1
2
3
4
5

The EnterEdTech Project

https://www.enteredtech.eu/

Module 4

Financial Planning & Revenue Models in EdTech

Erasmus+

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Modules

1. Education Market
2. Product Market Fit & Evaluation
3. Marketing and sales
4. Financial Planning & Revenue Models in EdTech
5. Commercialisation, Marketing, and Pitching

4 Financial Planning & Revenue Models in EdTech

Objectives

Participants of this module should:

✓Understand the financial objectives of a startup

✓Distinguish between different types of monetization and funding

✓Be able to make calculations for your startup

✓Understand how financial accounting differs form managerial accounting

4 Financial Planning & Revenue Models in EdTech

Competences

- ✓ To be aware of the importance of the economic viability study for the business idea validation.
- ✓ To be aware of the major financial consequences of a business opportunity
- ✓ To conduct calculations: cost to design, operate, promote and price the product
- ✓ Understand different selling and pricing methodologies
- ✓ Become aware of funding opportunities for EdTech startups at national, EU and international level

Units of Module 4

- 4.1 Introduction to Financial Planning
- 4.2 Approaches to Monetization
- 4.3 Types of Monetization
- 4.4 Funding
- 4.5 The Financial Tree (Product/Service)
- 4.6 Financials 101

Unit 4.1
Introduction to Financial Planning

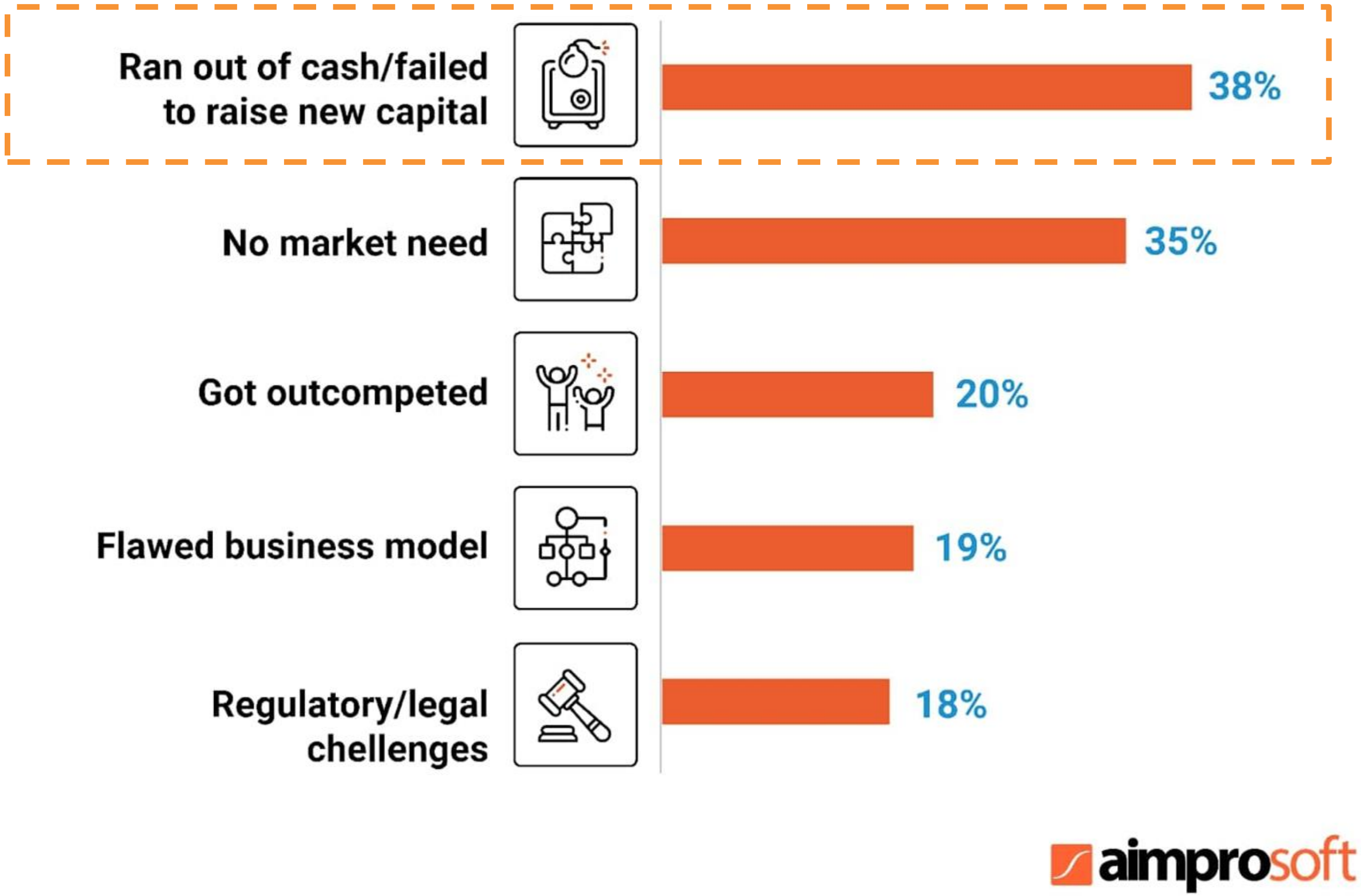
Objectives

In this unit, you will

- recognize the importance of financial planning
- understand the financial objectives of a startup
- understand the process of financial management

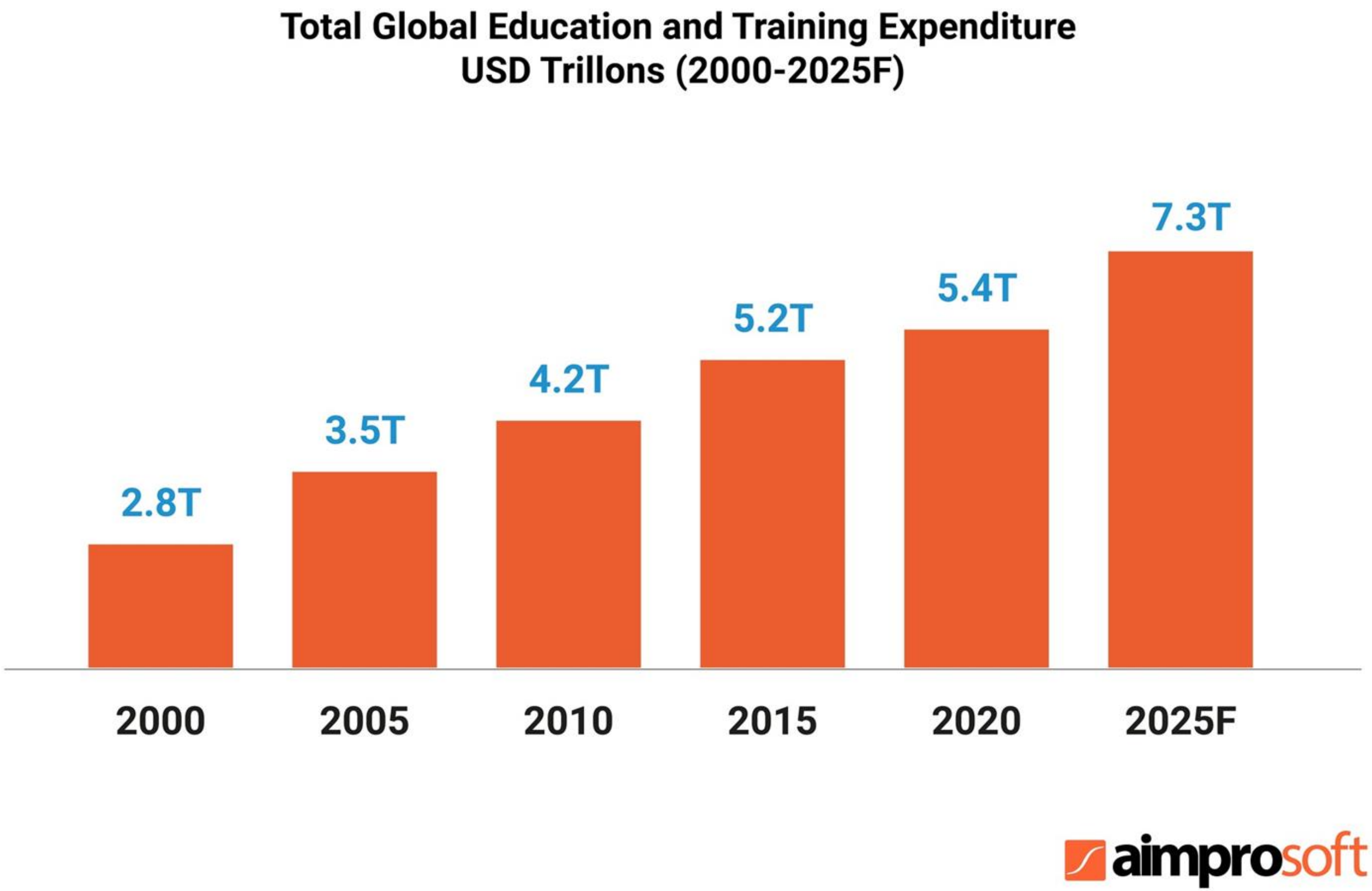
Erasmus+

Why do Startups Fail?



(How to Start an EdTech Company Successfully - Aimprosoft, 2021)

Global Education & Training Expenditure



(How to Start an EdTech Company Successfully - Aimprosoft, 2021)

Introduction to Financial Planning

- Financial management deploys funds optimally towards hiring talend, playing suppliers, investing in research and development and other initiatives that will drive profitable customer acquisition and retention
- Effective financial management can help your business operate smoothly, improve profitability and prepare for long term sustainable growth.

"If you don't have control of your finances, you don't have control of your business"

Financial Objectives of a Startup

- Most entrepreneurial firms have four main financial objectives: profitability, liquidity, efficiency, and stability
- Profitability is the ability to earn profit. Startups are not often profitable during their first one to three years
- Liquidity is a company's ability to meet its short-term financial obligations. To do so, a firm must keep a close watch on accounts receivable and inventories
- Efficiency is how productively a firm utilizes its assets relative to its revenues and its profits.
- Stability is the strength and vigour of the firm's overall financial posture. Calculated for example by dividing the firm's long-term debt by its shareholder's equity (debt-to-equity ratio)

Profitability → A company's ability to earn profit

Liquidity → A company's ability to meet its short-term obligations

Efficiency → How productively a firm utilizes its assets

Stability → The strength and vigor of the firm's overall financial posture

The Process of Financial Management

1. Preparation of financial statements

- Income statement
- Balance sheet
- Statement of cash flows

2. Preparation of forecasts

- Incomes
- Expenses
- Capital expenditure

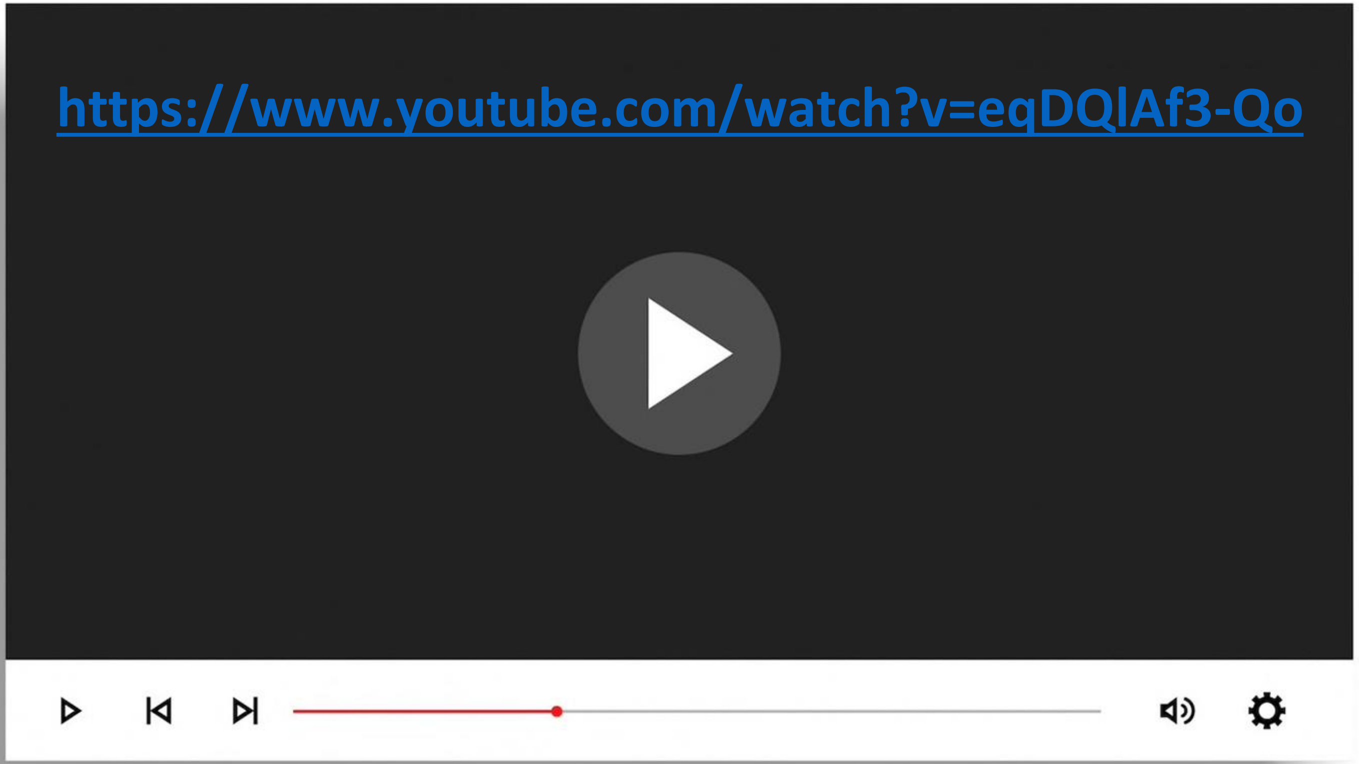
3. Preparation of financial projections

- Financial Projections income statement
- balance sheet
- statement of cash flows

4. Ongoing analysis of financial results

- Ratio analysis
- Measuring results versus plans
- Measuring results versus industry norms

The Startup Finance Pyramid



Unit 4.2
Approaches to Monetization

Objectives

In this unit, you will

- distinguish between the three monetization approaches
- Understand the difference between B2B, B2C and B2G
- be able to choose the monetization approach

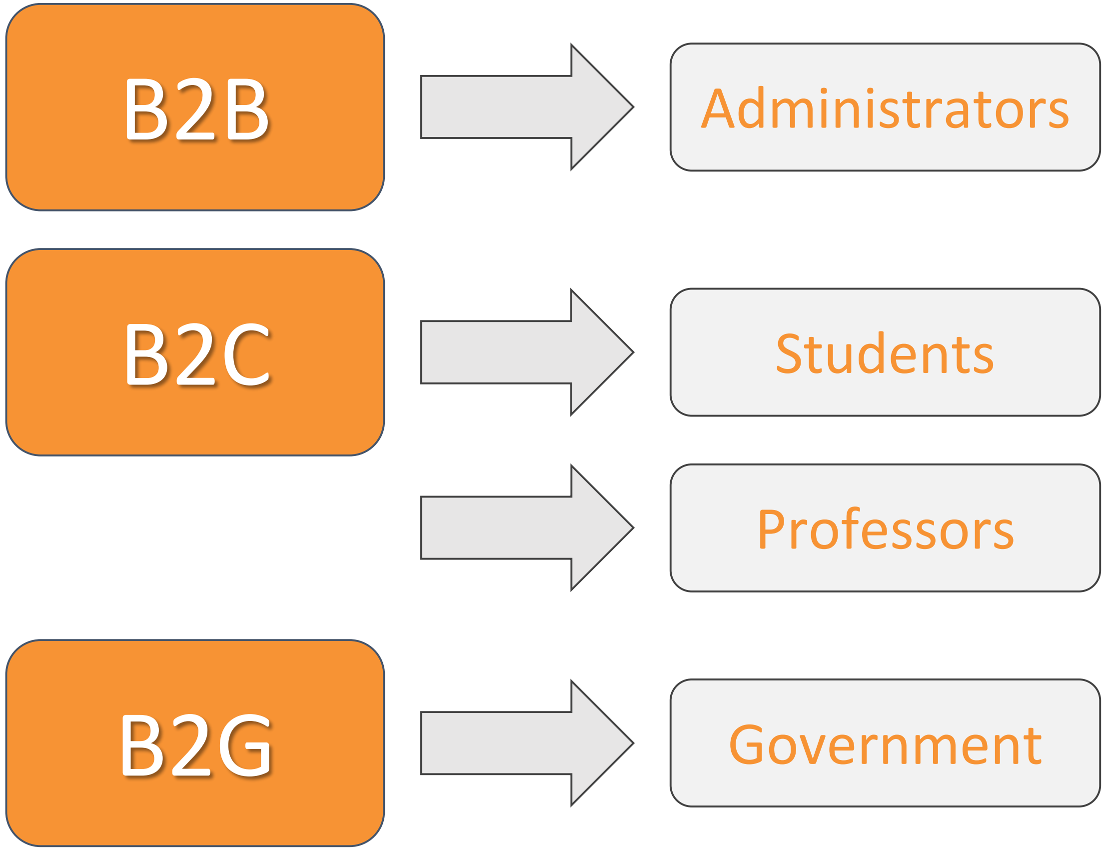
  for your startup

Approaches to Monetization

Edtech startups ponder carefully in choosing the approaches to monetization. The monetization method influences who you hire, which features you include, how fast you build the product, and most importantly, who your investors are. There are **four monetization approaches** in edtech that companies manage to scale:

