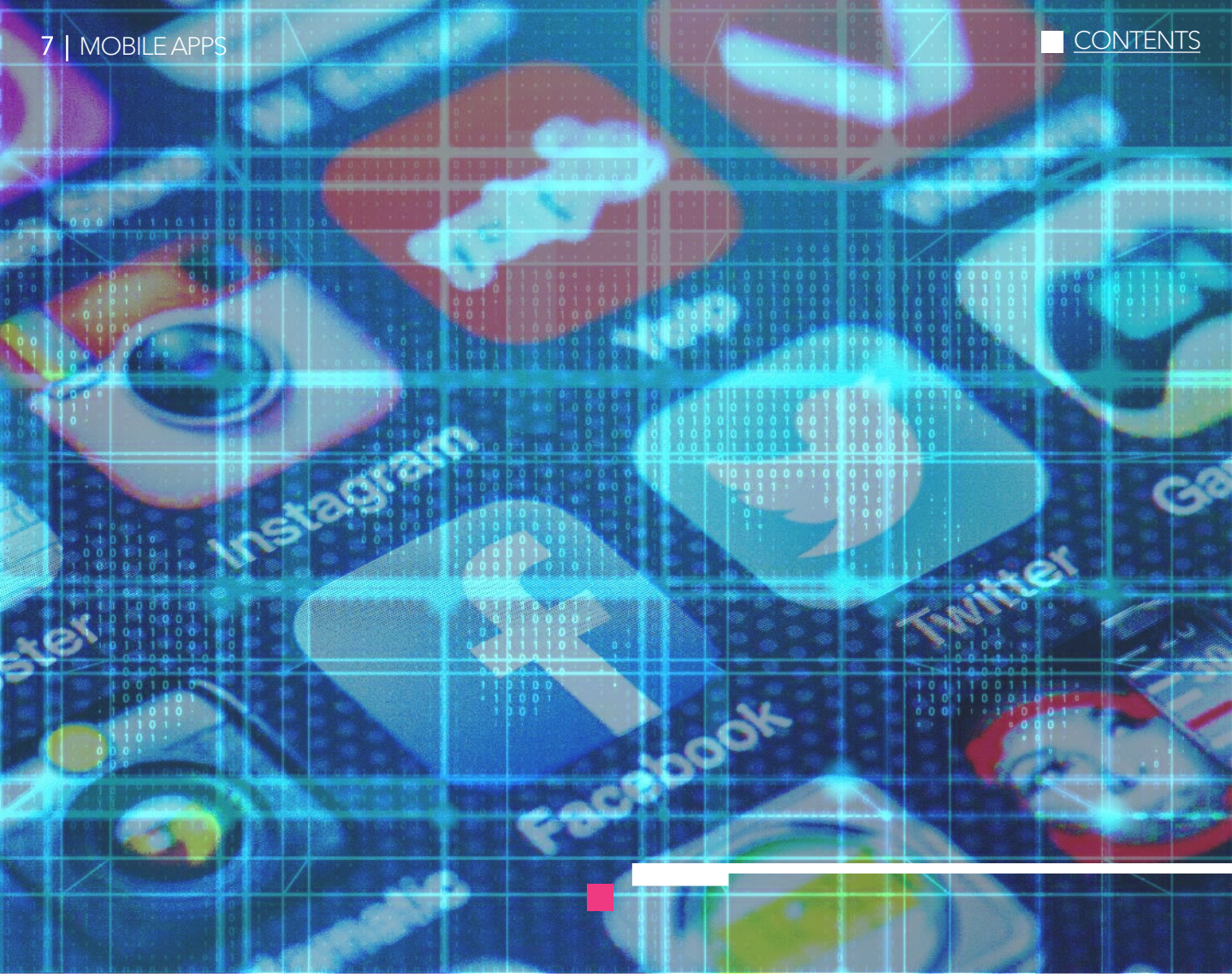
- Provides you with a glimpse at how engaged a customer is. Indicates the likelihood the customers will or will not churn.
- Each company's customer engagement score scale will be different depending on how a typical customer or user uses your software. To create your own customer engagement score, create a list of inputs that predict a customer's happiness and longevity. Once you have your list of inputs and have assigned a value to each one (depending on how critical they are to customer stickiness) you can calculate an engagement score across the board for your customers so you can quickly and easily evaluate customer health with one data point.

Revenue Assumptions

Revenue Assumptions

- Subscription Tiers (€)
  - Free
  - Paid
  - Premium
  - Corporate
- New Users Distribution (€)
  - Free
  - Paid
  - Premium
  - Corporate
- Upsell (%)
  - Free > Paid
  - Paid > Premium
  - Premium > Corporate
- Downsell (%)
  - Paid > Free
  - Premium > Paid
  - Corporate > Premium
- Churn (%)
  - Monthly churn
- ARPU, GP per User (€)
  - Total customers
  - ARPU
  - Average Gross Profit per User
- Customer Churn (%)
  - Customer Churn, in %
  - Implied Customer Lifetime (months)
  - Customer Lifetime Value
- Net new customers (#)
  - Free Monthly
  - Free Annual
  - Paid Monthly
  - Paid Annual
  - Premium Monthly
  - Premium Annual
  - Corporate Monthly
  - Corporate Annual
- Total Customers
- Recurring Customers (#)
- Free Monthly
  - Free Annual
  - Paid Monthly
  - Paid Annual
  - Premium Monthly
  - Premium Annual
  - Corporate Monthly
  - Corporate Annual
- Net New MRR (€)
  - Free
  - Paid
  - Premium
  - Corporate
- MRR
  - Free
  - Paid
  - Premium
  - Corporate

7 MOBILE APPS



Mobile Apps

Humanity's dependency on mobile devices has boosted the need for almost all organizations, private or public, from all sectors to have a presence on our phones and other mobile devices. Mobile device market penetration is the main factor for the growth of the mobile apps market.

This business model can be viewed from 2 different perspectives, or through a combination of both:

1 | As an extended source of an original business model such as media, e-commerce or SaaS.

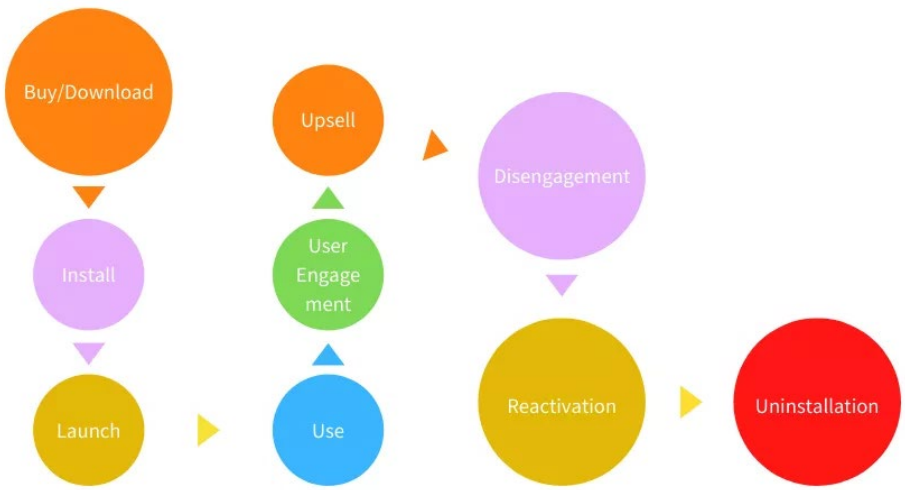
2 | As a stand-alone business activity, such as games and social networking.

This business model emerged from the expansion of the iPhone and Android smartphones' ecosystems, which now support all sorts of other technologies including IoT and virtual reality.

How big is this market now?

Well, here are a few facts:

- The iOS App Store has more than 1.85 million applications and the Google Play Store has more than 2.56 million, and thousands of new applications go live every day (Statista).
- By 2021, there will be roughly 7 billion mobile users worldwide (Statista).
- According to Appanie's "State of Mobile 2021" report, in 2020:
  - An app was download 218 billion times.
  - $143bn was spent on app stores.
  - Daily time spent on a mobile per user reached 4.2h.
  - 92% of time spent on a mobile is using apps, while social. networking and communication apps account for 44% (Hootsuite).
  - $240bn was spent on mobile app ads.
- VC investment in mobile tech reached $73bn in 2020 (Crunchbase).



Mobile apps make money through

- App purchase
- Downloadable content
- Customization
- Upsell
- Advantages (game apps)
- Elimination of countdown timers
- Cross-selling
- In-app ads

Applied metrics in mobile ap

Downloads

- Hou many people have downloaded the application.

Customer acquisition cost (CAC)

- How much it costs to get a user and to get a paying customer.

Launch rate

- The percentage of people who download the app then actually launch it and create an account.

Percent of active users/players

- The percentage of users who have launched the application and use it on a daily and monthly basis: these are your daily active users (DAU) and monthly active users (MAU).

Percentage of users who pay

- How many of your users ever pay for something.

Time to first purchase

- How long it takes after activation for a user to make a purchase.

Monthly average revenue per user (ARPU)

- This is taken from both purchases and watched ads. Typically, this also includes application-specific information such as which screens or items encourage the most purchases. Also look at your ARPPU, which is the average revenue per paying user.

Rating click-through

- The percentage of users who put a rating or a review in an app store.

Virality

- On average, how many new users a user invites.

Churn

- How many customers have uninstalled the application or haven't launched it within a certain time period.

Customer lifetime value

- How much a user is worth from cradle to grave. In the case of a mobile app, LTV is calculated using averages of the money spent by every player post-churn.

P&L Assumptions

P&L Assumptions

Income Statement	Revenue Assumptions	Cost Assumptions
Revenue	Download Tiers (€)	**Inbound (Paid Traffic)**
App purchase	iOS	**Channel 1 (€) (%)**
In-app purchases	Android	**CPC (Cost per click)**
In-app ads	Funnel	**Channel 2 (€) (%)**
Commission revenue	Downloads per month (#)	**CPC**
Affiliate revenue	Launch rate (%)	**Channel 3 (€) (%)**
discounts (-)	Launches (#)	**CPC**
Total revenue	Engagement rate (%)	**Total CPC**
Hosting	Engaged users (#)	**Inbound (Organic Traffic) (#)**
Customer Support	Active users (%)	**Beginning of year**
Services fees	DAU	**Organic Traffic monthly growth**
Gross Profit	MAU	**Organic Traffic**
Gross Margin	Upsell (%)	**CAC**
Paid Marketing	Downsell (%)	**Advertising**
Payroll	Churn (%)	**New Customers**
Management	Monthly churn	**CAC (Paid)**
Engineering	ARPU, GP per User (€)	**Sales & Marketing**
Marketing	Total customers	**CAC (Blended)**
Customer Support	ARPU	**CAC Payback (months)**
Sales	Average Gross Profit per User	**LTV/CAC**
Team expenses	Customer Churn (%)	**Commission fees**
equipment Software, tools	Customer Churn, in %	**Channel 1**
Travel	Implied Customer Lifetime (months)	**Channel 2**
Other expenses	Customer Lifetime Value	**Payment fees**
EBITDA	Net New Users (#)	
Depreciation & **Amortization**	Engaged Users (#)	
EBIT	Total Users (month)	
Net interest	Real Users (year)	
EBT	Virality	
Corporate taxes	Invitations per user (#)	
Net Income	Invitations (#)	
	Virality conversion rate (%)	

8

USER-GENERATED CONTENT

User-Generated Content

If someone is creating **content online**, editing it, and publishing it periodically, they are probably in the media site business. They produce content, bundle it, and distribute it. The media industry covers a wide variety of areas like advertising, broadcasting, and networking, news, print and publication, digital, recording, and motion pictures, and each has its own associated infrastructure. We call these media sites or media apps.

