

Simulations in Entrepreneurship Education – where do we currently stand

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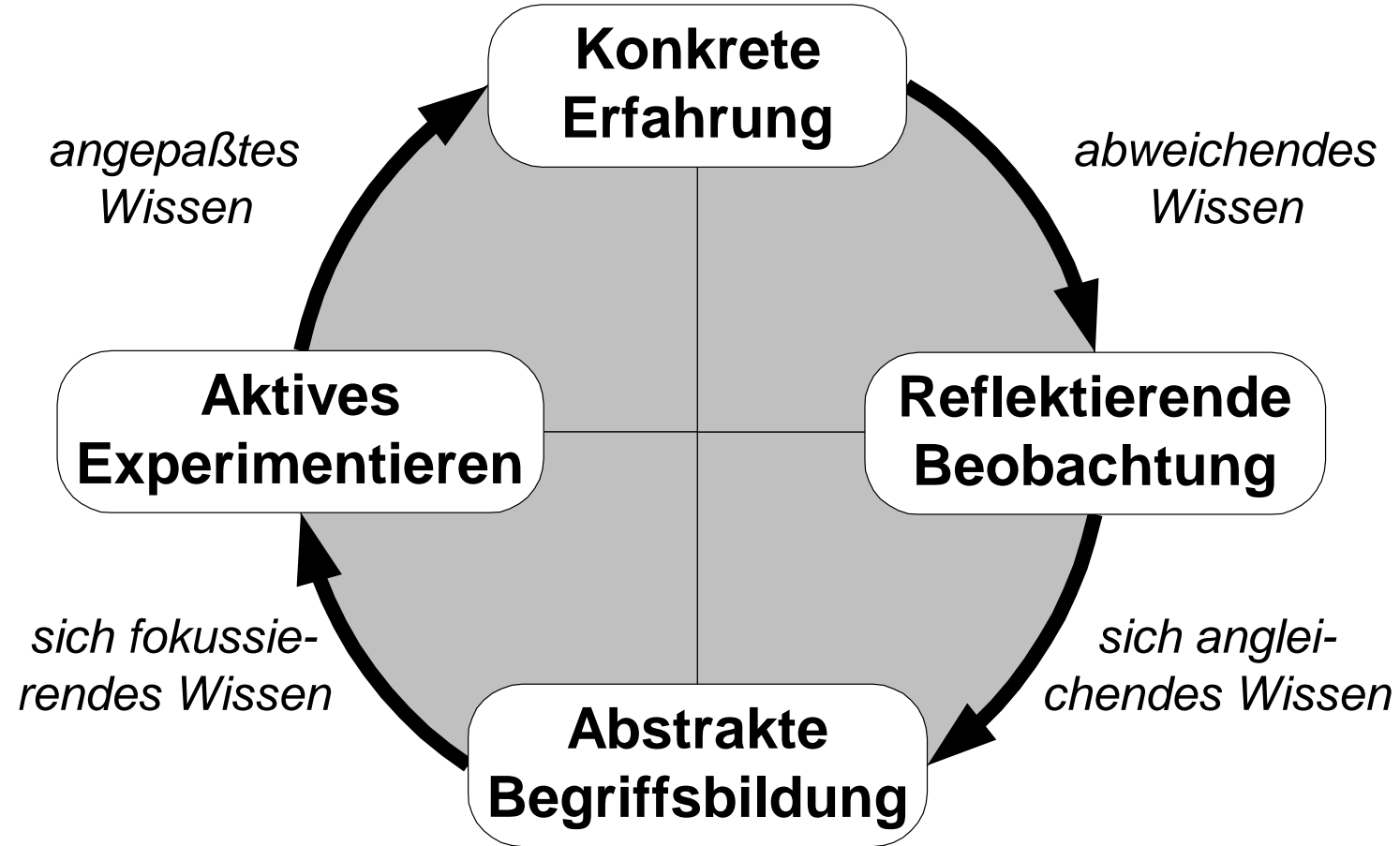
Learning Goals

- You will learn about what experiential learning is and what management simulations can do for it
- You will learn why design thinking and the lean startup almost killed simulation games in entrepreneurship education
- You will learn why there is so much more than entrepreneurial theory and business model generation
- Why it is time to revisit management simulations in entrepreneurship education

What are management simulations?



