

## HOW PASSION ATTRACTS TALENT: A STUDY OF RECRUITMENT IN AN AUSTRALIAN HIGH-TECHNOLOGY START-UP

*Susan Rushworth: Australian Graduate School Of Entrepreneurship, Hawthorn,  
Australia*

*Murray Gillin: Australian Graduate School Of Entrepreneurship, Hawthorn, Australia*

~

**Contact:** Susan Rushworth, Australian Graduate School of Entrepreneurship, PO Box 218,  
3122 Hawthorn, Australia, Email: srushworth@swin.edu.au

### ABSTRACT

This study explored the recruitment process in a technology start-up for consistency with established models, and the role entrepreneurial passion had played in attracting team members. Recruitment incidents were identified through interviews with the founders and members of the core team and analysed both against existing models and for emerging themes. Passion for the technology vision was found to be instrumental in attracting early participation on a part-time, casual basis, but in making serious commitment to the venture, shared values of equity and trust, together with the entrepreneur's passion and credibility, creating conviction that the vision was achievable, emerged as the decisive factors.

### INTRODUCTION

Many entrepreneurial ventures are started by a team, rather than a single founder, and studies have found that ventures founded by a team rather than an individual are more likely to be successful (Cooper & Bruno, 1977; Reich, 1987). This has led to an emerging interest in the entrepreneurial team rather than the entrepreneurial individual. However, an entrepreneurial team does not just consist of multiple founders, but includes key team members who are added in the formative stages of the venture. Literature on the topic of team member addition is scarce and there is a need for further research, both theoretical and empirical in this area (Forbes et al., 2006).

This need has been supported by practitioners. Heneman et al. (2000) found that recruitment and retention were the most widely identified issue in human resource management (HRM) among CEOs of fast growing companies, but were under-represented in the already scant literature on HRM practices in small and medium-sized enterprises. The most urgent issue identified by CEOs was managing the cultural fit of new recruits. Recent research (Cardon, 2006) has suggested that transmitting the passion of the entrepreneur to employees might lead to greater success than adopting less emotional traditional HRM practices.

Most studies of entrepreneurial team formation have taken a multiple case study (e.g. Chandler & Hanks, 1998; Leung et al., 2006) or even large scale survey approach (e.g. Chowdhury, 2005). While this has the benefit of diversity and generalisability, it is less able to illuminate whether the approach to recruiting new team members differs *within* an individual venture according to stage of development or nature of role being filled. Thus a case study of a single venture may add further insight into this developing field. Through prior research and personal connections, the first author has access to a new venture that has allowed such a study to be carried out over a period of almost 12 months, thus adding a longitudinal element to the findings.

Among the rationales for a single-case study, is the extreme or unique case, where the case in question represents an ‘outlier’ in the normal profile of similar cases (Yin, 1989). In this study, the case is a high-technology venture, formed in 2001, but which until 2005 operated with no paid employees and no cash, and yet had commissioned 20,000 man-hours of work worth AU\$5.5 million at market rates, had attained an estimated valuation of US\$12 million, and had recruited one of the founders of Apple Computers to its advisory board. The study follows the recommendations of Kamm and Shuman (1990) that the entrepreneurial team should have been together long enough to have experienced the challenges faced by a start-up venture, but not so long ago as to cast doubt on reliability of memory of events.

## **BACKGROUND TO THE CASE**

The idea that led to the formation of TechCo (not the real name of the company) arose during the founder’s undergraduate studies in 1996, as a result of a research project assignment. He recognised an emerging need for technology to help resolve the problem of information overload and to put the power of managing information more in the hands of the users than the content providers.

The idea went through an incubation process punctuated by moments of insight about how it could be crafted into an opportunity, consistent with Lumpkin and Lichtenstein (2005). In 1999, the founder discovered on the internet the email address of Steve Wozniak, co-founder and technical ‘wizard’ behind Apple Computers, and decided to contact him for permission to use the name of an early invention of the Apple founding team as the company’s name. The response was not only permission, but endorsement for the concept and an invitation to contact Wozniak for further assistance. In 2001, the founder put together a team to enter a local university’s business plan competition. Although it was not successful in winning the competition, it attracted the attention of one of the mentors who believed that the concept had merit.

In April 2000, the dot.com boom had come to an end and the two years that followed were a difficult time for technology companies, as investors and advisers alike had become cautious. The traditional start-up resources of own savings and contributions of family and friends were not available to the founder, meaning development of the concept had to be carried out alongside full time work to earn a living. However, by 2003, the company had attracted a project manager and a technical developer, as well as a wide network of contacts expressing interest in the venture when it was more advanced. A prototype had been designed and pitched overseas, attracting an offer of investment if the company relocated, which it was not in a position to do. Up to this time, all work had been done on the basis of deferred payment and/or equity share. In early 2005, a few small investors provided sufficient capital to allow the founder to continue to work on the project, and attract enough additional investors to pay a team of developers. Paid development commenced mid-2006. At time of writing, the company is about to enter a round of formal capital raising and aims to launch its proof of concept prototype at a technology conference early in 2007.

The first author wishes to disclose that the founder and several members of the company have become personal friends. This relationship has been a factor in permission being given to study the company at such a busy and vulnerable time. Methodological rigour and the overview of the second author, were applied to minimise the consequent risk of subjectivity. Also, the conclusions about the value systems operating within the company and the motivational factors that had served to attract and retain staff were verified with the founder’s personal partner, who found them to be an accurate representation of the culture and ethos of the company.

## **LITERATURE INFORMING THE RESEARCH DESIGN**

As noted earlier, there is a lack of research regarding recruitment processes of early stage entrepreneurial business, and small businesses in general (Heneman & Tansky, 2000). Two streams of literature influenced the research design: entrepreneurial team formation (Forbes et al., 2006; Kamm & Shuman, 1990; Kamm & Nurick, 1993; Leung, 2003; Leung et al., 2006); and entrepreneurial passion (Cardon et al., 2005; Cardon, 2006; Patel et al., 2006; Winnen & Huber, 2006; Vallerand et al., 2003). Broadly speaking, the entrepreneurial team formation literature informed the data collection design and initial data analysis – tabulation and categorisation. The entrepreneurial passion literature informed the second stage of data analysis, searching for themes and patterns in textual data.

