The Role of Shared Leadership in the Decision Making Processes of New Technology Based Firms

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ABSTRACT

The dynamic business environment is seen by many as requiring a significant change in our thinking about leadership (Hiller *et al.*, 2006). Shared leadership is one alternative to the 'classic' vertical model and implies that either no individual performs all of the leadership functions or that within an organisation, there is a set of individuals who collectively perform such functions. This emerging model of leadership is seen to be of particular relevance to the management of new ventures (Ensley *et al.*, 2003). However, both the construct of shared leadership and leadership within new ventures remain under-researched areas. This paper employs a case study approach to analyse the factors integral to the appointment of a CEO, the criteria upon which founders and CEOs make their decisions and the process by which decisions are made after a CEO has been appointed.

KEY WORDS

Leadership, Decision Making, Management Teams, Shared Vision, Collaboration, New Technology Based Firms (NTBFs)

INTRODUCTION

The changing business environment with an increasing focus on growth, volatility and complexity is seen by many as requiring a significant change in our thinking about leadership (Hiller *et al.*, 2006). One alternative, to the 'classic' vertical model, is shared leadership where, it is suggested, a set of individuals collectively perform the leadership functions. This, emerging model of leadership, is of relevance in an entrepreneurial context and, particularly, in the development and growth of new ventures in the technology sector (Ensley *et al.*, 2003). However, both the construct of shared leadership and leadership within new ventures remain under-researched areas (Groon, 2002; Ensley *et al.*, 2003; Pearce 2004, Kempster and Cope, 2010)).

Shared leadership has relevance within new ventures as an external CEO is often introduced at an early stage either at the request of founders or as the result of an external equity investment and this is particularly the case in New Technology Based Firms (NTBFs). In the case of NTBFs, founders may look for support because they prefer to focus on the development, rather than the commercialisation, of technology (Oakey, 2003) or in recognition of skill limitations associated with the 'liability of newness' (Stinchcombe, 1965, Eisenhardt and Schoonhoven, 1990). However, technology firms often require several rounds of funding before commercial viability is proven (Oakey, 1995, Murray and Lott 1995) and to be attractive to equity investors, business proposals need to exhibit a sound proposition supported by an experienced management team with significant market knowledge and a broad network of contacts. If these qualities are not available as part of the existing management team then every effort would be made to attract a CEO that had experience of the challenges faced by start-ups and the ability to adapt a firm's strategy in line with changing market dynamics. Therefore, despite the obvious advantage that founder CEOs might have in championing a firm they themselves have created; evidence indicates that between a third to a half of companies go public (at their initial public offering) with non-founder CEOs at the helm (Certo *et al.*, 2001; Nelson, 2003).

Leadership has been linked in the extant literature to both effective strategic decision making (Eisenhardt and Bourgeois, 1988; Thomas, 1988; Korsgaard, Schweiger, and Sapienza, 1995) and entrepreneurial firm performance (e.g., Baum, Locke, and Kirkpatrick, 1998), however, research that has attempted to prove such propositions has, thus far, been inconclusive (Chrisman *et al.*, 1998, Ensley *et al.*, 2003). It has been suggested that this may be due to previous literatures focusing, almost exclusively, upon the contribution of the entrepreneur (see Hofer and Sandberg, 1987). Ensley et al. (2006) have argued that there is a need to broaden the unit of analysis to include the new venture team. Whilst there has been significant research undertaken into management teams in established firms (Hambrick and Mason, 1984; Finkelstein and Hambrick, 1996; Knight *et al.*, 1999), little research has focused on the contribution of management teams in new ventures. The purpose of this paper therefore is to explore the process of leadership and decision making in NTBFs where a non-founder CEO has been introduced to support the original founder(s) of the company. The research uses a case study approach and investigates the leadership activity in five case firms where a non-founder CEO has been employed. Secondary documentation has been collected on each firm and interviews undertaken with the non-founder CEO and the founders of each company (see appendix one). The objectives of the study are to understand the factors that lead to the appointment of an external CEO, to analyse the relationship between founders and CEOs, to evaluate its impact upon the practice of leadership and to contribute towards the development of new constructs in leadership that can support of future research.