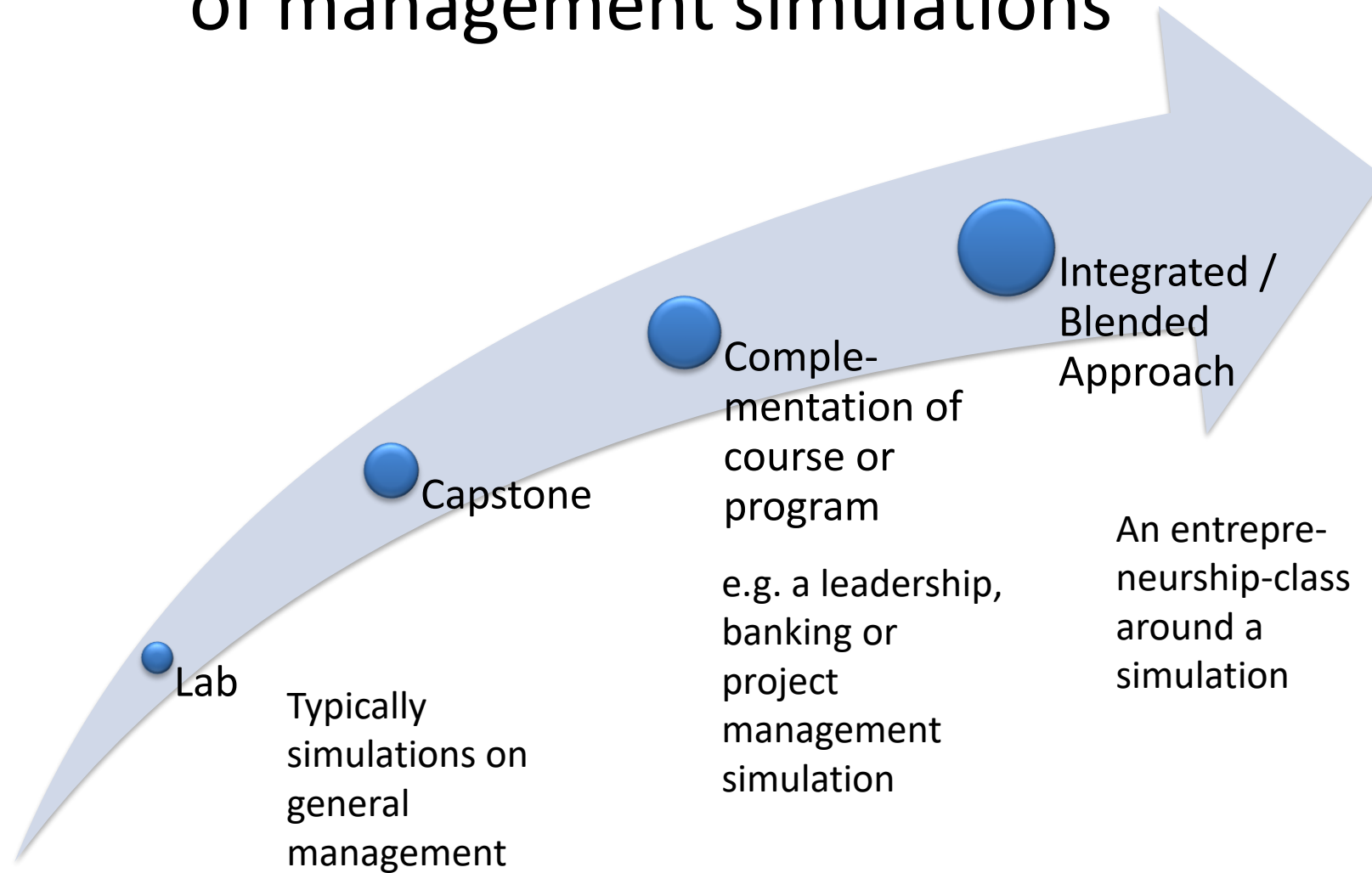
„Learning-cycle“ im Experiential Learning