- **Student-centric**
- **Professor-centric**
- **Administrator-centric**
- **Government-centric**

Each of these is oriented toward serving different customers - the people who make decisions and pay for the solutions. **By changing the customer, you're changing the approach, and thus, your entire company.**

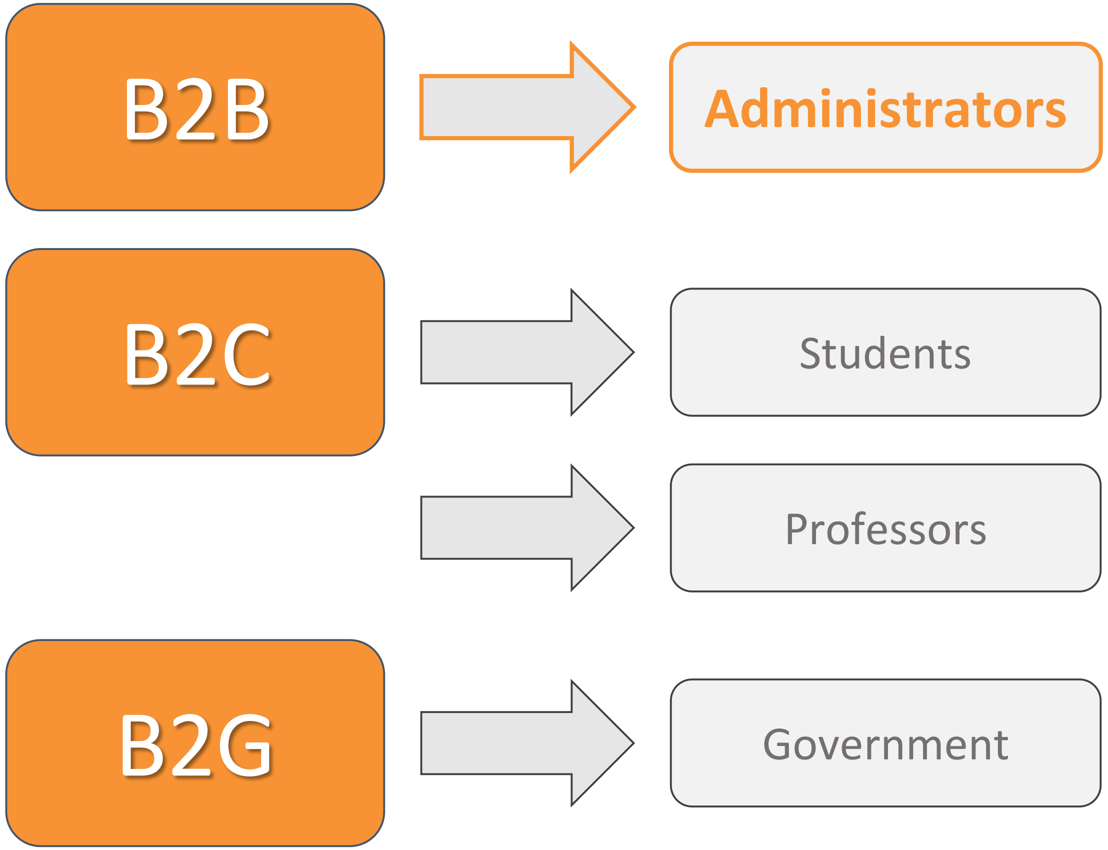


Approaches to Monetization: Administrators

Several of the largest edtech companies monetize by introducing their product to administrators. The most prominent companies that choose to sell to admins are **Blackboard and Canvas**.

Such an approach is transparent: edtech startups persuade university and school admins, notably CEOs, CIOs, and CTOs, to use and pay for their solutions. The receipt of success is finding a proper way to reach administrators and make them like your software.

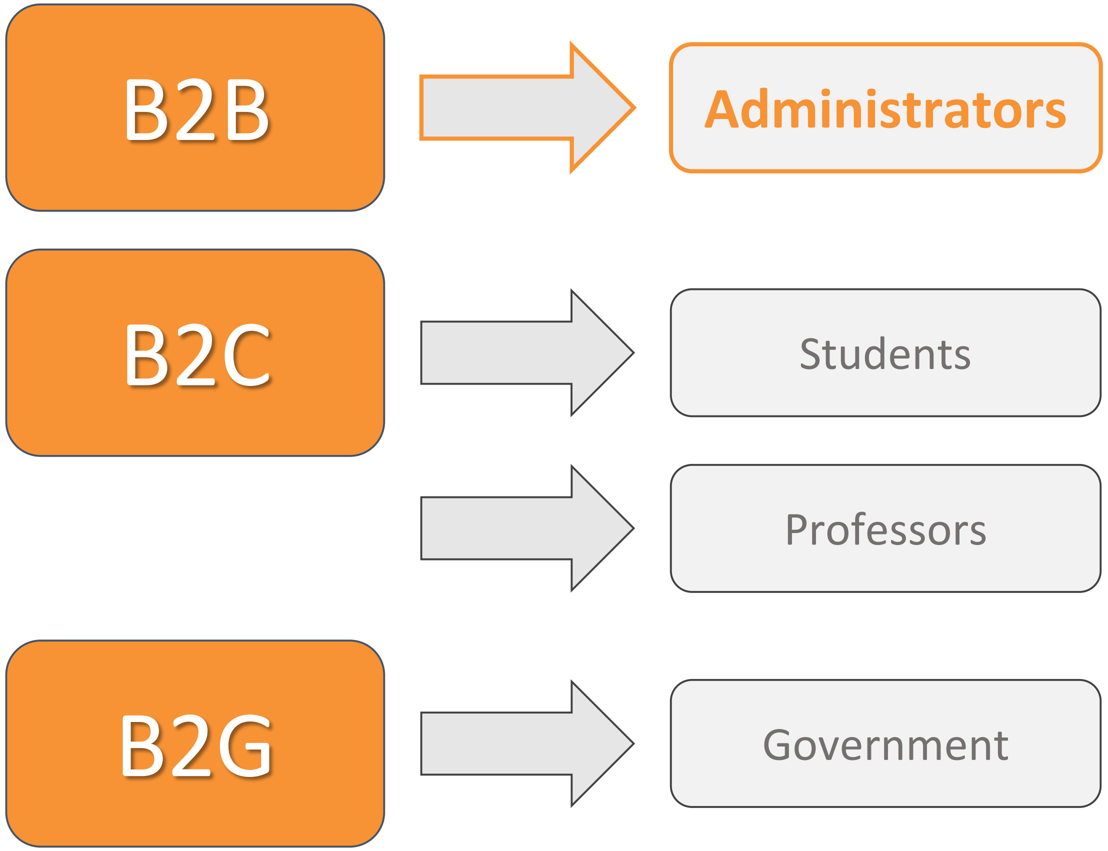
Besides, campus CEOs, CIOs, and CTOs are such types of customers who tend to make considerate and careful decisions. They weigh a lot before starting a partnership with the edtech startup.



Approaches to Monetization: Administrators

+ As follows, using this approach, you'll go wrong if you invest in gamification of your software and exceptional features.
– Blackboard proved that it is necessary to invest in skillful salespeople and customer-facing account managers to establish and enhance a proper relationship with campus administrators.

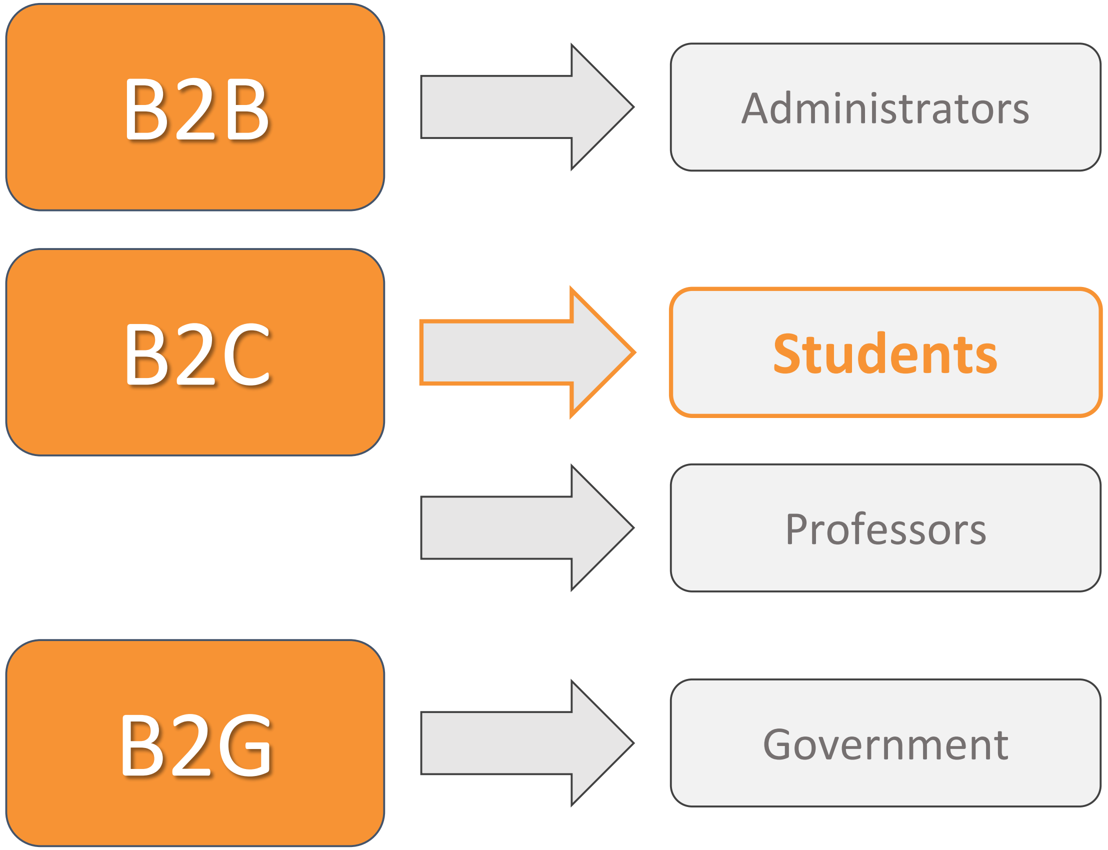
So, if you are choosing whether to invest 300K into exclusive features or to host a fancy webinar for admins, the decision will be obvious for an administrator-centric approach. You choose everything that connects you better to the higher-ed CEOs, CIOs, and CTOs.



Approaches to Monetization: Students

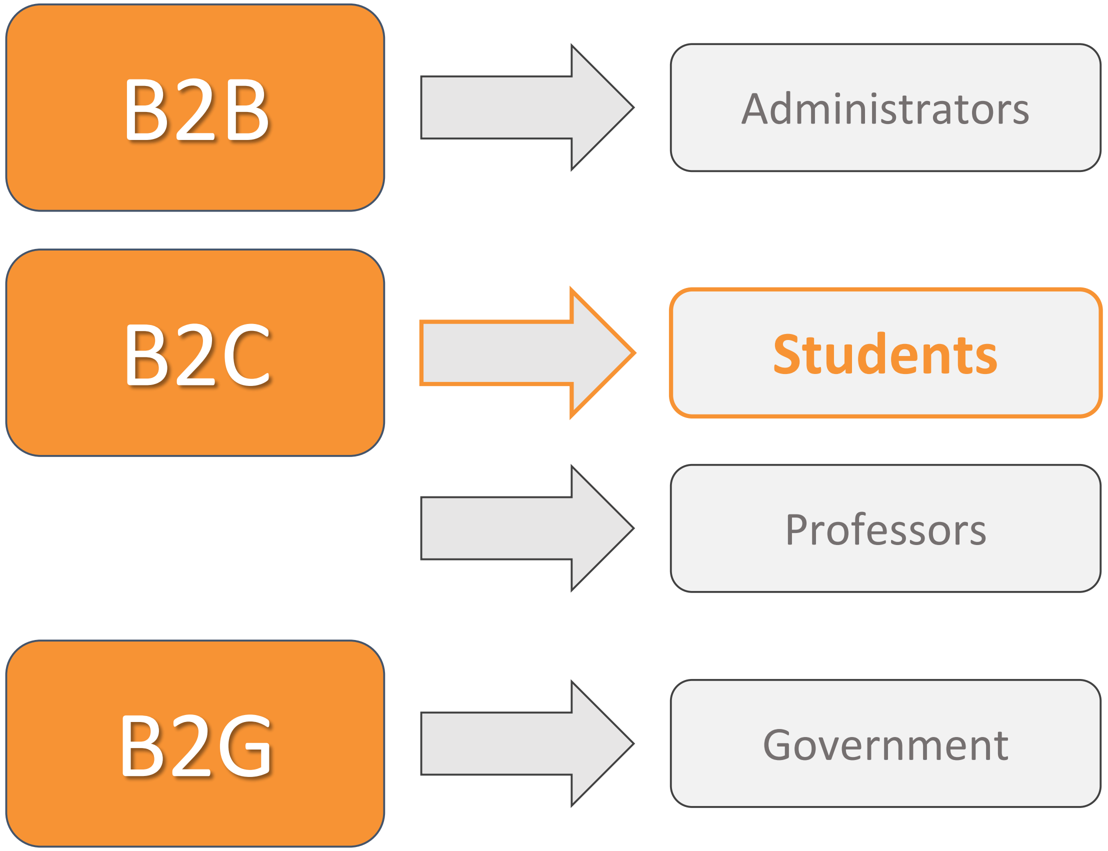
Edtech companies like **Chegg, CourseHero, and StudySoup** choose students as their customers. They monetize their business by directly offering their solutions to students who are the end-users.

+ From first sight, the student-centric approach looks attractive and straightforward. We all were students one fine day and must understand what a student's life looks like.
– Yet, there is one crucial drawback in selling your edtech software to students. You'll have to deal with customer churn every year as 30% of students stop studying annually.



Approaches to Monetization: Students

+ However, this challenge can be easily solved: become or hire a marketing pro who is able to introduce your product to new students every year and skyrocket the accounts.
− Sometimes, students want to get an “A” instead of actual knowledge. It also complicates the monetization of an edtech startup. If your primary goal is just to offer a tool for studying, you’ll need to look for a specific group of students who are interested in learning or try to align and create ways for students to get an “A” without effort.

