CREDENTIS – THE NEXT STEP



Entrepreneurial Investments part II

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THE INTELLIGENT INVESTOR FRAMEWORK

Investors are actively seeking valuable businesses and assisting in their development in order to create return on their investments. A natural question one may ask is, what defines a valuable business? Furthermore, how do investors go on to value and decide whether or not to put money into a potential investment opportunity? We base our analysis on an article of Harvard Business School that was published 2004 and personal conversations with investors ¹. There are several techniques to quantify the value of a company, such as peer multiple and cash flow analysis. However, they all have their roots in the underlying fundamentals of value creation within businesses. In this paper, we will present three main factors that constitute the value creation processes of a company; a) the market and inherent industry dynamics, b) its product and value proposition, and c) the team that's responsible for delivering future value.

Market and industry dynamics:

Within the investment industry there's a quote saying: Do you bet on the racing track, the car or the driver? Obviously, the corresponding industry, corporate and team are all important factors an investor needs to consider. A racing car can only win the race if the track is correct. Therefore, we first focus on the industry - racing track, to analyze what criterion an industry needs to have to attract investments.

Investment preference: Venture capitalists should invest in sectors where they have educational background or previous operational experience. In industries where the investor has sufficient knowledge and experience, he/she will be able to thoroughly and efficiently analyze the market and the target company, thus getting an edge compared to the rest of the market. Moreover, venture capitalists sticking to their field of experience can assist the ventures in strategic matters and increase the probabilities of the venture succeeding in its mission to deliver value.

Market landscape: When investors evaluate an investment opportunity, it's very attractive if the target company is operating within a rapidly growing sector. An upcoming expanding market could yield a first movers advantage, making it difficult for newcomers to catch up and incumbents to respond. An investor should also carefully consider the market size. If the market ceiling is too low, there is perhaps not enough space for new ventures to

¹ Roberts, Micheal J., Barley, Lauren. "How Venture Capitalists Evaluate Potential Venture Opportunities", *Harvard Busniess School*, 9-805-019 (2004)

expand. In such an industry, even if the venture becomes the number one company, the size of the profits might be too small to justify the required investments. Investors prefer to invest in industries where even a small piece of the pie results in a hefty meal. With that being said, it does not mean that a large and mature market with low profitability poses as an attractive investment opportunity. Rather the opposite might be true, a small but upcoming rapidly growing segment might be more preferred.

Competition: Awareness for competition on the race track is crucial for the success of the race car and it should therefore be carefully examined by a responsible investor. If the company is first in the market, competition is perhaps negligible, but the farsighted investor will analyse future potential competition. How hard will it be to match our offering? What's our offering's edge? If the market however is already filled with players, it could be difficult for the venture to get a piece of the pie. If there are numerous incumbent competitors, the investor should think about how the venture could position itself in the competition landscape with a differentiated offering having attractive competitive advantages.

Policy: Regulations and policies impact how an industry will develop. Do the government or NGOs support and encourage efforts in this market? Or do they restrict it? Hence, it makes sense for venture capitalists to fully understand the possible current and future policies in regards to duration, scope and extent. For example, increasing CO_2 emission taxes makes it more expensive to purchase a gasoline-powered vehicle, which makes investments on traditional automobile less profitable. Industries with fewer restrictions or more government support would be more attractive to investors as this might boost the ventures odds for success. However, the flipside might also be true. Being an approved player in a regulated market increases the thresholds for other companies to enter, rendering less competition, more stable market and generally less risks.

Product and value proposition:

A second and obvious investigation of a potential investment opportunity is its product offering and value proposition to its customers. Customers are ready to pay up for a product, or service, if it helps them relieve or mitigate a pain or problem they're facing. Therefore, it is of vital importance to analyse the core of the company's offering and dig deeper into its whys and hows. This process is more straightforward for solutions in an already existing market or industry, and much harder, if even possible, for new ventures creating their own playing field in a non-yet defined market.