Experiential Learning Model by Kolb

- Active experimentation: Phase of trying things out and implementing plans.
- Concrete experience: acting and experiencing consequences enable direct individual experience
- Reflective observation: reflection on factual (and hopefully also) group dynamic aspects of the experience
- Abstract conceptualization: Evaluation and generalization of consequences for further action steps

Levels of Maturity in the use of management simulations

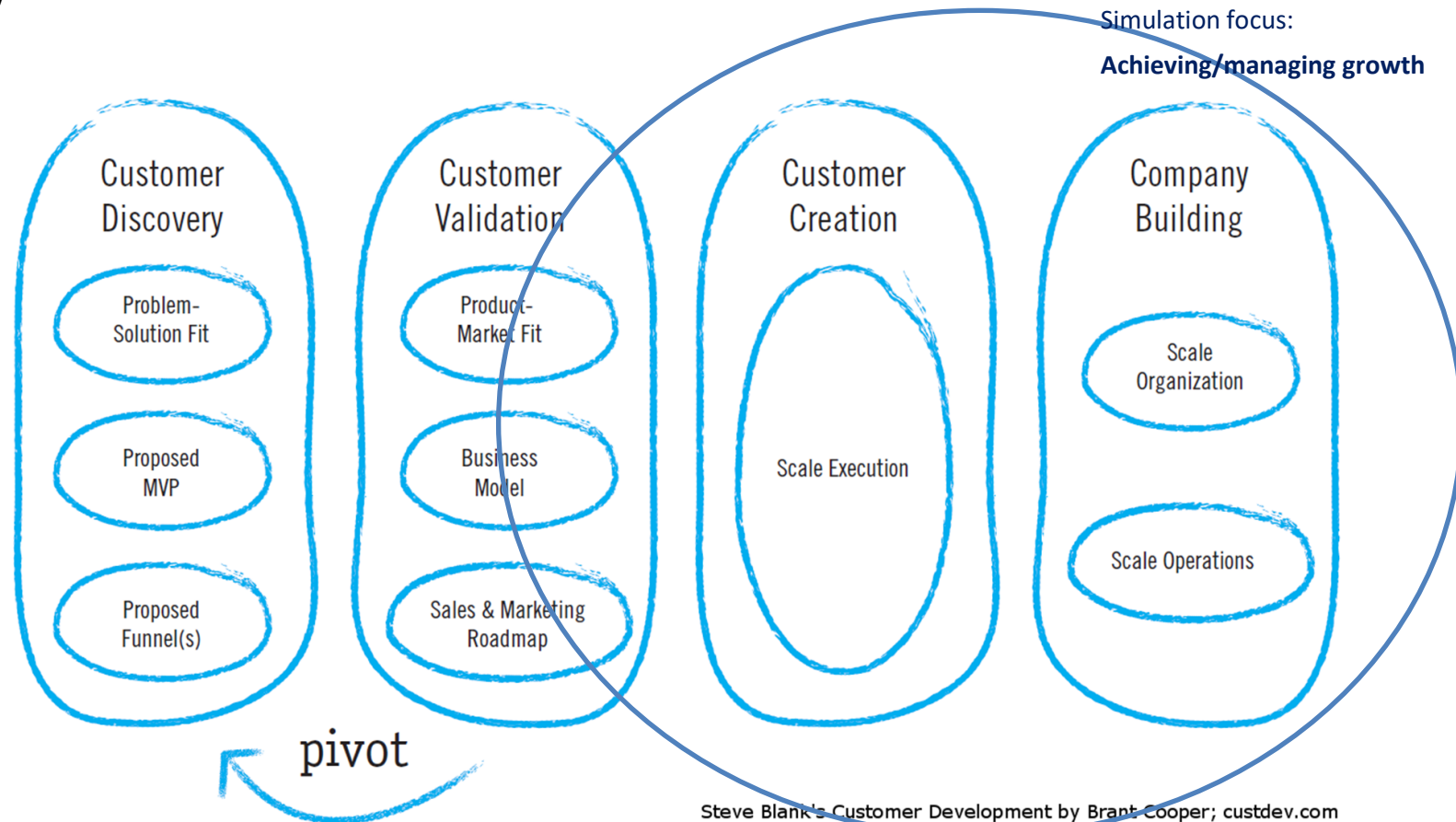


Let's revisit entrepreneurship education

- Entrepreneurship Simulation Games were everywhere in the 2000s
- Basically it came down to an enhanced business plan course
 - Write your business plan
 - Implement it
- As we all know: 95% of the business plans never get implemented
- Then Design thinking came and soon afterwards the Lean Startup Approach changed everything
- Entrepreneurship Education is nowadays Action Learning
- Thus, learn the tools and validate your idea
- Game over for management simulations?

