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Personality, Accountability, and Liquidity – The Road to Success for Start-up Companies in the Life Science Area

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Abstract: Within the framework of the project presented, in itself a component of the HSG Executive MBA program in general management, the success factors of life sciences start-up enterprises in the BioValley are examined. The study, supported by the BioValley organization, is based on an online survey and interviews with professional investors. According to the information available to the authors, this represents the first research taken in this specific area. The team compiled a synthesis of the results – the 12 T's.

Keywords: Business plan · CEO · Start-up companies · Success factors

The figures are astonishing: For the last three years the flood of business failures in Switzerland increased relentlessly – up to a new Swiss record. According to the St. Gallen-based Creditreform 2466 companies went bust in the first half year 2004, 10.9% more than in the comparable period of the previous year.

On the other hand the number of new business start-ups is increasing too. 17 559 new companies were founded from January till July 2004, which is a rise of roughly 12%.

With the increasing figures in business failures and business start-ups, the question of what makes a young company more successful than another is more current than ever. Acknowledging this fact, a group of four professionals with different business experience backgrounds (media/communication, pharmaceutical industry, and banking) examined that question scientifically (Fig.). They concentrated their study on the life science business. Within their Executive MBA program at the University of St.

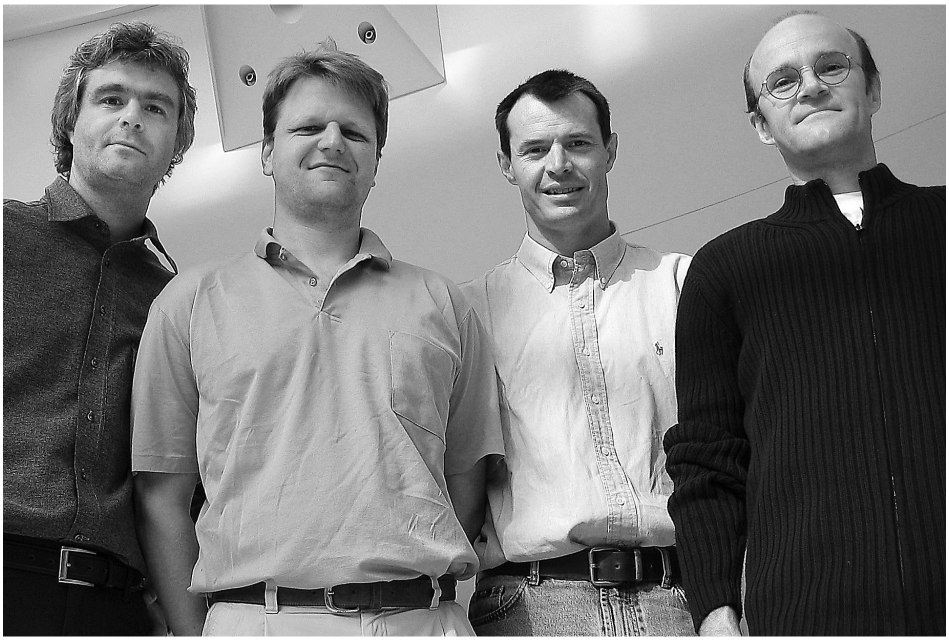

Fig. The EMBA team: from left to right: Urs Frei, Arnold Gloor, Guy Lachappelle, Dieter Gramberg
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Gallen HSG they wrote their final thesis on the 'Success Factors of Start-up Companies in the Life Science Section in BioValley (Basel–Alsace–Southwest Germany)'. According to the information available to the authors, this represents the first research taken in this specific area.

The life science sector is defined by distinctive features:

- New products need long development periods which are internationally standardized (phase 0–4). Patent protection plays a crucial role.
- Because of the long product development periods, much capital is needed over extended periods of time.
- The market is internationally orientated, mainly Business to Business (B2B) and not Business to Customer (B2C). There are only few customers, and the price elasticity is low.
- Local infrastructure is important. There is a need for the right business environment: highly qualified and specialized staff, sufficient laboratory space, supporting legal and regulatory framework.

