Entrepreneurial finance

TUM School of Management

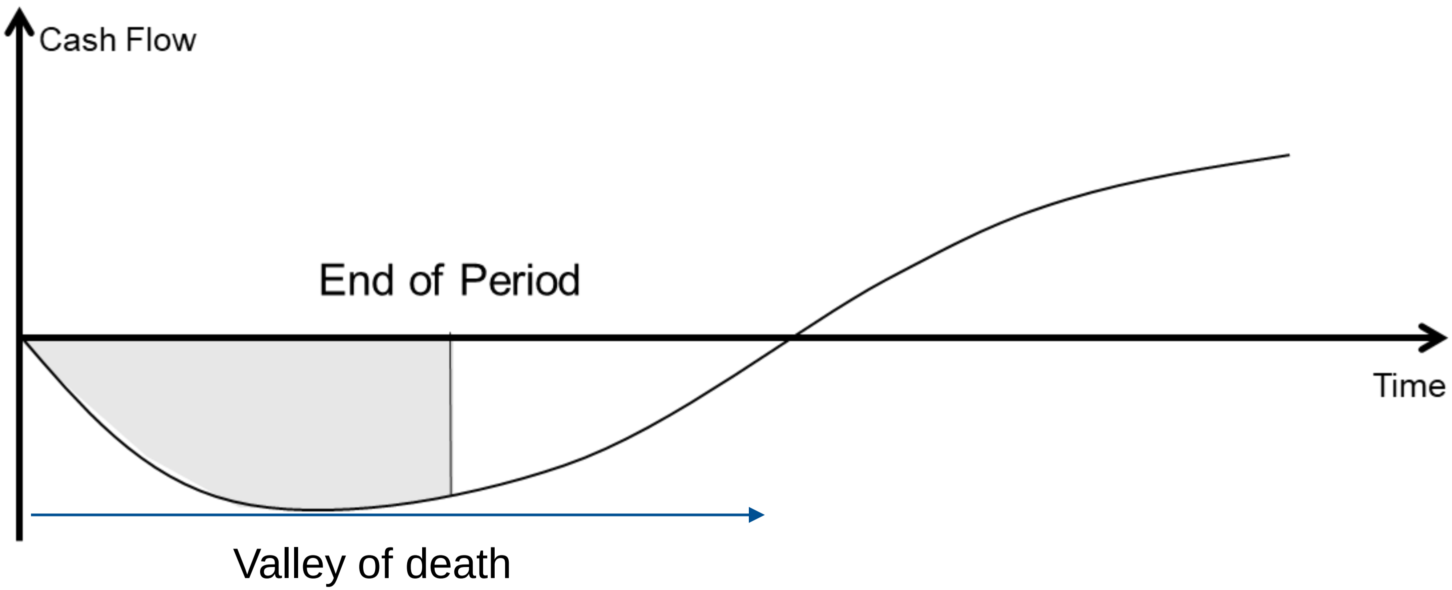
Entrepreneurship Research Institute

Prof. Dr. Dr. Holger Patzelt

In this session you will learn:

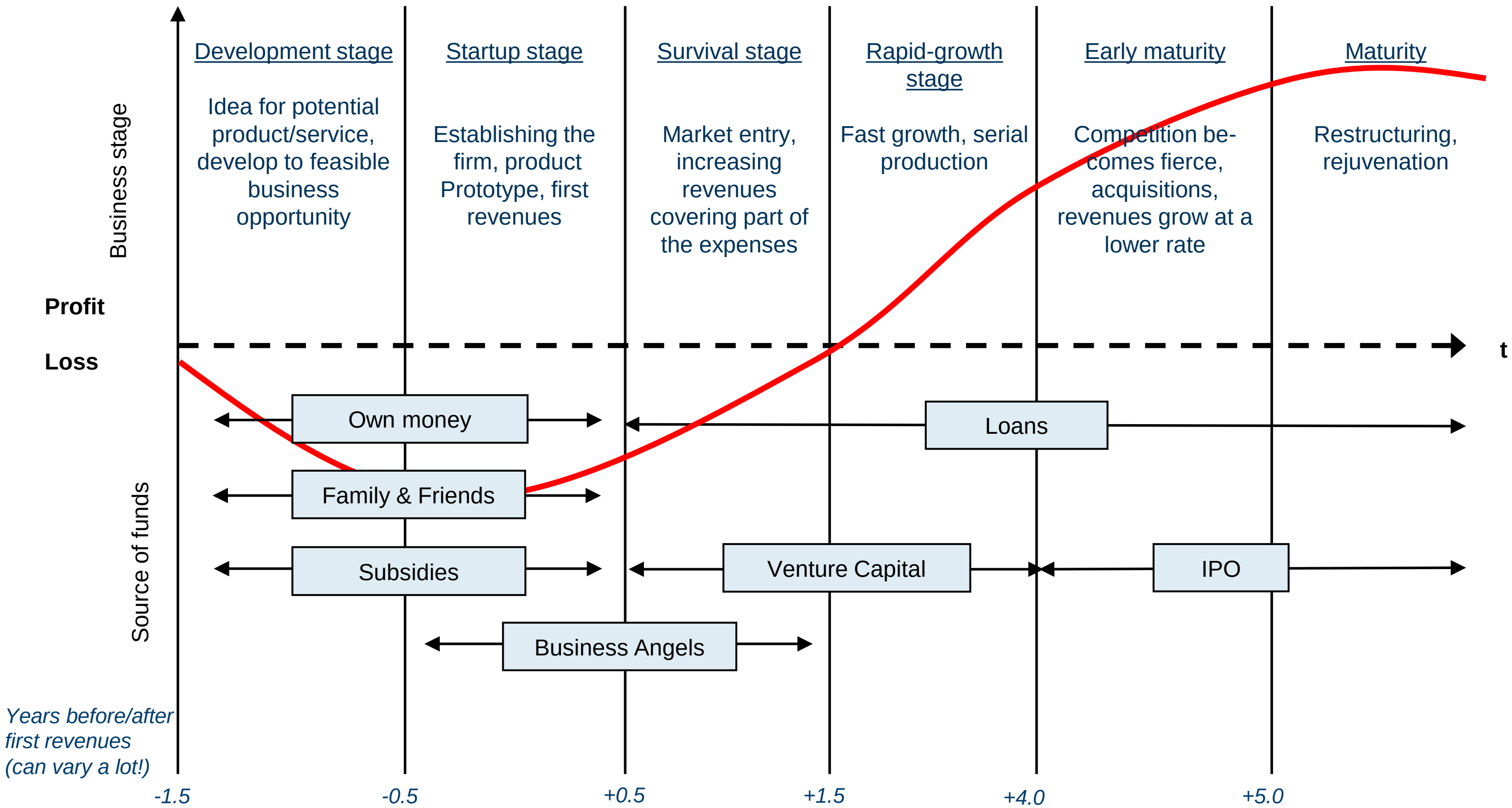
- What is the difference between getting money and earning money
- Why many new ventures go through a valley of death
- Why VC investors fail with 70% of their investments but earn money nevertheless
- Why TUM startup Lilium is taking off

The cash flow of new ventures



- The rate at which cash is consumed is called the **cash burn rate**
- **Cash burn rate:** If beginning cash is EUR 100’000 and cash at end of year is EUR 40’000, then the cash burn rate is 60’000/12 = **EUR 5,000 per month**
- **Cash runway:** You have now EUR 40’000 left in cash left. With a burn rate of EUR 5,000 per month, it will take **8 months** until you run out of cash

Sources of new venture finance



Decisions you have to make

- bootstrapping
- External money
  - Equity financing/ Investment
    - Venture Capital
    - Family & friends
    - Business Angels
    - Etc.
  - Debt financing
    - bank
    - Family & friends
    - Etc.

Bootstrapping

Financing the venture without outside capital, only with own money and the startup‘s cash flow

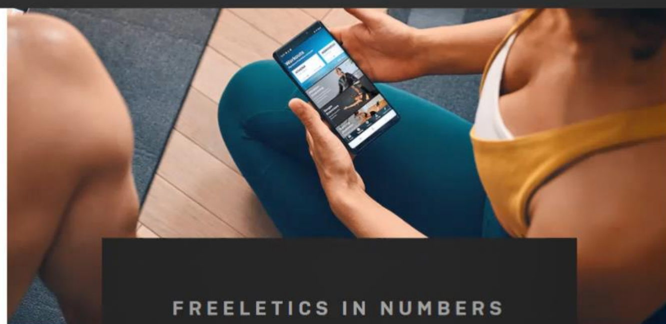
Benefits	Downsides
Ownership and control remain with founder(s) for a long time Higher financial reward in a potential later exit/ IPO	Need to generate cash flow soon Hard to develop the best possible (complex) product Growth can be slower More difficult to pay an own salary Investors often add value