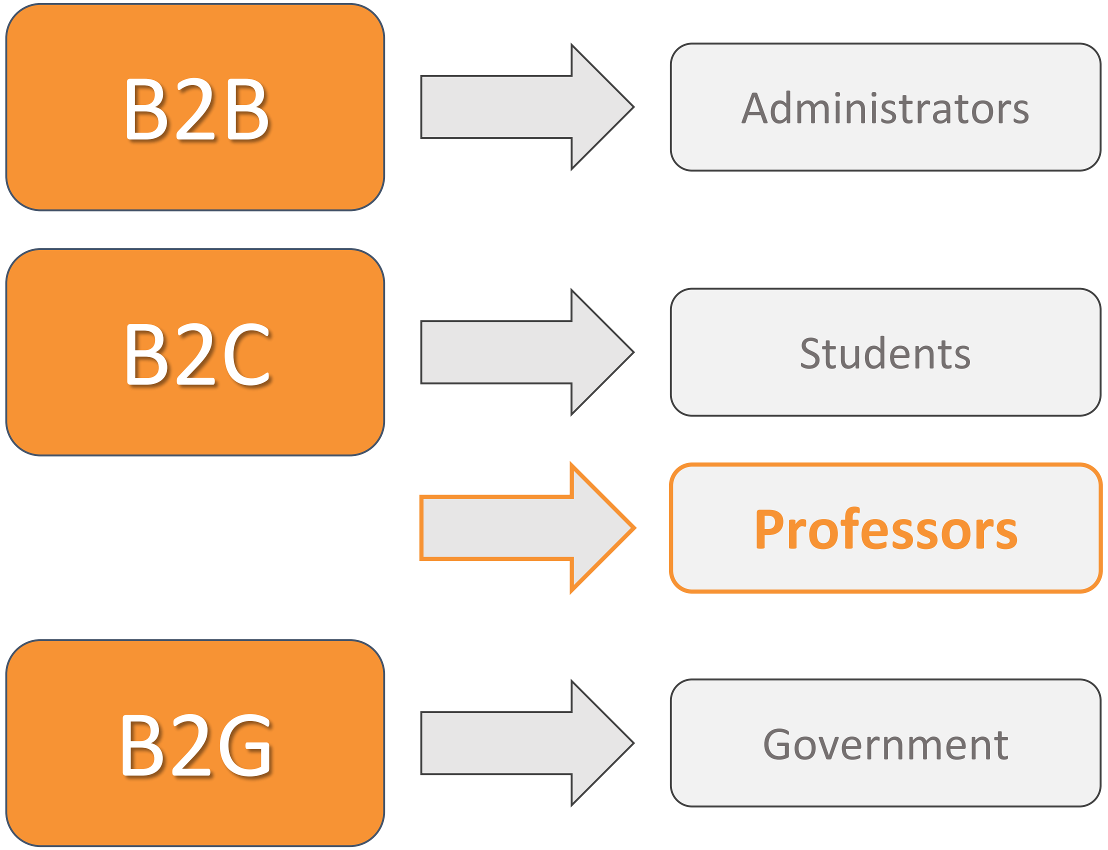


Approaches to Monetization: Professors

One more approach to monetizing edtech startups is to sell to professors. **TopHat and iClicker** are examples of companies that benefit from the professor-centric approach.

Professors are always interested in helping students and improving learning. Edtech startups assist professors in freeing up their time to focus more on engaging with students and optimizing the learning process. These are the reasons professors can be attracted to your product.

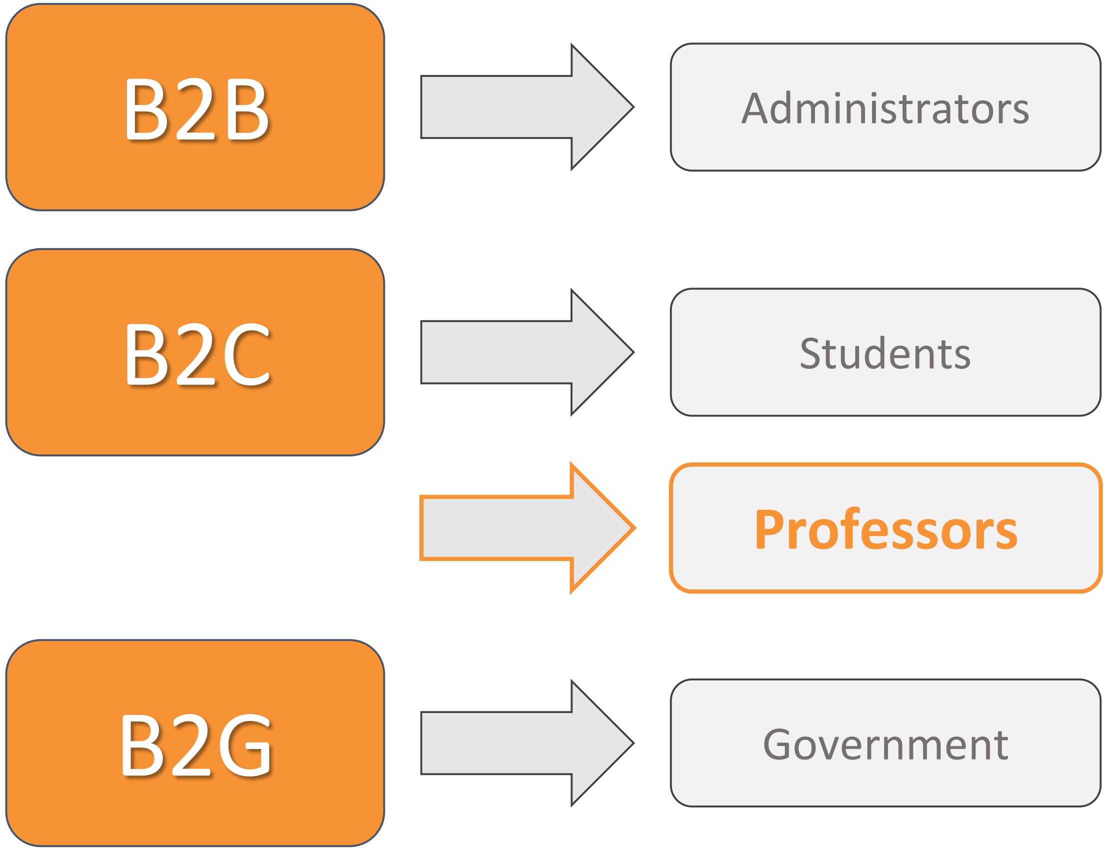
In simple words, if you want to sell your edtech solution to the professor, focus on how your software actually improves teaching and learning.



Approaches to Monetization: Professors

- Still, the professor-centric approach isn't without stumbling blocks. In most cases, the obstacle is money. Faculties often lack the budget to pay for premium access to the educational platform.
+ Yet, the edtech startups that monetize their business by selling to professors offer several solutions to this challenge:
  - They provide basic plans for free
  - They allow passing the cost onto students if they can afford it

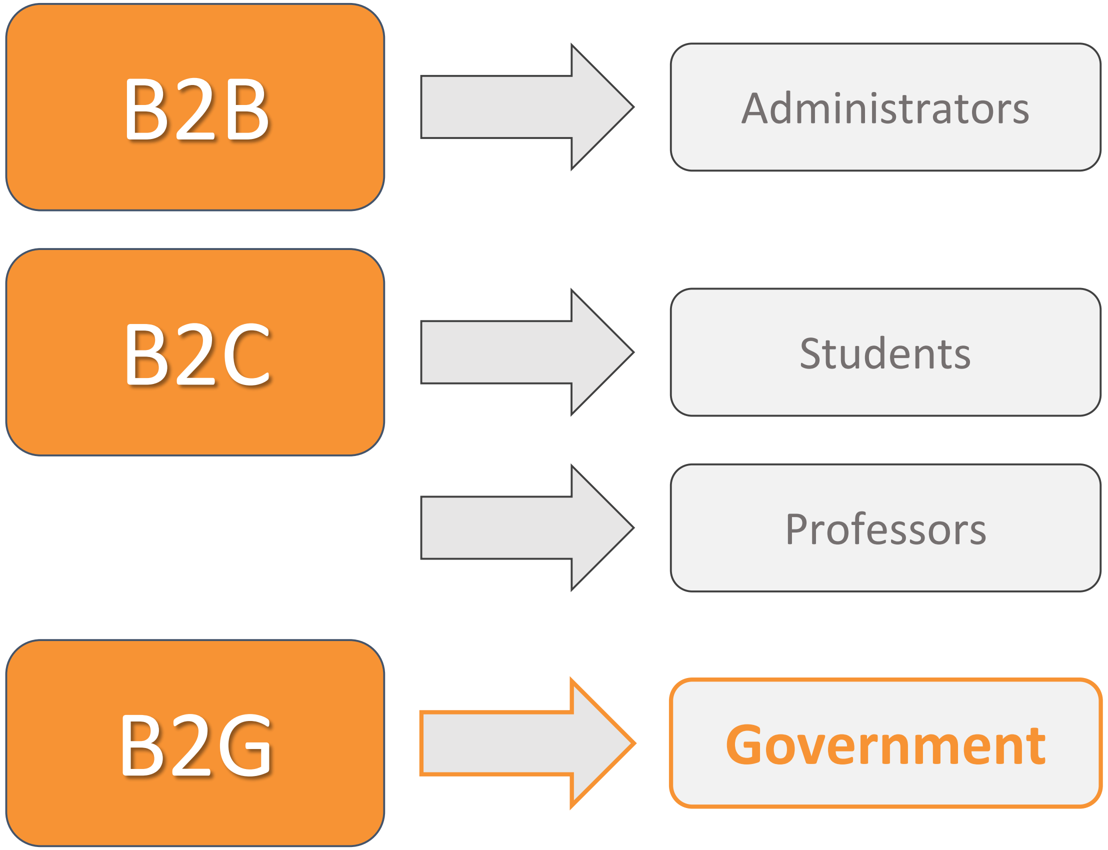
So, you'll easily sell to a professor or faculty if you offer a great way to improve teaching and flexibility in payment methods.



Approaches to Monetization: Government

B2G is defined as a sales model when companies sell products, services and information to governments or government agencies (such as federal, state, or local agencies).

- − Government agencies take more time than private companies to approve and begin work on a project. All those regulations can drag on the efficiency of the contracting process.
- \+ Government contracts are usually large and more stable than similar private-sector work. And a business with a history of successful government contracting can get the next contract easier.



4.3 Types of Monetization

Objectives

In this unit, you will

- distinguish between the types of monetization
- be able to choose the type of monetization

  for your startup

Types of Monetization

- Sale of Goods and Services
- Freemium
- Subscription
- Course Fee
- Advertising Model
- Institutional Model
- EdTech marketplace
- Grants/Corporate Sponsorships/ Recruiting Business

Sale of Goods and Services:

The explanation of this edtech startup monetization model best goes with an example: Let's say you own a cryptocurrency platform that helps people to buy, sell, transfer, and store cryptocurrency. Then, the school for people who want to invest in cryptocurrency will be the right base for your main business. **Firstly, you will make money as an edtech business. Secondly, you will secure yourself with a constant stream of qualified leads for the cryptocurrency platform.**

Freemium:

What can be easier than giving users a freebie and offering a premium plan as an optional upgrade? Freemium is a business model in which a company offers basic or limited features to users at no cost and then charges a premium for supplemental or advanced features. Such a model helps edtech startups to quickly establish trust in their brand and become niche leaders.

Subscription:

This model envisions that the user pays for access to your edtech platform. In most cases, a subscription has a due date. It can last one month, a year, or a whole lifetime. The subscription monetization model allows you to limit the number of courses available, the number of visits, and the number of users. **It's you who decide on the most convenient way to subscribe and the fee that is necessary to access all courses and increase monthly visits.**

Course Fee:

One of the simple and clear options for edtech startup monetization is the course fee. **You can sell copyrighted, popular, or personally-developed content there.** Still, selling the course right after you've created it can be a wrong strategy because you don't know your audience. To test how many people are interested in your product, conduct several workshops or webinars for free. If the number of visitors is high, then your topic is in demand, and the price can be raised.

Advertising Model:

Edtech startups that use the **ads monetization model** offer free use of educational apps. They just show advertising to those who take courses or view content. If you worry that the number of users will decline due to the ads on your app, then include an option to pay for the ad-free experience. **Customers who value your content quality will not hesitate to pay for skipping adverts.**

Institutional Model:

This is a traditional model for the K12 sector. The concept is simple – pitch your product to school districts, university administrations, and other decision-makers. This model can be a winning choice if your product benefits organizations more than individuals. Or if it needs to be integrated into data systems at the district level.

EdTech Marketplace:

The idea of an edtech marketplace is quite straightforward. You build a platform where **creators can post educational content and courses and take a share of their revenue to monetize your business.** However, there are different approaches to charging creators on such educational platforms. You can charge an upfront fee for publishing a course or take the first $50,000 earned on the marketplace.

Grants/Corporate Sponsorships/Recruiting Business:

Besides having a main business model, your startup can experiment with additional revenue streams to offset expenses and accelerate your growth. **A popular option is to partner with governments, education institutions, or nonprofits.**

- **XuetangX** was the first Chinese massive online course (MOOC) platform. From the very start, it was supported by **Tsinghua University** and the **China Ministry of Education Research**.
- **FutureLearn** is another MOOC heavyweight with **210+ partners** that include **universities, humanitarian foundations, and large businesses.**

Case Study in Breakout Rooms: Coursera

Coursera: https://www.coursera.org

- Visit the website of Coursera and identify the type of monetization Coursera uses.
- Discuss in breakout rooms!
- What helped you identify the type of monetization?
- Name 2 advantages and 2 disadvantages of this monetization type.

- If you want a step further research the history of Coursera. Did they ever change their monetization model?

Sale of Goods and Services	Freemium
Course Fee	Advertising Model
Institutional Model	EdTech marketplace
Subscription	Grants/Corporate Sponsorships/ Recruiting Business

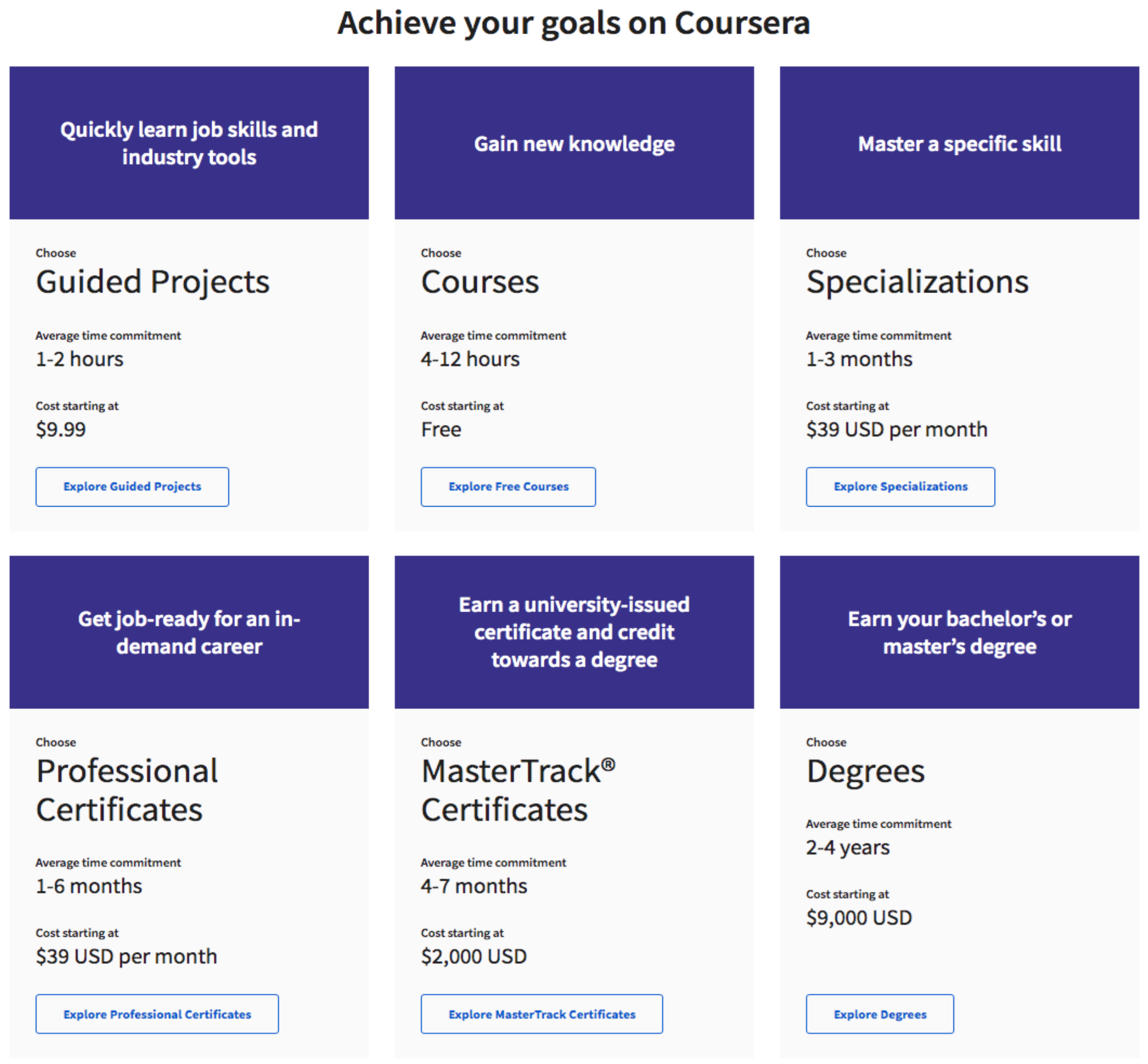
Freemium: Coursera

What can be easier than giving users a freebie and offering a premium plan as an optional upgrade?