LITERATURE REVIEW

It is argued that the conventional constructs of leadership no longer accommodate the changing nature of the work environment and this makes it difficult for individual leaders to possess all of the necessary expertise to perform, effectively, the required leadership functions (Yukl, 1999; Groon, 2002; Pearce, 2004; Hiller *et al.,* 2006). This has led to a move away from the dominant view of leadership as an individual construct (Bass, 1990; Avolio *et al.,* 1996) to considering leadership as a more distributed, fluid construct (Yukl, 1999; Hiller e*t al.,* 2006). Nevertheless, the literature does remain rooted in a vertical model of leadership (Groon, 2002; Pearce and Conger 2003; Pearce, 2004), where the effective performance of an organisation is dependent on leadership by an individual with the skills to find the right strategy and the ability to motivate others to follow that direction (Yukl, 1999). The key critiques of such a model concern the failure to consider task orientated behaviour or interaction with peers (Yukl, 1999; Higgs, 2003); a lack of consideration of differing contexts, especially, entrepreneurial models (Yukl, 1999; Ensley *et al.,* 2003; Pearce, 2004) and a failure to study the process of leadership in a more systemic manner (Yukl, 1999).

In attempting to address these critiques the concept of shared leadership has been proposed (Ensley *et al.,* 2003; Pearce 2004; Hiller *et al.,* 2006); this concept, which has evolved from work on top management teams (TMTs) in large firms, focuses on the relationships between two or three individuals that are engaged in providing leadership in a collective manner. In essence, shared leadership implies that no individual performs all of the leadership functions but rather that within the organisation there is a set of individuals who collectively perform this activity; thus leadership may result from a process of negotiation between leaders (Miller, 1998; Turnbull James *et al.*, 2007). Hiller *et al.,* (2006) argue that the increasingly complex organisational environments require effective team working and this provides the underpinning for a shared model of leadership associated with the concerted actions of multiple players rather than the behaviour of an individual (Groon, 2002). It is argued that performance is enhanced by complimentarity of individuals enabling them to capitalise on their strengths (Groon, 2002; Hiller *et al.*, 2006). Indeed there is some research evidence to support performance effectiveness of such shared leadership (Avolio *et al.*, 1996; Pearce and Sims, 2002); however, this must be viewed in the context of the leadership team and the interaction between members (Hiller *et al.,* 2006).

While the construct of shared leadership and leadership within NTBFs remain under-researched areas (Groon, 2002; Ensley *et al.,* 2003; Pearce 2004) there is some evidence, from the literature referring to leadership and the working of TMTs in large firms, which is potentially relevant to NTBFs. Katzenbach (1997) argues that an effective TMT needs to learn to rotate the leadership role, depending upon requirements, between parties; the leader, at any one time, will therefore be the member that has the appropriate knowledge or experience to cover the issue. The full participation of the TMT is therefore perceived as critical to the effective functioning of the leadership system; this includes team members motivating one another, sharing feedback, and directing activities of the team together (Katzenbach, 1997; Srivastava *et al.,* 2006; Lee *et al*., 2010). Consequently, within shared leadership processes it is suggested that TMTs enjoy greater collaboration, cooperation, and innovation (Manz and Sims, 1993, Yeatts and Hyten, 1998) and are better able to interpret group needs such as task interdependence and coordination (Perry *et al.*, 1999). It has been suggested that this notion of group interaction and socialization within the leadership function is more likely to support group cohesion (Perry *et al.*, 1999) which in turn increases the chances of a common sense of direction (Hambrick, 1997; Katzenbach, 1997).

This emerging model of leadership has the potential to be of particular relevance in an entrepreneurial context and the development of new ventures (Ensley *et al.*, 2003). However, while the role of TMTs in established firms has been well documented (Hambrick and Mason, 1984; Finkelstein and Hambrick, 1996; Knight *et al.*, 1999), there is relatively little work that concentrates upon the activities of management teams in new ventures (Groon, 2002; Ensley *et al.*, 2003; Pearce 2004). Previous literatures have highlighted the importance of the entrepreneur in the early stages of the firm's development (Carland, Hoy, and Carland, 1988; Shane and Venkataraman, 2000) and their leadership role has been linked to effective strategic decision making (Eisenhardt and Bourgeois, 1988; Thomas, 1988; Korsgaard, Schweiger, and Sapienza, 1995) and firm performance (e.g., Baum, Locke, and Kirkpatrick, 1998). Chrisman *et al.* (1998), however, conclude that research that has attempted to prove this proposition has been inconclusive. One possible explanation for the lack of conclusive evidence regarding the contribution of the entrepreneur to new venture performance is that the unit of analysis has been incorrectly identified. While many researchers have focused on the entrepreneur as a lone individual (Hofer and Sandberg, 1987), others have suggested that the new venture team is, perhaps, a more appropriate level of analysis (Roure and Madique, 1986; Ensley *et al*., 2003; Ensley *et al*., 2006). In the TMT literature, Hambrick (1997) concluded that 'a firm's strategic performance depends not so much on the characteristics, behaviours, and background of the chief executive officer (CEO), as it does on the sum of the characteristics, behaviours, and experiences of the senior management team and how they work together. It is perhaps more useful, therefore, to look at the activities of the management team in NTBFs in order to fully understand the relationship between leadership and performance.