It's understandable to think that social media sites like Facebook, Tik Tok Instagram or Quora are media sites, as they mostly make money from advertising driven by the content consumption metrics on their sites. That is what a regular media company's business model would revolve around.

Instead of creating their own content these businesses strive to create user communities that create content. This makes them companies based on the **User-Generated Content** business model. They deserve their own business model because their primary concern is the growth of an engaged community that creates content. It has some similarities to the E-Commerce / Marketplace model. Instead of joining buyers and sellers, they bring content creators and content consumers into the same platform. Hence, user engagement is the main driver for this model.

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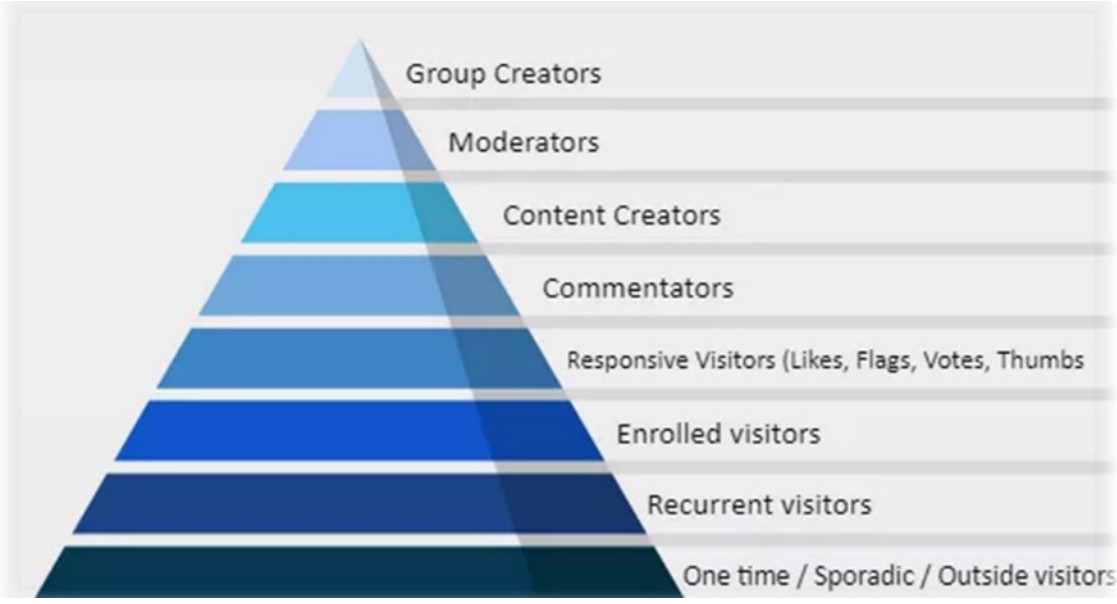
This model is driven by its unique funnel of user engagement



User-Generated Content

Engaged Visitors:

- Measures the user stickiness (how often they use the site or app.

Content Engaged Users:

- Users that interact with content.

Content creation:

- The % of users that actively create content.

Engaged funnel changes:

- Ratio that measures how people changes from one level of the engagement funnel to others.

Content value:

- Perhaps the heaviest metrics of all, as it holds the weight of user content engagement and interaction to monetize the business. The business value of content (ads and donations).

Content sharing and virality:

- Ratios that measure the % of content that get shared.

Virality:

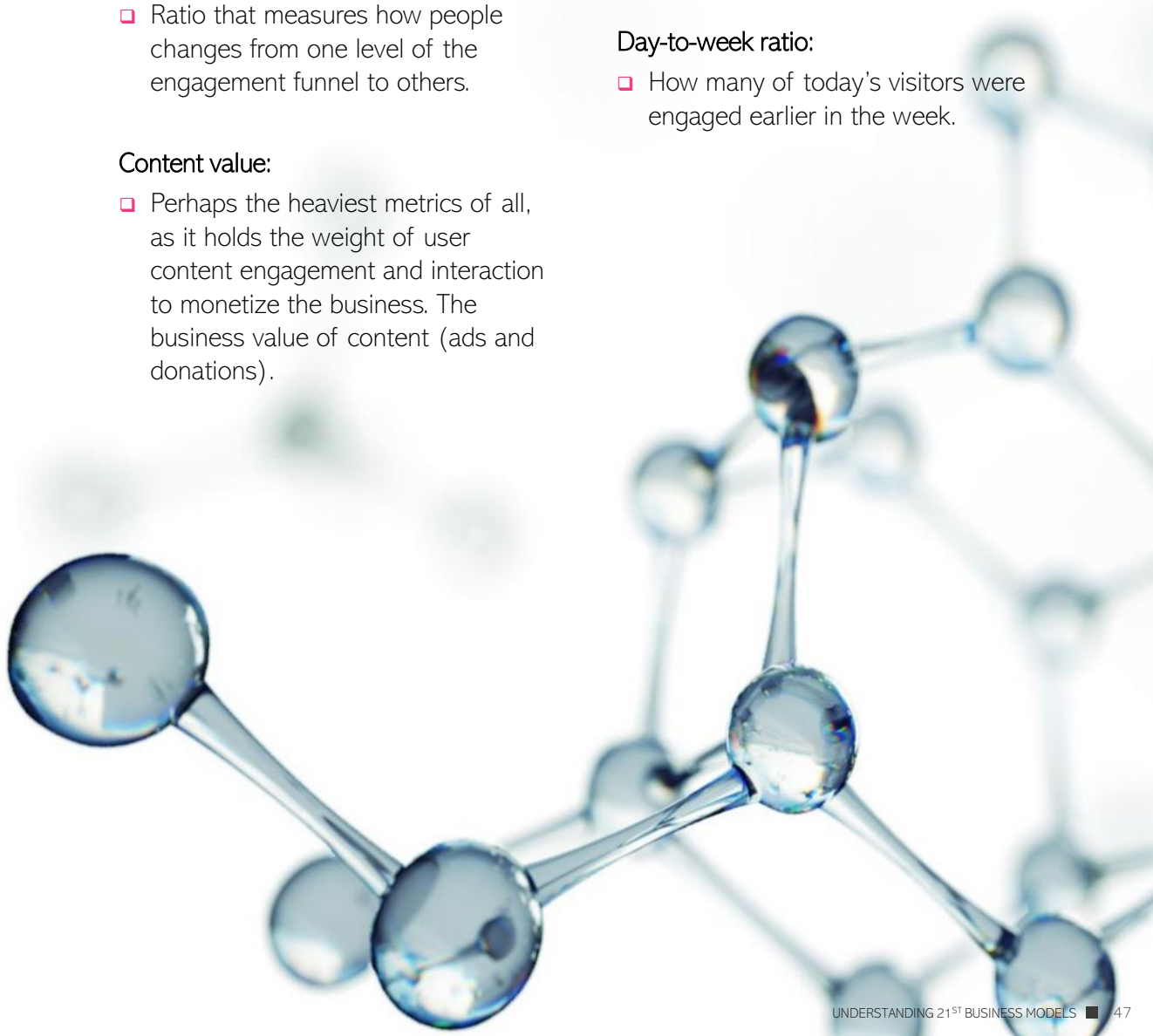
- User engagement based on Content sharing. Includes new users from shared content.

Notification effectiveness:

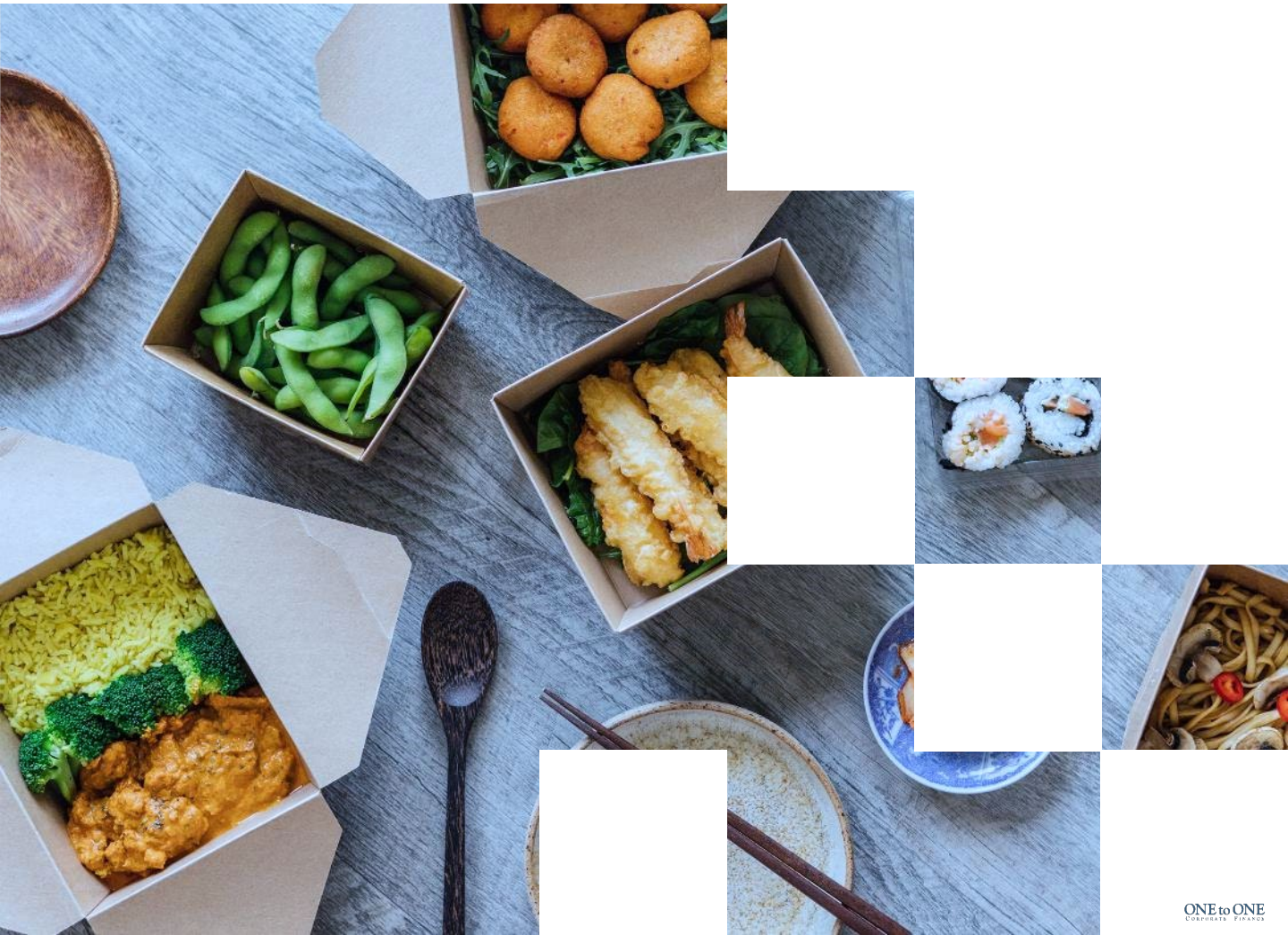
- % of users that act upon a notification.