### **Entrepreneurial team formation**

Kamm and Shuman (1990) outlined a research agenda for studying entrepreneurial teams. Among their recommendations were the use of qualitative research methods and independent, in-depth interviews with as many members of the entrepreneurial team as possible using a common protocol. Kamm and Nurick (1993) followed up on this agenda, developing a model of entrepreneurial team formation. It consisted of an Idea and an Implementation phase, the latter being the more relevant to this study. The implementation phase consists of three stages. Stage 1: The founder(s) decide that they need additional core team members (reasons include skills, resources, risk minimisation, personal fit). In Stage 2: Recruitment, the three key decisions are: where to find team members (through existing relationships or other sources); how to select them (personal fit or skills and resources); and how to convince them to join (material and/or non-material benefits). Stage 3 is an ongoing process of team management.

Leung et al. (2006) examined the practice of recruitment through networks, common in entrepreneurial ventures, with reference to the concept of strong and weak ties (building on Leung, 2003). Strong ties are based on trust and emotional closeness, while weak ties involve a more casual relationship, and limited emotional involvement (Burt, 1982). While previous literature had suggested that firms would shift from using relationships with strong ties to weak ties as they developed in maturity, Leung et al. found that the use of strong ties persisted well into the growth phase, driven by a desire for personal fit in the form of shared values and goals. However, business networks replaced personal networks as the recruitment channel as firms entered the growth stage.

Forbes et al., 2006 considered the impact of new member addition to the core team. They examined the reasons for recruitment ('why'), the process of recruitment ('how') and the timing of recruitment ('when'). 'Why', they proposed, was driven by alternative, but non-exclusive motivations: resource-seeking, and interpersonal attraction. Resource-seeking could be further sub-divided into human capital (adds value through doing work), social capital (adds value through personal connections to resource providers) and resource-dependence (reduces uncertainty regarding access to critical resources). The last of these might involve an alliance rather than an addition to the team. 'How' corresponded closely to the process proposed by Kamm and Nurick (1993), described above. 'When' was related to 'why' in that resource-seeking recruitment was triggered by a problem and timing was therefore determined by the identification of a problem and urgency of resolution. Recruitment motivated by interpersonal attraction, by contrast, was driven by the opportunity presented by finding a good personal fit for the company and could happen at any time. In this research, we have summarised motivation and timing under the two concepts of 'problemistic' (resource-seeking, problem-driven) and 'opportunistic' (interpersonal attraction, opportunity-driven).

### **Entrepreneurial passion**

Cardon et al. (2005) identified the influence of passion using the metaphor of parenthood for the relationship between a founder and the venture they create. Passion may be one attribute of the feelings of the founder (parent) toward the venture (child). Use of the parenthood metaphor may help to understand how founder's possessiveness about their 'baby' may lead to actions that less emotionally engaged participants in or observers of the venture may find irrational. Cardon (2006) examined more deeply the specific role of passion in the entrepreneurial process, in particular whether and how it might be transmitted from founder to employees. Her conclusion was that founders who shared both positive and negative emotions with their employees were most likely to transmit their passion to their team.

Vallerand et al. (2003) examined the positive and negative attributes of passion and proposed two types: harmonious and obsessive passion. With harmonious passion the individual retains the choice to participate in the activity about which they are passionate and it co-exists comfortably with other aspects of his or her life. With obsessive passion, the individual is compelled by an inner pressure to participate in the activity, even if they feel negatively about it during or after participation and it impacts adversely on the rest of their life. Winnen and Huber (2006) incorporated these concepts in a multi-case study of four entrepreneurial ventures, selected for the founder's passion and proposed a model of entrepreneurial competency of which entrepreneurial passion was a component. Obsessive passion was found to lead to 'blind spots' (unconscious incompetency) and poor venture performance. Winnen and Huber also characterised the contribution of entrepreneurial passion to the culture and direction of the venture, identifying six characteristics which can be summarised as motivational (persistence, trigger to action), strategic (defining mission, affects scope of entrepreneur's vision), tactical (works with cognition in decision-making), and cultural (integrates into value and belief

systems). The contribution of passion to mission and shared values is consistent with Chang (2000) and Collins and Porras (1994), suggesting that passion provides not just impetus to action but to create a sense of meaning for an organisation. This, in turn, has parallels with Weber's concept of substantive rationality, which is "a conscious belief in the value of a thing for its own sake regardless of its economic value." (Weber, 1946, paraphrased in Winnen, 2006)

A recent quantitative study found that entrepreneurs strong in social capital and social skills were more likely to be able to achieve legitimacy and assemble resources (Patel et al., 2006). One aspect of social capital is the strength of network ties (Aldrich, 1999), and strong ties are based on trust and emotional closeness (Burt, 1982). If entrepreneurial passion can be contagious to employees (Cardon, 2006), then it may also be contagious to social networks, building emotional closeness and therefore strengthening ties. This was identified as an area of exploration in the data analysis.

## **DATA COLLECTION**

In this study, the intention was to collect information about recruitment events from the perspective both of the company (via the founder) and, where possible, the person being recruited. From the founder's point of view we were interested in the reasons for recruitment and the process of recruitment—how located, how selected, how induced to join. The founder was also asked to comment on what factors he thought attracted people to the company and persuaded them to join, as this was considered relevant to how he presented the company to prospective recruits.

From the recruit's point of view, we were interested in how they became aware of the company, how they were approached, what attracted them about the venture, what persuaded them to join (or not, as the case may be), and why they had remained with the company. Thus two separate, but somewhat overlapping, interview guides were designed for the founder, and for members of the core team. The second of these was later adapted into a question and answer format that could be conducted by email.