Within the context of early stage technology firms the introduction of an external CEO or management team is one solution to address the 'liability of newness' which has the potential to limit the development of new ventures. This liability reflects the fact that a new business idea is yet to be fully tested and, perhaps more importantly, that the founder has limited business experience and access to networks that could facilitate a firm's development. In such circumstances, the introduction of an external CEO with the necessary bespoke experience and access to appropriate networks would help to overcome the liabilities that affect new firms. This is often cited as the reason founders seek external support and why equity investors look to identify appropriate management teams alongside good ideas before they are prepared to make investments (Timmons, 1999). However, the identification and introduction of good quality management to support founders in the commercialisation of new technology has been highlighted in the extant literature as problematical (Bank of England, 2002; Oakey, 2003; Vohora *et al.*, 2004; BVCA, 2005).

In addition, not all founders are persuaded of the need to employ external management to facilitate the commercialisation of technology; Oakey (2003), for example, indicates that the involvement of external actors is often perceived as unattractive, especially where this may cause a dilution of the founder's control over the firm. Furthermore, where an external CEO is appointed explicitly to commercialise a technology developed by a founder, Samson and Gurdon (1993) highlight the potential for conflict within the subsequent management team that include parties embedded in the divergent cultures characteristic of science and business. To address this issue Oakey (2003) suggests that a major competence that a technical entrepreneur requires is an ability to see the functional relevance of complimentary business management skills as part of the overall "success equation" in support of technical innovation. He indicates that these skills become more acute as firms grow and especially when such growth takes place over short time periods. As a consequence, technical entrepreneurs, that often have primary responsibility for research and development, need to understand the necessity to bring in other specialists for the firm to develop unhindered (Oakey, 2003).

The literature therefore highlights the advantages that can accrue to NTBFs from the practice of shared leadership, characterised by processes of negotiation and collaboration, through facilitating the fusion of technology and business development. It is, however, recognised that the introduction of such practices within NTBFs are likely to be mitigated by the entrepreneur's desire for independence and control, the extent to which the founders has managed to progress the firm under their own steam and the divergence that exists between the scientific and business cultures. This paper will address these issues using five case studies of five early stage technology businesses to analyse the reasons and processes in the identification and selection of an external CEO and the impact such appointments have upon the leadership and decision making processes in those firms.

RESEARCH METHODS

This research analyses the process of leadership and decision making in new and young technology firms where a non-founder CEO has been introduced to support the original founder of the company. The research aims to explore, from the perceptions of those involved in the process, the reasons for joining forces, how the leadership and decision making processes were subsequently managed and the factors integral to the success of the relationship. The investigation into these phenomena requires the researcher to elicit information from participants that will involve interpretation, meaning and significance and needs to be understood within the context and construction of the interviewee. The research, therefore, adopted an inductive, qualitative process and uses a case study method with evidence being drawn from five new technology ventures. The five companies represent a purposive sample; all of the companies had recruited an external CEO to work with the founder/s to promote the commercialisation of a piece of technology, this relationship had continued for more than three years and all had previous affiliations with the incubator facilities at the universities of Bristol or Southampton. The research method started with the collection of information on the case firms involved, this was developed from secondary data sources and from interviews with the incubator managers. For each case, in-depth, semi-structured interviews were conducted with the main protagonists, the original founder/s and the non-founder CEO that subsequently joined that firm. Obtaining the perceptions from both parties associated with the process enables the validity of any assertion by a participant to be checked against other interviews and secondary data sources. This paper adds value to the extant literature by exploring the use of shared leadership within early stage technology firms, analysing how such processes are operationalised and evaluating the factors that facilitate its implementation.