Day-to-week ratio:

- How many of today's visitors were engaged earlier in the week.



9 CLOUD RESTAURANTS



Cloud Restaurants

With the digitalization of many industries and given the COVID situation, the restaurant industry has been shaken up and transformed in order to survive. Restaurants, regardless of the segment they appealed, had the same model for decades, if not centuries. You sit down, order, eat and pay (what differentiated from one to the other was this order).

Then came the on-demand delivery companies. The Deliveroo, Glovo and Uber eats of live provided restaurants, which had a finite sit in capacity to extend their orders to an online audience.

This new revenue stream developed in the idea of creating restaurants, or branded kitchens that only sold through on-demand delivery platforms.

Cloud restaurants are known by various names such as ghost kitchens, shadow kitchens, virtual, or dark kitchens.

But the basic idea remains the same: **restaurants have an online presence**, and their food can be ordered through food aggregator apps or through the restaurant's own app, but the restaurants themselves don't have dine-in facilities.

Like many retail food chains such as McDonalds, KFC, etc., **they have expanded this revenue stream**, and have also streamlined their digital sales operations to a Dark Kitchen model.

Now there are companies like Rebel Foods (formerly Fassos) that base their sole business model on digital sales.

This has given way to an exponential propagation of companies that develop many brands representing different cuisines under the same company. They fall under different strategic models.

Some operate under the same roof. Others operate based on the demand and delivery facilities optimization.

Delivery companies like Deliveroo, Glovo and Uber eats have transformed restaurant industry providing with **new opportunities** for a business model that hadn't changed in decades, if not centuries.

Business model explained

Advantages over traditional restaurants:

- Low operational cost.
- Low setup and introduction cost.
- Allow to better segment the target audience.
- Industry 4.0 - Automation, traceability and Data.

Traditional "dark kitchen"	Multi-brand dark kitchen	Takeaway dark kitchen	Aggregator owned dark kitchen	Aggregator owned dark kitchen plus	Outsourced dark kitchen
One brand owns or rents a single kitchen location without offering a dining room. These businesses generally focus on a single type of cuisine and rely on delivery channels or employees to handle orders and deliveries.	Multiple brands under one parent company share one kitchen,kepping operational costs down. **The success of this model is based on data analystics:** each seperate brand/cuisine type has its own unique identity from a marketing perspective and uses data insights to supply the most popular mealsbased on local demand for each different type of cuisine.	Essentially, it´s a dark kitchen-normal restaurant hybrid. This set-up is much like the "traditional" dark kitchen,except it also hosts customers in addition to offering delivery, not to dine,but to wait for their food and pick it p themselves. It was very popular during COVID-19 lockdown times.	Delivery aggregators offering empty kitchen space and minimal infrastructure that restaurant businesses can rent. These businesses benefit from the delivery aggregator´s fleet and online ordering and menu platform. In essence, the onlyprocesses that resteraunt employees need to handle have to do with cooking the food.	Very similar to the aggregator-owned dark kitchen,except that more infrastructure and optimised kitchen process frameworks are included in the offering. The aggregator may include a storefrontframework as well. For exampl, the delivery aggregator might provide a well equipped kitchen for the restaurant business to use and take care of every process including data-driven demand management, except the cooking and menu.	A resteraunt outsources almost any, or every,process, except the finishing touches. This is done in partnership with another business that specializes in food preperation as well as order processing and delivery. The final seller is only minimally involved in the cooking process.