From start-up to scale-up

„A startup is a temporary organization used to search for a repeatable and scalable business model.
They fail because they confuse search with execution.“



Wait

- There is more to entrepreneurship education than entrepreneurial theory and business model generation
 - Fundamentals of Business Administration for Entrepreneurs
 - Entrepreneurial strategy and finance
 - Traction, Business Development and entrepreneurial marketing
 - Leadership
 - ...
- May it is time to reconsider management simulations in entrepreneurship education



Why Scooters will be the next wave of high growth business

From Bill Moonshot, Startup Crunch

The first waves of Scooters and sharing services has hit the cities creating micro-mobility for the users and a few unicorn valuations for investors as prominent as Darkstone and Redwood Capital. Yet it has received some backlash from cities as prominent as tech-savvy San Francisco. “Those things look like children toys, but they are not, especially when a 220lb grown-up is using them with 20 miles per hour on a sidewalk. We need regulation and those things shouldn’t drive on the sidewalks!”, a city official is quoted.

Inspired by China and Europe a new group of startups has emerged creating a different kind of street-safe scooters. Some look retro like the Vespa in Italian “Dolce Vita”-style movies while others are the Tesla-equivalent of a new generation of motorcycles, but they all share a solid foundation with lots of technology making them extremely safe and fun to drive. “If you can drive a car or bicycle you will be ready,” Sam Pace, CTO of MyScooty states: “We could make the drive autonomously, but this would take the fun part out of it.”

Selling in the range of 3,000 – 4,000 US\$ they can replace the second car in some households. Others just use them as a fun vehicle getting them to the beach or the corner store without the parking hassle. “More interestingly, 37% of our current users don’t even own a car, relying on Uber and rental cars for other occasions. Operating costs are low with only a few cents per mile driven and when travelling less than 5 miles Scooters are usually faster than a car when considering the time spent on parking,” one of the competitors head of traction is quoted.

“Are they street legal?”, early adopters are often asked. Yes, but they fall into different categories and a minor software update can push them into other legislation. If the top-speed is 20 mph and less in California no registration and insurance is required. If they go faster, different licenses are required, but e.g. a top speed of 30 miles is still covered by a one-time \$18 registration. “You choose how much fun and speed you want. The good news is that you can always upgrade over the air when you hold the right drivers’ license” Sam Pace explains.

Business news: MyScooty - Founders step aside for the next generation of managers

Santa Cruz/Scotts Valley, CA: Rumors about a change in management was talk of the town, especially before the first board meeting following the successful B-round. Just before Christmas MyScooty raised 25 Million US\$ and investors include a number of Silicon Valley veterans. The current CEO and CTO, both cofounders will remain part of the board, but serving as chairman and technology advisors.

Bill Nash and Sam Pace founded MyScooty four years ago with the goal to provide “real scooters to real people blending Italian style with Silicon Valley technology”. The past fiscal year was quite satisfactory for MyScooty Inc. The Model 1 scooter continues to be in great demand among customers. With sales reaching 10,000 units revenue was at a record level of 30 million. For the first time in history the operating cash-flow was positive and the EBIT is at -4 Million US\$. The financial situation is rather comfortable with approx. 20 Million US\$ in cash after the successful B-Round at a \$100-million valuation. “The good news is that we don’t need the cash for our operations any more: It will fully go into the financing of our growth.” Sam Pace is quoted.