The starting point for the investigation was the interview (actually conducted in two stages, due to time constraints) with the founder to identify recruitment incidents and locate them on the timeline of the venture. This established a rough timeline and an initial list of potential 'core team' members. Interviews were conducted with the first two members of this provisional list, in the order they joined the venture. Based on their interviews, a list of six core team members was agreed. These included the four directors, all of whom had been associated with the venture for at least two years, and two other individuals whom the directors agreed had been essential to the survival of the organisation. The remaining three members of the core team were then interviewed in the order in which they joined the venture. Five interviews were conducted face-to-face and the sixth by email due to time constraints. An additional interview was conducted by email with a person who declined to join the company in the role for which he was sought, but retained a less formal ongoing relationship with the company. Any inconsistencies between interviewees regarding details or timeline were followed up and clarified as far as possible.

From these interviews, a total of 16 "recruitment events" were identified. Two of these involved multiple recruits brought in to perform a specific task, where the characteristics of the recruitment event were essentially the same for all recruits in the group. A cut-off of end September was imposed on recruitment events, to avoid chasing a moving target. Since then a user interface team has been hired, the development team has been extended and a new director, who will also act as chairman of the board, has been recruited. Even for the time up to September 2006, these 16 events do not constitute a complete set. In the early stages, compensation was based on deferred reward and formal contracts were rarely drawn up. Many people contributed to the company in an advisory capacity, some with the intention of joining in a more formal capacity should favourable circumstances arise. The 16 events chosen represent all the core team members and other recruitments for which enough data was available for useful analysis.

## **DATA ANALYSIS**

Interviews were transcribed verbatim, including pauses and word emphasis [indicated by capitalisation], and analysed using Nvivo software. This allows for dynamic and flexible coding (passages can be coded against multiple themes), while maintaining a clear evidence base for any conclusions drawn.

### Recruitment process

First of all, recruitment events were classified from the company's perspective according to characteristics derived from the entrepreneurial team formation literature:

- Reason for recruitment: problemistic or opportunistic (Forbes et al., 2006)
- Value added: human capital, social capital or resource-dependence (Forbes et al., 2006)
- Method of location:
  - Existing relationships or other means (Kamm & Nurick, 1993)
  - Networks used: personal, social or business (Leung et al., 2006)
- Selection criteria: skills or personal fit (Kamm & Nurick, 1993)
- Inducements offered: material or non-material (Kamm & Nurick, 1993)

The results are summarised in Table 1. The overall pattern is of a loose, informal approach to recruitment. Many of the hires were opportunistic in nature, and even where the search was problemistic in nature, personal fit was an important criterion for selection. The value-add was predominantly human capital, though social capital was important in some cases. The use of existing relationships and personal networks dominated recruitment. One of the two entrepreneurial networks was, effectively, a personal network, because it was managed by one of the company directors. The three individuals whose personal networks were most prominent were the founder, who made the initial contacts through existing or deliberately sought-out personal relationships; the mentor (subsequently director) who, as well as running one of the entrepreneurial networks, brought in many personal contacts who were not part of that network; and the chief software architect, who brought in the development team and executive assistant through a social network associated with recreational activities.

Little use was made of traditional business networks and limited use of technical networks. In interviews much was made of the need for people joining the company to be flexible and understand the constraints of a start-up. Several examples were given of prospective recruits or actual recruits who subsequently left, who were uncomfortable with the resource-constrained and unstructured nature of a start-up company. It is therefore reasonable to assume that traditional business networks were not viewed as likely to yield recruits with a good personal fit. Technical networks were used only when personal networks failed to provide a suitable candidate. For example, the chief software architect was recruited through a technical network, but once on board, subsequent recruitment of technical staff was through his own personal networks. The manner in which networks were located and extended is most readily understood when presented in pictorial format as shown in Figure 1 (numbers correspond to those used to identify recruitment events in Table 1).

The heavy use of personal networks is characteristic of a company at the start-up rather than growth stages (Leung et al., 2006). This was not altogether surprising, as the company was yet to develop a saleable product, but it is not unusual for technology-based companies to be well established before actually bringing a product to market. Although the company management team recognised that use of personal networks for recruitment would eventually place limitations on ability to attract the best candidates, and might limit growth, there was no evidence yet of a move toward more traditional recruitment channels. The impression given was that only when personal networks were exhausted would alternatives be seriously examined. While this approach is likely to attract people with a strong personal fit, minimising personality conflict within the company, it risks creating the impression with investors that the venture's management team has a stronger commitment to the people and culture of the company than to its commercial success (Davidsson & Klofsten, 2003).

### Motivation to join

Each recruitment incident was further analysed to understand the main factors in each recruit's decision to join the company. Inherent in this was an understanding of their opportunity cost in terms of benefits potentially foregone. Other than the founder, no member of the company had foregone personal income to the extent that it threatened their ability to meet their regular financial commitments. Early recruits continued to work their 'day job', doing work for TechCo in their spare time. This does not mean that the decision to join TechCo was without opportunity cost. All of the core team members had more lucrative employment opportunities. Most of the core team were married and therefore time spent working on TechCo business was time with family foregone. Since the middle of 2006, TechCo had been able to pay salaries that, while below market rates, allowed a reasonable standard of living. Several recruits whose financial constraints had previously prevented them from joining the venture were then able to come on board.

A common pattern among all recruits was that each had defined (some more consciously than others) personal minimum income needs that they were not prepared to risk. Once these income needs were met, either by maintaining an alternative source of income, or through a regular salary from TechCo, then other motivational factors took precedence and it was on these factors that analysis of motivation focused.

To understand the other motivational factors, it is necessary to explain in a little more detail the concept on which the company was based. There were two components: technology and content provision. The technology aspect of the company arose from the convergence of digital media, and was based on the recognition that technology available had mostly evolved from platforms originally designed to meet distinct and specific needs and, as a result, no one technology solution handled well the range of demands of the digital consumer. The technology objective, therefore, was to design hardware that consumers would find efficient, effective and easy to interact with. The second component recognised that technology without content was doomed to struggle (witness the slow uptake of digital television in Australia), and developed a model of content delivery, that would put a greater degree of control in the hands of the consumer.

