

THE ANATOMY OF
LIFE SCIENCE
BOARDS OF
DIRECTORS IN
MEDICON VALLEY

-
PROFILES AND
COMPETENCIES

WACHSTFONDEN

Egon
Zehnder
International



1. Introduction

The Biotech Builders organization was formed in 2002, in the midst of a difficult period for the International Biotech industry. The objective is to create a forum for Biotech executives active in the South Scandinavian region, where they can exchange experiences and be inspired by presentations and workshops around topics of high relevance for the industry. A second objective is to nurture the ongoing process of quality improvement by creating more awareness around key industry success factors.

In this context, this year's Forum will pinpoint the functions and characteristics of a successful Biotech Board. In order to prepare for an expanded discussion around this topic, we have taken the initiative to map the board competencies and processes of the region with the overall goal of obtaining a better understanding of strengths and weaknesses in the boards of these companies in order to enhance the likely success of the company. The study is carried out and sponsored by Vækstfonden and Egon Zehnder.

The following executive summary includes the most interesting findings of the survey. The first section gives a description of the composition of the boards highlighting areas such as background, competencies, age, gender and nationality. Combined, these observations identify the typical profile of a life science board in Medicon Valley. Based on this profile, the strengths and weaknesses of the boards are discussed with focus on the most critical factors such as international and industry experience - and network. The survey also gives the opportunity to evaluate how differently the CEO and chairmen view their boards –resulting in a wish-list for both the CEO and Chairmen. Finally, the executive summary provides a conclusion to what defines a good board of directors.

Method and sample

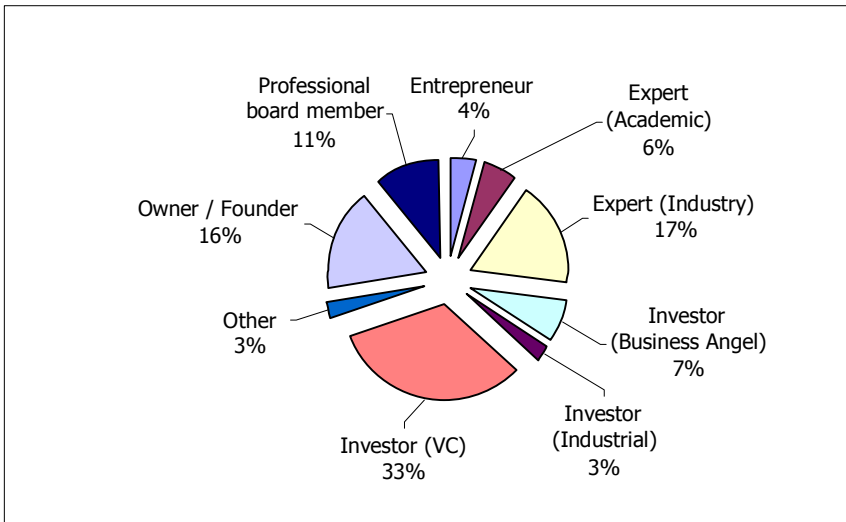
The results are obtained through an anonymous online survey where the CEO and Chairman of the Board of 146 companies have been contacted. In total 266 individuals were contacted, and of these 97 individuals replied, resulting in a respond rate of 37%. Equal shares of Swedish and Danish companies have answered. The sample allows for three separate analyses based on 77 different companies, 38 chairmen, and 20 paired CEO-Chairman samples.

The majority (84%) of the sample are Danish companies. In the total group of companies, 66% are established in 2001 or earlier – while 54% of these have less than 9 employees. Only a minor share (7%) is listed on a stock exchange. The main part (60%) of the companies are characterised by not having launched a product yet. The participating companies are located within four different industry segments; "Diagnostics (in vitro)" (16%), "Drug Discovery and Development" (40%), "Medtech" (29%), and "other biotech" (5%).