Yet this growth road map is what is the talk of the valley. Currently Model 1 sells mainly to the usual tech-savvy Silicon Valley and Venice Beach-suspects with 50 % of the sales from California. „Model 1 sells to the typical innovators,” an analyst is quoted „and unless they are able to appeal to the next segment of the market this might just be another Segway-Story“. Thus further growth requires to cope with a number of challenges such as rethinking the distribution channels requiring a larger sales force and marketing efforts and an approach to internationalization in the medium run. Also the current product is fairly expensive to manufacture and batteries are small due to cost considerations.

The new management is experienced coming from various industries and some with a background in consulting and audit. „Starting a business is one thing, scaling a business requires very different skills in operations, sales and finance“ an investor and Silicon Valley veteran shares „I am happy that Bill and Sam are still around with their vision and I have trust in the new management“.

Your starting situation

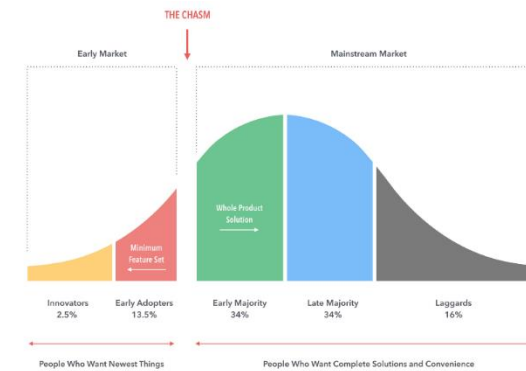
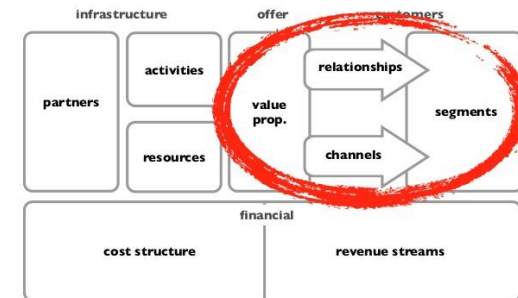
The challenge:

- Move successfully to mainstream market
- Scale the business increasing sales tenfold and move the valuation from 100 Million US\$ to Unicorn dimensions.

Starting situation:

- The B-round-financing just closed raising 25 Million US\$ at a 100\$-valuation
- Sales are in the range of 10k units
- There are 20 Millions cash in the bank with a positive operating cash-flow as a starting point for the next level of growth.
- An earlier equity deal provided you with enough capacity for 25k production volume

Product / Market Fit



<https://smithhousedesign.com/models-predicting-future-geoffrey-moores-crossing-chasm/>



Your Product

MyScooty Model 1

Classification	Scooter
Top-Speed	20 mph/30 mph/60 mph (depending on the software version and license/insurance requirements)
Power	7-10 hp (4-7 kw)
Engine	Brushless DC electric motor
Weight	320 lb
Batterie	LiFePo4; 48V 54Ah
Miles per kwh	40
Range	50 miles on a single charge
Breaking system	2 disc-breaks with lifetime warranty thanks to the recuperation-model
Price	US\$ 3000 + sales tax
Units sold last year:	10,000

Tasks for the First Year

- Analyze the initial situation and decide on a strategy
- Set your strategic objectives and identify the key performance drivers to create traction and growth
- Implement your strategy in the operational decisions of period 1 focusing on the following aspects.
- You are the new management team and those are your primary areas of concern for year 1 to grow the business:
 - Pricing
 - Advertising budget
 - Sales Staff
 - R&D
 - Hiring and overtime
 - Accepting the offer from the bulk buyer
- Currently there are 2,500 Scooters Model 1 in inventory.
- Your production capacity is at 22,000 units and overtime can squeeze out up to 25,000 units.



Business News

General Economic Situation

- The aftermath of the trade wars in the past year is still impacting the economic development. Banks continue to be reluctant to enter into new credit agreements forcing businesses in some industries delaying investments. Experts expect a slow start into the new year with growth picking up in the 3rd and 4th quarters:
 - Gross domestic product will grow by an average of 1.5 % in real terms.
 - Investment levels will be comparable to the previous year, with little additional growth
 - The cost of living is to increase by 2 %.
 - Wages and salaries will grow moderately by 2 %.