These two components combined to form a vision that genuinely had potential to change current use of technology, and therefore placed TechCo in a highly competitive market place, with some very big and powerful players. The vision was ambitious both in terms of technical challenge and market impact.

This recognition was evident in the first two of the four main motivational factors: *concept* and *impact*. Concept concerned the technical challenge and the innovative business model. Impact, though related, was more concerned with the potential to bring to market a product that would change people's lives and challenge the biggest players in the information technology space. In general, technical staff were attracted by the concept, and business development staff were attracted by the potential impact. In fact, one of the directors openly disclosed his lack of interest in the product ("If there was a freebie on offer, yeah, I'd take a trial one, but I wouldn't go out and buy it."), but was intrigued by the huge scope of the market and the challenge of taking it on.

Another major motivational factor was personal enjoyment, which was expressed in terms like fun, variety, challenge, and autonomy. The company was highly social and actively created opportunities to play together as well as work together. Many team members saw it as an interesting change from the traditional work they did to earn their regular income. Others confessed to being easily bored and sought a work environment that offered a lot of variety. All core team members were very confident of their own abilities, without any display of arrogance (in fact arrogance was reported as a major issue with certain people who had joined the company, had not been a good fit, and had left after a short time). They enjoyed the challenge of taking on a difficult task – either technically or commercially. The informal nature of the company meant that it was not possible to employ anyone who needed close supervision, therefore a high degree of autonomy was inherent in the nature of the work. This was reinforced by the changing nature of the company's "office" space. In the first few years, there was no office – people worked in their own homes. For a while there was a notional office located in the outer suburbs containing desks and computers, but it was only really used to add credibility for external parties who needed to see an office to feel that the company was real. For six months, the office was an old ferry moored at the docks. Only in the last few months had the business moved to a space that would be recognised in the traditional business world as an office. Autonomy, therefore, was a given.

The last significant motivational factor was the peer group. This fell into two elements: the entrepreneur and the work force in general. Every member of the core team cited the entrepreneur as being a reason for joining the venture:

*"I noticed some of the qualities in [founder] that I'd seen in [another entrepreneur], which made me think that this guy might just be mad enough to pull this off."*

*"I liked [founder]'s enthusiasm about the idea. It wasn't that he said - oh, I'll just try and see how I go. He believed in it. And that is, I think, what actually got me over the line"*

*"I saw his vision as something special. You don't see that everyday."*

*"I saw this strength in him, which I look for in entrepreneurs."*

*"I invested in [founder] more so than the company"*

Beyond the entrepreneur himself, several interviewees mentioned the other people within the company as an attraction to join. The attraction seemed to be twofold: that the TechCo team were both smart *and* nice to work with:

*“TechCo has great people that I enjoy working with. The flat structure of the company, and general collegial atmosphere is a big plus.”*

*“... an opportunity to work with bright and interesting people.”*

Although none of the development team were interviewed, the existence of prior social and working relationships between them suggested that peer group was a strong motivational factor for them also. This is supported indirectly by the chief software architect's comments on a development team member he had wanted to recruit but been unable to entice away from her current employment:

*“... she'd been paid a staggering amount of money at [large company] and actually likes the people there”*

The attraction of potentially significant personal wealth if the venture succeeded should not be discounted, but it was not once quoted as a primary motivation for joining the venture by any of the seven interviewees, nor attributed to any other recruits who had remained with the company. Typical comments were:

*“I've always been interested in trying to build my own [technology product], so of course TechCo being in that area, looking to pay people to do that kind of stuff, I thought, OK, I'll take some of that.”*

*“My career path is going out and helping guys to get their business up and running, make some money out of it, meet some friends, find a new industry and go and do something else.”*

In both cases, accumulating wealth was a secondary consideration alongside other factors, chiefly personal enjoyment.

### **Company values**

Organisational values are a research interest of the authors and the company's web site contained some very strong and direct statements on values. However, it has been well-established that espoused values do not necessarily reflect values in use (e.g. Argyris & Schön, 1978), so interview transcripts were examined for statements representing values in action—both personal value systems of the interviewees, and shared values of the organisation.

Rokeach (1973) made a distinction between personal values, which were modes of conduct or end states valued by the individual, and social values, which were considered to be generally desirable in society. The values in use at TechCo divided readily into these two categories, as shown in Table 2. Social values all concerned relationships between people in some way. Equity concerned the concept of distributive justice, how rewards are divided between contributors; Trust concerned belief about how people should (and generally will) behave; Respect concerned each person being equally valued as an individual, disagreement being aimed at the behaviour or opinion, not at the person. Quality might be expected to be a personal rather than a social value, but the way it was expressed in this context was social in orientation. Failure to deliver the best quality solution was seen as a lack of respect for the end user, and frustration was expressed with people who couldn't be bothered to do things properly. These values were strongly expressed on the company's web site, with statements to the effect that consumers of digital technology were not getting a fair (equity) deal and deserved (respect) the best solution technology could provide (quality).

Of the personal values, Achievement was the most strongly represented, followed by Fun and Creativity, and these three were closely linked. Team members were high in self-efficacy regarding their ability to solve difficult problems, and creativity was seen as part of this ability. Fun was associated with creating an environment where creativity could flourish. Parsimony was also linked to creativity, but was valued mainly by the founder, and may have been a consequence of making a virtue of necessity.

The strength of organisational values is often best judged by the consequences of breaching those values. In the context of TechCo, lacking a product, customers or investors who expect a return at this stage, the only real opportunity to assess this was through those individuals who had exited the venture. The only instance of forced exit was the first development team, but among the 16 recruitment

events examined, there were three other instances of incompatibility resulting in voluntary departure. All four of these involved a breach of the equity value and three of the four involved a breach of trust. The indications were that breach of equity could be repaired if the offending individual was prepared to reconsider their position. However, a breach of trust would result in no further dealings with that person.