In the first case, the new solution should ideally be orders of magnitude better than existing solutions. Having a **differentiated** and potent way in relieving a customer's problem could allow the company to develop its own price point and provide a margin of safety, rapid customer acquisition and potentially lucrative margins. On top of potential margins, an investor should also carefully consider **capital needs** of the business, since tying up a lot of capital will dilute the investors returns. It is also of exponential value whether or not there exists a **proof of concept**. Having a proof of concept, and a small but important customer base to feedback with, can reveal substantial insights that help further development and expansion. In the latter case, where a market is yet to be built, the risks are much higher but potentially also the rewards. Often, these cases are proposing new business models.

A company's **business model** is key. Much like Rolls Royce 'power by the hour' concept allows them to harvest fat profits from service, a refined business model can increase the value of the initial value proposition - to supply jet engines. But just as there are upsides to business models, there are downsides. Distribution is a vital part of a company's business model, no matter whether it is a B2B software product or B2C retail product. A direct salesforce is costly and a risky venture for a new firm. However, relying on distributing partners might also not be the best idea since their incentives to distribute the product might be low. Costs, risks and rewards all need to be critically examined when looking at a business model. Also, business models that require a huge initial investment to gain traction are in practice pretty hard to get flying. The sheer size of the initial investment and low pre-money valuation (since it's of no value without the investment) is going to carve out the management's incentives to get the business going.

Just as important as potential upsides are, **risk identification** and **mitigation** are crucial to consider. The value proposition that the venture has come up with can in many cases be protected by legal means, through for example **patents** or exclusive licensing deals. It should however be said that some investors do not believe very strongly in the value of patents, especially in some industries, since enforceability can be tricky and competition sooner or later will find its way to undermine its value. There are also more soft measures to value appropriation, for example through efforts in creating a **brand** around the offering. Either way, intangible assets could often be of substantial value for the investor to consider, and protect.

Venture capitalists invest someone else's money, hence they are more concerned with practical financial considerations in their investment choices. On the other hand, those who invest their own money, such as angel investors, are usually more emotionally-driven. They might have become investors not only for seeking an economic return, but also for the feeling of making their money productive and socially useful instead of just a means of consumption. In this respect, the **impact** that a product can have on society is also important for the investment decision.

Team:

Besides the quality of the product and the value proposition of the business, a key factor for the success of the company and therefore for the companies attractiveness towards investors, is the **team**. There seems to be a consensus among investors that the team needs to be closely evaluated. However, there is not much agreement on how the quality of the team is weighted compared to other factors like market or product. While some investors tend to focus fully on the market and decide to replace the team if necessary, others only invest if they are convinced that the team is capable of bringing the enterprise to success. If these investors found a suitable team, they will even invest if the product is not fully developed or otherwise not entirely convincing. In any case, the team needs to be evaluated based on some criteria that are accessible by the investors.

The first evaluation criteria is the **general background** of the team. What academic status do the team members have? Does their academic and professional record imply that they are capable of solving the relevant problems? How successful have they been in the past? Do they have experience in this industry or in founding a company in general? A study that was published in Research Policy in 2010 showed how different characteristics of the founding team correlate with survival and growth of a startup company². It was found that previous financial responsibility in a business and technological background significantly improved the likelihood of survival. Interestingly, the academic status of the founding team did not correlate with survival or growth of the company. In order to evaluate the team background thoroughly, also criminal record checks are performed on a regular basis.

Another important criteria is the **composition** of the team. Solo entrepreneurship seems to be very risky and balanced teams tend to increase the rate of success. A technologically

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² Gimmon, Eli, and Jonathan Levie. "Founder's human capital, external investment, and the survival of new high-technology ventures." *Research Policy* 39.9 (2010): 1214-1226.
This article was prepared by Viktor Charpentier, Yuanyuan Hu, Tobias Kull, Emil Martensson, Cristiana Passiu, Joran Savenije,

driven founder with a clear vision for the product and the industry is desirable. Additionally, there should be a marketing driven entrepreneur who is able to sell the product and idea to investors, partners and customers. This core team should mostly consist of 2 or 3 people. Most investors agree, that it is beneficial to have the founders and entrepreneurs lead the company as opposed to a professional CEO at least in the early stages.

