38104 Entrepreneurial Finance
SPRING 2024

Venture Financing Deal Simulation: Objective of VC Firm

In this simulation, you will represent a VC firm interested in investing in a startup that develops a wireless application for college students. The Startup was founded in late 2023 and has reached to this stage using €500,000 provided by the Founder/CEO, his uncle, and some angel investors (See Table 1 for the capitalization table).

The Startup has gathered approximately 500 paying subscribers by March 2024 through word of mouth and expects to get 10,000 paying subscribers by the end of 2024. See Table 2 for the actual and projected number of paying subscribers. However, it now wants to launch a major marketing campaign and develop the next generation of software for the mass college student market. Your associate has examined the technology, and it is believed to be sound and appealing to customers. However, the CEO was a software engineer in his previous career and is relatively inexperienced in marketing and general management.

Revenue model:

- Each subscriber pays a €3.95/mo fee
- The company expects to generate some advertisement revenue – approximately €1 per member per mo

As you can see from the cash flow statement (Table 3.b.), the Startup is currently running out of money and needs some cash injected very quickly. It expects to break even by Q2 of 2025 and then become self-sustainable.

The Startup wants to raise €1 million in funding and proposes the funding to be used in the following manner:

- Marketing campaign expenses: €250,000
- R&D costs for next-generation application: €250,000
- Ongoing operating expenses and cash buffer: €500,000

You believe that this is a great opportunity for your firm, which is lately focusing on nurturing growing wireless application developers. However, there are a number of sticky issues in negotiating to close this deal with the Startup.

1) Amount of investment: Although the Startup is asking for €1 million in lump-sum, you believe that staged financing will be more appropriate given the highly uncertain market and unproven ability of the management team. Thus, you would like to invest €500,000

at this time and maybe invest another half a million in 6 months, if needed, depending on the progress of the Startup.

2) Valuation: The Startup proposes that it will issue 100,000 shares (33% post-money ownership) for €1 million of your investment – That corresponds to €10/share (twice as much as what the CEO's uncle and angel investors paid for at the beginning of the year) for €3 million in post-money valuation. There have been recent IPOs in a similar line of business, but with a much more mature business with 250,000 paying subscribers, valued at approximately €200/subscriber for €50 million in total market cap. However, that company also generated revenue of €10 million (Price/Sales = 5) with €2.5 million in profit (Price/Earning = 20) last year. Applying a similar valuation ratio analysis, you think a fair valuation would be the following: approximately €800,000 if you apply €20/subscriber ratio for the 40,000 paying subscribers by the end of 2025 (and you haven't even applied a private firm discount!). The valuation would be even lower if you applied price/revenue or price/earning ratios. Indeed, the company isn't even making money at this time! In contrast, the CEO/CFO of the Startup says that their current proposal is conservative in that €3 million in post-money valuation is approximately 2X of 2025 projected revenue and 5X of its 2025 projected profit. However, you believe his revenue/profit figures are grossly optimistic!

3) Liquidation preference right: You believe that you're taking a huge risk on this Startup and should be compensated accordingly. Thus, you'd like to ask for a 3X liquidation preference right with full participation and no cap. This is especially important because you believe the Startup's exit will most likely happen by selling out to a large firm like Google or Facebook in a couple of years, rather than an IPO.

4) Other preferred shareholder rights: You want all standard preferred shareholders' rights, including majority board rights, so that you can decide on the future of the Company. This is especially true because you believe that the Startup's current management team is weak. Indeed, you think the Startup will be better off by hiring a professional CEO so that the current CEO could step down and serve as a CTO. Current board members include the CEO, the CFO, and one angel investor. The Company eventually wants to have five members on the Board. You want to replace the angel investor with the professional CEO appointed by you, and the remaining two seats could be occupied by your firm and another close VC firm that could chip in some of the €1 million in investment.

At the end of the simulation, your goal is to work on an agreeable term with the Startup by completing the following table on "summary of terms" in the next page. Please note that this does not necessarily mean that you must reach an agreement and you do have an option to walk away.

Summary of terms

Item	Term	Note
A. Investment Amount (Million €)	€ __________	
B. Post-Money Valuation (Million €)	€ __________	
C. Investor Ownership Share (%)		Investor share = A/B
D. Liquidation preference		
E. Board membership		
F. Preferred shareholder rights		
G. Others		

Pro forma capitalization table

	Amount invested	Number of shares	% ownership
CEO	€100,000	100,000	
Employee stock options	N/A	20,000	
CEO’s uncle	€100,000	20,000	
Angel investors	€300,000	60,000	
VC			
TOTAL			**100%**

Table 1: Capitalization table

	Amount invested	Number of shares	% ownership
CEO	€100,000	100,000	50%
Employee stock options	N/A	20,000	10%
CEO's uncle	€100,000	20,000	10%
Angel investors	€300,000	60,000	30%
TOTAL	**€500,000**	**200,000**	**100%**

Table 2: Historical and projected number of subscribers

2024	Jan.	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Subscribers	103	311	501	800	1,200	1,600	2,000	3,000	4,500	6,000	8,000	10K
2025	Jan.	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Subscribers	12K	14K	16K	18K	20K	22K	24K	26K	28K	30K	35K	40K

Note1: Actual figures until March 2024 and projected figures after April 2024.
Note2: The Startup expects to have 80K and 120K subscribers by the end of 2026 and 2027 respectively.
Note3: There are approximately 20 million college and graduate students in the US market.
Note4: Monthly membership fee is €3.95/mo. In addition, the Startup expects about €1/subscriber/mo generated through advertisement revenue.

Table 3: Historical and projected income and cash flow statement

3.a.) Income statement (Unit: thousands of euros)

	2024 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4
Revenue	5	18	45	119	208	297	386	520
COGS	(12)	(18)	(24)	(30)	(40)	(50)	(60)	(70)
Op. exp.								
Marketing exp.	(15)	(15)	(250)	(50)	(50)	(50)	(50)	(50)
R&D exp.	(50)	(50)	(250)	(50)	(50)	(50)	(50)	(50)
General admin. exp.	(25)	(25)	(25)	(25)	(50)	(50)	(50)	(50)
Net Income	(97)	(90)	(504)	(36)	18	97	176	300

3.b.) Cash flow statement (Unit: thousands of euros)

	2024 Q1	2024 Q2	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3	2025 Q4
Beg. Cash	-	403	313	809	773	791	888	1,064
NI	(97)	(90)	(504)	(36)	18	97	176	300
Financing	500	-	1,000		-	-	-	-
End cash	403	313	809	773	791	888	1,064	1,364