Some very successful ventures bootstrapped at the start

Freeletics: Bootstrapping for years

Press EN

About News Coverage Downloads Contacts



FREELETICS IN NUMBERS

Founded in 2013

51 million users

Available in 10 languages & 175 countries

In 2013, Freeletics began disrupting the fitness industry, a multi-billion dollar industry previously dominated by gyms and exclusive personal trainers. Today, after years of bootstrapped global growth, Freeletics is the leading provider of AI-based fitness and lifestyle coaching. Seven years on, with over 51 million users, 165 employees and a clothing line, Freeletics has become one of the fastest-growing sports and lifestyle companies in the world.

Few startups have cornered the billion-dollar fitness app market as successfully as Freeletics, a five-year-old German venture that's produced some of Europe's most popular personal coaching apps. The firm, which was entirely bootstrapped until August 2018, has more than 31 million users worldwide in over 160 countries. And now, with 120 employees, a suite of four apps, and a clothing line, it's gearing up for further expansion.

Freeletics today announced that it has raised $45 million in a series A funding round led by FitLab, Causeway Media Partners, and Jazz Venture Partners, with participation from Courtside Ventures, Elysian Park Ventures, Ward Ventures, and business mogul Tony Robbins. As part of the round, Causeway's Mark Wan and Jazz's John Spinale will join the board, and FitLab, which bought a controlling majority of shares from

https://venturebeat.com/2018/12/04/fitness-app-developer-freeletics-raises-45-million-to-expand-internationally/

www.freeletics.com

External money

Equity financing

An investor provides capital to the new venture and receives an ownership share in return

Examples: family and friends, venture capitalists, angel investors

Debt financing

The new venture gets a loan that has to be repaid (including the corresponding interest)

Examples: bank loans, loans from friends, family members, colleagues, or other lenders

Equity financing

Benefits	Downsides
No forcible repayments, therefore no bankruptcy risks from equity financing. More equity financing can increase the creditworthiness for future debt financing.	The investor takes a stake in the company (dilution of control). The entrepreneur has less freedom in decision-making. Buying out their stake at a later stage will cost more in comparison with what was originally invested.

Particular important for R&D-intensive, high growth ventures

Debt financing

Benefits	Downsides
Creditor has no control over the business Debt can be cheaper than equity (the interest is tax deductible, lower required return due to different risk pattern, etc.) Financial planning is easier due to fixed and finite payment structures Return on equity may be positively influenced by financial leverage (‘leverage effect’)	It’s difficult to get a bank loan without having assets to pledge, a good credit history, and/or a track record Obligation to pay amount back at fixed schedule

Particular important for ventures that can offer securities

3 Fs: Family, Friends, & Fools

The typical sources for initial new venture funding are:

(Founder)

Family

Friends

Fools

Advantages of family as a source of financing:
Altruistic ties between borrower and lender, leading to:

- Easier access
- Longer time frame
- More flexibility in terms of contract form
- Lower cost
- Renegotiation opportunity

The downsides:

- Limited amount of funds
- Reciprocity
- Increased risk aversion to keep family assets safe
- Intervening family members
- Potential relational conflicts

Government subsidies (grants)

- Targeted toward very early stage ventures
- Often linked to technology transfer
- Regional development
- Industry-specific programs
- Typically „free money“ – no ownership or interest loans