It is important, that the **mindset** of investors and entrepreneurs are aligned. Some entrepreneurs are only there for the lifestyle and prestige, others are so attached to their product that they are unwilling to accept any necessary changes. Both scenarios need to be avoided. Additionally, founders should accept the fact that it might be in the best interest of the company to hire an external CEO or other members of the team at some point in the endeavour.

If possible, also the intellectual and professional **capabilities** of the team members are analyzed. Especially in software based companies, the investors like to have a look at the developed code, the general style of work and the internal processes. Discussion of the financial model reveals how thoroughly the team thought about its business and how competent they are in formulating a detailed financial concept. Moreover, a study published 1993 in Journal of Business Venturing stated that managerial capabilities and experience are of key importance to investors³. In many cases there is not a lot of hard data about the team that can be evaluated. The chemistry between the team and the investors has to match and therefore, a large part of this decision is made by the **gut feeling**, often derived from previous experiences.

CREDENTIS INVESTMENT OPPORTUNITY / INVESTMENT PITCH

The Problem for Consumers:

- Coffee and almost all consumables stain teeth
- Whitening one's teeth causes sensitivity
- There is no optimal solution to relieve sensitivity

The Solution

The "sensitive bleaching" kit. The kit includes bleaching, desensitizing gel and desensitizing gum. With a size fitting into a letterbox, the product will be easily accessible to consumers

³ Hall, John, and Charles W. Hofer. "Venture capitalists' decision criteria in new venture evaluation." *Journal of business venturing*, 8.1 (1993): 25-42.

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through both e-commerce and retail stores. Credentis' unique peptide has superior repairing properties leading to excellent desensitization. By providing consumers with the least painful but still effective whitening experience on the market, Credentis unique selling proposition is scientifically proven best-in-market desensitization properties and excellent bleaching. We aim to acquire customers through aggressive marketing campaigns and are convinced that our superior technology platform will help the penetration through word-of-mouth and social media.

Market size: The teeth whitening market value worldwide is >5 billion USD⁴ (including toothpaste). We estimate the market size for our product category, specific whitening stand alone products, to be around 0.5 billion USD. The whitening market (non-toothpaste) itself is a market of 300 million, but because we sell both desensitizing products as add on products to the whitening products, the total is estimated to be 500 million USD.

Subscription model: The purchase model would be a subscription similar to the new shaving competitors of Gillette (Dollar Shave Club etc). The kit includes a bleaching tray mold that will be used to create the tray for the customer's teeth. For 3 months (with possible extension after) there will be refills of gel, gum and bleaching product. The kit is estimated to have a **retail price of around 100 dollars**. Example of turn over: Start kit \$100, refill \$30, average customer retention 4 months, 5,000 customers: \$220*5,000 = \$1,100,000 (0.2% market share)

A refill package contains 4 separately packaged pieces of gel. One treatment per week is needed for desired results, meaning a refill package lasts for 1 month. The customer binds himself for 3 further refills on purchase but has then the option to cancel it anytime.

Target group: The target group is **stylish** and **trend sensitive** men and women in the age bracket of **18-35**.

Marketing: Social media influencers are followed by millions of users, with their submissions being watched daily by equal numbers. The marketing should therefore be mainly targeted to social media channels using influencers and sponsored posts to reach out to young consumers who are actively looking for whitening products. This is the best

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⁴ Teeth Whitening Products Market Size and Forecast, 2014-2024, Hexa Research, August 2017
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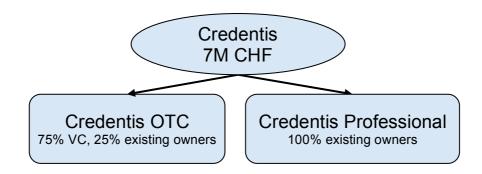
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way to gain their **trust**. These posts are usually priced in the range of 0.5 to 1.5 cents per follower, e.g. to post with one influencer with 100,000 followers costs 1,000 dollars⁵. This will be complemented with marketing in ordinary channels (internet ads and, if deemed appropriate, television).