### **The role of passion**

Winnen and Huber (2006) identified six characteristics of entrepreneurial passion, most of which were clearly evident in TechCo as summarised in Table 3. The passion of the entrepreneur for the concept was not only an essential factor in starting the business at all (as it often is with new ventures), but was a defining factor in the ambition and scope of the vision. In talking about the concept and the business model, passion for the venture could be compared to religious zeal for bringing the 'truth' (a product that would empower users) to the masses (the mass market). Of particular interest was Winnen and Huber's identification of entrepreneurial passion with Weber's concept of substantive rationality, a belief in the value of something for its own sake (Weber, 1946, quoted in Winnen & Huber, 2006). The entrepreneur clearly believed that the purpose of the venture had value in its own right, rather than being just a vehicle for himself and others to make money.

One interviewee offered the opinion that the founder was naturally a fairly shy person, but had overcome his natural disposition in order to be able to generate interest in the venture. The observation of the first author is that any such inhibition has now been well and truly overcome, but that this natural disposition may have served him well. The founder networked actively and regarded any conversation as a potential opportunity to interest someone in the venture, but retained sufficient empathy for his audience to avoid the pitfall that many would-be entrepreneurs fall into of being so caught up in their business idea that they present as obsessive and blinkered. The business development members of the core team were impressed by his willingness to listen and learn, as well as by his passion for and dedication to the venture.

In terms of Cardon's (2006) model of passion transmission, the entrepreneur was firmly in the 'open, contagious' quadrant, sharing both positive and negative emotions about the venture, which Cardon found to be the most effective in communicating passion to employees. He communicated successes and milestones reached not just within the venture but to his extended network of advisers and investors (actual and potential). Nevertheless, although retaining and communicating a conviction that problems can be overcome, he did not hide disappointment over set-backs or attempt to gloss over them. Cardon cited research indicating that sharing of positive emotions leads to increased commitment and setting more challenging goals, while sharing of negative emotions leads to greater focus on progress toward goals and caution in processing information. There was evidence of both effects. Interviews contained many statements about the exciting concept and ambitious scope, the innovative use of technology and the challenge of attempting what had never been done before. There was also evidence that sharing of negative emotions in relation to a major set-back (being told the product was not marketable at the price envisaged) had led to renewed (and successful) efforts to find an alternative business model.

However, there was also evidence that communication of negative emotions had additional effects to those cited by Cardon. All members of the core team had had occasion to observe the founder during set-backs and were aware of his feelings of disappointment and even depression. In several cases this was explicitly referred to as a factor that enhanced his credibility, convincing them that he had the necessary resilience and determination to achieve his vision. To the energy and excitement of 'passion' was added the assurance of conviction. We would also suggest that sharing of negative emotions, when shared without imparting blame, play an important part in generating emotional closeness and trust, factors that have been associated with social capital (Aldrich, 1999; Burt, 1982). The fact that the entrepreneur was prepared to make himself vulnerable by disclosing negative emotions and (necessarily if not to be seen as simply 'dumping') the events that led to those negative emotions, generated confidence firstly that important information was not being concealed, and secondly that it was safe to share such emotions, thus enhancing trust.

## **DISCUSSION**

One of the interests in studying recruitment incidents spanning a period of several years in a single company was to explore whether recruitment processes differed as the company matured. The finding was that, in this case, they did not. A strategy of mostly opportunistic recruitment, with

selection based on personal fit over skills remained the pattern throughout almost four years (dated from recruitment of Director 2), and continued to be based on personal rather than business networks, in contrast to Leung et al. (2006). Skills were not discounted, but were regarded almost as a given, because of the strong shared value of quality and achievement. However, they were *not* the primary consideration and they were *not* necessarily related to the role the recruit would fill. There was a strong, shared belief that smart, motivated people could learn what they need to know, and that there was value in having an open, unprejudiced perspective, that would not necessarily be available from someone with highly specialised skills, however relevant.

This lack of evolution might indicate that the venture was yet to reach the stage of maturity where changes in approach bring benefits. Certainly, it did not yet appear to have reached the ‘survival threshold’ score on the Klofsten Business Platform instrument (Davidssen & Klofsten, 2003), that Yencken (forthcoming) found to be a predictor of survival in technology businesses spun off from public research institutions. Lacking a market-ready product, it could only attain the threshold score of 5 on two of the eight elements (based on the researcher’s observation, not actual completion of the survey). Technology start-ups have a lengthy product development stage compared to businesses where product development is a minor component of start-up activities. They might thus be expected to follow a different maturing process, and hence adopt different recruitment processes. Certainly there was a strong belief among some members of the core team that people were the most important resource in the early stages of a technology business. This had been a source of friction in at least one case where technology-oriented members of the team felt that the “due diligence” preoccupations of the more business-oriented members had led to the failure to secure a valuable recruit. However, it was not an objective of this study to compare recruitment in technology start-ups to other types of start-ups and we will leave that question for other scholars, noting only that the Australian situation may differ from other countries where early stage capital is more readily available and technology start-ups may be, therefore, less cash-constrained.

Was passion a factor in attracting recruits to join TechCo? Cardon makes the distinction between feelings, which are long-term affective states, and emotions, which are transitory (Dolan (2002); DaMasio (2003) cited in Cardon (2006)). In the traditional recruitment model, candidates have limited exposure to a company before they join. Initial interviews are with a recruitment agent, interviews with company members are structured and of relatively short duration and it is likely that only positive emotions about the venture will be shared. Thus traditional recruitment processes might induce an emotion of excitement about the venture and the role, but would seem less likely to create the long-term feeling of passion. In TechCo, no employees were recruited using traditional processes. Most recruits and all members of the core team, except for the software architect, had some informal exposure to the company before taking on an active role., usually via the entrepreneurial network referred to in this paper as TechNet. TechCo was heavily represented at TechNet monthly gatherings, therefore potential recruits would have the opportunity to meet other members of the company as well as the founder, and in an informal, social setting. While it is unlikely that negative emotions would have been shared at these gatherings, there was an opportunity to get to know the company more intimately than would be usual in most recruitment scenarios. Thus the conditions for transmitting passion from founder (and other team members) to potential recruits were somewhat more favourable than in a traditional recruitment process.