Such a model helps edtech startups to quickly establish trust in their brand and become niche leaders.

Back in its first days, **Coursera** offered free courses on a bunch of topics with the choice to pay for the completion certificate. Add to this that the company was supported by $210 million of investments.

It's no surprise that Coursera skyrocketed! It gained **30+ million new users in 2020** and earned **$22 million in revenue.**



Coursera, 2022. [image] Available at: <https://www.coursera.org> [Accessed 2 June 2022].

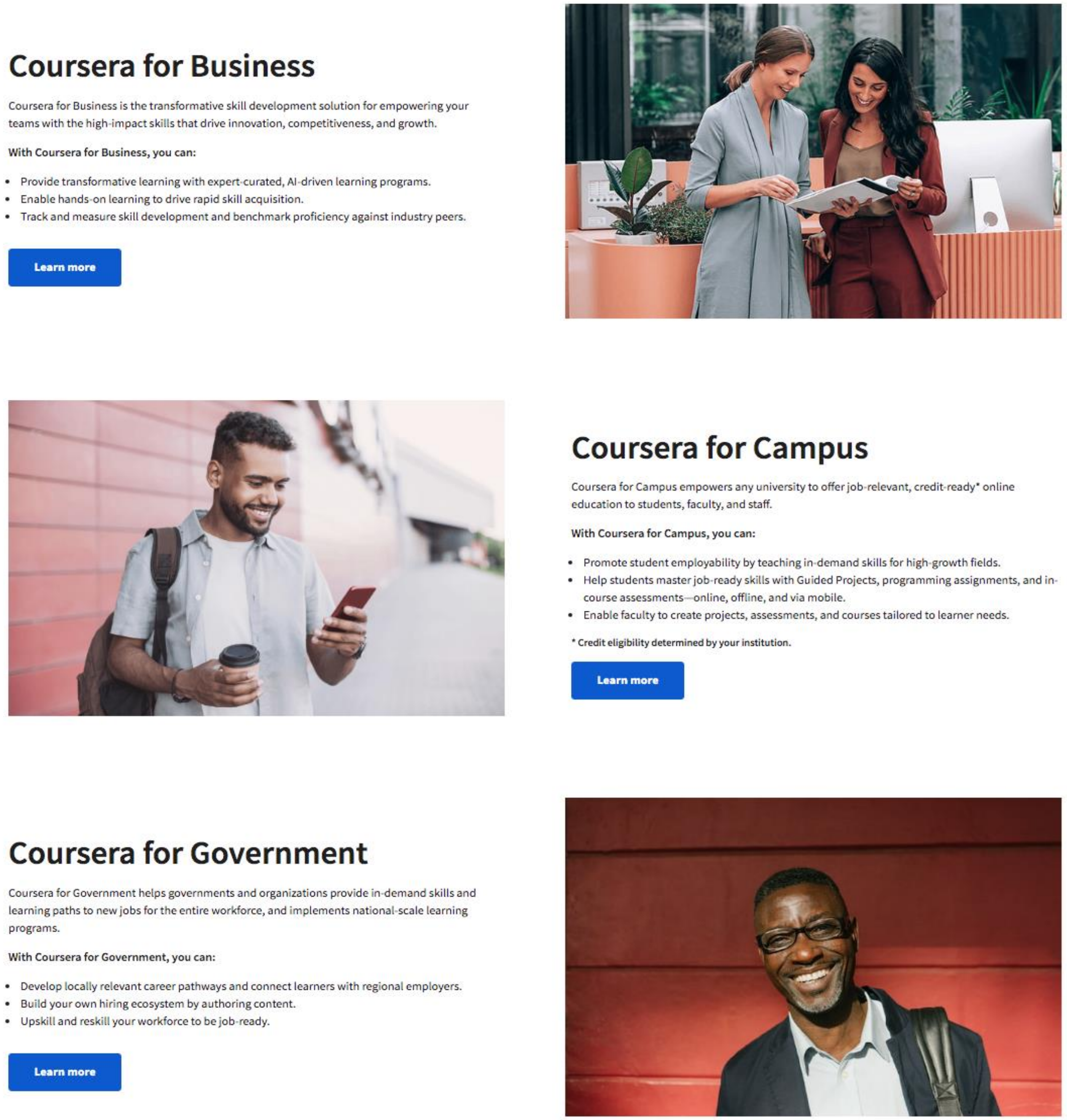
Freemium: Coursera

- + Quick user acquisition
- + Recurring revenue

At the same time, the company reported a **net loss of $67 million.**

This leads us to the two main downsides of the freemium model:

- – Burn of millions of dollars to acquire and support a great number of free users. Marketing is worth 36.5% of Coursera’s total revenue.
- – The complexity of converting free users into loyal and paying customers.



Coursera, 2022. [image] Available at: <https://www.coursera.org> [Accessed 2 June 2022].

Case Study in Breakout Rooms: Mystery Science

Mystery Science: https://mysteryscience.com

- Visit the website of Mystery Science and identify the type of monetization Mystery Science uses.
- Discuss in breakout rooms!
- What helped you identify the type of monetization?
- Name 2 advantages and 2 disadvantages of this monetization type.

- If you want a step further research the history of Mystery Science. Did they ever change their monetization model?

Sale of Goods and Services

Freemium

Course Fee

Advertising Model

Institutional Model

EdTech marketplace

Subscription

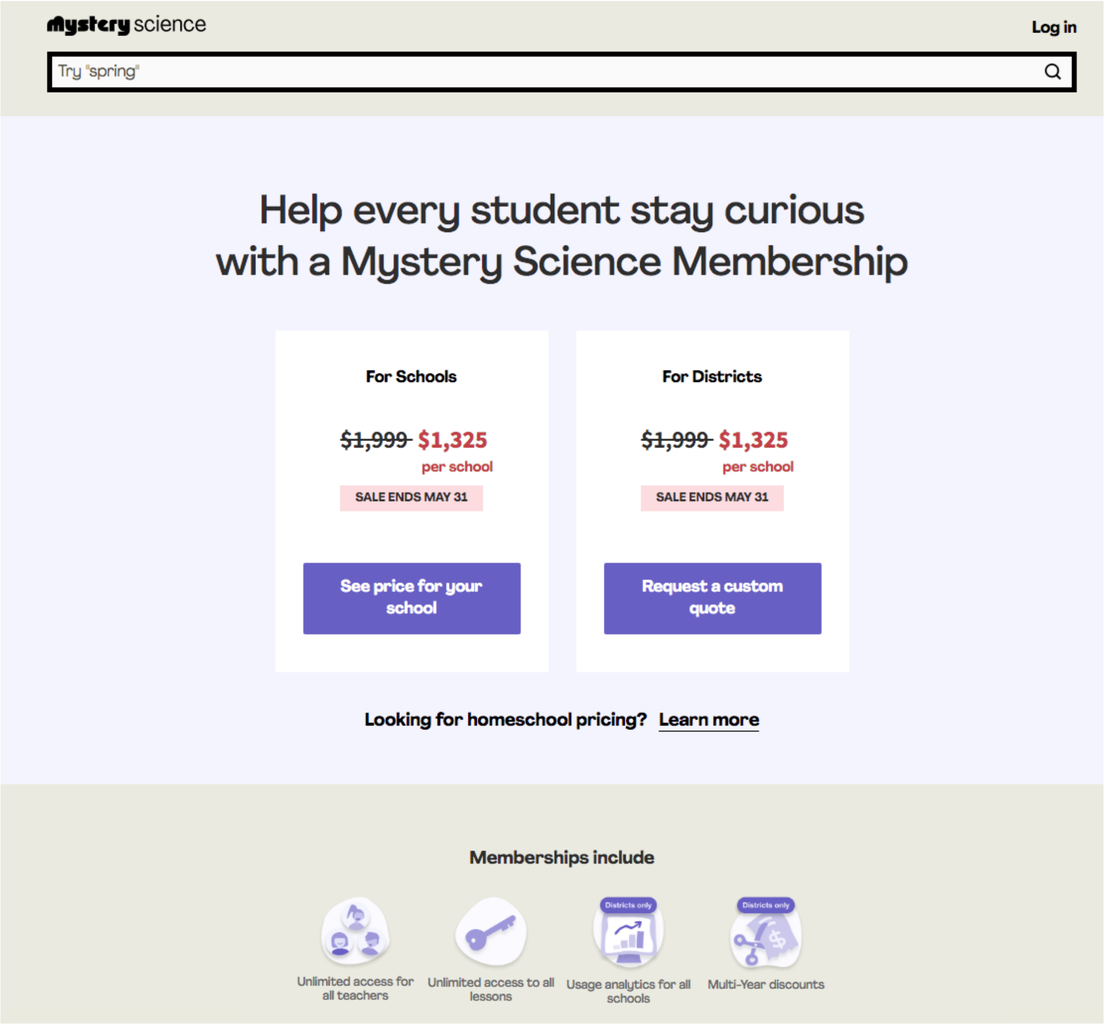
Grants/Corporate Sponsorships/ Recruiting Business

Subscription: Mystery Science

– The main drawback of the subscription business model is no safeguards for a high margin.

+ Yet, if you do everything right, the subscription has a scale influence. The user accesses a valuable source of information and content for a relatively small fee. As follows, the small price and a huge amount of resources bribe the customer, and they continue paying for the subscription.

Moreover, the subscription model is the fastest way to the monthly recurring revenue stream. When the quality of content exceeds the expectations, users renew subscriptions, and you're happy with your re-sale!



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Case Study in Breakout Rooms: Duolingo

Duolingo: https://www.duolingo.com

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Sale of Goods and Services

Freemium

Course Fee

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Advertising Model: Duolingo

- Duolingo started back in 2009, when language learning software cost hundreds of dollars apiece. But the app went with a very different business model. Duolingo planned to provide the service 100% free and charge businesses for user-translated texts.
- The company spent its early years growing the user base. Usage grew at a steady pace, but the startup wasn't making any money.
- In 2013, the company partnered with CNN and BuzzFeed, translating 600+ articles a day.
- Over the next few years, Duolingo built a flashcard app called TinyCards and introduced paid language testing which accounts for about 20% of the company's bottom line.
- Yet, these revenue streams were insufficient to make the app profitable.
- Instead of focusing on the B2B service that was bringing money, the founders went back to the core idea – provide the best way to learn a language, free of charge.
- They started showing ads at the end of a lesson with an option to pay for the ads-free experience. Combined, this earned the company **almost $180 million in 2020**.

"The key to succeeding with an ad-based model is to make it your ads as unobtrusive as possible. User experience is still the king!"

Case Study in Breakout Rooms: Schoolzilla

Schoolzilla:
https://www.renaissance.com/products/schoolzilla/

- Visit the website of Schoolzilla and identify the type of monetization Schoolzilla uses.
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Institutional Model: Schoolzilla

Schoolzilla offers interactive dashboards to 140+ school districts across the US. Its main benefit is better decision-making, which appeals to principals and district admins. So the top-down approach was a natural extension of the product.

However, it's not a one-fits-all solution.

There are over 16,000 districts in the US alone. Some of them big, some small and there can be large differences in the procurement process.

You can, of course, sell to individual schools instead of districts. According to Y Combinator's CEO Geoff Ralston, **schools now have bigger IT budgets** and often employ directors of technology to help with purchasing decisions. Getting to know people those might be the key to your success.

However, to scale effectively, this model might require a large number of people doing the groundwork across the country. Another challenge is that your end-users (teachers and schoolchildren) are often not your customers (people who pay for your product).

- + Big deals
- + Post-sales revenue
- + Added value from partnerships
- − Higher dependency on education institutions
- − Red tape and technology resistance

"Their advice is to reduce the layers of approval and maintain a direct relationship with your customers, whoever they may be."

Case Study in Breakout Rooms: Udemy

Udemy: https://www.udemy.com

- Visit the website of Udemy and identify the type of monetization Udemy uses.
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- What helped you identify the type of monetization?
- Name 2 advantages and 2 disadvantages of this monetization type.

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Sale of Goods and Services

Freemium

Course Fee

Advertising Model

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EdTech marketplace

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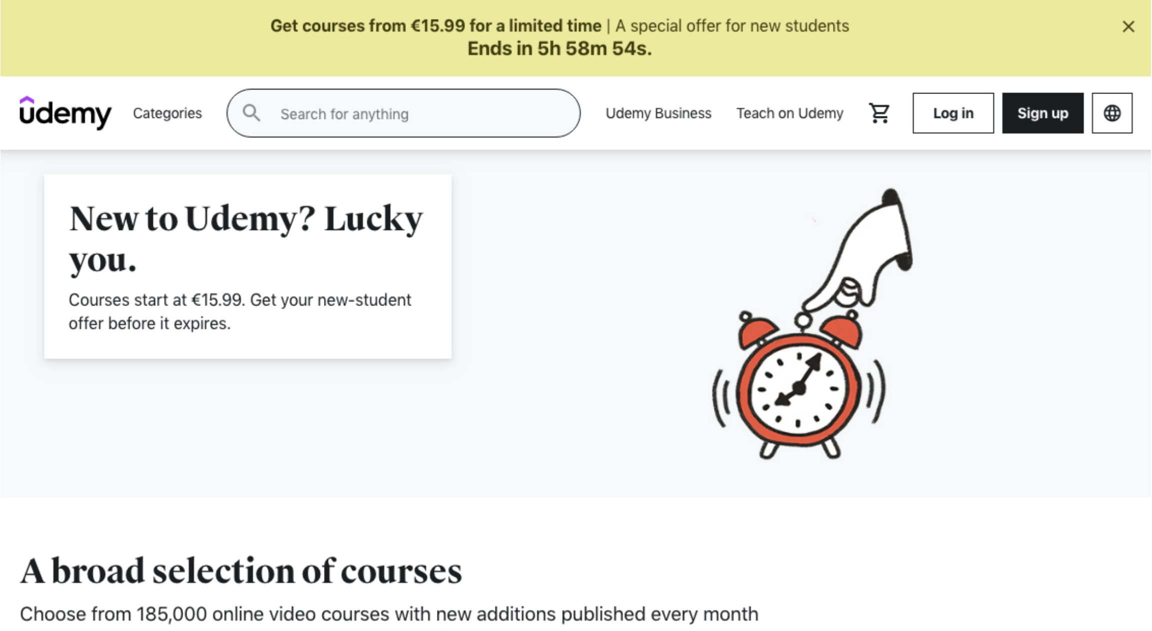
EdTech marketplace: Udemy

Udemy is the first example of such an edtech startup known by everyone who has the Internet. Using the edtech marketplace monetization type and taking 50% of the creator's revenue, Udemy is now worth more than **$3,3 billion.**



Udemy, 2022. [image] Available at: <https://www.udemy.com> [Accessed 2 June 2022].

How to Choose the Best Monetization for your EdTech Startup: Competitive Advantage

People tend to choose products that are useful. In other words, **users pay money for unique value**. Even you are the same with your buying behavior. You will buy a product that has a range of personal benefits.

For example, people now buy vegan milk more because they care for their health. The same goes with the edtech startups: **if users can learn from your app and get the visible result, they will pay.** Still, **if you start a product similar to hundreds of others, you will likely fail.**

This is why you have to think carefully about what unique value you plan to offer to the users even before you develop the educational app. You can even choose not a very new idea, but the case here is to **set trends and provide quality.**

Competitive advantages in the edtech industry are various.

- original courses
- invite experts from the leading universities
- use gamification and augmented reality
- dive into the topics that are the pain of the target audiences.
- implementation of the audio and video materials allows to perceive learning material better and foster students' engagement.

How to Choose the Best Monetization for your EdTech Startup: Transparent and Fair Fee

Customer experience will always matter, but **the price is a more important factor**. In 2022, rational shopping has become more popular, and it pertains to the edtech startup industry as well.