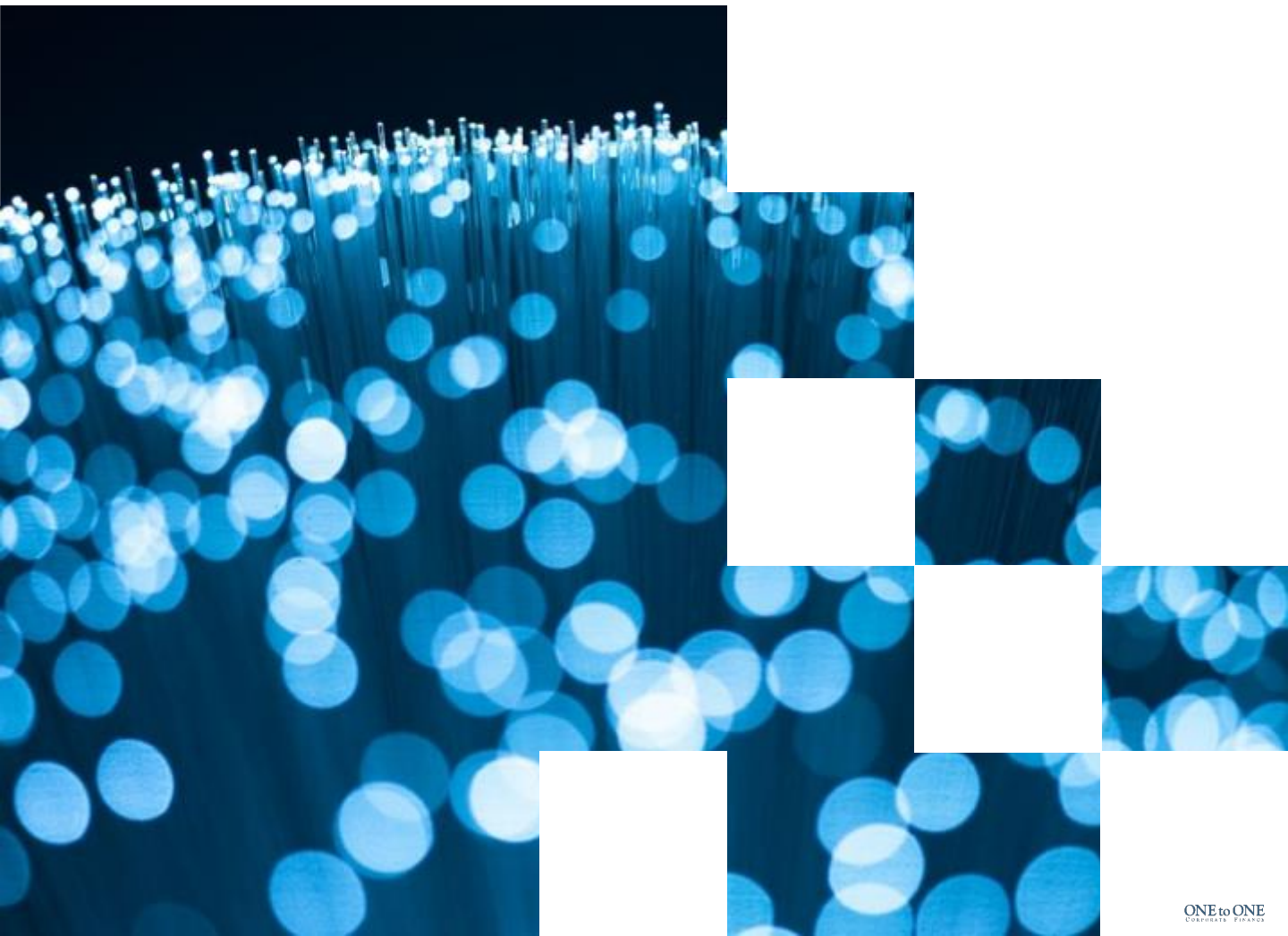
P&L Assumptions

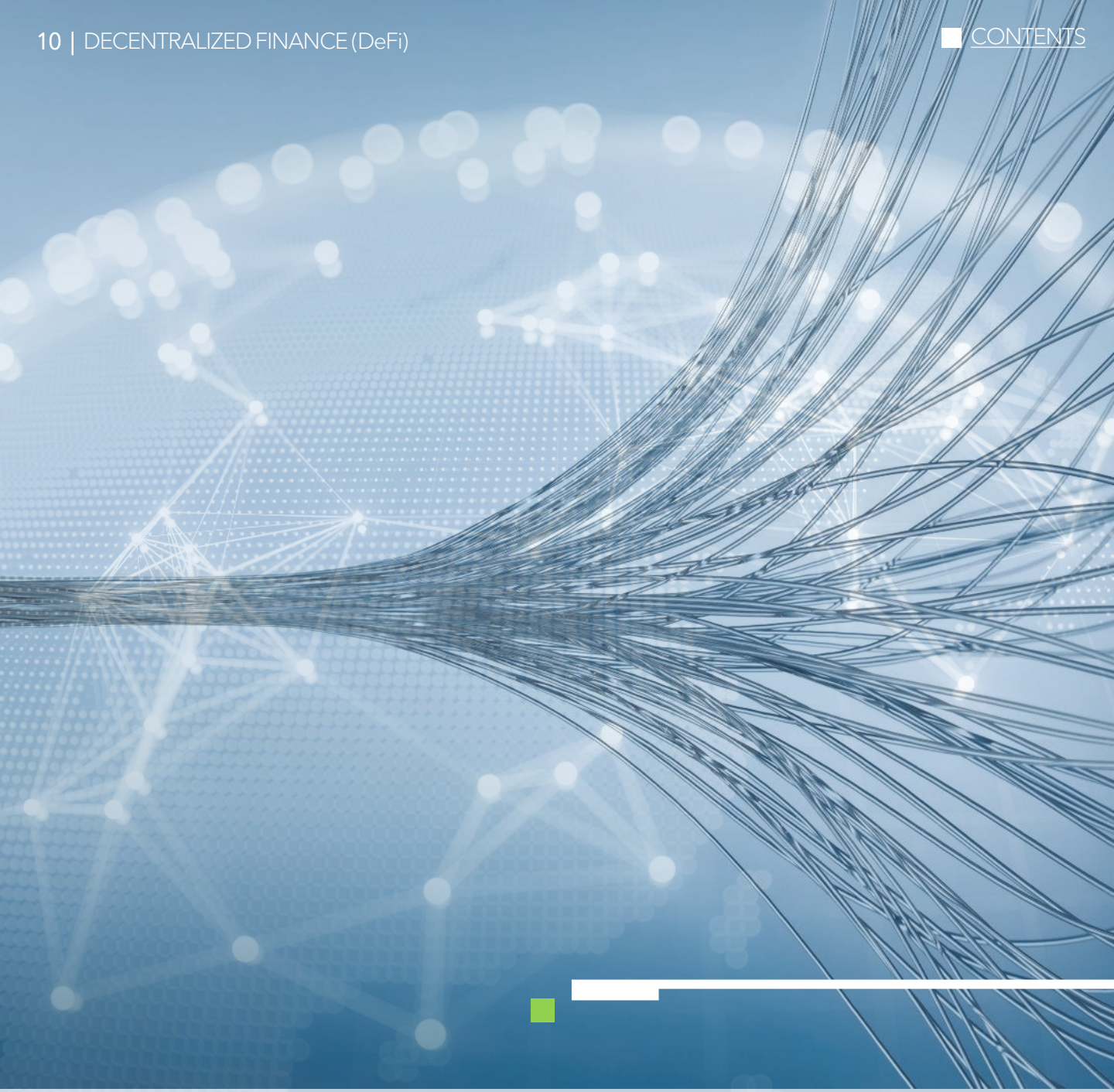
Revenue asumptions Customer Source	Starting Orders Per Month (#)	Monthly Growth Rate %	Total Revenues	Fees per order-% of sales	Fees per order- Flat rate	Disc-ounts	Net Revenue
Uber Eats Door Dash Just Eat Deliveroo Glovo ... Comapny Website Total Net Revenue Food Drinks Hosting Service Fees TOTAL CD GS Gross Profit Gross Margin Payroll Direct Labor Management Marketing Marketing Lease Other expenses EBITDA Depreciation & Amortization EBIT Corporate taxes Net Income	Cost Assumptions Total hours open/ day (€) Direct LABOR Hourly Rate Extra hour rate (€) Transactions per hour per employee (#) Sq. Mts.Leased (#) Equipment Leased (€) ease Cost (€)	In apps Promotion Marketing Channel 1 Channel 2 Channel 3 CAC Advertising New Customers CAC (Paid) Sales & Marketing CAC (Blended) CAC payback (months) LTV/CAC		xxx € xxx € xxx €	xxx € xxx € xxx €		xxx € xxx € xxx € xxx € xxx € xxx € xxx €

Applied Metrics

- Food cost % of total costs
  - Food cost % per item.
  - = Item Cost / Selling Price.
- Menu Item Profitability
  - = (Total Number of Items Sold Per Menu Price).
  - – (Total Number of Items Sold Per Item Portion Cost).
- Preparation
  - = (prep) Times per item.
- Quality Rating
  - Rejection Rates (of orders).

10 DECENTRALIZED FINANCE (DeFi)





Decentralized Finance (DeFi)

These days you have probably encountered with a business or a project that uses tokens as a means of financing. Tokens are the digital currency means by which the so-called Decentralized Finance economy circulates by way of blockchain protocols.

Blockchain itself is complicated enough to understand, so prior to immersing into the basics of tokenized projects, let us try to explain a little about how and why are they possible. What is the best way to eat an elephant?… Piece by piece.

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Decentralized Finance (DeFi)

The traditional financial system is organized in a centralized manner, and it involves a lot of intermediaries in order to function. It is regulated by centralized bodies that can be governments, central banks, or commercial banks. These bodies also often use your deposits to buy shares, lend money, and make other investments to earn profit and offer a partial amount of these earnings to you as interest.

The 2008 financial crisis exposed the problems related to centralization in our traditional financial systems and has encouraged the introduction of a decentralized medium. DeFi, an acronym for decentralized finance, provides an alternative for customers to tackle many of the issues related to traditional finance.

These issues range from autonomy to transparency and put the customers in a better position financially. It all started with the introduction of Blockchain and Bitcoin.

Blockchain

Blockchain is a technology that preserves records and ledgers that occur with any cryptocurrency. Blockchain is a series of information that is stored in 'blocks' and tied together through the usage of cryptographic validation to make a 'chain.' Every block contains details about the transactions like date, time, and the amount, and it also contains information regarding the people engaging in the transaction. Moreover, to distinguish blocks from one another.

- To distinguish blocks from one another, each block contains a hash. A hash is a unique code that is designed by an algorithm. It can be compared to a serial number of a receipt. The serial number allows you to distinguish between the two, even if they both state the same products being bought at the same time.
- When the transaction is made, the blocks become attached to the pre-existent blockchain and become public knowledge.
- Decentralized applications are leveraged on these blockchain technologies.

Cryptocurrencies

Cryptocurrencies are digital cash independent of banks, for that reason, being called a decentralized currency. They are stored on a digital ledger known as a This blockchain maintains a record of all of the transactions by having a distributed network of people with running computers to verify these transactions.

When a transaction takes part, the receiving end of it owns the established amount through a private key.

Decentralization – In a decentralized network, there is no 3rd party that owns your assets.

Now, where does this digital cash come from? There are two types of supply when it comes to cryptocurrencies.

- Through mining: Bitcoin has only 21 million bitcoins that can be mined in total. A bitcoin is a cryptographic problem that, when solved, turns into one Bitcoin. As of Aug, 2021, 18.77 million bitcoins have been mined, which leaves roughly 2.3 million yet to be introduced into circulation.

- Through minted supplies: The creators of the cryptocurrency decide the maximum amount of supply of that cryptocurrency and produce it on demand.

Just as the world operated under a gold standard, what drives a cryptocurrency's price is supply (which is scarce when the supply has been maximized) and demand. Cryptocurrencies are considered an asset class. They are also spendable, contrary to what most think. For example, as of 2021, you can pay through Paypal using Bitcoins. You can also buy things with a crypto card that converts cryptocurrency into fiat money.

Bitcoins

The original crypto asset is basically a ledger (its blockchain) that is decentralized because the transactions are recorded in databases on many different computers. That single record (stored across many databases) is secured with cryptography and the computers keep tabs on each other to make sure it hasn't been tampered with. No single party is in charge, so it's nearly impossible for someone to go rogue and change the rules that govern the virtual coin.

Likewise, even if a government manages to prevent a bunch of computers from supporting bitcoin, the digital asset can continue functioning because other computers on the network retain a full record of transactions and can carry on running the show.

For reasons expressed above, Bitcoin is considered digital gold. It is considered an appreciating asset.

Ethereum

Ethereum: is the second highest valued cryptocurrency, behind Bitcoin. Highest among all ALTcoins (coins other than Bitcoin). It is also an appreciative asset. It is also a way to buy others cryptos and the way to buy into ICO (Initial Coin Offering) as a crowdfunding platform.

The difference with Bitcoin is that Ethereum is a software platform, meaning you can create software and decentralized services (dApps).

Ethereum is so important because it introduced the smart contract technology.

ALTcoins

ALTcoins are all cryptocurrencies other than Bitcoin. These can be bought with Bitcoin (BTC), Ethereum (ETH), Bitcoin Cash (BCH), LiteCoin (LTC), Ripple (XRP) and Tether (USDT). Tether is a stablecoin, which means it is pegged to the US Dollar 1:1. They usually more volatile than Bitcoin. Every ALTcoin has its own community

DeFi takes this concept a step further. Decentralized Finance systems use blockchains like the Ethereum network, as most of the dApps are connected to it. The computers that provide processing power for Ethereum are rewarded with Ether, which is now the second-most valuable crypto asset behind Bitcoin. Ethereum's blockchain was created to host programs. Think of Ethereum as a decentralized computer that software developers can make applications (dApps) for, just like iOS or expanding further,

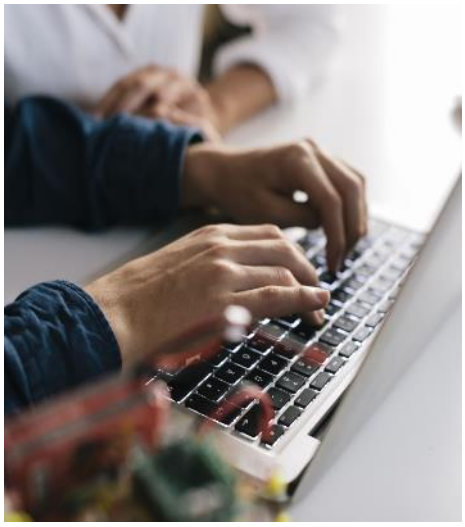
DeFi, enables people to access financial services like investing, lending, and trading without relying on centralized institutions. Such financial services are delivered through Decentralized Applications (dApps).

Most applications that call themselves "DeFi" are built on top of Ethereum, the world's second-largest cryptocurrency platform, which sets itself apart from the Bitcoin platform in that it's easier to use to build other types of decentralized applications beyond simple transactions. Although there are others like the upcoming Solana.

Decentralized Finance DeFi as an economic sector

Decentralized finance is an emerging ecosystem of financial applications and protocols (programmed projects) built on blockchain technology with programmable capabilities, such as Ethereum and Solana. The transactions get executed automatically through smart contracts (or computer code) on the blockchain, which includes the agreement of the deal, which automatically execute transactions if certain conditions are met.

For example, say a user wants his or her money to be sent to a friend next Tuesday, but only if the temperature climbs above 90 degrees Fahrenheit according to weather.com. Such rules can be written in a smart contract. Simply put and according to Wikipedia: "Decentralized finance (DeFi) is a blockchain-based form of finance that does not rely on central financial intermediaries such as brokerages, exchanges, or banks to offer traditional financial instruments, and instead utilizes smart contracts on blockchains, the most common being Ethereum."



That's important because centralized systems and human gatekeepers can limit the speed and sophistication of transactions while offering users less direct control over their money.

In other words, whoever you are transacting with, you are doing it directly, and not through a centralized institution (bank, exchange, or brokerage). Again, in the DeFi case, the transaction is executed by the smart contract, and not by these intermediators, and is only executed when all the checkpoints in the smart contract are verified by the protocol of these blockchain communities known as Decentralized Autonomous Organizations (DAO).

DeFi allows money to flow in and through the internet and program money, it creates digital rights, introduces efficiency, and creates a disruption in the current financial world.

DeFi platforms allow people to lend or borrow funds from others, speculate on a range of assets using derivatives, trade cryptocurrencies, insure against risks, earn interest in savings-like accounts, raise money through crowdfunding, engage in betting and more. Cutting out middlemen from all kinds of transactions is one of the primary advantages of DeFi. DeFi uses a layered architecture and highly composable building blocks.