2. Current composition of life science boards

The boards of the life science companies participating in this survey consist of investors (43%), experts from the industry (17%), founders (16%), and professional board members (11%). The remaining board members are experts from academia and entrepreneurs (see fig. 1).

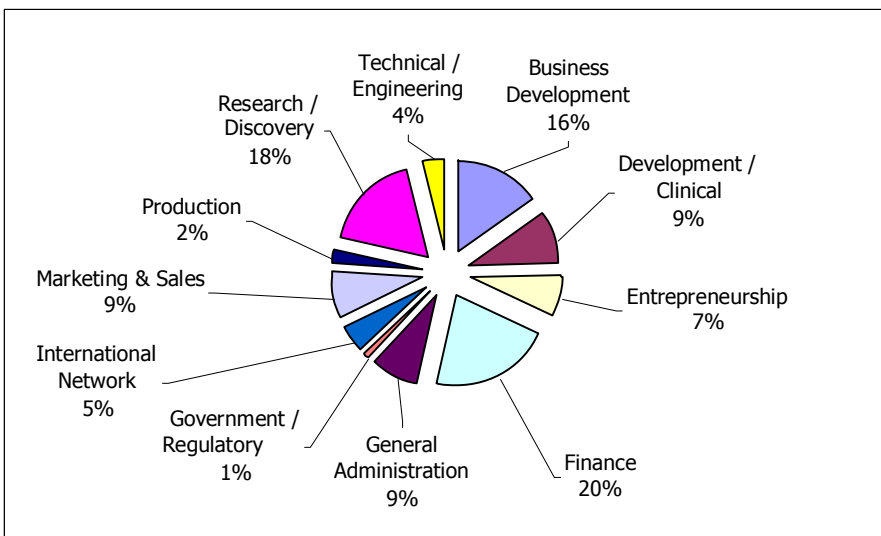
Fig. 1 Profile Board Members



As the average board consists of five members, these results imply that a typical board of a life science company has two investors, one founder, one industry expert and one professional board member.

The combined key-competencies of the board members – according to the CEO and Chairman – are “finance” (20%), “research and discovery” (18%) and “business development” (16%) (see fig. 2).

Fig. 2 Key competencies of the board members



When looking at what kind of key-competencies the different board members possess, it is no surprise that the main competency of investors is knowledge about finance. For 50% of the venture investors "finance" is thus their key competency. However, the industrial investors possess equal knowledge of both "finance" and "research/discovery" – while the business angels' primary competency lies within business development (27%), see table 1.

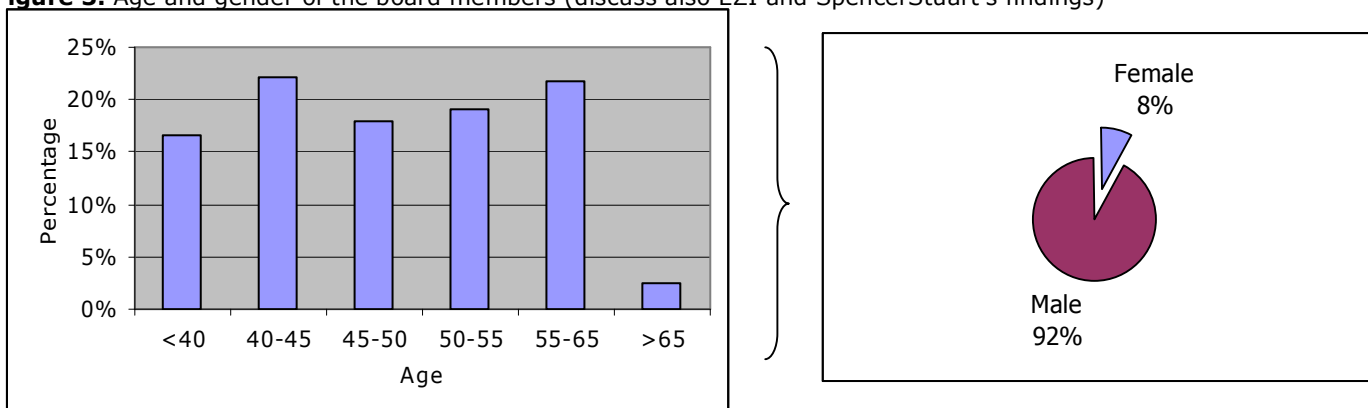
Table 1. Combination of reference and key competencies