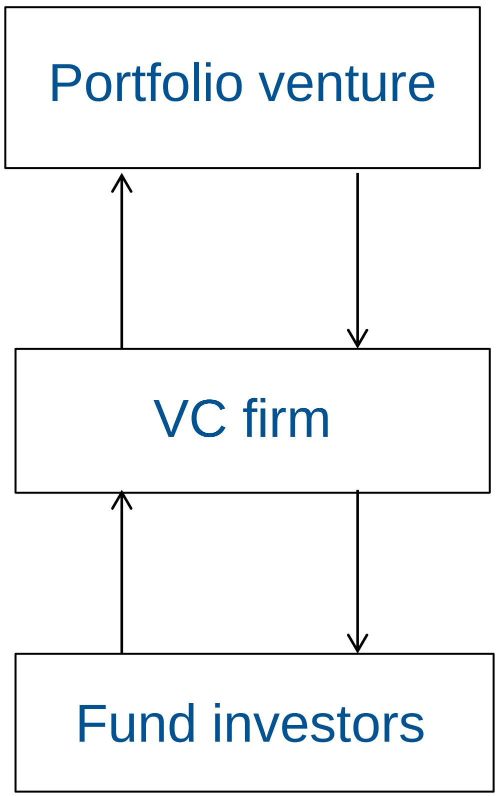
Business angels

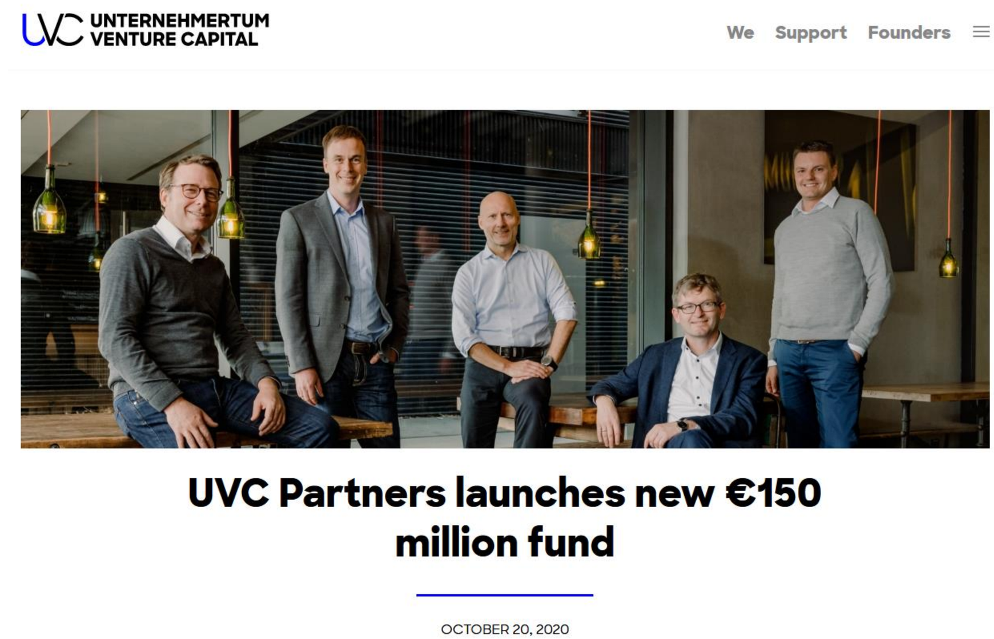
- Wealthy individuals often with expertise to add value to the new venture
- Usually invest in products related to personal interest
- Early stage, typical investment 50,000 to 500,000 €
- More flexible to invest in ventures that may grow at a slower rate or have a lower rate of return than demanded by VCs
- Individual or collaborative investors (Business Angel Network - BAN)

Venture capital (VC)