FINDINGS AND DISCUSSION

Previous work has documented the desire for independence as a motivating factor for many entrepreneurs to start their own business and this often leads, in the early stages of business development, to a situation where all managerial roles are undertaken by the entrepreneur (Oakey, 2003). The effectiveness of such a management structure is often dependent upon the pace of growth; in fast growth contexts, typically faced by successful NTBFs, it is often necessary to introduce management with complimentary skills to enable the founder(s) to concentrate on the technological development (Oakey *et al.*, 1988). It would be expected, therefore, that founders that chose to consider an external CEO understand the limitations this is likely to have over their levels of independence and control but accept this compromise because of perceived commercial advantages. The overall picture emerging from the analyses of the findings is shown in Table 1.

Insert Table 1 here

1. Introduction of the CEO

We begin by examining the views of founders and CEOs on the background to their coming together and the factors they considered important in this process. It must be emphasised that the decision to look for an external CEO was not the first choice of any founder; all had sought, with varying degrees of success, to commercialise the technology independently. In cases one and two founders were encouraged to take on a CEO by equity investors. Both companies had obtained close to one million pounds in equity investment and accepted, as a consequence, third parties on to the Executive Board. It was the Board's recommendation to the founders that they find someone with experiential knowledge of the sector and complimentary business skills to join as CEO. The interviews indicate that both parties worked closely together on this decision and that the founders were fully supportive of the activity. In both case firms the external investors were charged with finding suitable candidates which gave them the opportunity to 'sell' the CEO position to potential candidates and effectively communicate the aspirations of the business. Once individuals had been identified, the founders played a key part in the selection of the CEO. This was a two stage process, a formal presentation by the CEO that effectively set out their vision for the firm and an informal set of meetings (three in one case, four in the other) where founders and prospective CEOs were able to discuss the technology, the potential opportunities this created and, generally, share thoughts. In both cases this eventually led to the appointment of a CEO.

In case firms three and four the future CEOs joined after being introduced to the founder as a mentor by an incubator director; in both cases the transfer from mentor to CEO came after considerable time and interaction with the founders. Taking company three as an example; the founders had not been convinced by the worth of an external appointment and had used several different mentors for ad-hoc support without making the role more formal. The move towards appointing a CEO came at a critical juncture, the survival of the business was threatened and the two founders of company three confessed to being too involved in the technology *‘we were more interested in the technology because that was what we were good at, time spent on business development was unproductive and unrewarding so we avoided it’* (founder company three).

Having little option the founders had to accept their limitations and looked again for help; they were not in a good financial position and the eventual CEO (Case three) was in no hurry to take on the role

‘I told the founders I'm not going to become an employee, I will spend a period of 6 months working for you as a consultant, and then I will decide whether I want to make a commitment to this business’.

The CEO of case company four came in at a much earlier stage; before the market, which the technology might address, had been determined:

‘I knew it (the technology) was different, I knew it was a bit clever, but it hadn’t really been exposed to the potential customers and hadn’t really had a reaction to find out whether, in real life, it would provide any benefit’.

He also indicated that he had enjoyed working with the founders and felt that they were committed to finding a commercial home for the technology. The founders simply indicated that the mentoring process had taught them a great deal, they had respect for his commercial and technological background and they felt that he would be a real asset as CEO.

In the final case, the founder of company five came to accept a mentor after two years of working on his own to develop the technology and grow the business. Over this period he had achieved some notable technological success, evidenced by two R&D awards, but had not managed to attract the interest of customers. The founder intimated that he had run out of funds, ideas and energy when a chance meeting, with the eventual CEO, occurred at a networking event. After this meeting discussions took place which culminated in X joining as CEO responsible for business development and making an equity investment in the company. The founder indicated that, while the money was a necessity, the attraction of the offer lay in the extensive experiential knowledge of the CEO and the fact that he would, no longer, be working on his own. The CEO liked the technology and saw an opportunity, his decision to commit time and money, however, was based on *'gut instinct'* and timing; as he admitted,

'I had been looking to do something like this for almost twelve months'.