Key-competency	Reference								
	Entrepreneur	Expert (Academic)	Expert (Industry)	Investor (Business Angel)	Investor (Industrial)	Investor (VC)	Other	Owner / Founder	Professional board member
Business Development	25%	5%	17%	27%	10%	14%	10%	8%	26%
Development / Clinical	19%	18%	21%	0%	0%	6%	10%	6%	5%
Entrepreneurship	0%	5%	6%	12%	10%	5%	0%	16%	2%
Finance	0%	0%	6%	12%	30%	50%	10%	3%	14%
General Administration	0%	9%	6%	15%	10%	7%	20%	0%	26%
Government / Regulatory	0%	0%	2%	0%	0%	0%	10%	0%	5%
International Network	13%	5%	6%	4%	0%	3%	0%	3%	10%
Marketing & Sales	19%	0%	17%	19%	10%	3%	10%	6%	10%
Production	0%	5%	3%	8%	0%	1%	10%	2%	2%
Research / Discovery	19%	55%	14%	0%	30%	9%	10%	42%	0%
Technical / Engineering	6%	0%	0%	4%	0%	3%	10%	13%	0%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

The owner / founder ensure that skills within research and discovery are also present on the board – as this is their primary competency (42%). Experts from academia also have very strong competencies within this area – however they only constitute 6% of the board members (see figure 1). Business development skills are primarily provided by the professional board member – who also possess knowledge of general administration, see table 1.

57% of the board members are 50 years old or younger, see figure 3. This is a significantly larger share of younger board members than observed in the 100 largest Danish companies – for these companies the share is only 32% (EZI, 2004). One reason for this difference is that a large number of the investors (who constitutes 43% of the board members in life science companies) and the entrepreneurs are less than 40 years old.

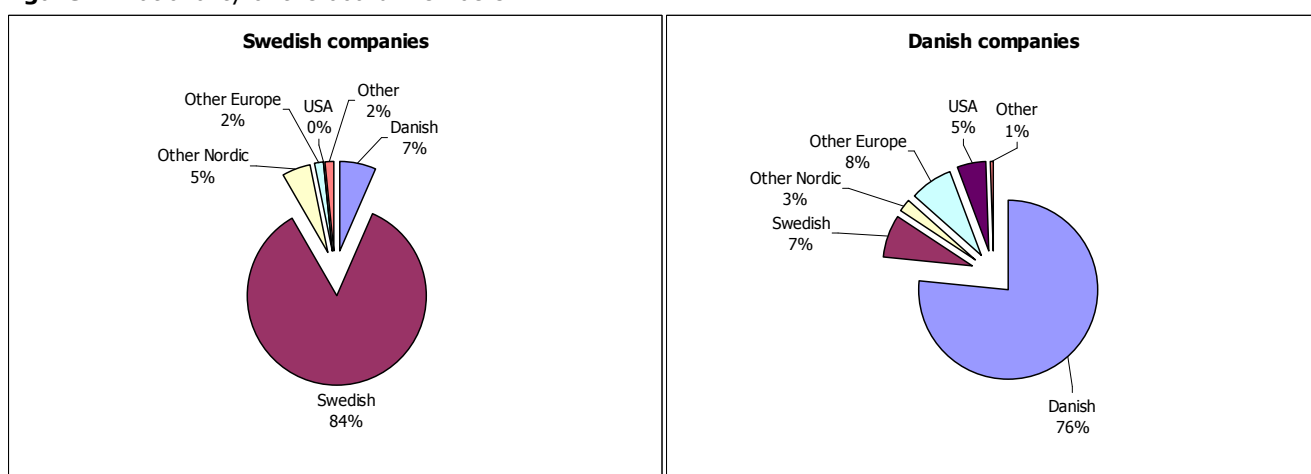
Figure 3. Age and gender of the board members (discuss also EZI and SpencerStuart's findings)