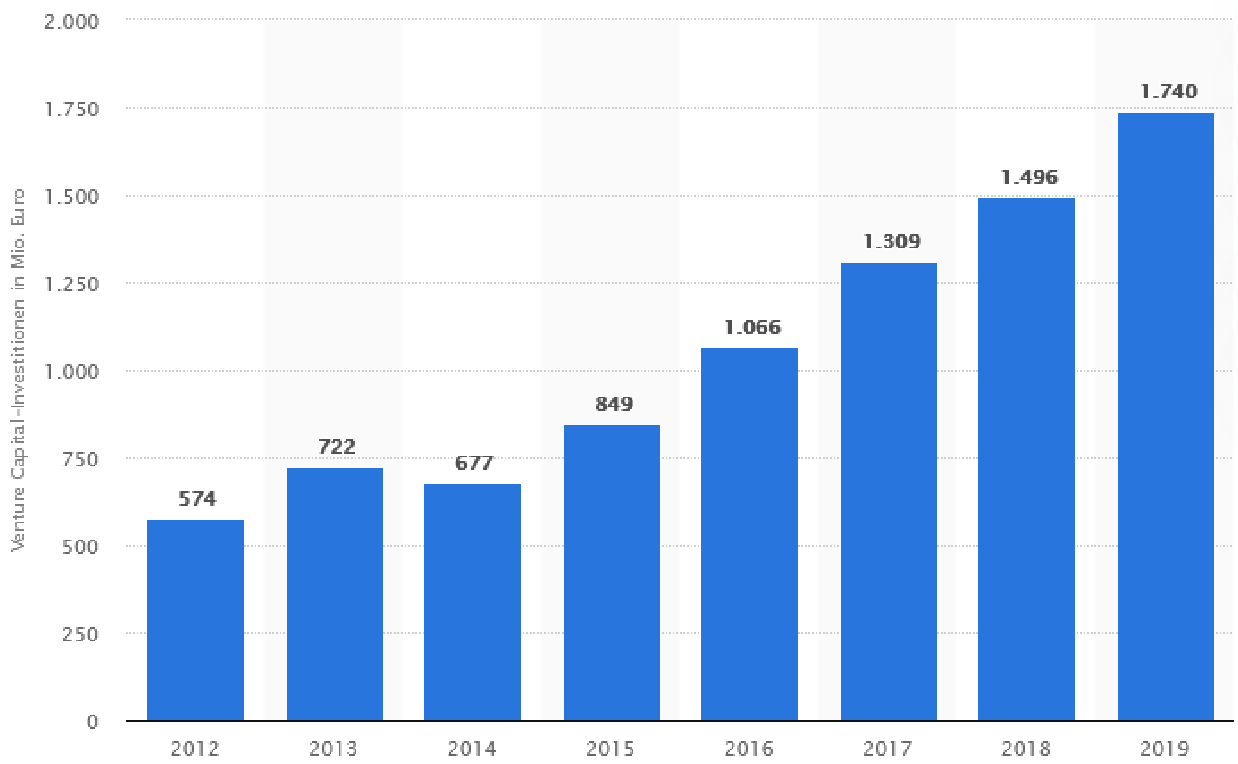
- Equity capital for young ventures, typically combined with management support
- Seed, early stage, or expansion financing (often specialized)
- Risk reduction strategies:
  - Portfolio of investees
  - Specialization (phases, industry)
  - Staged financing in several rounds (Seed, A, B, C …)
  - Lead investor or co-investor in VC investment syndicates
- Explicit goal to sell the business within a certain timeframe (through an IPO, trade sale, etc.)
- Venture capitalists typically invest in exchange for at least 20-30% share of equity
- Investment horizon 3 to 5 years
- Targeted investors' expected return (internal rate of return, IRR) > 20% p.a.
- Out of 10 investments: 1 star, 2-3 moderate, rest write-offs
- VCs are compensated by fund management fee and profit share

The venture capital cycle





VC investment in Germany



Venture capital investment criteria

1. Entrepreneurial team
2. Entrepreneurial team
3. Entrepreneurial team

4. Market size, market growth, competition, risk, product/technology, partners, strategy, …

New ways of venture finance

Business incubators/accelerators

- Public or private organization that provides new ventures with offices, networks, advice for up to 3-6 month
- Entrepreneurs provide an equity share (1-10%) in return

Microfinance

- Provides uncollateralized loans to people living in poverty without access to finance (especially women)
- Loan is provided to an individual or a group (a group decreases the risk of loss and increases probability of repayment)
- Entrepreneurs need to repay the loan and the interest

Peer-to-peer lending

- Uncollateralized loans from other individuals (equity or other ownership relations are generally not included)
- Screening process involves credit history of the borrower and other criteria
- Risk that entrepreneurs use money to finance consumption

Crowd-funding

- Collection of (small amounts) of capital from a large a number of people through online platform/social media
- Entrepreneurs present their projects on platform
- Investors get a compensation in form of “tokens of appreciation” (e.g., personalized products) or equity stake

Examples crowdfunding

Kuchentratsch ist eine Anlaufstelle in Form einer Backstube für alle SeniorInnen die Freude am Backen haben. Unsere SeniorInnen backen bei uns gemeinsam Kuchen, tratschen, lernen neue Leute kennen und haben die Möglichkeit ihre Rente aufzubessern. Die leckeren Kuchen werden an Privatpersonen, Unternehmen, Stiftungen oder Cafés verkauft - so hat jeder etwas von den mit Liebe gemachten Kuchen. Begleitet uns bei unserem nächsten Schritt - eine eigene, seniorengerechte Backstube in München.