Recruitment, however, concerns not just *attraction*, but also *retention*. In the early years of TechCo, no team member was paid any salary, and contracts, where they existed, were in the form of a commitment to pay invoiced amounts at market rates when the company raised capital. Thus there was no contractual commitment to stay with the venture and no immediate material reward. Furthermore, all the members of the core team had other, more lucrative, ways of earning a living or other uses for their weekends and evenings. Thus non-material inducements needed to be strong for people to want to stay involved. There was evidence that passion for the concept and vision played a significant part in keeping people involved in the venture.

The style of leadership of the entrepreneur created favourable conditions for passion to be transmitted from the entrepreneur to the rest of the team. The culture was open and based on trust. Feelings, both positive and negative, and information were shared readily. The underlying value of respect prevented the culture of openness becoming confrontational, which can be a risk in any team of smart, high-achievers. In interviews, every member of the core team talked with enthusiasm about either the technical and business concept, or the ambitious scope of the venture, often both. And they talked about it in passionate terms, “the opportunity to do it *right*”, “this is the biggest opportunity I’ve seen in my life”, “the market is *huge*”, “we’re going to be bigger than Google”.

However, the strong sense from the interviews was that passion for the *possibilities* of the venture was not enough on its own. What made it truly compelling was the conviction of the entrepreneur, and the rest of the core team that it truly *could* be done. Underlying that conviction was the credibility of the entrepreneur, in terms of his dedication to the venture, the endorsement of Steve Wozniak and the connection he brought with Apple, the quality of the venture team, each of whom was highly successful in their field, and the collegial culture of mutual respect, which gave confidence that a team of high achievers could work productively together.

This observation lends support to the finding by Patel et al. (2006) that an entrepreneur's social capital and social skills increase the effectiveness of building legitimacy and assembling resources—not just human resources, which were the subject of this study, but also financial resources. In this case, the founder made a deliberate decision to network widely and had succeeded in building a large pool of what might be termed 'interested parties'—people who might eventually become investors, advisors, mentors, contractors or employees. Furthermore, he had had a high degree of success in converting members of this network into active participants, when the time was right. This had been particularly true of investors—most of the capital raised had been from small investors attracted through the personal networks of the entrepreneur and core team.

Two recent studies offer insight on the role entrepreneurial passion has played at TechCo. Brännback et al. (2006) found that entrepreneurial passion was strongly related to self-efficacy. Secondly, a study of the motivation of participants in open source projects found that the strongest correlation between time spent on a project and other factors was how a person assessed the creativity of the project (Lakhani et al, forthcoming): "The more creative they felt in those projects, the more likely they were to participate and spend time... So fun and the enjoyment of problem solving fit together in open source." The personal motivations of Achievement, Fun and Creativity were prominent at TechCo, as was a high degree of self-efficacy with respect to ability to solve difficult problems and achieve challenging goals.

## CONCLUSION

The authors offer the following interpretation of these findings in combination with our own study of TechCo. In the early stages of TechCo, the primary motivation to participate was consistent with the motivations observed by Lakhani for participating in open source development – an interest in solving difficult problems. This is a form of passion, in that it implies a long-term positive feeling toward the problem-solving activity, rather than a transitory emotion (Cardon, 2006). However, in transforming a passion and capability for problem-solving into a commitment to build a sustainable and profitable business, other factors came into play. Firstly, the shared values of equity and trust have been very important in cementing the organisation, allowing the team members to focus on building the product and the business, in the confidence that the eventual rewards would be fairly distributed. Secondly, there was another aspect of passion in the form of the entrepreneur's dedication to the venture, resilience to set-backs and consistent conviction that it could be done. This conviction was instrumental in convincing key team members that the venture was capable of being more than an interesting diversion.

On this note, the authors would like to close by reporting an experiment regarding the perception of entrepreneurial passion. The Vallerand et al. (2003) passion survey was adapted to refer to a 'business venture' rather than an 'activity', and the questions sorted randomly so that the distinction between harmonious and obsessive passion would not be obvious to the respondent. Both the founder and his personal partner were asked to complete the survey, the partner substituting 'he' for 'I' in responding to the questions – in other words assessing the nature of the founder's passion for the venture as she observed his behaviour. The results showed that the founder viewed his passion as harmonious (6.9 out of 7) rather than obsessive (4.6 out of 7). However, his partner viewed it as *both* harmonious (6.3 out of 7) and obsessive (6.7 out of 7). This gives a degree of insight into how other participants in the venture might have interpreted the entrepreneur's passion. The interesting finding for us is that, although the founder's partner did see an obsessive aspect to the founder's passion (her unprompted comment when the concept of passion was mentioned was, "It's not a passion, it's an obsession!"), she *also* saw a harmonious aspect. It would be interesting to extend this experiment to members of the core team, and to informal investors in a venture, to explore whether there is a relationship between the type of passion they perceive and their decision to join or invest.