2. Selection Criteria

Founders from case firms one and two identified three factors as important in their decision appoint the CEO. Initially they needed to demonstrate a good theoretical understanding of the technology and experiential knowledge of the business sector. As the founder of company one suggested:

'he had a great background in this area and an understanding of the market potential. He came from a company not far in technology from what we were offering…..he had been involved in the industry so to speak. Secondly, he's complimentary rather than overlapping in that he was also a chemical engineer rather than a straight chemist, and that gives him a different technical perspective which is always useful.'

This blend of technical and business experience was thought to provide complimentarity with the more rigorous scientific and technical background of the founders. In addition, the founders were looking for an inclusive approach; founders expected to be consulted and involved in the decision making process; a founder in company two stated:

'I think he also had a natural respect for the inventors of technology and the technicians, if you like, the scientists who were involved in it, I think if that isn't there I think probably, you know, we're too arrogant to kind of just accept that we're just the people who supply something'.

The CEOs reflected similar criteria, the technology needed to have commercial value and the founders had to be ready to allow that technology to be commercialised. As CEO 1 indicated:

'the founders were leaders in their field and they were not just tied to their research benches ……..they were academically bright but commercially astute'.

CEO 2 also suggested that they had aims and objectives that were congruent:

'the IP was clear and there was a great deal of enthusiasm for forming a successful enterprise and to have a greater commercial interaction to really drive the sales of the business.'

In case firms three and four the procedure was different but the actual criterion employed very similar. As mentors they had been introduced after the efforts by founders to commercialise the idea had stalled, as the founder of case company three indicated

'the CEO came at the right time we had taken a few knocks and the business had not progressed how we had wished he came in and our fortunes and mood changed, he had our confidence from that point'.

Mentors are expected to observe a twelve month period before any involvement is formalised; in this case, therefore, the decision to appoint a CEO is not an event but a process and is based on an understanding that gradually develops over time. The time spent mentoring was a proving ground for all parties, enabling them to sample the activity before fully committing themselves to the process and this allowed a strong bond to develop. A founder in company four stated:

'*the CEO showed a great deal of empathy towards us, to understand us collectively we are not easy people to deal with, we're all very different, but he took time to learn about each of us.'*

The level of empathy supported the process but it was the quality of the technology and the business acumen of the parties involved that led to the final decision to link up; the comments from the founder and eventual CEO of case four were typical:

'*He had a very very good worldwide network, and was able to open doors in China, India and America, you know, with very large OEM companies. We simply did not have these connections'*. (founder)

'Primarily I thought the technology was very sound, giving a clear edge and the two founders were very clear that what they want to do is make a lot of money and then sail off in to the sunset…..
This made me believe that I could help develop the business.' (CEO)

In case five two factors appeared to underpin the relationship; both identified real confidence in the abilities of the other and the relationship augmented the ambitions of both parties to develop a successful business. This example was far more intuitive in nature and, although both parties could offer post-hoc rationalisation (commercial acumen, and technical expertise) for the partnership, both were aware of the risks that they took and the limited effort they had made to fully appraise themselves of the other party. The over-riding factor was that both parties were keen to commercialise the technology:

'I had done all that I could to get meetings with the right people, to showcase the technology and find customers but it didn't work out and I don't think it's my strong point. Finding someone that had done this sort of thing before, did not want to be paid and would put money into the firm was a no-brainer' (founder)

‘The technology looked as though it had real potential and I thought I could do something with it, but more importantly X (the founder) was just as keen as I was’ (CEO)

3. Shared Vision, Decision Making and Leadership

This section analyses the extent to which the decision making practices that evolved within the case firms could be described as shared leadership; a concept where the firm is directed by the actions of multiple players working together rather than a single individual. In exploring the data it was notable, in four of the five cases, that the selection criteria and process appeared to result in the development of a purpose and vision that was shared by the founders and the incoming CEO which led to joint decision making and a shared leadership approach.

In case company one the process of working together was perceived as important with shared vision being one of the criteria that both the founders and the CEOs looked for during the selection process. In company one a founder stated

‘…. I think that really what we managed in those early days was the idea that even though we had different skills we were a team that were working together towards the same objective’.