Katharina und Katrin

24.630 €
23.000 € Fundingziel

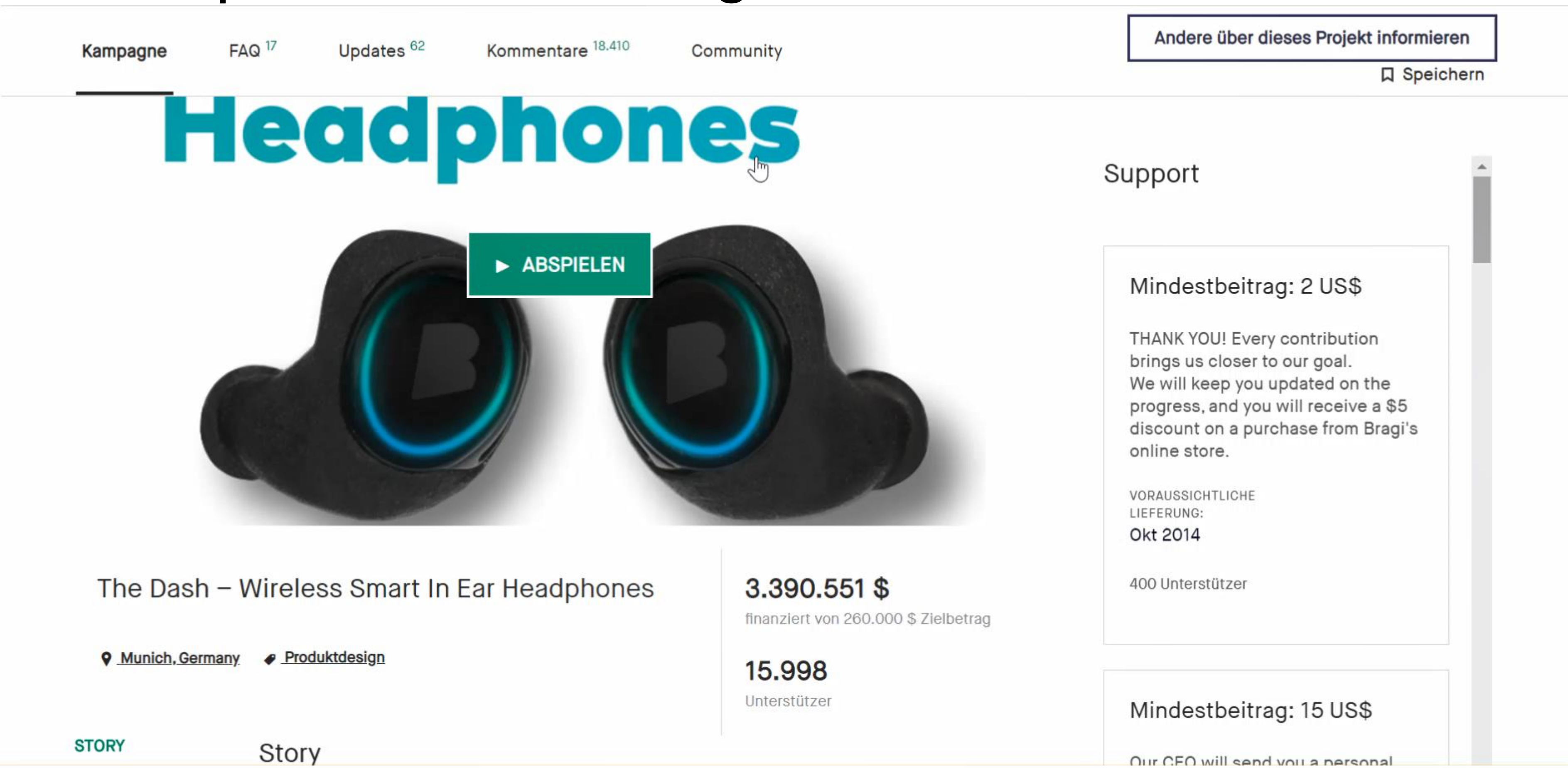
381
Unterstützer*innen

Projekt
erfolgreich

Gefördert von yooweedoo - dein ökologisches und sozial nachhaltiges Projekt

https://www.startnext.com/kuchentratsch

Examples crowdfunding



https://www.kickstarter.com/projects/hellobragi/the-dash-wireless-smart-in-ear-headphones?ref=discovery_location_most_funded

Exit

= exit of investors or the founders from the company with the highest possible profit.

What do you need for an successful exit?

- fast growth & multiplication of start-up value
- high valuation of the start-up

What happens during an exit?

Investors or founders sell their shares in the company and leave the company as shareholders

Why should one do this?