However, concerning the gender composition of the boards of life science companies, the results correspond well with those found in other publications. Females only represent 8% of the life science board members in Danish companies – and 9% in Swedish companies. For the top-100 Danish companies, the share is also just 8% - while the share of female board members for companies in Norway are substantially higher (EZI, 2004) due to political incentives.

Since the market for life science companies is global, the boards of these companies should to some extent consist of foreigners. In Swedish life science companies 84% of the board members are of Swedish nationality – while 7% are Danish and 5% have other Nordic nationality – the remaining share comes from a broad range of countries, see figure 4.

Figure 4. Nationality of the board members



In Danish companies 76% are of Danish nationality, while 7% comes from Sweden, 5% from USA, 3% from another Nordic country – and finally 8% from another European country. For the complete population of Danish and Swedish companies, only 15% of the board members come from outside of Denmark or Sweden. The vast majority (>76%) of the board members in life science – in both Denmark and Sweden - are thus of domestic nationality.

By combining the results above, it is now possible to list the typical composition of a life science board concerning reference, key-competencies, gender, age and nationality, see table 2.

Table 2. Typical composition of a board of a life science company – for each type of Reference

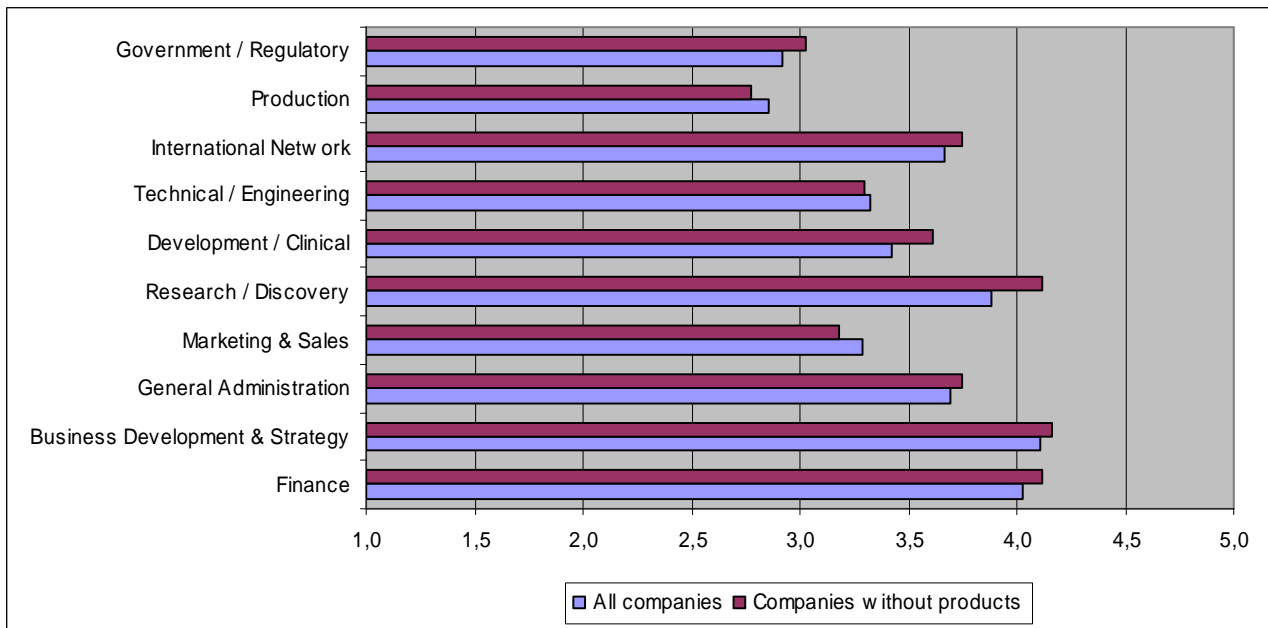
Reference	Key-competencies	Gender	Age	Nationality
Investor (VC)	Finance	Male	<40	Domestic
Investor (Industrial or Business Angel)	Finance and research / discovery or Business development	Male	50-55	Domestic
Owner / founder	Research / discovery	Male	40-45	Domestic
Industry expert	Development / Clinical	Male or female	50-55	Domestic or foreign
Professional board member	Business Development and General Administration	Male	55-65	Domestic or foreign