Since the mid 1990s, after the shock of the Ciba-Geigy/Sandoz merger, the new global player Novartis, the traditional company Roche and the financial global player UBS funded start-ups in the life science area. As a supporting network, the trinational BioValley organization was founded in 1996. One of its goals is to support and boost the foundation of new companies. With remarkable success: According to the organization 121 new small and smallest companies emerged between 1996 and 2003, creating 500 new jobs. To learn about their survival strategies was one of the main goals of the MBA team.

Definitions and Method

To begin, the MBA team had to set a framework of definitions. The concept of a start-up enterprise was defined as young companies established since 1996. Following the choice of topic and an intensive study of the available literature, the question arose: How is success in the given context defined? In order to retain a clear and simple definition, success was equated with the continued active existence of the companies considered.

Based on a study of the pertaining literature the project team developed 17 success theses. They were grouped as followed:

- Entrepreneur
- Relation between entrepreneur and investor
- Network (general relations to the stakeholders and customers)
- Finances
- Leadership (corporate, staff) and organization
- Strategy and business plan

Based on this a questionnaire covering 59 questions was drawn up, which was the core of an online survey. Of the over 300 companies to which the questionnaire was submitted with the support of the BioValley organization, a total of 19 actually took part in the survey, which is within the average range of a survey of this kind. The intermediate results were checked for plausibility by means of interviews with three professional investors: François L'Eplattenier (Novartis Venture Fund, Basel), Martin Münchbach (Biomedinvest AG, Basel), Hans-Beat Gürtler (Varuma AG, Basel). The goal was to bring in another point of view. After the interviews the team compiled a synthesis of the results.

The Results

The Entrepreneur

It is not surprising that having a degree in the domain of science seems to be compelling for leading a company in the life science area. Almost all the participating companies have at least one person in the top management with a science degree. In one third of the start-ups the management consists exclusively of scientists. The majority of them have experience in research and development.

The lack of experience in finance and management seems to be compensated by the acquisition of specialized employees, support by the investors or simply by learning on the job. The investors do not see a problem in this lack of know-how at all. In their view cash management is the only important financial issue for a young start-up company. Too much financial expertise at this stage could even be counterproductive: First money has to be spent on product development – and not for sophisticated financial tools. In general, personality and the potential of intellectual development of a CEO is one of the most important criteria for the investors' decision to invest in a company.

The CEO has to be a decisive and convincing ambassador of his own company. This is an essential criterion for the success of a start-up company in the early stage. Investors, the scientific community, potential customers, employees – the stakeholders who have to be convinced, are numerous. The management characteristics of a good start-up company leader are: persistence, self-motivation, self-confidence, and persuasiveness towards customers and business partners (Table 1).

Last but not least a very important ability of leadership should not be neglected: the ability to delegate tasks and competences. Delegating is a very important tool for promoting a climate of self-responsibility within a start-up, which is a compelling success factor in small start-up teams.

The Relation Entrepreneur–Investor

Investors play a very important role in start-ups. In the perspective of both the managers and the investors they are much more than mere investors, they are also strategic and operational consultants (*e.g.*

Table 1. Management characteristics

Characteristics	Biased Score
Persistence	288
Self-motivation	195
Self-confidence	180
Persuasiveness towards customers and business partners	127
Ability to an overall perspective	118
Single-mindedness	114
Ability to motivate employees	92
Consciousness of the realities	90
Good view for critical details	76
Risk taking	66
Team player	59
Role model for employees	36
Persuasiveness towards employees	29
Persuasiveness towards investors	12
Natural born leadership	12
Being extraverted	6

financial experience as mentioned before) and networkers with other investors, the media or future customers.

For the interviewed investors, having longstanding business experience in life science is an important precondition for success. For one simple reason: Only an investor experienced in the life sciences knows how to deal with long-term projects which demand a great deal of patience. A majority of the company founders declared that they knew their investors at the beginning of the co-operation already quite well.

Customers, Business Network, and Patents

Most of the future customers are involved in the development of the products. They add knowledge, capital, infrastructure, and regulatory know-how. As a logical consequence, it is this added value which links the customer to the company and not *e.g.* price discounts. The margins of future profits are usually quite high anyway. If not, a product would not be brought to readiness for marketing…

Innovation not crowding out, is an unwritten law, especially in the pharmaceutical industry. Therefore building a strong patent situation very early is very important – and costly. As a consequence, two thirds of the participating companies do not monitor violations of their patents actively. They defend their rights only when they learn about a patent breach by chance.