Technology: Curolox technology from Leeds. Protected by IP (until 2023). Validated high user rating report available. Medical papers published within dentist communities.

Team: Core competence required for team: **social media market manager** including assistants to handle deals with influencers and do search engine optimization.

Valuation: Credentis equity is currently valued at **7 MCHF**. The company will be split in two separate domains, attributing 50% of value to the professional business and 50% to the OTC. Thus, the **pre-money valuation on the OTC part is 3.5 MCHF**. Since we need to raise **10 MCHF**, we will offer the investors **75% of equity** in the OTC-company.



CREDENTIS INVESTMENT EVALUATION

Market evaluation

Market landscape: The global teeth whitening products market is expected to reach \$7.4 billion by 2024. In the segment markets, bleaching increases quite a lot. In US, the bleaching oral care rises 29 percent in every year recently since people believe that smile is an important social benefit and aesthetic demands increase drastically⁶. Even if Credentis just takes up a small portion of the market, its revenue potential is still very high. The fast growth rate and large size make this market very attractive. However, most bleaching procedures cause some tooth sensitivity. Most customers are not able to get instant

⁶ "Cosmetic Dentistry State of the Industry Survey 2015." *American Academy of Cosmetic Dentistry* (2015)

⁵ strikesocial.com/blog/social-media-advertising-costs/

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sensitive treatment after bleaching. Credentis can solve the painful point of customers. The desensitization gel and gum included in the kit of Credentis provide prompt after-bleaching care, which add more value to customers.

Competition: The competition is fierce in the bleaching market. Customers have lot of choice, like the whitening toothpastes, OTC whitening kits and dentist in-office whitening treatment. However, the combination of whitening and sensitive treatment provides the Credentis kit unique competitive advantages. Even though whitening toothpaste segment holds the largest share in the market, it often fails to achieve noticeable change in the teeth. And on the other hand, compared to in-office bleaching treatments which costs more than more than \$1000 treatment⁷, the Credentis OTC kit is 10 times less expensive. And it is very convenient that consumer could complete bleaching procedures and desensitization care by themselves under instructions at home. In addition, since the kit contains low percentage of whitening active ingredient (less than 6 percent hydrogen peroxide), it is acceptable for most customers.

Policy: There are not so many restrictions for bleaching products in US. Dentist-dispensed and OTC home-use tooth whitening bleaches are eligible for ADA Seal of Acceptance program. The director of the program said "The seal is a symbol that an independent panel reviewed and approved the product for its safety and effectiveness". However, participants in the program are not limited to specific types of bleaching (toothpaste, OTC bleaching and professional kit) and specific concentrations.

Product / Offering evaluation

The product consists of a bleaching kit that includes desensitizing gel and desensitizing gum based on the Curolox technology. The market of at-home teeth whitening products is already established, so the proposal inserts in an existing market, which comes with different uncertainties than from creating and entering your own new market. On the one hand there are industry comparisons of your product, on the other hand there are large existing competitors.

The unique characteristic of the proposed kit would be the inclusion of the desensitizing products. The differentiation of the proposed product in its market is not as good as the

⁷ "Navigating The 'Aisle of Confusion' To Whiten Your Teeth", *NPR*, August 14,2017
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professional Credentis products. The professional branch has the *only* treatments able to regenerate enamel in early caries, but there are several tooth desensitizing products in the business-to-consumer market.

However, presenting the desensitizing gel as specifically aimed for relief of bleaching pain allows not being in direct competition with generic desensitizing products, such as the established Sensodyne toothpastes. The consumers, aware of the high risk of long-lasting pain given by bleaching, might be willing to buy a bleaching kit that includes a desensitizing gel proven to be effective by other customers. This does not imply a change in the consumers' behaviour, since they can keep using all their other routine dental care products.