Similarly the CEO of company one indicated

‘*There seemed to be some very positive dynamics between the founders and myself, the personalities seemed to work, and also my own background which is a mixture of technical and commercial roles seemed to fit nicely with the objectives of the founders’.*

This had led to close working relations on strategic issues, for example on the successful development and implementation of a ‘sales and marketing’ plan. The practice of collective decision making was reinforced by the success of such plans and had become embedded in the working practices of the firm.

Both parties suggested that they are working with people of quality that they trust; the CEO says that one of the founders

'is very commercially astute, understands far more about the business world than you might find amongst his peers and is capable of interacting with customers in a very effective way'.

Similarly a founder indicated that the CEO

'brings a huge experience of business and mechanisms of business, …..and he's very responsive to the needs of the technical team and the business team, you know, he empowers and he understands'.

This has helped the cohesion of the company and enabled the collective decision making to continue even when difficult decisions have had to be made. As the CEO suggested

'*there've been some hard decisions we've had to make decisions about which projects have looked likely to succeed, and sometimes we've had to stop programmes and reallocate, or release, resources, but that's always been done on a consensual basis in discussion with the founders'.*

A founder made a similar comment about a set of redundancies

'it was a collective decision we knew the situation there were other ways to save money but it would have been to the detriment of the technology'.

In contrast, the degree to which a shared vision existed in company two was less clear and there appears to be some ambiguity between respondents regarding the aims and objectives they had for the company and their own aspirations. The founders of company two were clearly comfortable developing the technology and the creation of the firm was one way in which they could derive funds to continue this work. As one founder intimated *'setting up the business seemed like a good way of keeping the research going and making some money'*. The CEO, however, had been involved in two other technology businesses, enjoyed the *'cut and thrust of business development'* and perceived the agenda as commercialisation. This ambiguity had little impact at the beginning because the technology had to be proven and the founders had a great deal of freedom to create something that could be shown to potential customers and investors. As a consequence, in the early stages of the relationship, both the founders and CEO have a similar vision which only begins to break down when the technology is ready to be commercialised. One of the founders suggested that they had compartmentalised the technology from its commercial development and commented:

'We could see that there needed to be a change of attitude and perhaps culture to the way in which we worked but I don't think any of us were ready to give up our existing activities (University Professors)' (a founder company)

Similarly the CEO could see problems:

'it was quite clear it needed someone in the organisation who could manage the R&D full time, who could manage the people, and also provide the kind of strategic leadership in R&D that we couldn't get from the founders, because we were starting to get to the point where this was no longer about basic research, this was about shaping a programme to take it forward in to development, which in our industry is two very distinct skill sets'.

A failure to overcome this hurdle led to the appointment of an external R&D manager who was recommended to the firm by one of the founders and this appointment effectively limited the need for the founders to be actively involved in the strategic decisions of the business. In discussing the current leadership process the CEO indicated:

'its definitely shared leadership within the organisation, but it's shared between X (R&D manager) and myself, between myself and the founders'.

The founders agreed with this assessment and while expressing some frustration at being *'sidelined'* they appear to be to have rationalised their position; as one founder suggested

'at the time it felt like we were being forced out but in truth we couldn't, or didn't want to devote the time required to develop the business. We still have the shares and 'the CEO' seems to be doing a good job'.

Looking at the cases firms three and four, the period during which the CEO acted as a mentor was important, both CEOs talked of the need to empower the founders to develop their business and to facilitate activity where the founders could understand and learn. For this to take place founders and the CEO had to work closely together, be fully participative in the decision making process and understand the implications. For their part founders suggested that they used the mentors as a way of trying to understand and learn about the ways of business and to develop commercial acumen. The time spent mentoring was a proving ground for all parties, enabling them to sample the activity before fully committing themselves to the process. In company three the emergence of a shared vision and purpose was evident from an early stage. The CEO saw his role as enabling the achievement of the founders' objectives and this was clearly understood by them:

"..fundamentally the team was, good, but they just really lacked the skills to take things forward, I made some suggestions and from that point on we were on the same page.." (CEO company three)

one of the founders indicated that the CEO

'showed a great deal of empathy towards us, to understand us collectively we are not easy people to deal with, we're all very different, but he took time to learn about each of us.'

Another indicated that the CEO viewed this time as an opportunity to understand the objectives of the founders, their predisposition to outside involvement and the potential to commercialise the technology; his comment was that from an early stage he knew

'*fundamentally the team was good, but they just really lacked the skills on how to take things forward, I made some suggestions and from that point we were on the same page'*.