Fair and transparent pricing models give users an explanation for what they actually pay their money.

“Reasonable fees generate more good reviews and, thus, attract new paying users.”

How to Choose the Best Monetization for your EdTech Startup: Brand Awareness and Right Positioning

The edtech products are B2C solutions and require continuous interaction with the target audience. **The fastest way to the customer lies through social media.**

As follows, social media accounts help edtech startups to establish brand awareness, right positioning, and public opinion about the company. Facebook, Instagram, Youtube, and LinkedIn have become paramount for social activity and building a bond with the target audiences.

- **Udemy, Coursera, Duolingo**, and many other edtech startups use **influencer marketing** and e**ngagement on social media** to **boost revenue and attract new users.** For instance, over the last six months, **Udemy** has gained **new 300k followers,** growing its account on Instagram **from 1.3M to 1.6M**.

- **Duolingo** is another example of leading great brand awareness campaigns on social media. The company **gained more than 60K followers in the last two months** due to **interactive content** and **influencer marketing**. Conversation starters, meme content, and engagement-grabbing posts allowed Duolingo to reach more than 40% engagement rate on its Instagram page.

4.4 Funding

Objectives

In this unit, you will

- recognise the importance of funding
- distinguish between the different types of funding

The Importance of getting Financing or Funding

- Few people deal with the process of raising investment capital until they need to raise capital for their own firm.
- Many go about the task of raising capital haphazardly because they lack experience and because they don’t know much About their choices.
- Many entrepreneurs think that they can fund their venture internally.
- However, they discover that operating without investment capital or borrowed money is more difficult that they anticipated.
- Because of this, it is important for entrepreneurs to understand the role of investment capital in the survival and subsequent success of a new firm.

Why most New Ventures need Funding

Cash flow challenges

- As a firm grows, it requires an increasing amount of cash to service its customers
- Inventory must be purchased, employees must be trained and paid, and many things have to be paid in advance.
- A firm has in the beginning usually a negative real-time cash flow, computed as monthly, which is called its burn rate

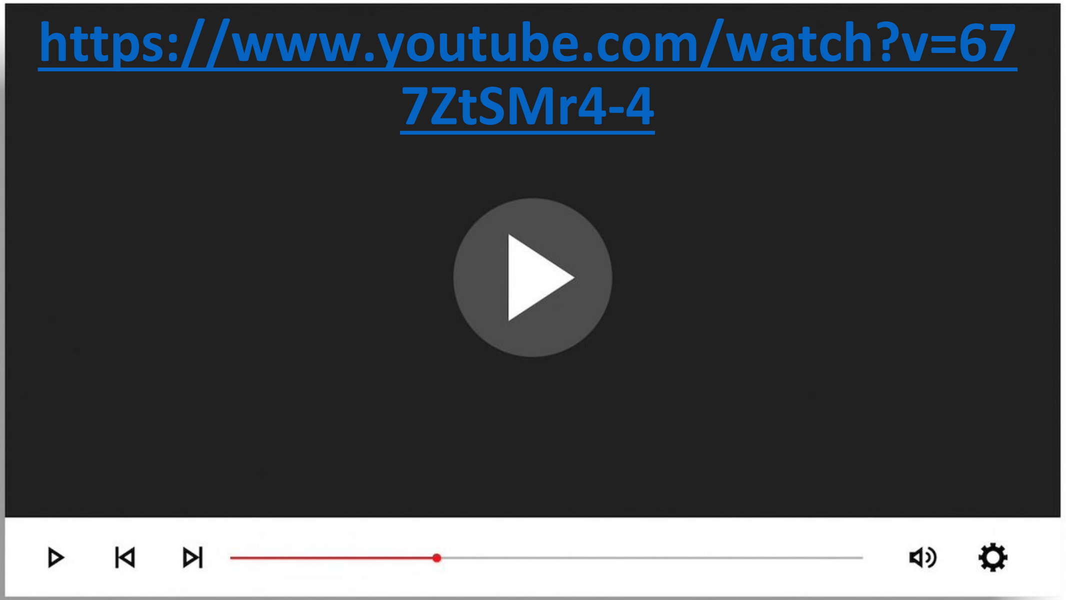
Capital investments

- Firms often need to raise money early on to fund capital investment
- For example, the cost of buying real estate, building facilities, and purchasing equipment
- Many firms delay these by leasing space and equipment. However, at some point, the firm’s needs may become specialized

Why most New Ventures need Funding

Lengthy product development cycles

- To pay the upfront costs of lengthy product development cycles
- Some products are under development for years before they generate earning. The upfront costs often exceed a firm's ability to fund these activities of its own.
- For example, it might take millions of euros to develop an electronic game



Self-Funding/Bootstrapping & Friends and Family Investors

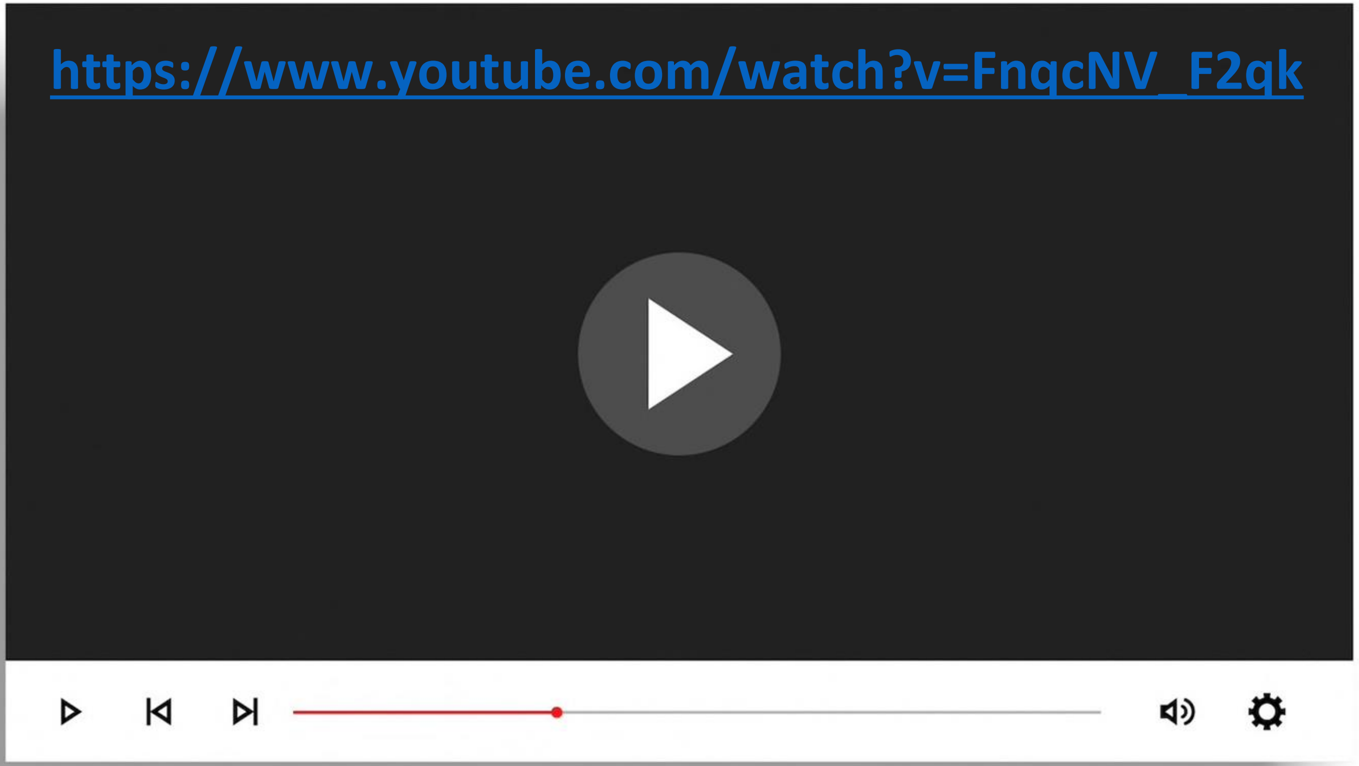
Many entrepreneurs start with some level of self-funding (also known as bootstrapping) and, in fact, **future investors likely will want to see that you have some “skin in the game”.** Even if you can only put in a little money, it is worth considering the benefits.

- For example, you don't have to worry about keeping investors happy. You also can keep more profits to yourself. Many founders also hold off on taking a salary, consider tapping into the 401(k) retirement account, and/or have a side job to help make ends meet while they get their business up and running.

Your friends and family may be willing to help you grow, and they probably wouldn't make you jump through the many hoops. These investments generally are some type of loans or stock purchases and are something later investors will likely find to be a positive (i.e., **if your family and friends don’t believe in you, why should the investor**).

- However, to protect yourself and your relationships, make sure you have a clear written agreement that outlines how the money will be repaid.

Raise Money for a Startup:



Crowdfunding

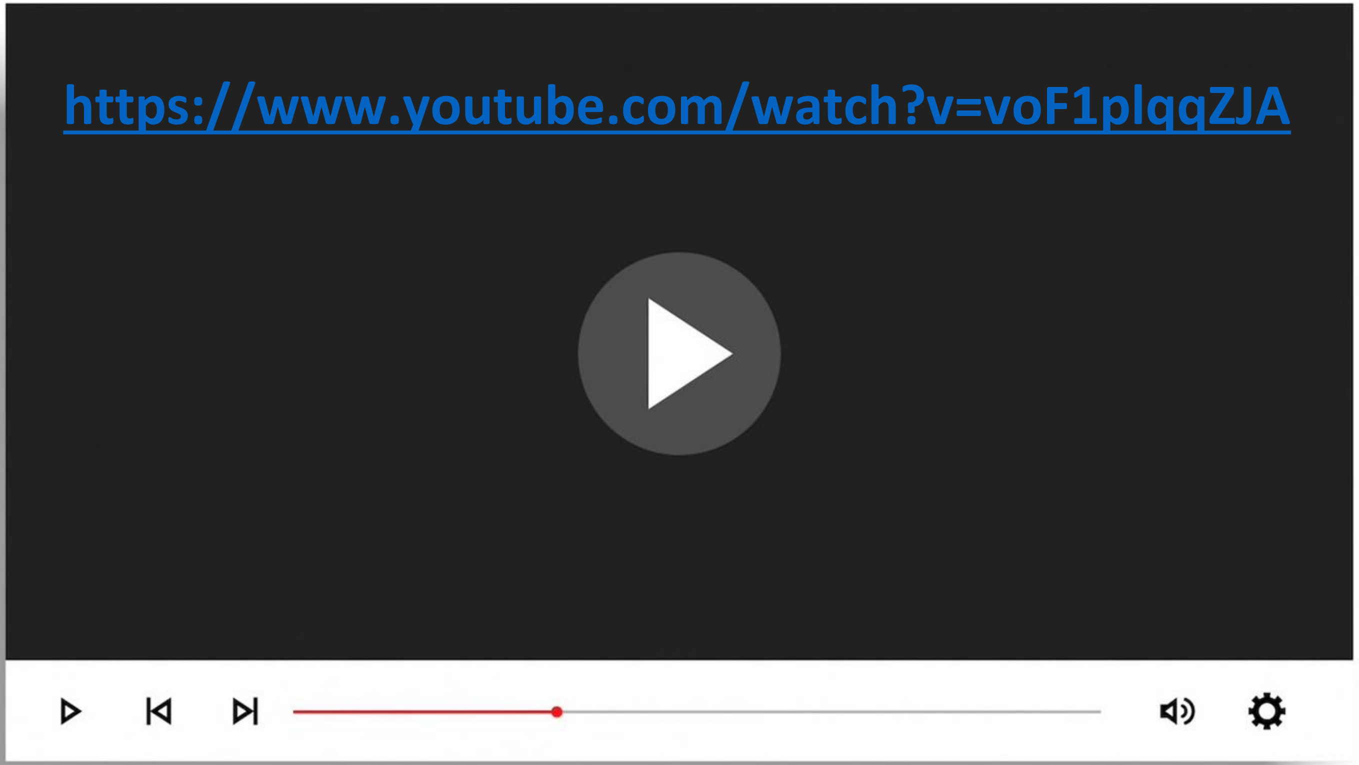
In the traditional approach to crowdfunding, you offer a first-run product or some other incentive in exchange for a monetary contribution. Contributors receive no equity and are not entitled to be repaid.

In many cases, the process is essentially a pre-sale of your product and not an investment.

- Debt-based
- Equity-based
- Rewards-based
- Donations-based

- **Equity crowdfunding** is a newer option which allows you to seek small investments from a large number of investors. You use a crowdfunding platform to post a listing similar to a traditional crowdfunding campaign, but your investors become shareholders. This includes voting and dividend rights as outlined in the shareholder agreement.

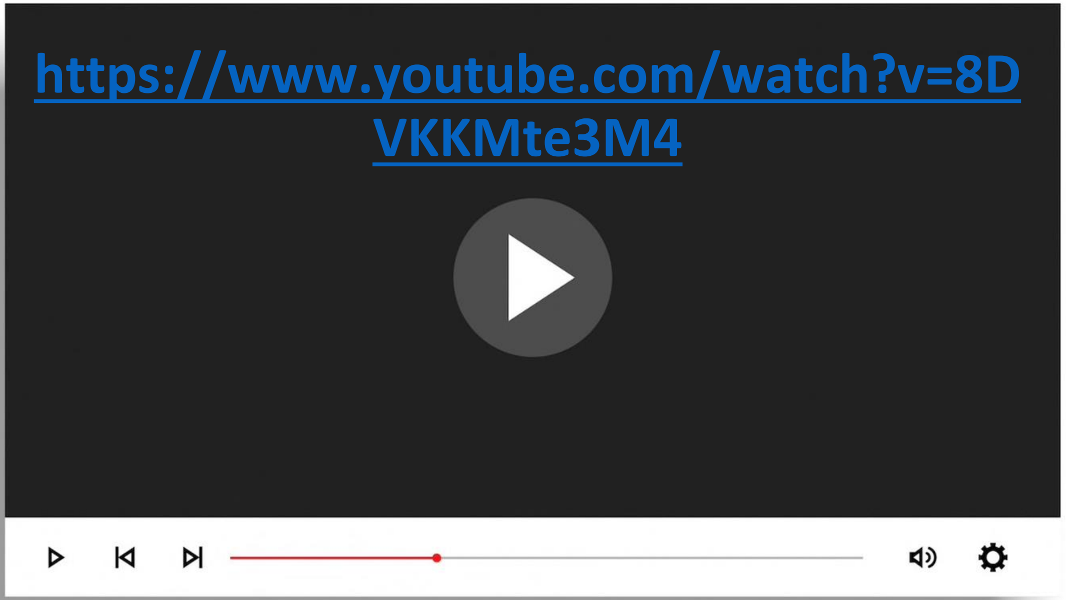
Crowdfunding Explained:



Incubators/Accelerators

Incubators and accelerators generally provide groups of startups with workspace, business advice and training, and potential funding. They are often sponsored by universities, industry organizations, or individual companies.

Each startup gets support from the sponsor plus networking opportunities with the other startups. In exchange, the incubator or accelerator may take an equity stake especially if they provide funding.



Venture Capitalists

Venture capitalists are professional investors who invest in startups and growing companies. This makes them a receptive audience when you're looking for investors to pitch. However, you'll generally need to be past the earliest stages because the typical venture capital investment is $1 million or more. It may also take many months to close the deal.

- Make sure that your interests are aligned with a prospective venture capitalist. These firms often seek fast returns and push for rapid growth. This may go against your desire to build slowly and steadily.
- Venture capitalists also seek, and regularly exercise, substantial control over a company. If you want to follow your own vision, venture capitalists may not be right for you.
- It is further important to note that venture capitalists typically want to use their own investor agreement. As with any important contract, you should carefully review it to ensure it promotes your own interests and goals. Don't be afraid to negotiate changes or walk away if it doesn't.

Loans/Credit Cards/Debt

New businesses can find it challenging to get a traditional loan from a bank unless they have business assets for collateral and/or are willing to personally guarantee the loan (e.g., by putting up the equity in their house). Some entrepreneurs may utilize credit cards, microloans or venture debt to finance their companies.

Once you have steady sales, you may be able to open a credit line against your accounts receivables (what customers owe you) (also referred to as "factoring") or use your business equipment as collateral for a loan (also known as an asset loan).

Pexels, 2022. [image] Available at: <https://www.pexels.com> [Accessed 2 June 2022].