Decentralized finance has captured only 5% of the crypto space, according to CoinGecko, but it has seen massive growth recently. There was $93 billion worth of DeFi assets in the crypto market as of June 2021, up from $4 billion just three years ago.

How are the transactions verified?

As an incentive for participants to actively participate in transaction validations, there is a way of earning rewards for holding certain cryptocurrencies. The process is called Staking, and it's a way to also generate gains by which participants with a minimum required balance of a specific cryptocurrency, lock their coins on a staking protocol.

The protocol then randomly assigns the right to one of these participants to validate the next transaction and, once the chosen participants validate the transaction, they are awarded some cryptocurrency in return.

The reason your crypto earns rewards while staked is because the blockchain puts it to work. Cryptocurrencies that allow staking use a "consensus mechanism" called Proof of Stake, which is the way they ensure that all transactions are verified and secured without a bank or payment processor in the middle. Your crypto, if you choose to stake it, becomes part of that process.

This system allows individuals to stake an amount to become validators. Whenever a new block is created, a validator is selected to validate the transaction on their node. If this process is successful, then the node is rewarded. When compared to traditional finance, they play the role of the bank.

Tokens into a business context

A project creates tokens in the context of a specific business model so that it can encourage user interaction and distribute rewards among its network's participants. These tokens have several uses, but they can be divided into security tokens and utility tokens:

- Security tokens are similar to traditional shares because their value is derived from a tradable external asset. They are issued in Initial Coin Offerings (ICOs) and, once regulators and governments decide on a regulatory framework, they will most likely be treated as regular securities.
- A utility token grants its holders access to a company's future product or service before it can be delivered, much like when a bookstore accepts pre-orders for a book that's yet to come out. Because their value isn't directly associated with ownership, these tokens could also be exempt from the laws that will probably be applied to their security counterparts. They can be a popular fundraising method where a company bypasses traditional institutional investors and venture capitals by going straight to its customers.

Difference between a Cryptocurrency and a Token

A **cryptocurrency** is a digital currency that uses cryptography to secure and verify its transactions, recording them in a decentralized and immutable ledger known as blockchain. They can be used as a medium of exchange or a store of value and are traded in many exchanges around the world.

Cryptocurrencies can be divided into two categories:

- Those that are supported by their own blockchains, like Ethereum and Bitcoin (BTC).
- Those that are built on top of other blockchains, also known as tokens.

A **token** is a unit of value issued by an organization, accepted by a community, and supported by an existing blockchain. Tokens are merely a subset of cryptocurrencies which are built on top of other blockchains. Tokens power the network of a said project.

For example, when you go to an arcade room, you pay with tokens. These tokens are not valued the same as the fiat currency they were exchanged, instead they have their own value. So, in order to belong to a network, you need to acquire the token it operated in.

In simple terms, a cryptocurrency operates independently and uses its own platform, a token is merely a cryptocurrency built on top of another pre-existing blockchain. All tokens are cryptos, but not all cryptos are tokens.

Token transactions using blockchain

Initial Coin Offerings (ICOS)

ICOs are a type of crowdfunding, and they're often used to raise money for open-source software projects. In exchange for capital, ICO investors get a unique token that might give them access to the software's special features

Non-Fungible Tokens (NFTS)

- NFTs are kind of like a limited-edition trading card—only online. Just as blockchain enables users to prove ownership of their bitcoin holdings, so too does it enable people to make unique digital assets like collectibles and art. Some examples of these transactions: https://decrypt.co/62898/most-expensive-nfts-ever-sold.
- NFT market is just staring, sectors like gaming will be benefitting plenty from this disruption. Imagine that Neymar designs his own shoes, exclusively for FIFA (the videogame), on a limited or exclusive edition. Those shoes can sell for hundreds of thousands or even millions. Players would acquire them using the game`s digital currency (FUT). In order to be limited, and not hackable, it uses a cryptographic transaction (hence the blockchain).

ICOs gave startups and software developers a way to raise money without the help of an investment bank or the backing of a venture capital firm. Likewise, NFTs can give musicians and visual artists a new way to monetize their work.

DeFi Service Projects and Use Cases

Most DeFi projects or protocols can be categorized into these main project types:

Descentralized Exchanges

Known as Dexes, are crypto currency exchanges that allow you to trade currencies without an intermediary. One example and one of the leading Dexes is Uniswap (an automated market maker protocol that runs on Etherum).

Lending Platforms

Decentralized finance allows anyone to borrow or lend cryptocurrencies. Users can earn interest yield when they loan their assets.

They can also borrow cryptocurrencies by using their own funds as collateral. CoinLoan, Lending Block and AAVE are leading cryptocurrency lending protocols.

Savings

- Like with a traditional savings account, you deposit the money you want to save in a bank and cannot withdraw it for a set amount of time, although at a very low interest. Crypto-saving works similarly, but the benefits overshadow those of a savings account in a traditional bank.
- There are Apps like compound that allow participants to create a network of people to allow them to pool their money to earn interests. borrowers can take a loan from these pools. These borrowers are required to pay the collateral as security against the loan and are scheduled to pay interest back into the pool.
- There are far less limitations on withdraws.
- Because of the blockchain platforms provide more rigorous security for their assets.

Insurance

- Cryptocurrencies are tied into smart contracts, which can be vulnerable to hacks and other security breaches. This is the reason why the insurance sector has now set foot into the DeFi space.
- Insurance is meant to protect a customer from uncertain losses and provide a plan of risk-management in case of a financial loss. Cryptocurrency insurance is similar to insurance for any other asset and protects against various risks attached to cryptocurrencies.
- Technical risks: risks involved in the coding of smart contracts and development bugs.
- Liquidity risks.
- Admin-key risks: Admin-key could be considered as the master key to all accounts on a particular platform; if it is stolen, everyone on the platform is at risk of being robbed.

Derivatives

In traditional finance, derivatives are defined as a commodity that derives its value from an underlying entity. These underlying entities can either be interest rates, stocks, commodities, indexes, or currencies (in the case of DeFi, cryptocurrencies). Derivatives are essentially contracts that are designed and signed by two or more parties, mainly for risk management purposes, agreeing to the purchase or sale of an asset at a decided price in the future.

In decentralized derivatives exchange, the need for a broker is eliminated. Instead, these contracts and leverages are coded into smart contracts. Moreover, the transaction is completed on-chain when the decided terms of the contract are fulfilled.

Another reason that derivatives are used is to speculate the direction in which the prices of an underlying asset will move. DeFi derivatives include forwards, futures, swaps, and options.

BitMEX is one of the first platforms to introduce decentralized derivatives in 2014, and since Dapps like Binance and Huobi have followed suit.

Asset Management

DEFI protocols are the future of finance but unfortunately, unless you are deeply immersed in the space, many potential investors don't have an idea of what protocols are worth following let alone what are worth investing in.

The process of buying into a DeFi asset requires climbing a steep learning curve. Having a wallet and having to fund a separate crypto account is foreign and intimidating to the average investor.

In the past year alone, we've seen a number of products offering different ways to either track, manage or hedge exposure through a suite of various DeFi projects in the lending, DEX and derivatives sectors.

The common theme is that of accessibility, ultimately making it easier (and safer) for DeFi users to keep track of their ecosystem interactions in a suite of intuitive dashboards and interfaces.

- Some key characteristics:
  - **Non-custodial** – Ownership of the underlying assets is never revoked and tends to live in the wallet being used.
  - **Composable** – Many of the top Asset Management projects connect to a wide number of DeFi projects , creating an end-to-end DeFi experience.
  - **Automated** – The growing number of Asset Management tools are automated, meaning rebalances, collateralization, and liquidations can occur seamlessly without user interaction
  - **Globally Accessible** – Asset management tools are accessible to anyone regardless of their location or tax bracket.
  - **Pseudo-anonymous** – Asset Management products often connect through a wallet address, meaning that identity is optional to those who wish to share it.

Real assets:

Its is now starting to fly but over the past 2 years some of the DeFi assets also include private companies, real estate as well as hedge fund shares. Such types of assets generally feature additional growth and income mechanisms, subject to algorithmic allocations alongside the benefits of transparency in Ethereum. What would happen is that real asset projects would raise funds through an ICO. Like in an IPO scenario there would be a secondary market for these tokens.

- **Assets tokenization**: Help to enable organizations to dematerialize assets in the form of tokens that are legally compliant via a decentralized blockchain that are digitally accessible for investors.
- **Payment solutions:** Eliminating central authorities to offer a faster, efficient and more transparent payment systems to the unbanked population.

Bottom Line and DeFi Metrics

Understanding Blockchain, Crytpo and DeFi concepts allow us to understand that at the end, DeFi is about providing financial services from a decentralized platform (meaning no intermediation). To enter the DeFi market, whatever the project one would one to buy in, one should acquire a project token. That is, the currency in which the project transacts in (cryptocurrency). For example, Ether for Ethereum. A good way to analyze tokenized projects would be to know:

1 | Who is behind the project? One way to do so is to find out if there are any known VCs behind the project.

2 | Know if it's a reliable product trusted by many developers. The more applications that are built on that blockchain, the better.

3 | There are KPIs that are more market aligned like:

- Total Value Locked (TVL): The most popular metric for DeFi is the TVL metric. TVL represents the total amount of assets locked in the various DeFi applications smart contracts. This metric is used to assess hoy much crypto is committed to a smart contract of a project. The total value locked in a protocol can be measured using crypto or USD. In a particular marketplace, TVL is the sum of total liquidity in the liquidity pool. TVL is often used in combination with the market cap, which is calculated by multiplying the value of tokens by their price in USD. As a rule of thumb, the lower the TVL, the more undervalued a DeFi project is. However, there's more to consider besides the TVL when making a decision.

- Token Supply on Exchanges: While DeFi aims to decentralize financial operations, it's still essential for you to check the supply of tokens on centralized exchanges. If an abundance of tokens is held at the exchange, it points towards a significant sell-off in many cases. As a result of such a sell-off, the token tends to destabilize. Thus, it's imperative to look for these signs while performing due diligence on your cryptocurrency. However, things don't always turn out this way, and you also need to weigh token supply and other DeFi indicators when making a decision.