From a leadership point of view the CEO suggested

'it's always me driving the discussion', it's always me challenging, you know, the assumptions or the decisions and saying, you know, 'do you think this is right? Should we do this? Should we do that?'

The notion of a discursive activity is important to note, others were expected to question, contribute and learn. The CEOs assessment was that leadership was a collegiate process

'deciding upon strategy in a small company is very very easy to sort of brainstorm, you can sort of brainstorm how you see the business evolving, potential exit strategies. And we've really had no disagreement in the business at all. You know, I think they've almost been so pleased to see the business finally taking off that, you know, its all been very very straightforward'.

In company four the CEO had placed considerable emphasis on building a shared vision with his time as a mentor influencing his leadership approach:

"…sometimes the hardest part of keeping people involved is there are bits where they just go"…don't understand this..don't want to know about it..just go away and solve it", which is fine but there are times when it is more important than that and I have to hold them and go no,no, no, you've got to understand what we're doing and what's happening" (CEO company four)

The founder concurred with this view and suggested

'He has never taken the easy route and just gone ahead and done it we have to be there alongside, its not always straightforward but I have learned a huge amount and I am grateful to him'.

As a consequence there was very little disagreement and as the CEO indicates

'things are as open as possible, everybody is involved and we're able to sit down and work things through'.

The founder very much agrees with this scenario and views their decision making process as a meeting of minds;

'the CEO normally starts the discussion but no one is quite sure how it will end, but we all have the opportunity to contribute and have our say'.

There is also an explicit sharing of roles

'in terms of putting proposals together, pitching to people and things like that then, well I will do it or the CEO will, or quite often, as is more successful, we will do it together' (founder).

In addition, they explore new possibilities and ventures collectively each bringing their own skill set to the decision making process the CEO indicated

'compared to a lot of companies we're probably doing a hell of a lot more innovation and a lot more R&D, but we will go through them, we will have talked about them and quite often talked about them with some of the other guys as well'.

In the overriding goal for the founder was to commercialise the technology he had developed and invested so much time in; the CEO, having committed a great deal of his own money and with no alternative employment, had the same goal. The commercialisation of the technology was the reason the CEO joined and the reason why the founder was keen for him to be involved as indicated below:

'I had done all that I could to get meetings with the right people, to showcase the technology and find customers but it didn't work out and I don't think it's my strong point. Finding someone that had done this sort of thing before, did not want to be paid and would put money into the firm was a no-brainer' (founder)

'The technology looked as though it had real potential and I thought I could do something with it, but more importantly X (the founder) was just as keen as I was' (CEO)

Although the founder preferred spending time developing the technology and the CEO came with a history of business development neither did anything of significance without the others consent and decisions were arrived at collectively. As the founder indicated *‘it isn’t always easy and we have a had a few heated arguments that were not resolved immediately but we both have the interests of the business at heart and this is the common denominator that wins through’*.

Both parties stated that they learned to work together on-the-job;

‘as things came up we worked them out through trial and error’ (founder)

This does illustrate the view expressed in the Top Team literature that shared leadership does entail mutual learning (Katzenbach, 1997; Higgs, 2003); in case firm five, the two parties are in daily communication, information is shared and they continually discuss the direction of the business.

In reviewing the five cases there is a clear picture emerging from the data that supports the literature from top management teams and indicates that such an approach enhances the dynamics within the management of NTBFs and leads to commitment to decisions and actions (e.g. Katzenbach, 1997; Higgs, 2003). In four of the cases it appears that a shared understanding of the purpose of the enterprise provided the basis for a shared approach to decision making within the top team (i.e. founders and CEO). The information provided by company two is significantly different and in this example the selection process did not prove to be the antecedent of a subsequent shared leadership approach. Following on from the selection of the CEO there was no clear, shared purpose and the data suggests that the founders and CEO engaged in “parallel conversations” (Argyris, 2000) and, having failed to recognise this, proceeded without a shared vision. As a result the way in which decisions were made was to separate the technical from the commercial; the latter being the sole province of the CEO. Furthermore, all parties failed to recognise the impact that this would have on the development of the business and in this case the apparent complimentarity of skills led to a separation of roles that in turn resulted in a failure of the top team to maintain a focus on building the business.