4.5 The Financial Tree (Product/Service)

Objectives

In this unit, you will

- be able to calculate your finances for your startup
- understand the different financial processes between product and service

Product

- You sell ownership of something
- Margin/Product
- Products/Year

Price/Product
€600

Margin/ Product
€300

Cost/Product
€300

Cost Sell/Customer
€200

Cost Sell/Product
€100

Products/Deal
1

Products/ Customer
2

Life Customer
(years)
2

Cost Make/Product
€200

Deals/ Customer
2

Margin/Year
€15,000,000

Beachhead Market
100,000

Life Product
(years)
1

Customers
50,000

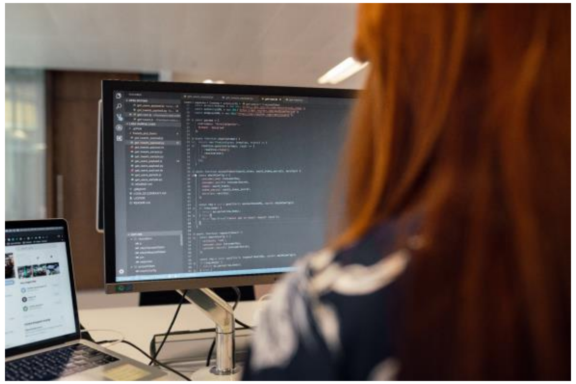
Market Share
50%

Products/Year
50,000

Products/Deal
1

Products/Customer/Year
1

Life Product
(years)
1



Pexels, 2022. [image] Available at: <https://www.pexels.com> [Accessed 2 June 2022].

Service

- You sell the use of something or someone for a certain period: hour, day, month, year, etc.
- Margin/Customer/Year
- No. of Customers

Financial Tree

Margin/Year
€25,000,000

Margin/Customer/Year
€125

Customer/Year
200,000

Margin/Customer
€500

Life/Customer (Years)
4

Beachhead Market
400,000

Market Share
50%

Revenue/Customer
€3,600

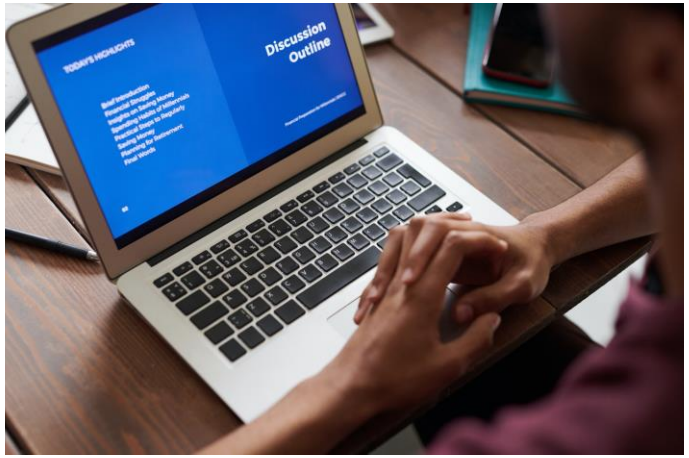
Cost/Customer
€3,100

Net Price/Year
€900

Life Customer (years)
4

Cost Sell/Customer
€500

Cost Delivery/Customer
€2,600



Pexels, 2022. [image] Available at: <https://www.pexels.com> [Accessed 2 June 2022].

BONUS ACTIVITY

Use the Financial Tree in order to make calculations about price, margin and customers.

- Download the relevant spreadsheet (product/service)
- Determine if you sell a **product** or a **service**
- Fill our the financial tree from right to left
- Fill out for Year 5 of your startup (for now it's about understanding the methodology)

Pexels, 2022. [image] Available at: <https://www.pexels.com> [Accessed 2 June 2022].

4.6 Financials 101

Objectives

In this unit, you will

- understand how financial accounting differs from managerial accounting
- be able to set your financial KPIs
- be able to visualise your growth

How to drive your business financials

There are three core financial statements that can help you with that:

- **Balance sheet:** Reports a company's assets, liabilities, and shareholder equity at a specific point in time.
- **Profit and Loss:** Summarizes the revenues, costs, and expenses incurred during a specified period, usually a quarter or fiscal year.
- **Cash Flow:** Summarizes the movement of cash and cash equivalents (CCE) that come in and go out of a company.

What Is a Balance Sheet?

- A balance sheet shows what a company owns and owes and how much shareholders have invested
- The balance sheet adheres to an equation that equates assets with the sum of liabilities and shareholder equity.
- This means that the balance sheet should always balance, hence the name. If they don't balance, there may be some problems, including incorrect or misplaced data, inventory and/or exchange rate errors, or miscalculations.
- Investors can get a sense of a company's financial wellbeing by using a number of ratios that can be derived from a balance sheet, including the debt-to-equity ratio and the acid-test ratio, along with many others.

Balance Sheet Example

Example Corporation
Balance Sheet
December 31, 2021

ASSETS		LIABILITIES	
Current assets		Current liabilities	
Cash and cash equivalents	$ 2,200	Short-term loans payable	$ 5,000
Short-term investments	10,000	Current portion of long-term debt	15,000
Accounts receivable - net	39,500	Accounts payable	20,900
Other receivables	1,000	Accrued compensation and benefits	8,500
Inventory	31,000	Income taxes payable	6,100
Supplies	3,800	Other accrued liabilities	4,000
Prepaid expenses	1,500	Deferred revenues	1,500
Total current assets	89,000	Total current liabilities	61,000
Investments	36,000	Long-term liabilities	
		Notes payable	20,000
Property, plant & equipment - net		Bonds payable	375,000
Land	5,500	Deferred income taxes	25,000
Land improvements	6,500	Total long-term liabilities	420,000
Buildings	180,000		
Equipment	201,000	Total liabilities	481,000
Less: accumulated depreciation	(56,000)		
Property, plant & equipment - net	337,000	Commitments and contingencies (see notes)	
Intangible assets		STOCKHOLDERS' EQUITY	
Goodwill	105,000		
Other intangible assets	200,000	Common stock	110,000
Total intangible assets	305,000	Retained earnings	220,000
		Accum other comprehensive income	9,000
Other assets	3,000	Less: Treasury stock	(50,000)
		Total stockholders' equity	289,000
Total assets	$ 770,000	Total liabilities & stockholders' equity	$ 770,000

The accompanying notes are an integral part of this statement.

Source: https://www.accountingcoach.com

Profit and Loss (Income) Statement

- The term profit and loss (P&L) or income statement refers to a financial statement that summarizes the revenues, costs, and expenses incurred during a specified period, usually a quarter or fiscal year
- Statements are prepared using the cash or accrual method of accounting.
- It is important to compare statements from different accounting periods, as any changes over time become more meaningful than the numbers themselves.
- A P&L or income statement provides valuable insights into various aspects of a business. It includes readings on a company's operations, the efficiency of its management, the possible leaky areas that may be eroding profits, and whether the company is performing in line with industry peers.

Source: www.legalzoom.com

Profit and Loss or Income Statement vs Balance Statement

	Forecast Period				
FINANCIAL STATEMENTS	**2017**	**2018**	**2019**	**2020**	**2021**
Income Statement					
Reveneue	**158,311**	**165,435**	**172,052**	**178,074**	**183,416**
Cost of Goods Sold (COGS)	58,575	61,211	61,939	64,107	64,196
Gross Profit	**99,736**	**104,224**	**110,113**	**113,967**	**119,220**
Expenses					
Salaries and Benefits	26,913	28,124	29,249	30,273	31,181
Rent and Overhead	10,000	10,000	10,000	10,000	10,000
Depreciation & Amortization	15,008	15,005	15,003	15,002	15,001
Interest	1,500	1,500	500	500	500
Total Expenses	**53,421**	**54,629**	**54,752**	**55,775**	**56,682**
Earnings Before Tax	**46,314**	**49,595**	**55,361**	**58,192**	**62,538**
Balance Sheet					
Assets					
Cash	272,530	307,632	327,097	368,487	413,243
Accounts Receivable	7,807	8,158	8,485	8,782	9,045
Inventory	11,715	12,242	12,388	12,821	12,839
Property & Equipment	37,513	37,508	37,505	37,503	37,502
Total Assets	**329,565**	**365,541**	**385,474**	**427,593**	**472,629**

Activity

Can you tell if this business is a product (SaaS) or services based company?

	2021	2020	2019
REVENUES:			
Revenues	$ 50,533,389	$ 44,327,039	$ 43,215,013
OPERATING EXPENSES:			
Cost of services	34,169,261	30,350,881	29,900,325
Sales and marketing	5,288,237	4,625,929	4,447,456
General and administrative costs	3,454,362	2,836,585	2,562,158
Total operating expenses	42,911,860	37,813,395	36,909,939
OPERATING INCOME	**7,621,529**	**6,513,644**	**6,305,074**

Activity

Can you tell if this business is a product (SaaS) or services based company?

SaaS Company, Inc.
Profit and Loss Condensed
January 2018 - June 2018

	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018
Income						
Revenues	$ 1,344,193	$ 1,525,121	$ 1,713,493	$ 1,825,653	$ 1,991,791	$ 2,189,588
Discounts/Refunds	$ (40,326)	$ (45,754)	$ (51,405)	$ (54,770)	$ (59,754)	$ (65,688)
Total Income	**$ 1,303,867**	**$ 1,479,367**	**$ 1,662,088**	**$ 1,770,883**	**$ 1,932,037**	**$ 2,123,901**
Cost of Goods Sold						
COGS Contractors & Consultants	$ 52,306	$ 59,347	$ 66,677	$ 71,041	$ 77,506	$ 85,203
Infrastructure COGS	$ 24,599	$ 27,910	$ 31,357	$ 33,410	$ 36,450	$ 40,070
Customer Service	$ 12,322	$ 12,568	$ 12,820	$ 13,076	$ 13,338	$ 13,604
COR Taxes & Fees	$ 672	$ 519	$ 575	$ 534	$ 477	$ 537
Total Cost of Goods Sold	**$ 89,899**	**$ 100,344**	**$ 111,429**	**$ 118,061**	**$ 127,771**	**$ 139,414**
Gross Profit	**$ 1,213,968**	**$ 1,379,023**	**$ 1,550,659**	**$ 1,652,822**	**$ 1,804,266**	**$ 1,984,487**
Expenses						
Marketing	$ 1,129,581	$ 1,013,868	$ 955,779	$ 1,027,005	$ 1,343,533	$ 1,222,788
Payroll Related	$ 206,827	$ 241,774	$ 266,255	$ 263,490	$ 878,207	$ 290,707
Office Expenses	$ 47,441	$ 45,529	$ 45,234	$ 47,945	$ 46,823	$ 47,613
Finance and Admin	$ 34,365	$ 66,709	$ 30,821	$ 46,878	$ 37,467	$ 37,410
Sales	$ 106,078	$ 43,283	$ 26,801	$ 35,629	$ 23,913	$ 74,188
Operational Expenses	$ 21,121	$ 28,161	$ 38,587	$ 46,832	$ 37,971	$ 34,899
Travel and Entertainment	$ 8,072	$ 41,478	$ 12,755	$ 21,092	$ 32,847	$ 22,510
Total Expenses	**$ 1,553,485**	**$ 1,480,801**	**$ 1,376,233**	**$ 1,488,871**	**$ 2,400,759**	**$ 1,730,115**
Net Operating Income	**$ (339,517)**	**$ (101,777)**	**$ 174,426**	**$ 163,951**	**$ (596,493)**	**$ 254,372**
Other Expenses						
Other Expenses	$ 9,737	$ 328	$ 16,997	$ 928	$ 4,993	$ 696
Total Other Expenses	**$ 9,737**	**$ 328**	**$ 16,997**	**$ 928**	**$ 4,993**	**$ 696**
Net Other Income	**$ (9,737)**	**$ (328)**	**$ (16,997)**	**$ (928)**	**$ (4,993)**	**$ (696)**
Net Income	**$ (349,254)**	**$ (102,105)**	**$ 157,429**	**$ 163,023**	**$ (601,486)**	**$ 253,676**

Cash Flow

- The cash flow statement, which acts as a corporate checkbook that reconciles the other two statements. It records the company's cash transactions (the inflows and outflows) during the given period. It shows whether all of the revenues booked on the income statement have been collected.
- But the cash flow does not necessarily show all the company's expenses. That's because not all expenses the company accrues are paid right away. Although the company may incur liabilities, any payments toward these liabilities are not recorded as a cash outflow until the transaction occurs. It is important to compare P&L statements from different accounting periods, as any changes over time become more meaningful than the numbers themselves.

Types of Cash Flow

- Cash Flows From Operations (CFO)
- Cash Flows From Investing (CFI)
- Cash Flows From Financing (CFF)

Cash Flow vs. Profit

- Contrary to what you may think, cash flow isn't the same as profit. It isn't uncommon to have these two terms confused because they seem very similar.

Remember that cash flow is the money that goes in and out of a business.

Cash Flow Example

Cash Flow Statement

[Company Name]

For the Year Ending	12/31/2019
Cash at Beginning of Year	15,700
Operations	
Cash receipts from	
Customers	693,200
Other Operations	
Cash paid for	
Inventory purchases	(264,000)
General operating and administrative expenses	(112,000)
Wage expenses	(123,000)
Interest	(13,500)
Income taxes	(32,800)
Net Cash Flow from Operations	147,900
Investing Activities	
Cash receipts from	
Sale of property and equipment	33,600
Collection of principal on loans	
Sale of investment securities	
Cash paid for	
Purchase of property and equipment	(75,000)
Making loans to other entities	
Purchase of investment securities	
Net Cash Flow from Investing Activities	(41,400)
Financing Activities	
Cash receipts from	
Issuance of stock	
Borrowing	
Cash paid for	
Repurchase of stock (treasury stock)	
Repayment of loans	(34,000)
Dividends	(53,000)
Net Cash Flow from Financing Activities	(87,000)
Net Increase in Cash	**19,500**
Cash at End of Year	35,200

How Financial Accounting Differs From Managerial Accounting

- Managerial accounting is the practice of identifying, measuring, analyzing, interpreting, and communicating financial information to managers for the pursuit of an organization's goals.
- Financial accounting involves recording, summarizing, and reporting the stream of transactions and economic activity resulting from business operations over a period of time to the public or regulators.
- Managerial accounting differs from financial accounting because the intended purpose of managerial accounting is to assist users internal to the company in making well-informed business decisions.

5 Key Performance Indicators

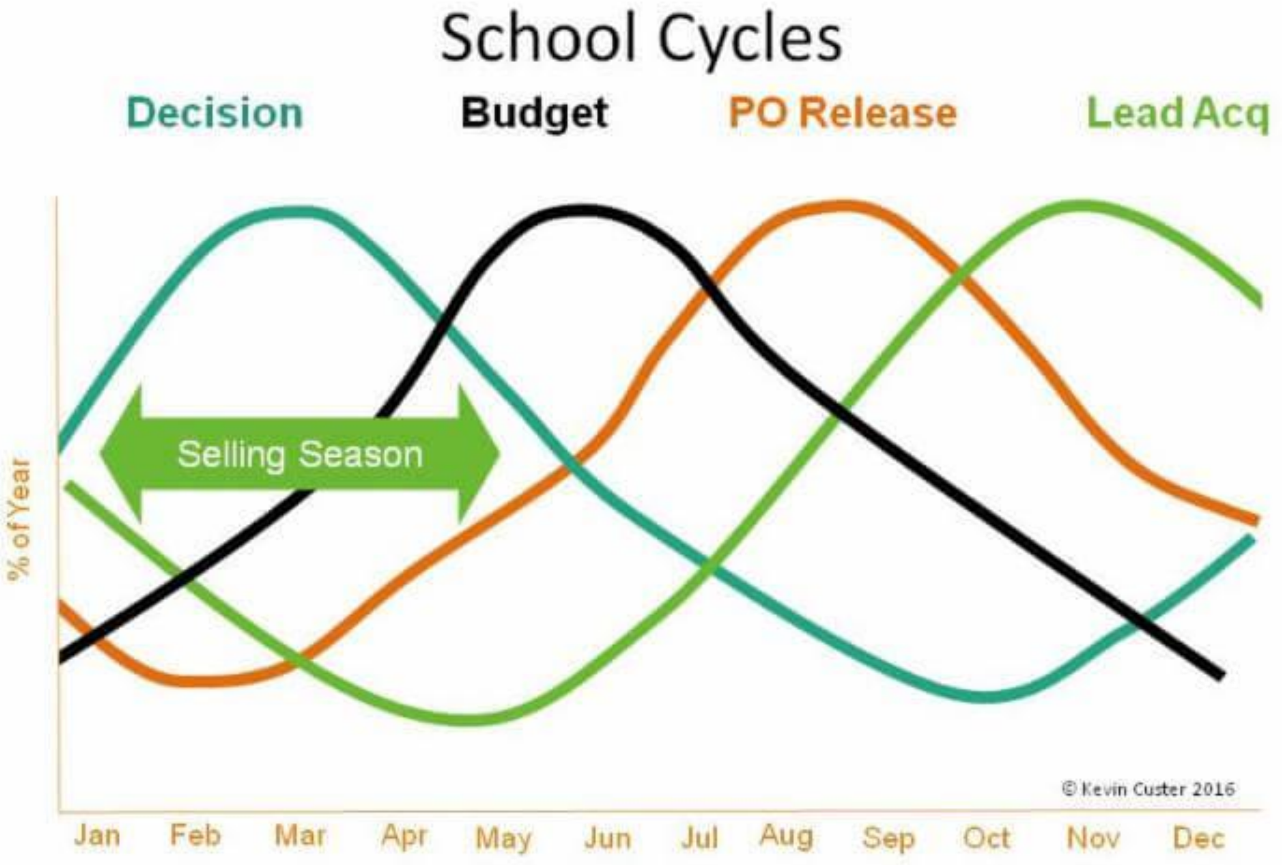
- Revenue growth.
- Revenue per client.
- Profit margin.
- Client retention rate.
- Customer satisfaction.