Investors: generally they don‘t plan to invest their capital in the long term. After an exit they can reinvest the capital in new start-ups (and earn even more money)

Founders: an exit means financial and legal independence

Exit Strategies

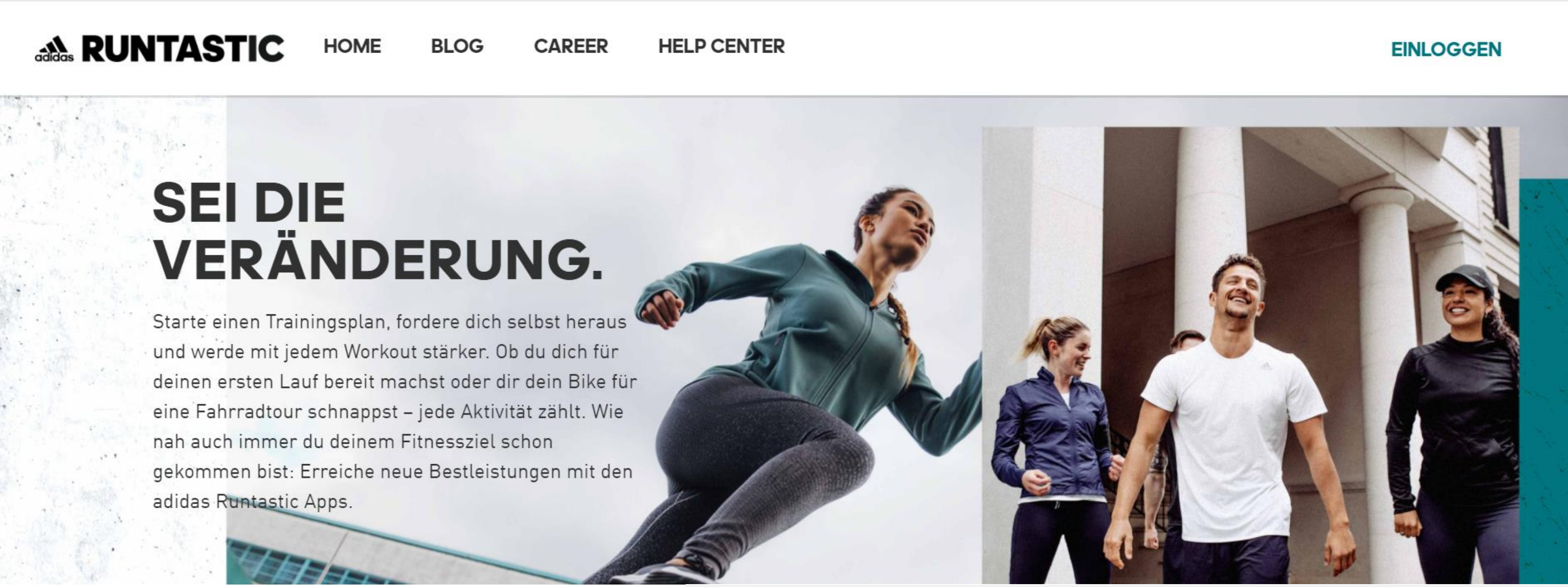
Trade Sale = selling the start-up to a corporation or private equity investor

Leveraged Buyout = selling the start-up to an investor that already invested in the company before

IPO = Initial Public Offering, probably ideal way of an exit, only possible for very successful start-ups