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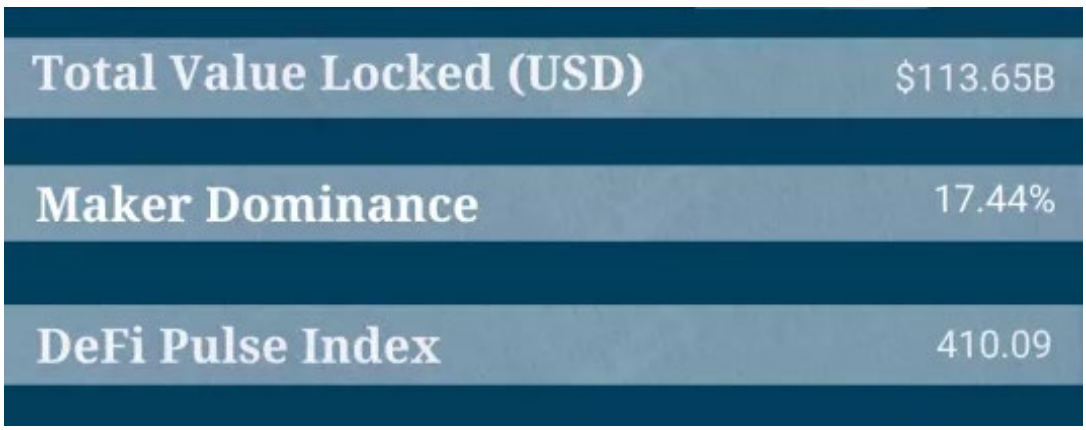
- Token Balance Trends/Movement: The token supply doesn't always indicate a large number of withdrawals from wallets. You also have to look at the balance movements of the token on the exchange. Keep in mind that it's characteristic of crypto trading to move tokens from personal wallets to exchange accounts, and vice versa. Only a highly uncharacteristic or significant movement should tip you off when making decisions about DeFi tokens.

- Inflation Rate: Most DeFi protocols have rules in place to ensure the token supply doesn't cause inflation, leading to the devaluation of the DeFi tokens. However, this doesn't apply to every token. While some projects don't clearly explain the mechanism of maintaining a limited token supply, others don't even have any coherent information on the subject. Therefore, when you're selecting a protocol, look at whether a token is susceptible to inflation. If the answer is yes, it's best to stay away.

- The Growth of Unique Addresses: If a large number of unique addresses are holding a particular token, that could mean it's growing in popularity and is being adopted massively. As an investor, you can use this as a metric to determine the relevance of an asset. However, it's also important to note that a single user can create many addresses, keeping their funds in separate accounts. That could give the false impression of a token being widely used. So, be wary when using this metric. It's best to use it along with other key performance indicators, as discussed in this article.

Key Players According to DeFi Pulse

DeFi KPIs and Indexes



DeFi KPIs and Indexes

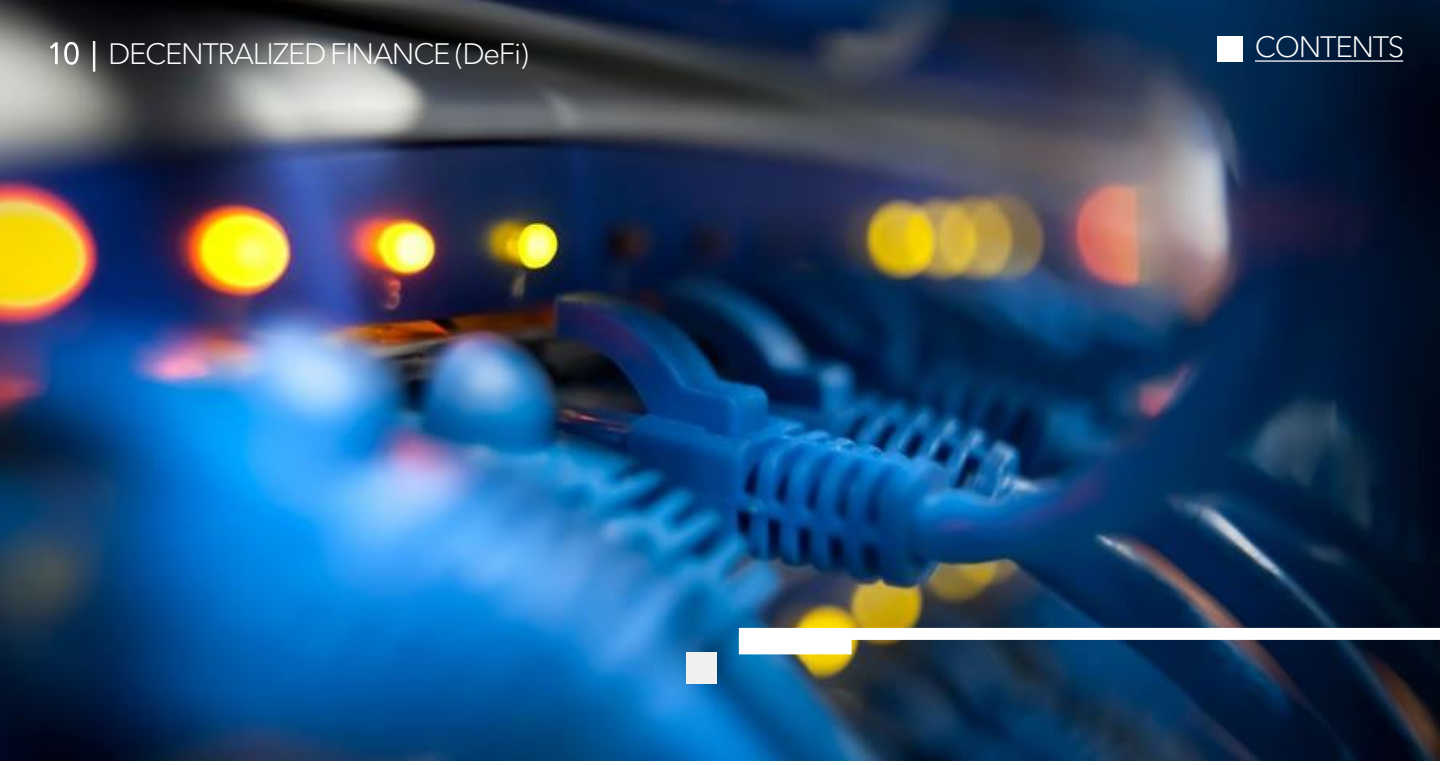
Top Projects by TVL

DEFI PULSE	Nombre	Chain	Category	Locked (USD)	1 Day %
1.	Maker	Ethereum	Lending	$19.83B	7.82%
2.	Curve Finance	Multichain	DEXes	$17.00B	1.17%
3.	Aaave	Multichain	Lending	$14.82B	9.78%
4.	InstaDApp	Ethereum	Lending	$12.53B	0.50%
5.	Compound	Ethereum	Lending	$12.24B	5.34%
6.	Convex Finance	Ethereum	Assets	$10.24B	0.74%
7.	Uniswap	Ethereum	DEXes	$8.19B	7.48%
8.	Sushiswap	Ethereum	DEXes	$5.29B	3.36%
9.	yearn.finance	Ethereum	Assets	$4.94B	5.19%
10.	Liquity	Ethereum	Lending	$2.64B	10.78%

Key Players According to DeFi Pulse

Top Derivatives Projects by TVL

DEFI PULSE	Nombre	Chain	Category	Locked (USD)	1 Day %
1.	Synthetix	Ethereum	Derivatives	$1.88B	7.07%
2.	dydx	Ethereum	Derivatives	$1.05B	-1.73%
3.	Nexus Mutual	Ethereum	Derivatives	$777.3M	5.41%
4.	Ribbon Finance	Ethereum	Derivatives	$190.3M	-0.45%
5.	Opyn	Ethereum	Derivatives	$188.6M	12.36%
6.	DerivaDEX	Ethereum	Derivatives	$66.1M	3.64%
7.	UMA	Ethereum	Derivatives	$56.9M	18.50%
8.	Pendle Finance	Ethereum	Derivatives	$34.2M	-4.98%
9.	HEGIC	Ethereum	Derivatives	$23.9M	5.14%
10.	BarnBridge	Ethereum	Derivatives	$23.0M	-12.38%



Key Players According to DeFi Pulse

Top Cryptocurrencies as of November 9th, 2021, 18:00

		Market Cap	Price
1.	Bitcoin-BTS	1.088,893 bn€	57.715,00€
2.	Ethereum-ETH	490,120 bn€	4.130,16€
3.	Binance Coin-BNB	93,405 bn€	555,49€
4.	Cardano-ADA	63,052 bn€	1,96€
5.	Solana-SOL	62,966 bn€	207,90€
6.	XRP-XRP	50,681 bn€	1,08€
7.	Polkadot-DOT	46,467 bn€	44,36€
8.	Dogecoin-DOGE	31,554 bn€	0,2383€
9.	Shiba Inu-SHIB	26,299 bn€	0,000048€
10.	Terra-LUNA	17,660 bn€	44,10€

11 VALUING 21ST CENTURY BUSINESSES

Valuing 21st Century Businesses

As we have said at the beginning of this series, 21st Century businesses require a new way of valuing them. Also, since their DNA is to grow exponentially, making profits might not be in their current radar.

So, to value these companies, we need to understand and take the metrics that best drives value for them. These drivers will eventually directly affect cash flow generation when these companies mature.

Performing a valuation

Our intention with this part is not to provide a valuation master class, but to explain how to identify these value metrics and why.

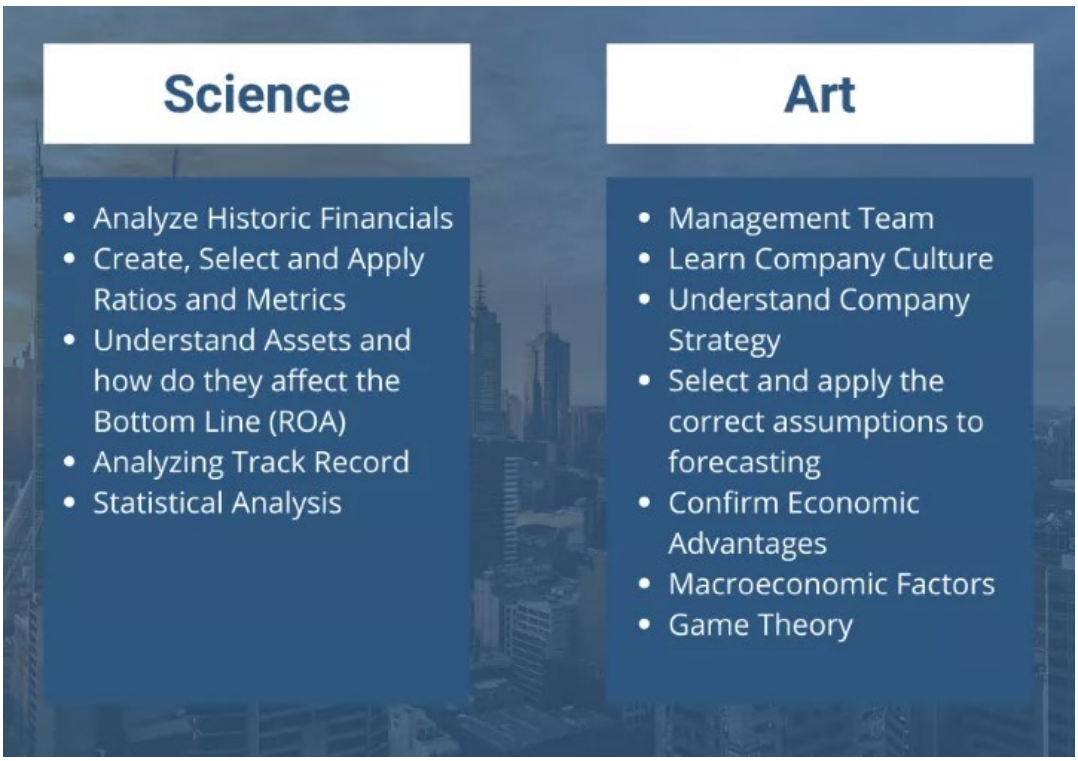
Why do we perform valuations on a business?