3. Competencies of the boards - strengths or weaknesses?

In a challenging and high-risk business such as life science some skills are essential in order for the company to become successful. In general, the expertise of the board members is fairly good according to the CEO and Chairman - although there are clear differences across the various types of competencies.

The board members, as a group, possess very strong skills within "Research/Discovery", "Business Development & Strategy" and "Finance", see fig. 5. These results correspond very well with the key-competencies of the board members - see figure 2 above.

Figure 5. Combined competencies of the board members



In contrast, the board could improve their skills and competencies within "Government / Regulatory", "Production" and "Marketing & Sales" which overall can be described as lack of industry related experience. Equally, the skills within "Technical / Engineering" and Development / Clinical are below average.

Other areas where improvement is required are international network and experience, technical knowledge, industry experience (including product development, regulatory know-how, production etc). In addition, it is important that there is the right composition of internal (defined as a person with ownership of the company) and external board members.

-International experience –are we global enough?

As mentioned above, 22% of the board members are foreigners. Meanwhile, the share of board members with international operational experience on average constitutes 30%. In addition to operational experience there is also a lack of board members with international regulatory experience. Only 22% of all board members have this experience. Hence, a very small share of the domestic board members

seems to possess regulatory and international experience. This is obviously a problem for the boards that do not have the right profile and money to attract foreigners. However, also boards containing foreigners would benefit from having at least one person, who understands business and culture beyond their own country. The missing international regulatory experience is critical when considering that the majority of a given market always will be outside the Medicon Valley area. Specifically, knowledge of the Federal Drug Administration (FDA) in the US is of high importance in order to gain access to the American market.

- Industry experience is a challenge!

The absence of specific industry know-how is a consequence of the composition of the board (table 2) as the internal board members - who constitute 60% of the board - and the professional board members in general do not have much industry experience. Industry experience is a broad term that includes several unique competencies, such as product development (e.g. clinical drug development), regulatory approval, production and marketing & sales – skills that cannot be contained in one person. This is a problem, since only one in five board members is an industry expert with a background most often in Development/Clinical (table 2). This suggests that there is an imbalance between the number of internal and external board members. One solution to this problem is to increase the number of board members or diminish investor representation – especially with respect to later stage companies.

- Network –people business!