## REFERENCES

- Argyris, C & Schön, D (1978), *Organizational Learning: A Theory of Action Perspective*, New York: McGraw-Hill.
- Brannback, M, Carsrud, A, Elfving, J & Krueger, NF (2006), "[Sex, Drugs and]... Entrepreneurial Passion? An Exploratory Study", Presented at Babson College Entrepreneurship Research Conference, Kelley School of Business, Indiana University, Babson College
- Burt, R (1982), *Toward a Structural Theory of Action*, New York: Academic Press.
- Cardon, MS (2006), "Is Passion Contagious? The Transference of Entrepreneurial Emotion to Employees", Presented at Babson College Entrepreneurship Research Conference, Kelley School of Business, Indiana University, Babson College
- Cardon, MS, Zietsma, C, Saporito, P, Matherne, BP & Davis, C (2005), "A Tale of Passion: New Insights into Entrepreneurship from a Parenthood Metaphor", *Journal of Business Venturing*, 20 (1) 23-45.
- Chandler, GN & Hanks, SH (1998), "An Investigation of New Venture Teams in Emerging Businesses", *Frontiers of Entrepreneurship Research*, Editors: Reynolds, P, Bygrave, W, Carter, N, Manigart, S, Mason, C, Meyer, G and Shaver, K, Wellesley, MB, Babson College. pp318-330.
- Chowdhury, S (2005), "Demographic Diversity for Building an Effective Entrepreneurial Team: Is It Important?" *Journal of Business Venturing*, 20 (6) 727.
- Collins, JC & Porras, JI (1994), *Built to Last: Successful Habits of Visionary Companies*, New York: Harper Collins.
- Cooper, AC & Bruno, A (1977), "Success among High Technology Firms", *Business Horizons*, 19 (1) 55-79.
- Davidsson, P & Klofsten, M (2003), "The Business Platform: Developing an Instrument to Gauge and to Assist the Development of Young Firms", *Journal of Small Business Management*, 41 (1) 1-26.
- Forbes, DP, Borchert, PS, Zellmer-Bruhn, ME & Sapienza, HJ (2006), "Entrepreneurial Team Formation: An Exploration of New Member Addition", *Entrepreneurship Theory and Practice*, 30 (2) 225-248.
- Heneman, RL, Tansky, JW & Camp, SM (2000), "Human Resource Management Practices in Small and Medium-Sized Enterprises: Unanswered Questions and Future Research Perspectives", *Entrepreneurship: Theory & Practice*, 25 (1) 11.
- Kamm, JB & Nurick, AJ (1993), "The Stages of Team Venture Formation: A Decision-Making Model", *Entrepreneurship theory and practice*, (Winter) 17-27.
- Kamm, JB & Shuman, JC (1990), "Entrepreneurial Teams in New Venture Creation: A Research Agenda", *Entrepreneurship: Theory & Practice*, 14 (4) 7-17.
- Lakhani, KR, Jeppeson, LB, Lohse, PA & Panetta, JA (forthcoming), "Open Source Science: A New Model for Innovation", Harvard Business School Working Knowledge, <http://hbswk.hbs.edu/item/5544.html> (viewed 26 November 2006).
- Leung, A (2003), "Different Ties for Different Needs: Recruitment Practices of Entrepreneurial Firms at Different Developmental Phases", *Human Resource Management*, 42 (4) 303.
- Leung, A, Zhang, J, Wong, PK & Foo, MD (2006), "The Use of Networks in Human Resource Acquisition for Entrepreneurial Firms: Multiple "Fit" Considerations", *Journal of Business Venturing*, 21 (5) 664-686.
- Lumpkin, GT & Lichtenstein, BB (2005), "The Role of Organizational Learning in the Opportunity-Recognition Process", *Entrepreneurship Theory and Practice*, 29 (4): 451-472.
- Patel, P, Fiet, J & Carter, N (2006), "Assessing the Effects of Social Capital and Social Skills: How Influential Are They in the Founding of Firms?" Presented at Babson College Entrepreneurship Research Conference, Indiana University, Babson College

- Reich, RB (1987), "Entrepreneurship Reconsidered: The Team as Hero", *Harvard Business Review*, 65 (3) 77-83.
- Rokeach, M (1973), *The Nature of Human Values*, New York: Free Press.
- Vallerand, RJ, Mageau, GA, Ratelle, C, Léonard, M, Blanchard, C, Koestner, R, Gagné, M & Marsolais, J (2003), "Les Passions De L'âme: On Obsessive and Harmonious Passion", *Journal of Personality & Social Psychology*, 85 (4) 756-767.
- Winnen, C & Huber, S (2006), "To Be or Not to Be: The Role of Passion and Obsession in the Entrepreneurial Process", Presented at Babson College Entrepreneurship Research Conference, Kelley School of Business, Indiana University, Babson College
- Yencken, J & Gillin, M (forthcoming), "The Klofsten Business Platform as a Self-Diagnostic Tool for New Technology-Based Small Firms." *INNOVATION: management, policy, practice*.
- Yin, RK (1989), *Case Study Research: Design and Methods*, Newbury Park, CA: Sage Publications.

Table 1: Classification of recruitment incidents - company perspective

Name	ID #	When joined <sup>‡</sup>	Motivation	Value Added	Existing relationships?	Networks used	Selection criteria	Inducements offered
Steve Wozniak	1	1Q 1999+	Problemistic	Social	No	Internet	Person	Interest
Bus plan comp team	2	4Q 2001	Problemistic	Human	No	Entrepreneurial	Person & Skills	Interest
Mentor Director 3	3	4Q 2001+	Opportunistic	Social	No	Entrepreneurial	Person	Interest
Development team no. 1	4	4Q 2002	Opportunistic	Human	Yes	Personal	Imposed	Deferred reward
Director 2	5	1Q 2003+	Problemistic	Human	Yes	Entrepreneurial	Skills	Deferred reward
Chief Software Architect	6	4Q 2003+	Problemistic	Human	No	Technical	Skills	Deferred reward
Prototype team	7	1Q 2004	Problemistic	Resource-dependence	Yes	Technical & Entrepreneurial	Skills	Deferred reward, portfolio
Director 4	8	2H 2004+	Opportunistic	Human, Social	Yes	Personal	Person & Skills	Deferred reward
Advisor, interim COO	9	2004 1H 2006	Opportunistic	Human, Social	Yes	Personal	Person	Deferred reward
Investor, Interim CFO, CTO	10	4Q 2004 1Q 2005 4Q 2006	Opportunistic	Human	Yes	Personal	Person & Skills	Deferred reward
Marketing Manager (resigned)	11	2Q05-1Q06	Opportunistic	Human	No	Business	Skills	Deferred reward
COO (resigned)	12	4Q05-1Q06	Opportunistic	Human	No	Entrepreneurial	Skills	Deferred reward
Prospective CTO, IP advisor	13	2Q 2006 3Q 2006+	Opportunistic	Human	No	Entrepreneurial	Skills	Material
Development Team Manager	14	1Q 2006+	Problemistic	Human	Yes	Personal	Person & Skills	Material
Executive Assistant	15	3Q 2006+	Opportunistic	Human	Yes	Personal	Person & Skills	Material
Development Team	16	4Q 2006+	Problemistic	Human	Yes	Personal	Person & Skills	Material