- To go through a company sale process.
- Raise capital.
- Financial planning.
- IPO.
- Bankruptcy.

- Acquire a business.
- Make investment recommendation (buy/sell/hold).
- Internal business decision making.
- Valuing employees´ compensation and options.
- Litigation processes.

As seen, a valuation is done to address many company situations and at different stages. There are many accepted valuation methods that can be applied.

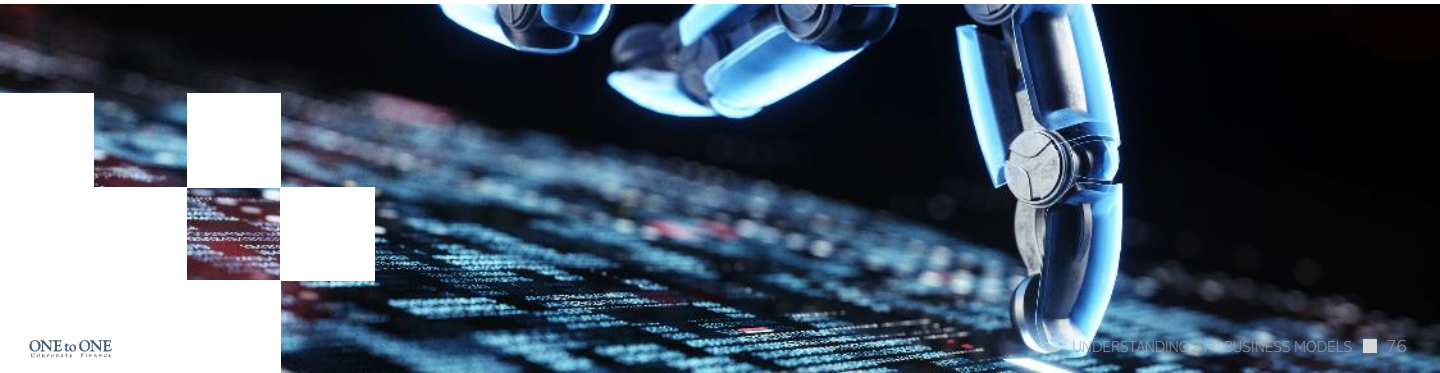
None of them is a straightforward winner when it comes to choosing one. It depends on many things. Hence, it is said that a valuation is both art and a science.



All of the above are just a few things that need to take into consideration when valuing a company. Furthermore, valuing a 21st Century company require of more art than science.

Valuation, in any business is based on expected future performance not past performance and involves:

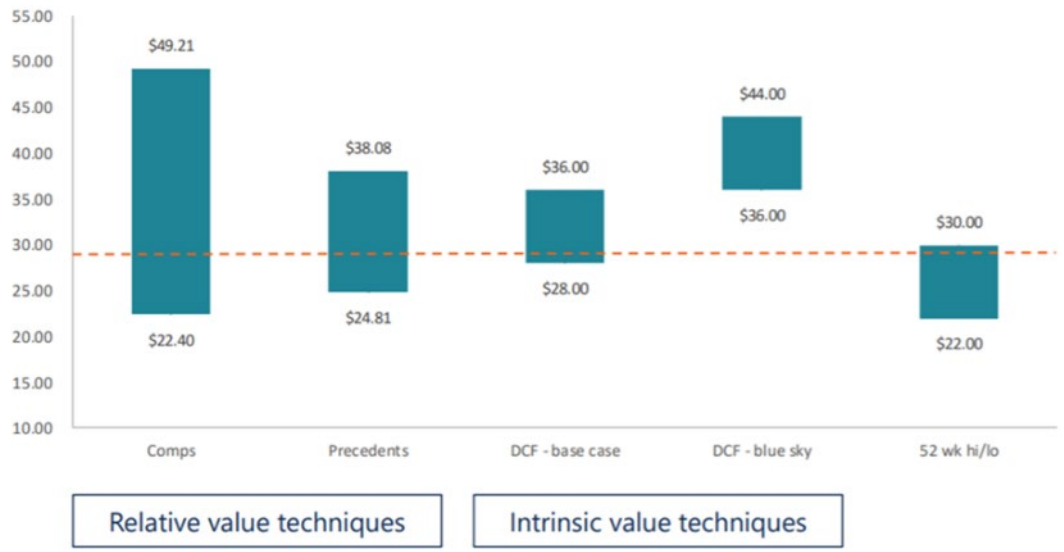
- Financial analysis
- Market and operation architecture projections to establish financial conclusions
- Industry and economic analysis
- Applying generally accepted valuation methods.



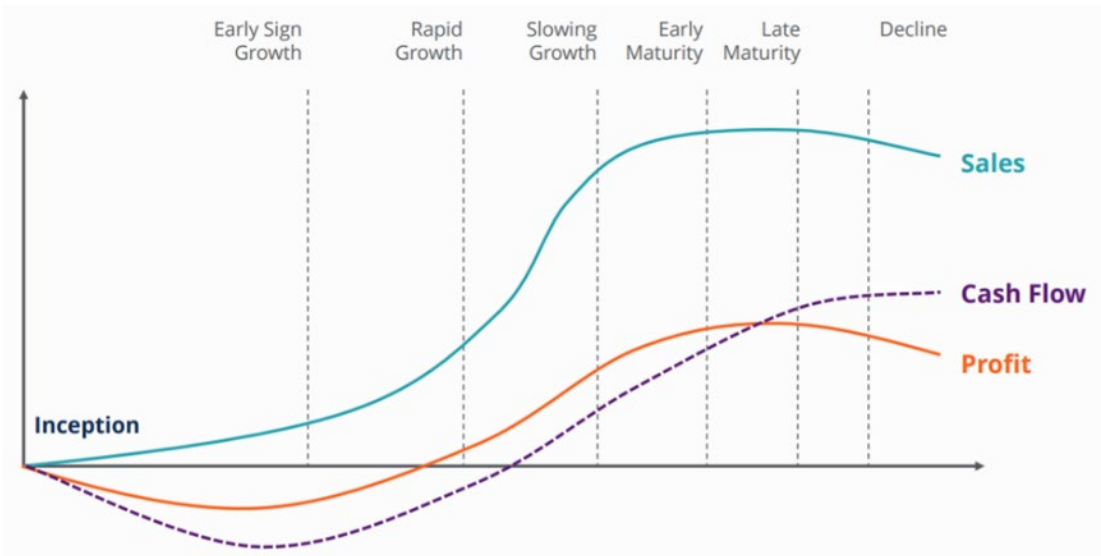
Universal rule

A UNIVERSAL RULE- The market dictates the value of a company. A valuation is a way to back arguments. So, it is in the eye of the beholding valuator that the true valuation approach is selected. Usually, various valuations methods are used to assess each argument. It is regularly represented in what is known a Football Field graph.

Valuation Summary – Equity Value per Share ($)



Valuation applied to 21st Century Business Models



Valuing 21st Century Businesses: conclusion

21st Century businesses are called that because most of them started operations this century. Most of them, as expressed in the Introduction part of this series, have not reached maturity yet.

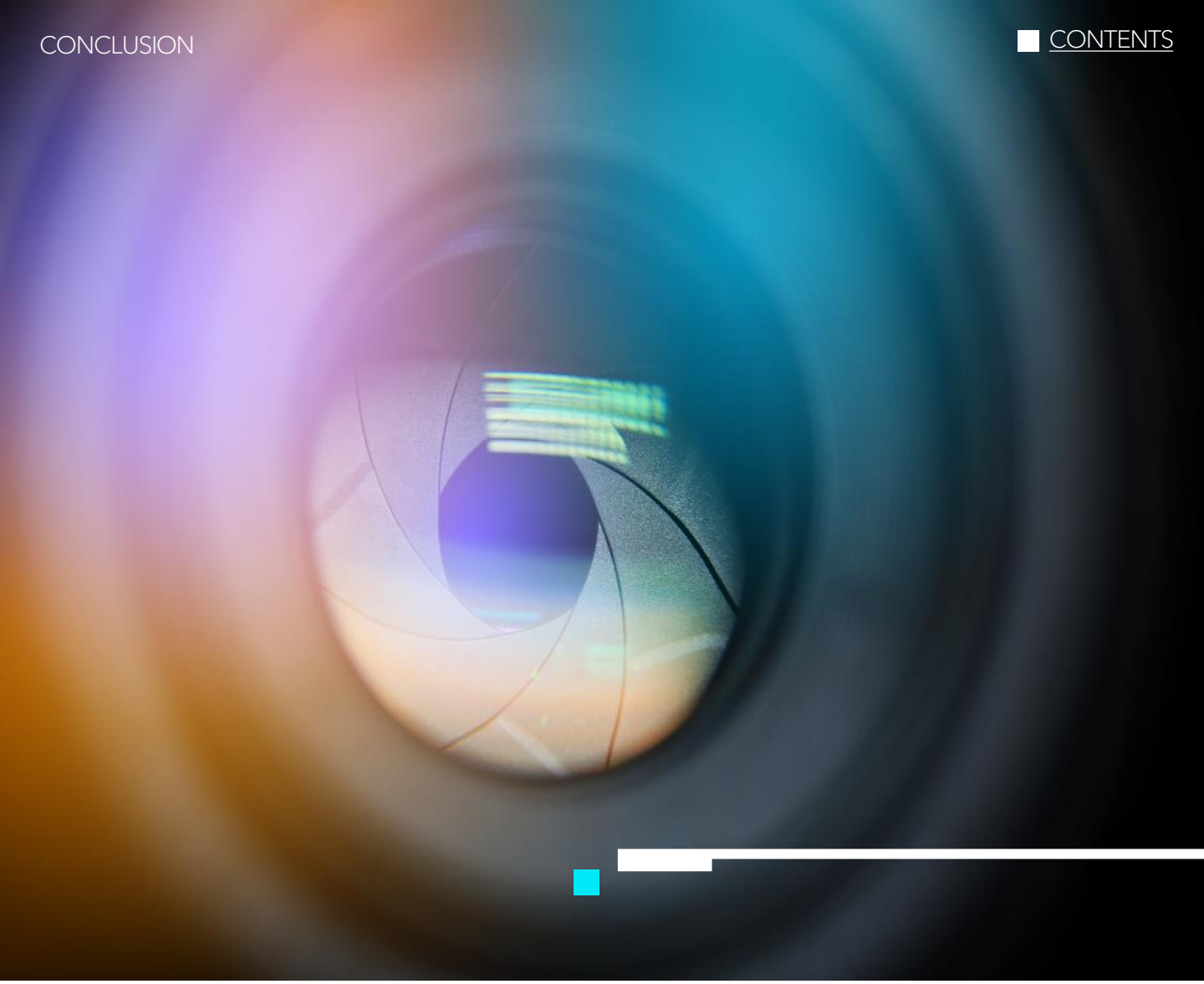
In fact, at least the ones that belong to the models explained in this series, many of them are still in growth stages.