Revenue Growth for Software as a Service Company (SaaS)

- What you should measure:
  - Total revenues in a fiscal year
  - Monthly recurring revenues (**MRR**)
  - Annual recurring revenues (**ARR**) which is 12 times your latest month or the last month of your fiscal year.

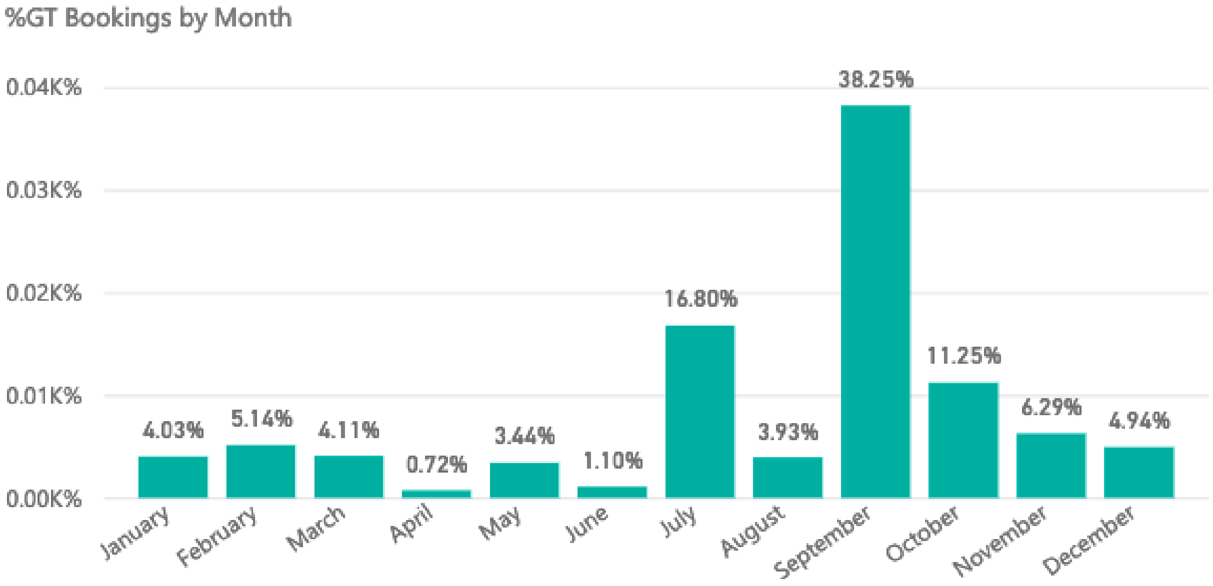
Revenue Growth for SaaS B2B in Edtech

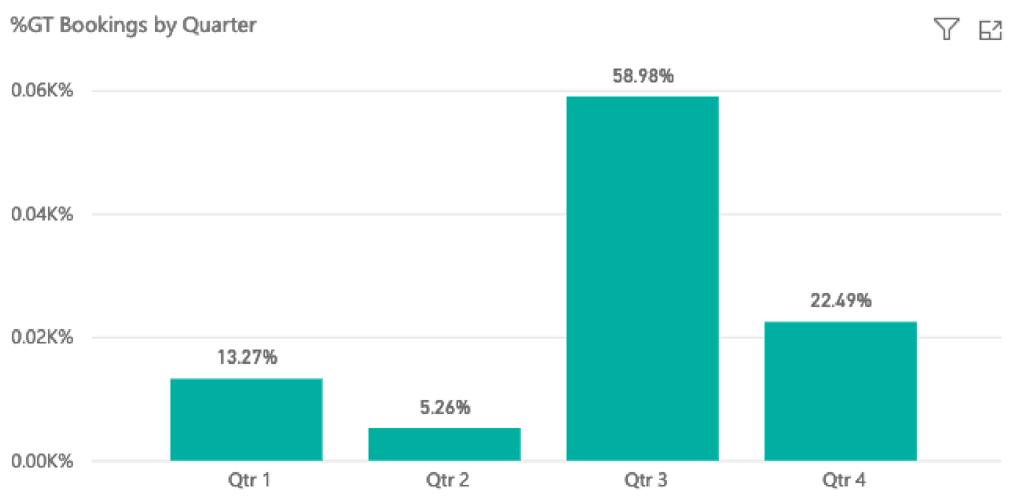
- Based on your sales cycle you can compare revenue growth:
  - **Year over year (YOY)** is a measuring technique that calculates the change between one fiscal year and the previous fiscal year. For example our bookings grew 230% from 2021 to 2022
  - **Quarter on quarter (QOQ)** is a measuring technique that calculates the change between one fiscal quarter and the previous fiscal quarter. For example our bookings grew 300% from Q3 2021 to Q3 2022



Activity

Can you tell if this business is B2C or B2B in Edtech?

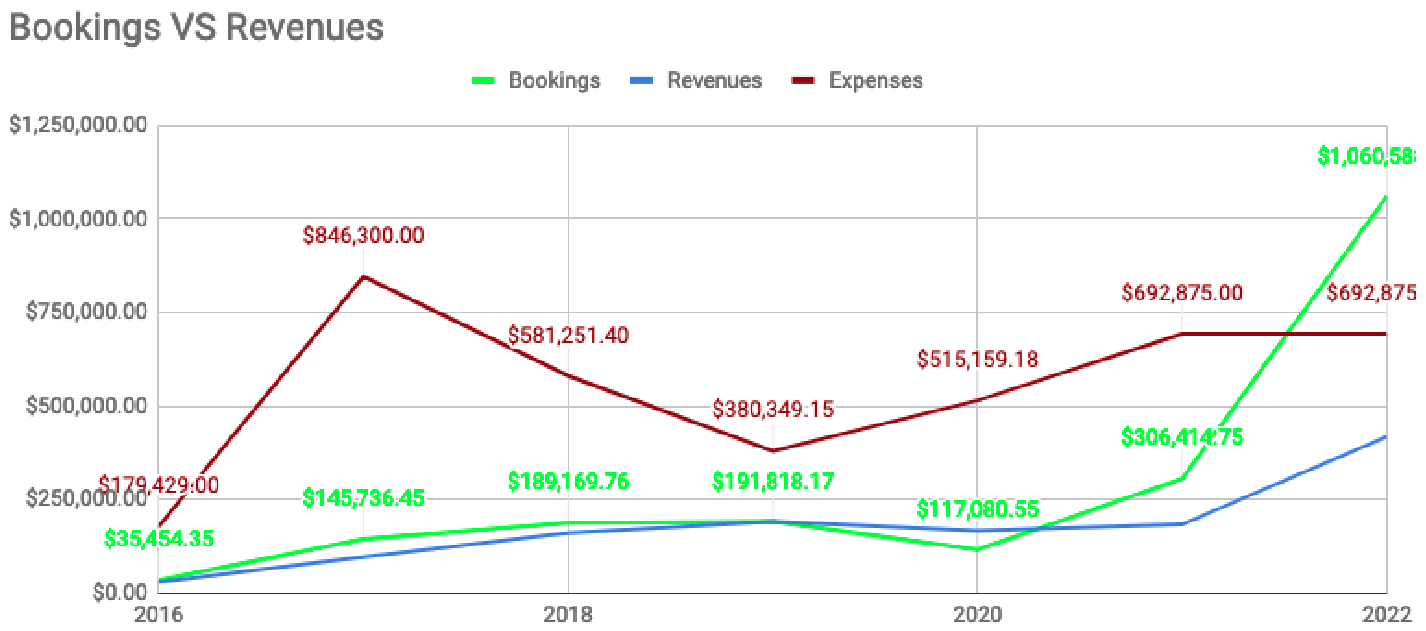




Activity

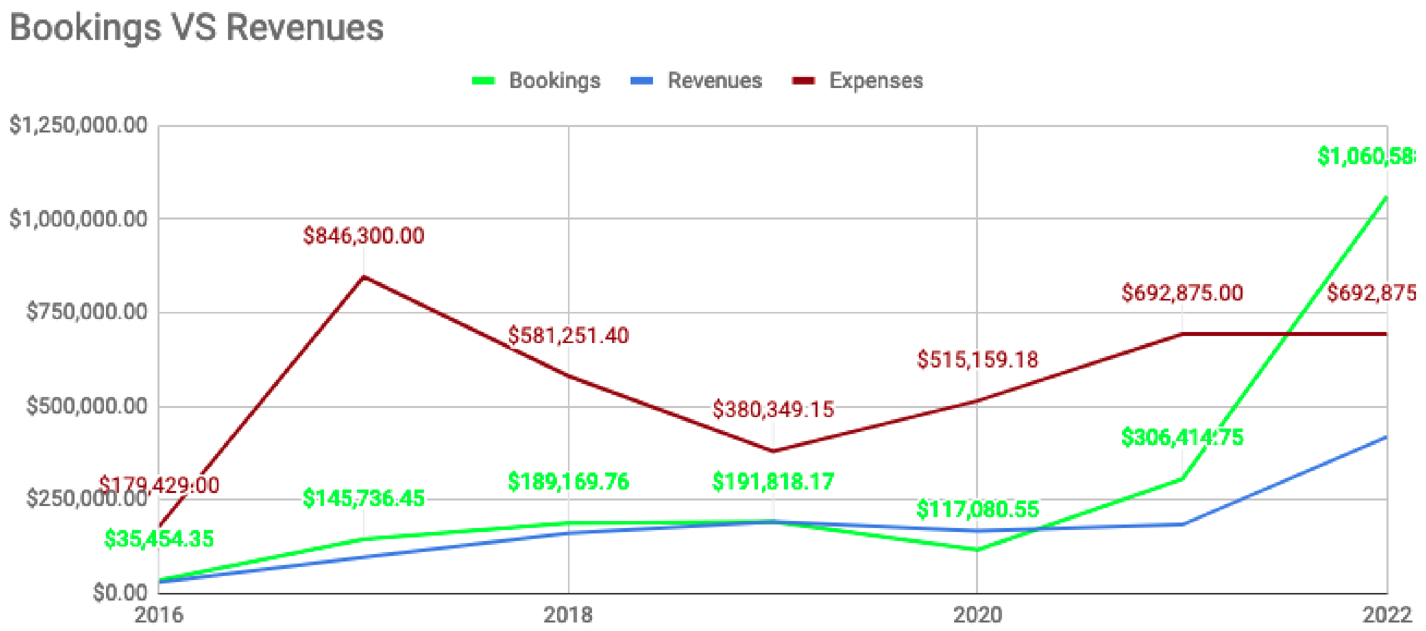
Can you explain the gap between Bookings (invoices) and realized Revenues ?

- In this example we have a SaaS EdTech B2B company that invoices schools for 12 months (pre-payment).



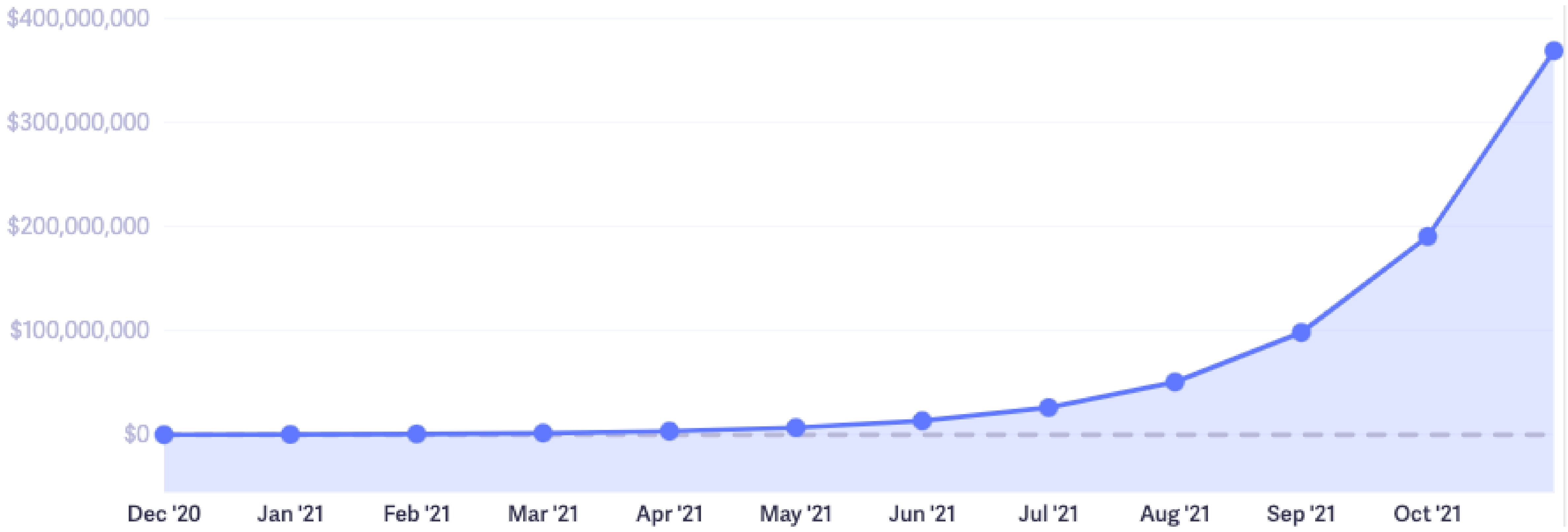
Answer

- B2B Edtech companies will send most of their invoices in Q3 (bookings).If these are prepaid annual subscriptions this company will realize (serve) only 3 months of the contract at the end of the year. So there might be a gap between bookings (invoiced value) and revenues (realized value).
- Due to this unique sales cycle it’s better to use the annual recurring revenues (ARR) as performance indicator rather than total revenues per year.