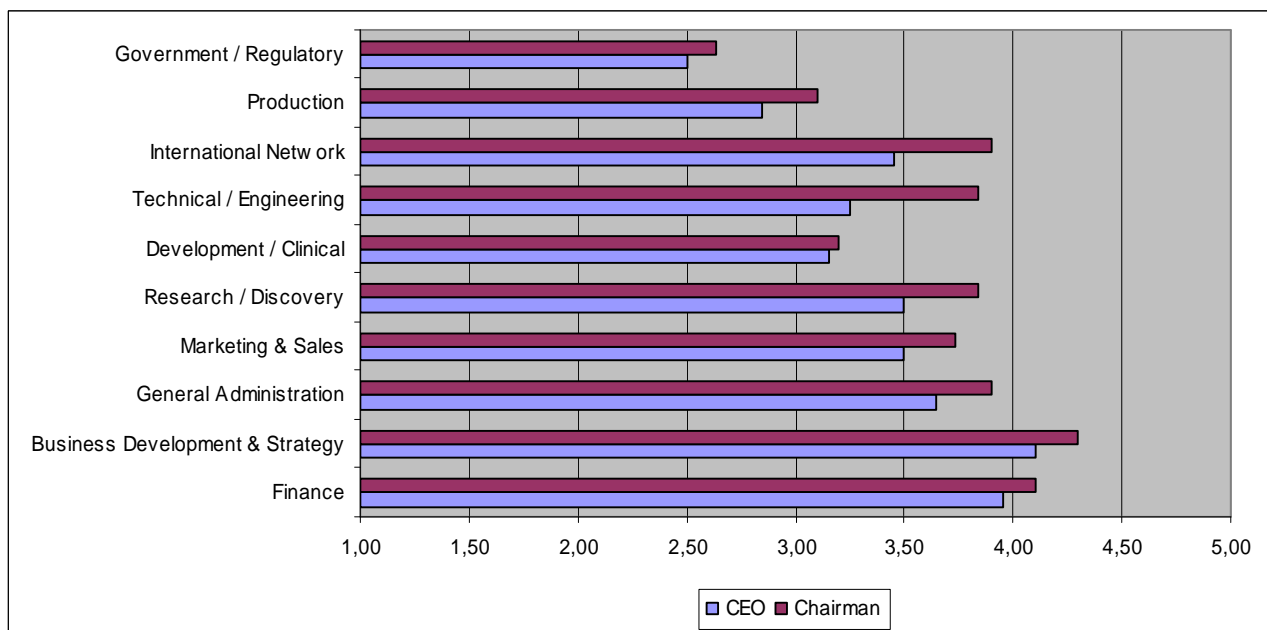
Network -both national and international- are important in order to maintain overview of one's sector, recruit the right people, be in contact with investors, get informal expert advice and obtain distribution partners. It is somewhat surprising that international network is ranked relatively high considering that international experience is lacking according to the board members (see text above). Furthermore, network is one of the competencies that are described as most often lacking and absolutely required in the qualitative statements from CEOs and Chairmen, suggesting that even a relatively high score of 3.7 is not nearly sufficient enough (fig 5 and section 4).

4. Alignment of deficiencies and wishes between CEO and Chairman

The next set of data stems from 20 companies where both the CEO and Chairman have provided information, which makes it possible to analyse to what extent they agree on key issues.

CEOs and Chairmen seem to agree that their respective board members possess an above average level of competencies required to build a successful company. Interestingly however, there is a clear tendency that the Chairmen are more positive than the CEOs, when evaluating the board's competencies (fig. 6). The different opinions are most pronounced in the competencies "International Network" and "Technical/Engineering" where CEOs rank approximately 3.4 and 3.1, respectively - in contrast to Chairmen that rank 3.9 and 3.8, respectively.

Fig. 6. Core competencies of the board members



It may not be that surprising that the CEO - who often is the founder and technical expert - finds the competencies in his particular field being less than adequate. More puzzling is the discrepancy with respect to international network competency. It can be argued that the different opinion between CEO and chairmen is due to chairmen overrating the actual competencies in this area or that the competencies are there but are not being used. The CEOs and chairmen do agree on something however, namely that those skills within "Government/Regulatory", and to a lesser extent "Production" know-how, are not present at a satisfactory level.

- Strategic objectives

When asked to list the five most important strategic objectives of the company, there is a good correlation between the CEOs and chairmen. Thus, both groups agree that finance and product deals (i.e. licensing) are the most important strategic objectives reflecting the significance of securing money and obtaining external validation of product. The strategic objectives - finance and product deals - fit very

well with the core competencies ranked highest by both CEO and chairmen i.e. "Business Development & Strategy" and "Finance" (fig. 6). Strategic objectives such as product development, marketing and sales, and proof-of-concept of technology are also valued as being important by both CEOs and chairmen.