Merger = merging the start-up with a competitor

Example successful exit



Runtastic Acquired By Adidas For $240M

Natasha Lomas @riptari / 7:25 PM GMT+2 • August 5, 2015

Comment

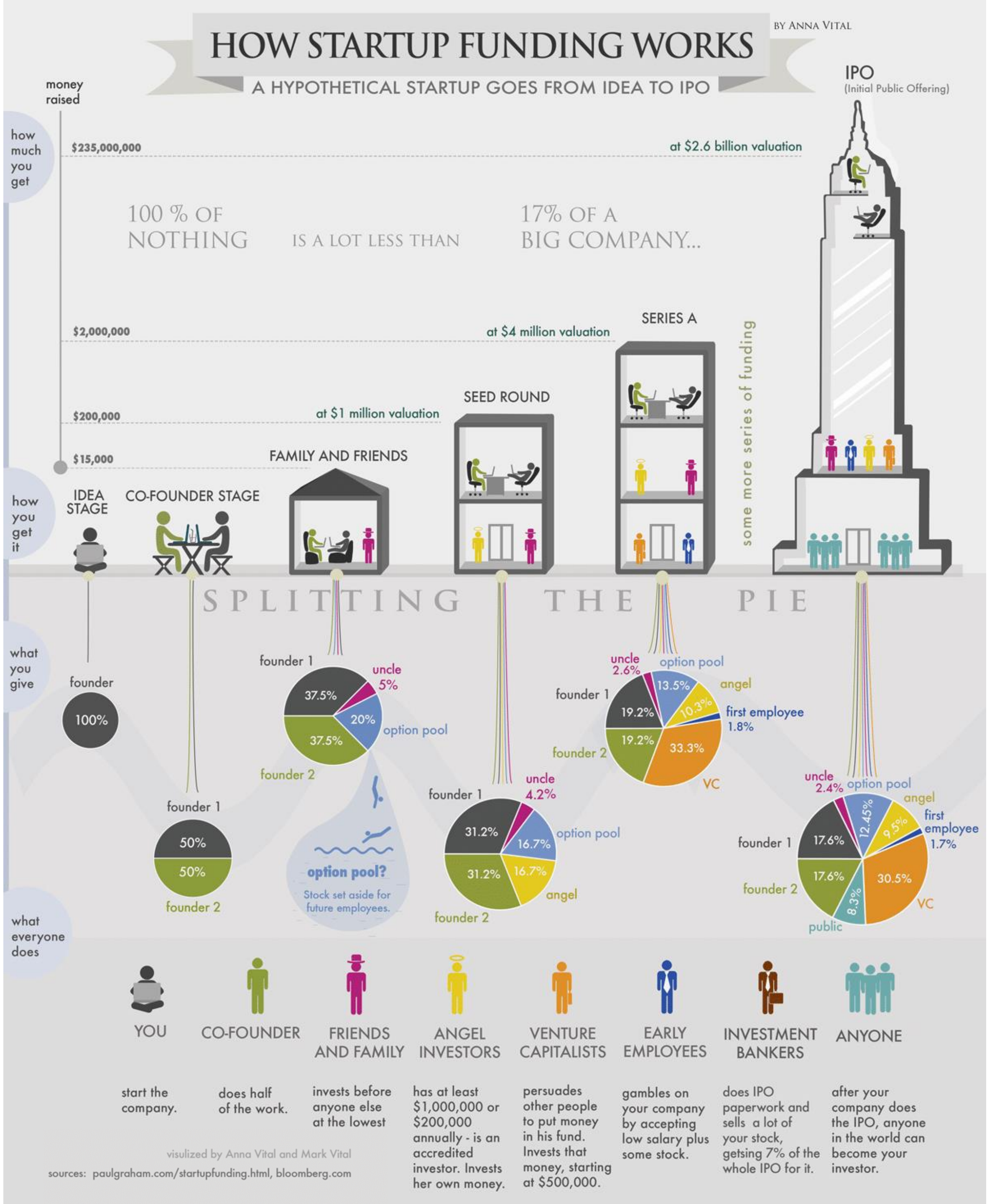
Your task (15 min):

- Read the press release and additional information provided on the financing of TUM venture Lilium by following the two links provided on Moodle.
- Try to answer the following questions based on the press releases, our session, and your own additional research:
  – When is the product launch planned?
  – Why do investors provide so much money to a venture without a product?
  – What type of investors have invested into Lilium in this round?
  – Would debt financing be a option for Lilium?
  – Who was the lead investor?
  – What is an “inside round”?
  – Which investment stages/ rounds are in focus of Freigeist?
  – What’s Lilium’s (supposed) valuation in the last financing round?

Lilium’s financing

- Product launch scheduled for 2025
- High risk-high return project, no (or little) collateral
- Financing by a syndicate of previous VC investors led by Tencent, including seed-/early stage-investor Freigeist
- Lilium is one of currently two TUM unicorns

Session summary



Further readings

Giese, M., Nielsen, N. (2020), Startup Finanzierung: Dein Insider-Guide: Praxis-Tipps von Investoren für Gründerinnen und Gründer. 1. Aufl., Martin Giese, Unterföhring 2020

Grompers, P., Lerner, J. (2006), The Venture Capital Cycle. 2. Edition, MIT Press (August 11th 2006)

Kuper, S. (2019), Secrets of Sand Hill Road: Venture Capital—and How to Get It., Virgin Digital (June 6th 2019)

Feld, B. (2019), Venture Deals: Be Smarter Than Your Lawyer and Venture Capitalist, 4th Edition, Wiley (August 27th 2019)