<sup>‡</sup> + indicates still with company

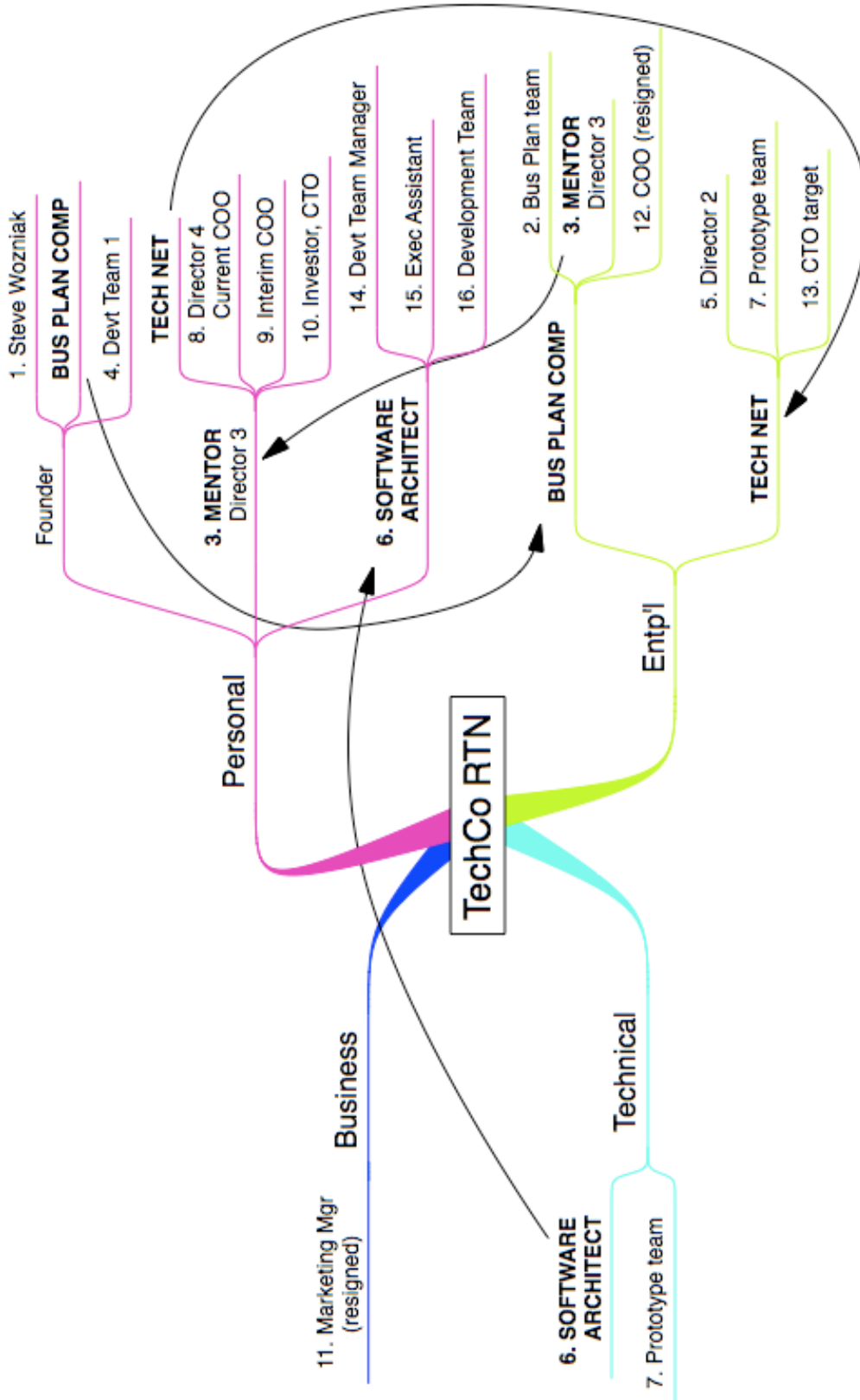


Figure 1: Mind map representation of recruitment through networks (RTN)

**Table 2: Values in use at TechCo****Social values**

- Equity** A concern for fairness, dislike of exploitation, fair reward for contribution, intolerant of people who demand more than they contribute.
- Trust** A belief in the importance and desirability of trust. Expecting people to behave with integrity, not tolerating any breach of trust. Personal integrity valued above written commitment.
- Respect** People accepted as they are and valued for what they do. Roles fitted to person, rather than vice versa. Respect coexists with heated disagreement. Does not mean tolerating unacceptable behaviour.
- Quality** Not settling for second best. Delivering a product or service that truly meets customer needs. Not leaving 'broken' anything that could and should be 'mended', pride in quality, pride in skills of people.

**Personal values**

- Achievement** Differs from "Quality" in concern for scope rather than content. Being prepared to take on powerful competitors, attack huge and competitive markets, do what has never been done before.
- Fun** Work should be enjoyable. Having fun, pursuing personal interests, autonomy over work goals and practices, congenial workplace etc.
- Creativity** Embraces creativity and flexibility, challenging conventional thinking.
- Parsimony** An enjoyment of the ability to run on the smell of an oily rag. Pleasure in finding creative ways to do deals, pick up things cheaply.

**Table 3: Characteristics of entrepreneurial passion at TechCo**

<b>Characteristic</b>	<b>Manifestation at TechCo</b>
<i>A motivating force leading to action</i>	Without passion, the venture would never have started. The vision was ambitious, hugely challenging, and there were much easier ways for the founder to earn a living.
<i>Determines the mission of the business</i>	The founder is passionate about delivering value to digital consumers
<i>Affects the scope of the entrepreneur's vision</i>	Because of the deep belief in the mission, the founder seeks to bring his company's solution to as wide a market as possible
<i>Leads to persistence</i>	The venture has suffered numerous setbacks, but the founder has persisted despite personal sacrifice and opportunity costs.
<i>Integrated into value and belief systems</i>	The venture's mission is based on the founder's personal values and beliefs, which were explicitly and strongly represented in the mission and ethics statements on the company's web site.
<i>Works synergistically with cognition in decision making</i>	Unclear

[Source: Winnen & Huber (2006)]