Finances

Unfortunately, the feedback on questions about the companies' finances in the survey was poor. The following conclusions are based on the investors' interviews. The majority of the start-ups have a general financial planning and cost control tool, but no detailed pre and post calculation and no investment appraisal. This fact was surprising for the MBA team. Obviously, a detailed cost control absorbs too many financial and human resources – resources which are needed in the product development.

The planning of a start-up's financial liquidity usually aims for a short time period of one or two years. In that period certain milestones have to be accomplished. If they are not, a new round of refinancing is very unlikely.

Leadership and Business Organization

One third of the participating companies admitted that they had no clearly defined organizational structure at the beginning. Interestingly, the pressure of redesigning the company's organization came from within the company itself. Life science start-ups develop their structures with the needs of the product development. They are fast learning organizations.

Table 2. The 12 T's – the road to success

1. The entire range of activity is primarily to remain subordinate to the actual product development.
2. That short to medium term financial planning and control mechanisms must focus on the maintenance of liquidity.
3. The product must be unique and patent protected.
4. The potential cooperation partners must be included in the development at an early stage. They can then contribute such resources as expert knowledge, capital, infrastructure and regulational experience.
5. The management must have a technical scientific background, thereby enabling the development of the product. The competences otherwise required for management can be learned, developed or supplemented from outside.
6. The personality of the entrepreneur is characterised by honesty, modesty and above normal commitment.
7. The entrepreneur must be a good and persistent salesperson of his idea, be it with investors or potential customers.
8. The means of both internal and external communication must be open, transparent and appropriate to the respective audience.
9. These basic conditions are important to staff: autonomous responsibility, clearly defined degrees of freedom and areas of authority and responsibility. This is of particular importance considering the often difficult working conditions (low wages, long working times *etc.*) and the typically rudimentarily structured organisation.
10. The upkeep of good contact to the investor and his support (networking, strategic and operative counsel) is crucial.
11. The progressive structuring of the undertaking must take place along the course of the project. That means that the closer the product approaches market maturity, the clearer a structure the organisation must adopt.
12. The business plan is imperative as a publicity tool to elicit the support of investors. It must be developed into a working tool.

The closer the market entry of the first product approaches, the more the structure has to be adapted. Research, development and marketing are the main focuses of young companies. As mentioned before, finances are not the top priority. Market entry is THE landmark for the (re-)organization. According to the investors, at the stage of market entry a full time Chief Financial Officer and a marketing professional are needed.

A crucial success factor is the company's ability to communicate internally and externally. The preferred communication tools within the small company are regular team meetings and overall plenary meetings. In the area of external communications the 'classical' tools are still the telephone, brochures or specialized trade fairs. New tools like the internet are already of high esteem. The company website is updated regularly.

The Business Plan

Almost all participating companies had a business plan when they started. And almost everybody has an updated version of the business plan today. That shows how important that document is as a planning and marketing tool.

At the beginning the business plan is the standard promotion tool in the search for seed money (the first round of capital for a Start-up company). In this context, the investors stressed the importance of an excellently written management summary (1–2 pages) at the beginning of every business plan. In a short and clear-cut manner the summary should explain what the business idea is and what strategy and financial means are needed to reach the goal. The investors admitted that very often only this part of a business plan is read. The summary has to grab their attention for the business idea.

Later on the business plan becomes an effective working tool for the management and the investors in the post formation phase. As a result of the discussions amongst them, the business plan will be rewritten again and again. The essential parts of a business plan are: Management summary, market research and market overview, research&development, current situation and external risks. In this context the investors stressed the lesser importance of the financial part of the business plan. Not that finances are not interesting for them – on the contrary – but according to their experience the figures are hardly ever accurate…

These main results may be condensed into 12 success factors (Table 2).

These success factors in themselves cannot guarantee business success, as constantly changing basic conditions and subjective or technical influences can negatively influence the desired result of a project considerably. Nevertheless these twelve success factors are worthy of note as general prerequisites for success.

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