New from the Scooter Industry

- After a rather slow growth last year experts expect Scooter sales to take off this year with the technology adaption lifecycles finally moving from the pioneers to the segment of early adopters. Pricing will be crucial since this segments sees the product primarily as a “nice-to-have”-gimmick. Depending on the price levels, the market for scooters could potentially double, but this will also require efforts in sales and promotion. One of the take-aways is that the new customers inform themselves on the web, but prefer a local dealer to close the deal.
- Your key account manager has been in talks with a distributor of electric bicycles from abroad. They are interested in expanding their offerings by distributing your Scooter (SCOOTY I) under their own label. For a set price of 2,700 \$ they are willing to buy any quantity up to a maximum of 4,000 Scooters. This is a negotiated deal which does not impact your regular sales nor is it influenced by actions of the competition. This bulk buyer considers this to be the potential start of a long-term cooperation. The delivery conditions are EXW (“ex works”) which means that transportation, customs, etc. are the buyer’s responsibility.
- Finding new employees has become easier due to the slower pace of the economy. Expect hiring costs to go down to 5,000 \$ per new hire.



Challenges by decision cycle

- Year 1: coping with the growth doubling the business in regards to activities, resources and partners
- Year 2: new technologies emerge, redefining the product-market fit, getting traction and revisiting the sales- and distribution approaches, coping with internationalization, moving the focus of the customer segments from innovators to early adopter, round C financing
- Year 3: Introducing the second generation of the product, re-designing the value chain, coping with HR-related issues and defining an HR-strategy
- Year 4: regulatory pressures, coping with authorities, compliance issues in several markets, more complex financing decisions. Valuation of the business, possibly another round of financing
- Year 5: costs of capital and working capital management, redefining the product mix possibly launching an entry level 3rd model into the market, make-or-by-decisions
- Year 6: return to the growth path, prepare for an IPO or equity sale

Factors impacting success and the valuation



Get ready for the ride!



Key Learning Outcomes and Topics

- Managing strategic partnerships
- Understanding how to grow the business and enter new markets and opportunities
- Optimizing sales pipeline and lead targeting
- Analyzing sales data and market information and making informed decision based on the input available
- Assessing impact of sales actions and planning ahead (modify or pursue)
- Mastering sales projections and reporting (curating financial data for territory and accounts and adjust activity accordingly)
- Tracking strategy execution quality and measuring against most relevant metrics and KPIs
- Identifying strengths and areas of improvement



Traction Challenge by decision cycle

- Year 1: focus on getting traction doubling sales
- Year 2: Establish your own digital channel, moving the focus of the customer segments from innovators to early adopter, coping with HR-related issues and defining an HR-strategy
- Year 3: Launch of the new Model 2 and Model 3.
- Year 4: Accessoires and Service/Updates offerings become available

Please note: we are planning 3 decisions cycles with the 4th period optional in case we have enough time.

- Year 5: dealing with some backlashes and compliance issues
- Year 6: return to the growth path, prepare for an IPO or equity

5a. Free Charging

Tesla has done it, so can you. Thus, you are offering free charging for the first year at all public charging stations in cooperation with a large utility company.

Cost estimate

900 T€

5b. Upcoming Social Media Stars and platforms

Don't go where people are, but try to be where they will hopefully be in 2 years. Thus, you invest into upcoming stars and you are experimenting with new platforms.

Cost estimate

500 T€

5c. Work with traditional media

Trying to cross the chasm you hire a PR-agency helping you with connection to traditional media getting you press coverage e.g. in car magazines, but also in newspapers and lifestyle-media.

A change management and leadership simulation

- The change incident
 - You are employed at incumbent aerospace
 - For the past 50 years you have not really changed the way you design rockets
 - Recently a new startup – let's call it Space Y – has started to drastically change the way the industry work launching vehicles into space at 20% of your cost:
<https://www.youtube.com/watch?v=UTwRxtmQ9IY>
- Your internal startup
 - You are an internal startup and you have 4 months of time using lean startup methodologies to work on a MVP
 - Your startup consists of a combination of region-specific and cross-divisional functions which should help you to design a new rocket launching into space at 20% of the current costs
- Your role
 - You and your team are friends of the head of the startup
 - Your task is to help her in engaging each and every individual in this startup thereby securing its future performance and success