CONCLUSION

The findings presented in this paper are the result of a pilot study which will be used to inform a larger research project that investigates leadership and decision making practices in NTBFs. The research used a purposive sample of five firms where an NTBF had recruited a CEO to support the commercialisation of a piece of technology previously developed by the company. The sample size is not large enough to offer generic conclusions for the sector but the findings do provide insight on how leadership practices evolve when an external CEO is brought in to help commercialise a technology developed by founders.

In looking at the factors that led to the appointment of a CEO the findings indicate that founders do not appreciate, immediately, the value of experiential commercial knowledge and in three of the examples the founders only came to realise the value of commercial expertise having failed to identify appropriate markets or gain significant traction once a market had been identified. In the other two cases the founders were encouraged to take on board a CEO at the advice of external equity investors. This supports previous work, for example Oakey (2003) that identifies a founder's desire for independence and the associated belief that they have the ability, skills and time to successfully fine tune the technology while, at the same time, commercialise its potential. Once founders appreciated the contribution that could be made by the appointment of an external CEO, there was a bias to select individuals that could also show a robust understanding of the technology that underpinned the business offering. The findings would suggest that founders were more comfortable in dealing with individuals that were familiar with the language and jargon of the subject and perhaps had more empathy towards their passion for the technology. It was also evident that, post-selection of a CEO, founders, in all but one case, were keen to remain fully involved in the decision making process and viewed the new appointment as an opportunity to share knowledge and expertise.

In reviewing the process by which decisions were made, it was apparent that, in four of the five cases, the CEO did not perform all of the leadership functions, all the time; nor did they make decisions without the consultation or support of founders. This aligns with the notion of shared leadership previously discussed Ensley 2003, 2006 and Hillier et al., 2006) with the four of the CEOs perceiving their role as helping to facilitate and direct the activities of the founders. As a consequence, there was considerable collective activity in evidence with decisions being arrived at by a process of negotiation. However, there was little evidence to suggest that the leadership role rotated between individuals on the basis of knowledge or expertise; instead there was a collective approach taken where knowledge and expertise was shared and decisions arrived at after consideration by the team.

The shared leadership literature (e.g. Groon, 2002; Perace, 2004; Hillier et al, 2006) does tend to overlap with research into TMTs and this finding tends to align with some of the more recent literature on effective senior level leadership (see Avolio et al, 2009). However what is notable in exploring the data in this study (and indeed the literature relating to SMEs and their leadership) is that in this context the TMT is relatively small and the potential for multiple-member conflict (e.g. Higgs 2003; Forbes and Milliken, 1999.) is notably reduced. However, it is interesting to note that the importance of a common shared purpose combined with complimentary skills and role clarity remain antecedents of team success in the same way as has been found in the TMT literature (Katzenbach, 1997; Hambrick and Brandon,1988; Higgs, 2003). This paper, therefore, provides evidence that supports the relevance of shared leadership to the entrepreneurial context (Ensley et al, 2003; Pearce, 2004; Groon, 2002) and has identified situations where the shared leadership approach has made a positive contribution to the cohesion of the TMT in new ventures (Perry et al, 1999; Hambrick, 1997; Katzenbach, 1997).

	Case 1	**Case 2**	**Case 3**	**Case 4**

Introduction of a CEO	**Encouraged by equity investors**	**Encouraged by equity investors**	**Introduced by Incubator Director**	**Introduced by Incubator Direc**
Selection Process	**High level of founder involvement**	**High level of founder involvement**	**Started as mentor Reluctance to formalise External threats change formal structure**	**Started as ment Founders felt va working togethe Good understan of each other**
Selection Criteria	**Good understanding of core technology Complimentary skills Inclusive style**	**Good understanding of core technology Complimentary skills Inclusive style**	**Access to good networks Complimentary skills Commercial acumen**	**Balance of comm and technical ac Able to work we together**
Style of Working/ Leadership	**Shared vision and goals Style began in selection process Collaborative decision making High levels of trust**	**Unclear initial vision and goals Initial role separation Informal decision making Eventual founder disengagement Ambiguity over business ambition unresolved**	**CEO empowering style All play to strengths Collegiate process Mutual trust**	**Joint ownership decisions Shared vision Mutual skill recognition Integrative appr Mutual trust**

Table 1: Summary of Case Analyses

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