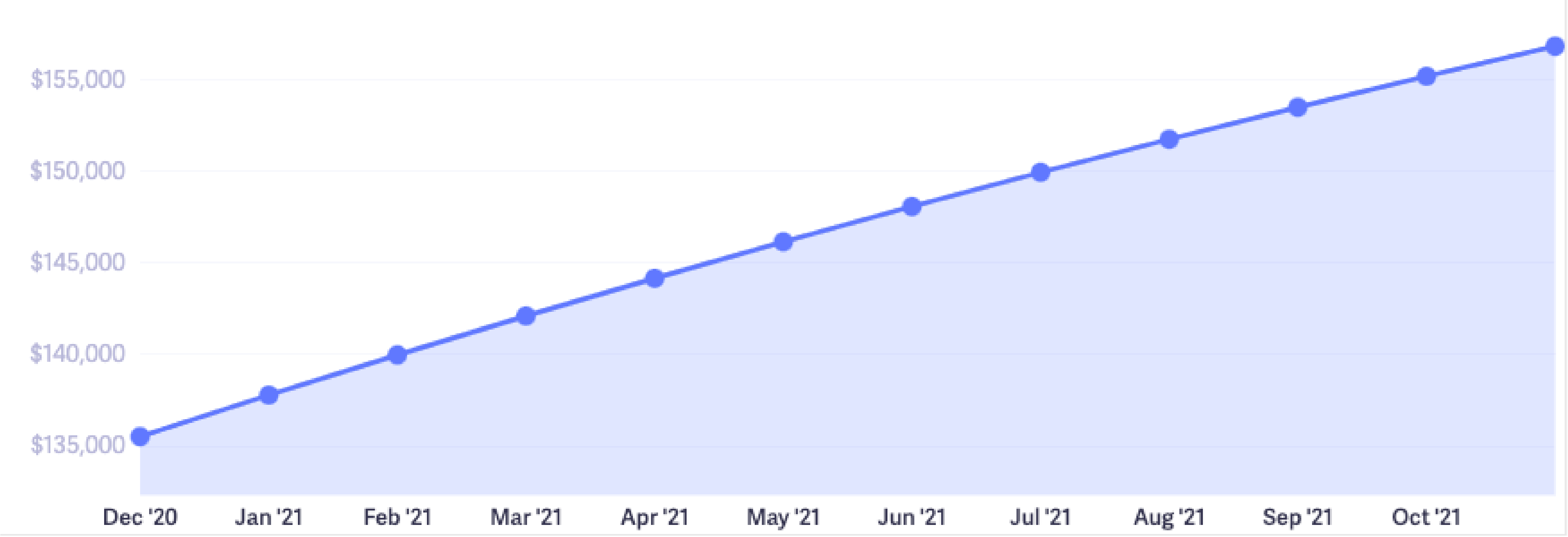
Growth example – Hockey stick

- What entrepreneurs think investors want to see in their projections



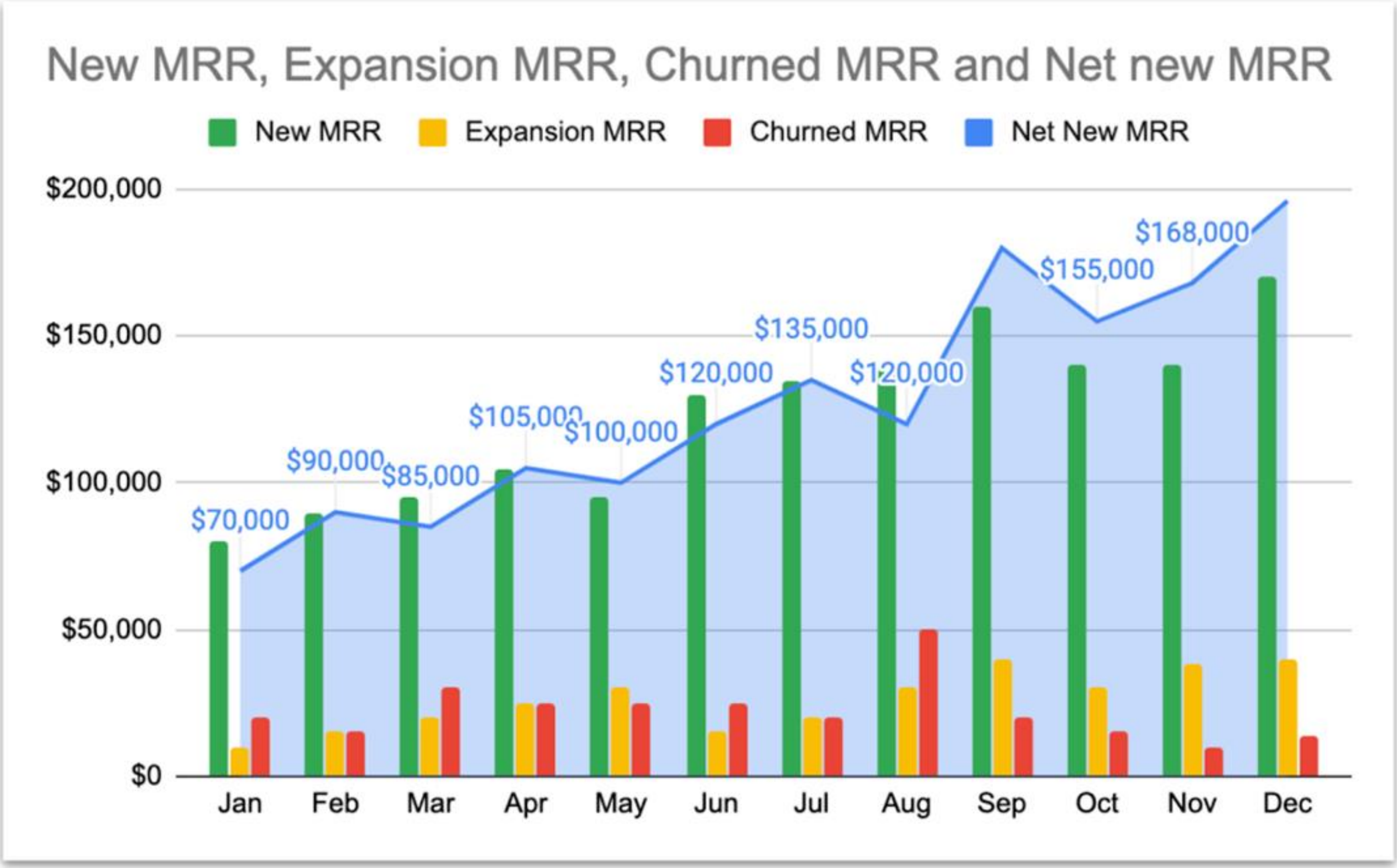
Growth example – Closer to reality

- What investors want to see is a high growth realistic revenue projection



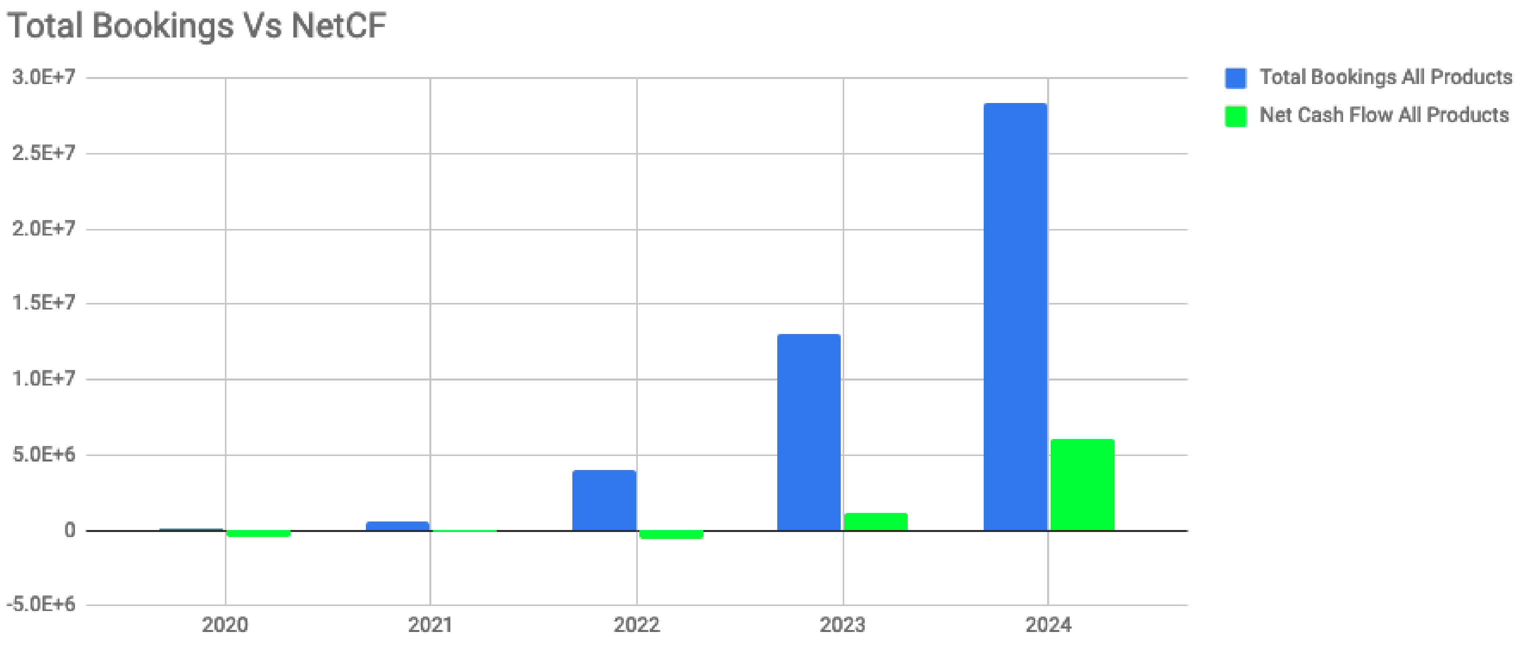
Growth example – MRR with Churn

KPI	Jan
New MRR	$80,000
Expansion MRR	$10,000
Churned MRR	$20,000
Net New MRR	$70,000



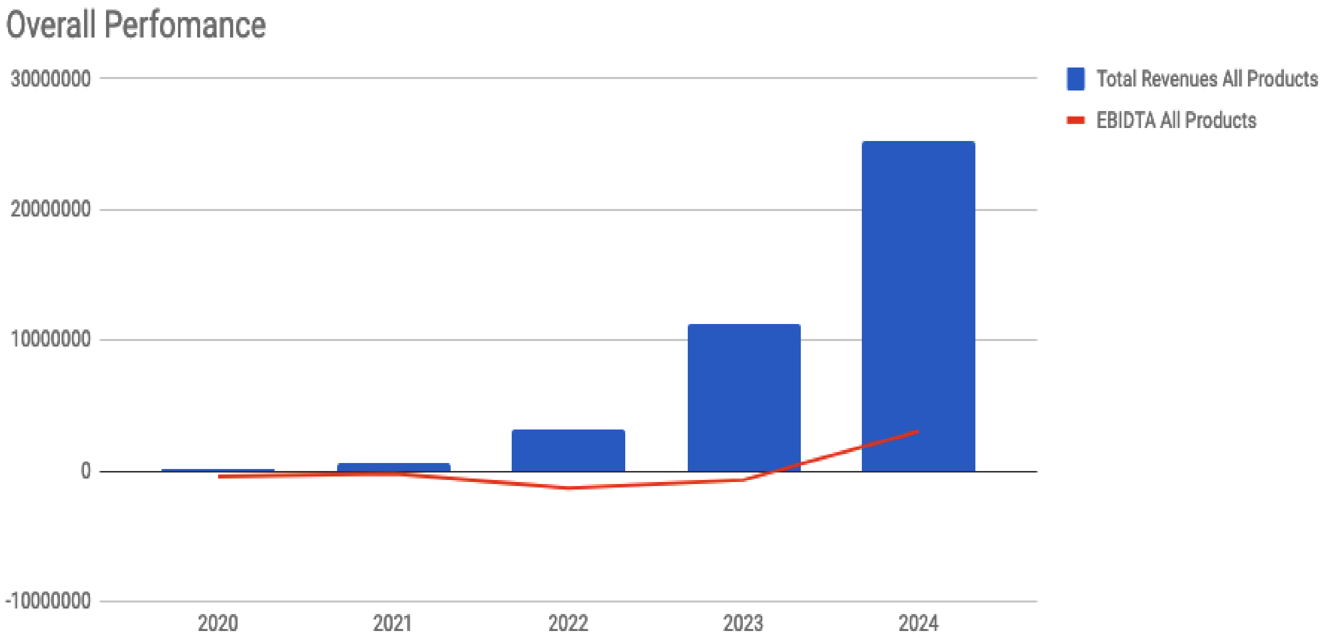
Financial performance Revenues VS Net Cash Flow

- Net cash flow means money left in the bank by the end of the year.
- Investors would like to see you grow rather than storing money in the bank.
- It's important to keep net cash low during your projections because they look more realistic and you will probably keep spending them for extra growth rather than keeping it in the bank.



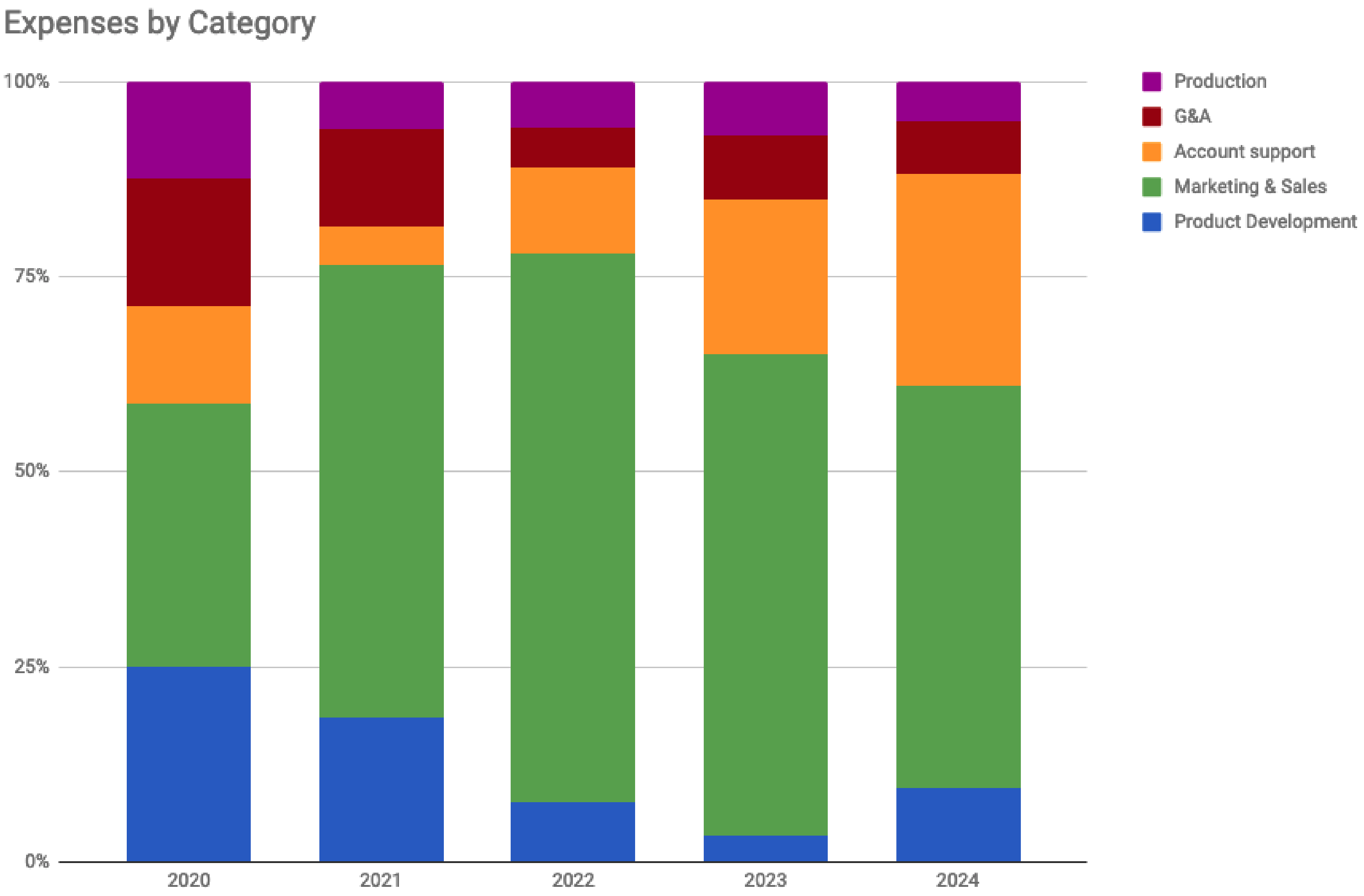
Financial performance - EBITDA

- EBITDA = Earnings Before Interest, Taxes, Depreciation and Amortization is also a great indicator of your company's performance.
- Investors know you will start with negative EBITDA as you grow but when the year you want to demonstrate profitability, EBITDA should slowly become positive as you grow your revenues and optimize your profit margin.



Analyzing your expenses

- For a SaaS companies production cost should should start decreasing and marketing & sales costs should grow when the product is ready and you are ready to scale your sales
- Keep in mind that your overhead expenses might increase if you plan have hiring or office managers as you grow.
- Account support costs should increase as well as you clients footprint grow.



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Congratulations!
You have completed this module!

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