As seen in the graph above, growth company barely generate profits, and sometimes negative cash flows. Does that mean that these companies are failing? NEGATIVE. By now, we should understand that the real value of these companies is in the continuous increase of their customer / userbase, with a credible thesis that this will convert into a cash flow generating machine in the long run. While engaging customers / users, 21st Century companies test various revenue generating ideas until they hit jackpot.

Based on this, the valuation methods that are best applied to 21 Century businesses are market approach methods.

There could be times when **cost approach methods** are applied, especially when valuing a technology or certain intangibles.

Multiple	Variations	Characteristics	Life cycle stage
User Value to # User	Price to Engaged User Value	• No cash or profit • No pattern of sales is clear, just a user strong user base • Sometimes used when the value of the user is its data	• Early sign growth • Rapid growth
Price to sales	**Data value** **Price to ARR** (for industries where recurring revenues are the most valuable metric- Ex; SaaS) **Price to GMV** (just as a benchmark, be aware that GMV are not sales)	• No cash or profit • Pattern of sales clear • Ignores operating economics • Ignores capital structure	• Early sign growth • Rapid growth
EV to EBITDA	EV to EBIT	• Operating cash flow positive • Operating profit • Ignores capital structure • Ignores tax differences	• Slowing growth • Maturity
Price to earnings		• Stable operating economics • Stable capital structure • Profit and cash flow similar	• Late maturity



Conclusion

By now, I hope, we can all agree that 21st Century Business Models need a new way of being analyzed and understood for their true value. It is important for all players in the economic ecosystem around them to have a common communication channel. Investors and corporations, that invest and acquire 21st Century companies, need to understand the value that they present, present and future. After all, they will be analysing their return on investment. On the other hand, entrepreneurs need to communicate their company's value in a way that the investor or acquiror will perceive the value of their investment.

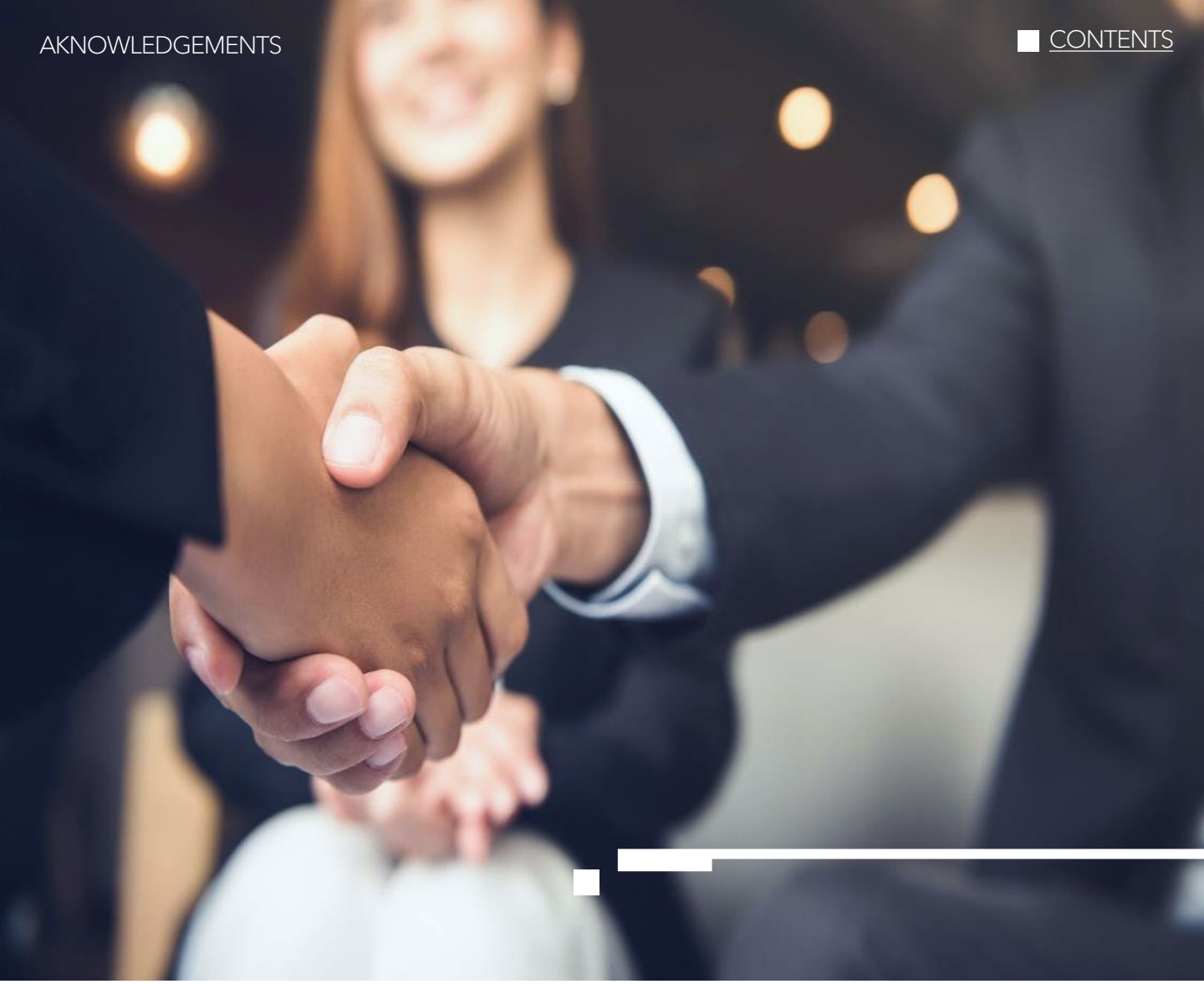
21st Century Business Models are aligned with the digital age. Hence, although there are many new business models, we have covered the most relevant as of 2021. We have explained how new customer demand and behavior in a customer driven age drive the success of these models. How they add value to customers and how this value is portrayed in business analysis, converted into kip's and translated into a financial language, so that investors and entrepreneurs are able to communicate about the value of a certain company.

Our goal has been always to show how to understand 21st Century business models in order to perform valuations that grasp the companies' real value. In most cases, and due to the drivers expressed, the value lies in the very first lines of the P&L. This is all related to, what is more related to the customer itself, revenues, and COGS. This value is better explained in the assumptions that result in the upper lines: revenues, gross margins, contribution margin and cost of customer acquisition.

If we understand how a business addresses customer needs, how it manages or project these upper line economics and how the KPI's that are communicated, then it will all make sense.

If you were a 21st Century Business Model valuations' sceptic, and now you understand what drives their valuation, our job has been gratified. If you are an entrepreneur and you have learned how to communicate the value of your company, we will both succeed.

If you would like to extend the conversation, learn more or are thinking of pursuing a corporate operation that involves the acquisition or fundraising process of a company with a 21st Century business model, I will be more than happy to do so. You can contact me at jose.ramirez@onetoonecf.com.



Acknowledgements

There are countless people who I need to be thankful to. I have been interested in the financing stages of both new and growth projects since the beginning of the 2000s.

Have had many mentors, along the way. One of them, late Cesar "Tito" Montilla, who mentored me in many things regarding corporate finance, who showed me that knowledge was meant to be spread and to find ways to express what

I am knowledgeable of. To my wife, who pushes me to find the better version of myself.

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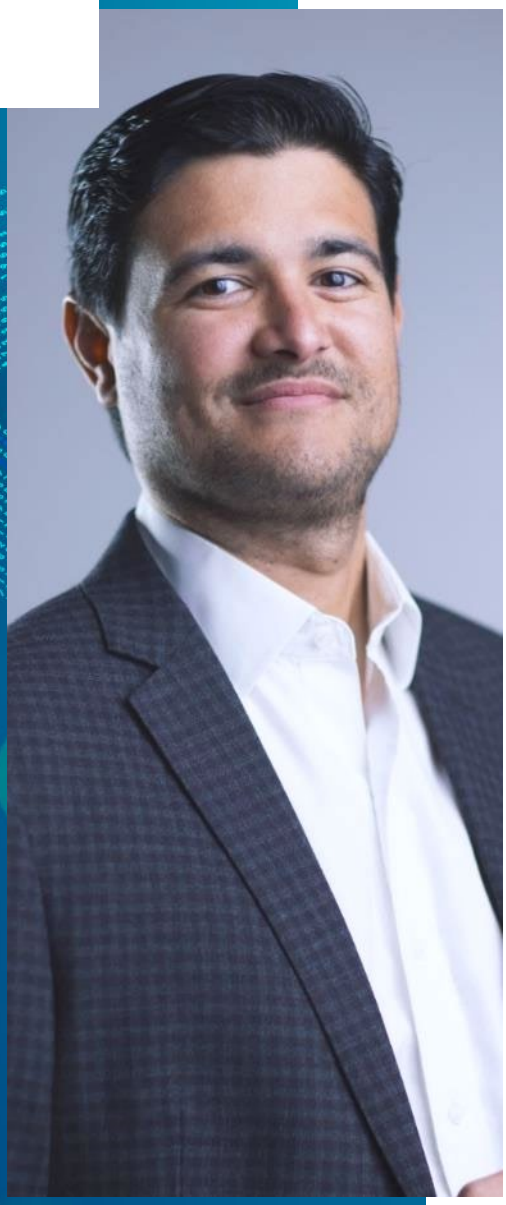
To the ONEtoONE Corporate Finance team and their support.

To all of you, Thank You!

— *José Ramírez*



José Ramírez Terc

José Ramírez has 12+ years of experience in corporate & venture development and specializes in 21st Century Business Models like SaaS, Enterprise SaaS, Marketplace, E-commerce, Platforms, Subscription-based, Data-driven, Content Creation & Entertainment Mobile App, Project Finance, Franchises, among others.

His background has led him to work with different verticals within a high-growth environment, understanding these companies' growth metrics and financial strategy.

Prior to being a Senior Manager at ONEtoONE led its origination department. He has been an associate partner at Spectrum Group, a consulting firm specializing in the business structuring, growth strategy, and financing modeling of emerging and growth projects as well as a partner in their Venture Capital arm. Has also been a corporate development manager of new business at Investment Skills Group, a private investment firm.

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