- Lacking and required competencies

Both CEOs and Chairmen consider international network as the competency most often lacking in board members. Bearing this in mind, it is interesting that only very few chairmen mention international network as a requirement for the company's strategic goals while the majority of CEOs have it on their list of essential competencies. In addition, there seems to be a critical lack of board members with industry experience. However, while the CEOs ask for this competency at a general level -the chairmen are more specific in their critique. Accordingly, chairmen point specifically to the shortage of board members that have skills within government/regulatory, product development, and production. These qualitative statement correlates well with the observations in fig. 6, where these competencies are ranked lowest. Technology know-how is a competency that does not get much attention from either CEO or chairmen with respect to lacking or required competencies. This is interesting, as this area is one of the top-5 strategic objectives for both CEOs and chairmen. The low-priority of technical insight is in contrast to a recent report from SpencerStuart on board practices of 25 leading publicly traded biotech companies (ref.: SpencerStuart). In this report, it was found that 11% of directors had an academic background representing people with technical skills – thus, placing scientific/technical competency at the same level of importance as investors and professional board members of these top-25 biotech companies.

- Wish list for CEOs and chairmen

When asked what would be on their wish list when it comes to making the boards more effective, there is complete agreement between the CEOs and chairmen. Confirming the statements on the lack of people with industry experience, this competency is also on the two group's wish list thus stressing the need for this skill on existing and future boards. Interestingly, the issues that are mentioned as often as industry experience on the wish-list, are better preparation for board meetings and more commitment from board members. The relatively good alignment between CEOs and chairmen fades somewhat in this area as the qualitative statements display a degree of frustration on both sides. It is therefore tempting to speculate that there is an element of miscommunication between the CEO and chairmen (and additional board members) with respect to expectations and the matching of responsibilities throughout the entire board.

5. What defines a good board?

The quality of a board is a product of its competencies, processes, personalities and commitment. The interaction between management and the board, in particular the Chairman, not least between the meetings, needs to be based upon a bilaterally established and accepted set of expectations. As has been seen in other studies, e.g. the Egon Zehnder European Biotech survey, it is "lonely at the top" and the need for the CEO to rely on his/her board for support and strategic guidance is great in smaller companies.

The competencies of the board need to be complementary but the relative weight of the competence factors changes as the company grows and matures. While many small companies in a younger Biotech market such as Denmark are powered by the initial discovery/innovation, they tend to have boards short on the competencies needed to drive the processes of development, regulatory processing, production and marketing. These competencies need to be added in time, emphasising networking abilities and "buying competencies", in other words the knowledge of where and how to procure services needed for the preparation of successful commercialization.

The processes and structure of meetings tend to be more operational in the early stages of a company's development. Preparation for the board meetings weighs heavily on the management and there is a clear need for management of expectations from the Chairman, as well as involvement in preparations in order to secure time for strategic discussions and to support the management in difficult operational decisions. The right mix of personalities and experiences is of crucial importance. Age, gender, educational and cultural backgrounds need to be balanced. It is doubtful whether the Danish market, due to its limited maturity, can provide enough available seasoned entrepreneurs, investors and board candidates. In order to prepare start-up companies for the challenges of an increasingly global market, the recruitment base needs to be broadened in all aspects. A comparison of 25 leading US Biotech companies (Spencer Stuart 2005) highlights the fact that their boards have a significantly broader spectrum of experiences than their younger and much smaller Danish counterparts – over time we will likely see a similar development in Denmark, but already entering the second growth phase, changes will have to be made.

The entire board has to be committed to realizing the vision of the company, as defined by the management and presented in the strategic planning documentation. A board too intent on acting out its important governance and control responsibilities, risks losing the focus on the fulfilment of operational and strategic objectives. This risk is exacerbated if a majority of the board members are investors with a short term focus which is why the establishing of subcommittees for auditing, remuneration and financing is recommendable early on in a company's history.

Finally, the greatest difficulty in developing the board may arise from the necessary process of succession. Exchanging entrepreneurs, business angels and trustworthy supporters for other competencies is an arduous and sensitive process, but necessary to realize the potential of the original idea.