To get an idea of how much the problem of pain given by bleaching is felt, it is possible to look at the evolution of Google searches in the last years⁸. The trend for "home teeth whitening" is in a steady state/slight decrease, while that for "whitening pain" is slightly increasing.

The fact that the technology is patented and clinically tested is an advantage. Competitors could however easily produce a similar product that contains a desensitizing gel. The marketing should therefore also focus on the type of technology used, which might be conceptually better liked being a biomimicking molecule, as compared to the inorganic substances commonly used⁹.

Team evaluation

The team has a very strong scientific background, with previous research done at highly ranked universities and research groups. Many years of experience in the pharmaceutical or med-tech industry of the team members adds to the professional expertise. As stated previously, technology background and previous responsibility in a company greatly increase the odds for success in a startup company. It would be beneficial if a person with a stronger finance or marketing background joined the team. This would increase knowledge diversity and allowed Credentis to make its focus shift from technology towards customers and profitability. It is appreciated that this is already proposed in the business model for the new product.

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⁸ trends.google.com/trends/

⁹ Soares, R., De Noronha De Ataide, I., Fernandes, M., Lambor, R., "Assessment of Enamel Remineralisation After Treatment with Four Different Remineralising Agents: A Scanning Electron Microscopy (SEM) Study", *Journal of Clinical and Diagnostic Research* (2017)

After the split of the company in two separate parts, the founders and shareholders will be involved in both, the OTC and the professional company. This might create a conflict of interest. The required investment of 10 MCHF and the corresponding shares applies only to the OTC company while the professional one remains untouched. Founders might decide to dedicate more time towards the professional company because there they own a majority of the business and their reward could be higher in case of success. However, the value of the OTC company will increase dramatically if the current investment turns out good. Therefore, the potential gains for the founders will stay balanced between the two companies and the conflict of interest should not be an issue.

Valuation reasonability

In agreement with the capital being invested so far, the current valuation of 7 MCHF seems to be reasonable. Credentis raised 7 MCHF so far and was able to prove that their technology is functional and should be able to outcompete comparable products on the market. The split in a professional and an OTC rooted branch gives the company flexibility and allows to set a dedicated focus on the large OTC market. The cooperation with Candida showed that consumers have interest in the products and that alliances with bigger players in the industry are possible. However, the overall revenue and profit of the consumer OTC branch did not develop as it was hoped. Therefore, the suggested valuation of 7 MCHF e.g. a valuation that is in the same range as the invested capital, is defensible. The required 10 MCHF seem to be a large amount of money. Unfortunately, it is not fully clear for which purposes this capital will be used. We would like to see a more detailed analysis why the 10 MCHF are required and how they will help to raise revenue and profit to the necessary extent.

NovaMin was acquired by GSK for 87 MGBP¹⁰. This shows that upcoming brands and technologies in the dental field can attain attractive exits. Here will follow a mental experiment on potential returns of current investment proposal; If Credentis succeeds with its subscription based plan, and acquires say 1 out of 200 people in their target group (estimating the target group to be 20 percent of US population). With a monthly refill cost of 30 USD, this translates into 115 MUSD in turnover per year. Given the low cost supply chain and high gross margins on refill packages, we can very roughly estimate an EBIT

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margin of 20%. Giving this venture an, more or less arbitrary, EV/EBIT multiple of 8x, it renders an enterprise value of approximately 180 MUSD. The potential investor has in this case earned roughly a multiple of 14x on his 10 MCHF investment. This is well in the range of potential returns a VC firm should be looking for. Since this is a consumer product, it might make sense to make it public through an IPO because of increased brand awareness. However, if Credentis gets successful traction in the market, it is likely that existing players, such as P&G, Colgate-Palmolive and more, will be interested in acquiring the business long before it has gotten a substantial market share. Such a valuation is hard to estimate since it depends very much on brand, customer retention, growth numbers and future prospects. Nevertheless, this analysis concludes that the suggested investment opportunity has the potential to yield attractive returns. It should, however, be noted that the uncertainties are clearly high.

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